OPAC Marine Protected Area Working Group
Summary of Meeting March 15, 2002
Hatfield Marine Science Center, Guin Library, Newport, Oregon

Members attending: Scott McMullen (north coast commercial fisheries) Kim Dunn (public-at-large), Marge Abbott (public-at-large), Dave Fox (Dept of Fish and Wildlife Marine Region), Bob Malouf (Oregon Sea Grant)

Members absent: Greg McMurray (Dept Environmental Quality), Pete McHenry, (south coast commercial fisheries), Ray Nolan (coastal environmental organization).

Others attending: Jack Brown (OPAC member, public-at-large), Jan Auyong (Oregon Sea Grant), Bob Bailey (OPAC staff, Dept Land Conservation and Development), David Jincks (Port of Newport, OPAC member), Jeff Boardman (PMCC Board member, fisherman), Rondi Robison (OSU COAS), David Revell (Surfrider Foundation), Mark Newell (Fisherman, PMCC Board member)

Convene: 9:45 am
Scott McMullen chaired.

The discussion focused on clarifying the draft recommendation that the Working Group would forward to the full Ocean Policy Advisory Council for deliberation at the April 26, 2002, meeting. Bailey referred to the comments he received from various WG members in response to a preliminary draft Executive Summary that he had sent via e-mail for comments. The responses revealed a need to agree on specific wording to reflect the WG's policy decisions.

Bailey characterized the basic WG decision of February 22 as having separated the many purposes or kinds of marine reserves into two piles: one pile contains purposes related to fisheries management *per se*, which the WG has decided to put aside, and the other pile contains those purposes not related to fisheries management *per se*, such as conservation and habitat protection, which the WG has decided to pursue. He noted a number of questions to be answered, including how to turn Scott's original proposal to "divorce fishery management aspects from conservation or ecological purposes" into a policy statement or recommendation? What is the basic message? What are the action verbs? How does research and monitoring fit in; is it the primary purpose? a major purpose but not primary? a necessary objective?

POLICY DECISION:
After much discussion, the WG agreed to forward the following statements to the full OPAC for discussion:

1. **The OPAC recommends that consideration of marine reserves for fisheries management be left to state and federal fishery management agencies;**

2. **OPAC recommends that Oregon design and implement a limited system of marine reserves to determine the effectiveness of reserves as a tool to achieve state ecosystem and conservation policies;** or alternatively

3. **OPAC recommends that a limited system of marine reserves be designed and implemented in Oregon waters and in federal waters on the continental margin to determine the effectiveness of reserves as a tool to achieve state ecosystem and conservation policies.**

In discussing these recommendations, the Working Group

- agreed that the effectiveness of reserves should be determined across the continental shelf and slope but acknowledged that Oregon has authority to designate such areas only in state waters. At issue is the lack of a clear federal governmental entity to whom such a recommendation could be addressed, although the Pacific Fishery Management Council is clearly one such entity. The proposed language leaves open the question of the specific federal agencies or entities to achieve the policy. Bailey noted that this is an issue that the state will bring to the attention of the new US Commission on Ocean Policy in June in Seattle.

- agreed that it was not possible or desirable at present to specify what "limited system" means but agreed that it implies
  - several reserve sites instead of a single one,
  - fewer, rather than many sites,
  - smaller, rather than larger, and
  - sites identified as the result of scientific and technical design based on goals and objectives, involving scientists, fishermen, and other technical experts.

- agreed that the full OPAC should discuss the issue an upper limit on the total area to be designated in marine reserves, such as 5% suggested by Scott McMullen in February (about 60 square miles in state waters); the WG felt that such a limit is probably politically desirable to calm concerns about small marine reserves expanding into large ones, but disagreed as to whether the lack of rational basis for any per-cent limitation at the present time would cast a shadow on the overall recommendation.

- agreed that specific reference to Statewide Planning Goal 19 was unnecessary and probably too specific, that it was enough to refer to state ecosystem and conservation policies, of which Goal 19 is the principal but not exclusive example.

- agreed to use the words "determine the effectiveness of..." instead of "test the effects of..." because they implied a more open-ended discovery process to fill information gaps rather than specific testing of a known situation.

<u>PROCESS</u>:

The Working Group discussed the process and principles for participation by which such a limited system of reserves could established. The WG agreed that

1. The OPAC should set overall goals/objectives and retain policy oversight and coordination role;

2. A marine reserves steering committee should be established to provide technical oversight and direction throughout the design and implementation process.

3. A two-step process over five years should be used to design and designate these demonstration reserves:

   a. Coast-wide "design" (estimated 2-years):
      - Establish a technical and scientific steering committee (scientists, fishermen, managers, others);
      - Follow process principles (below) to design the overall reserve system, including alternatives & rationale, siting policies, implementation guidelines, monitoring and research objectives, benchmarks, etc;.
      - OPAC adopt coastwide system design and criteria;
      - OPAC (and Governor) recommend appropriate parts of overall system, policies, etc., to the Pacific Fisheries Management Council or other federal entities.

   b. Local-site selection (estimated 2-3 years):
      - Scientific and Technical steering committee to oversee local siting process;
      - Seek assistance from Pacific Marine Conservation Council, Oregon Coastal Zone Management Association, Sea Grant, local port districts, etc., to create local involvement process with fishermen, ports, other local interests;
      - Use overall coastwide design to identify local sites;
      - Create local site management plan with monitoring, cooperative research, mitigation, enforcement provisions;
      - OPAC adopt reserve sites in Territorial Sea Plan.

3. Implementation:
   - For state waters: state agencies would amend regulations as needed based on overall system design and/or local site plans;
   - For federal waters: federal agencies would be asked to carry out similar process with state and local involvement.
   - Evaluation: sites should be evaluated at a regular basis to assess performance and to expand, contract, or terminate sites as appropriate;
   - Mitigation: local plans should identify mitigation for effects on fishermen through research contracts, monitoring, enforcement.
   - The State of Oregon should fund basic elements of the reserve system and not rely solely on federal or other funds.

The issue of performance "endpoints" and the desirability of setting a time-limit on the life-span of reserves was discussed. There was a range of opinions: some felt that that these might make reserves more politically palatable. Others felt that the benefits of reserves, as measured through research or monitoring, might not be evident for decades and that a time-limit was arbitrary. No decision was made.

The WG also discussed the issue of whether, as the OCZMA's process "bullets" suggest (see discussion below), funding for research and baseline studies should be mandated before reserves

are designated. There was agreement that having research funding in place ahead of time would be wonderful, but that it was nearly impossible and unrealistic to commit to funding prior to designation of reserves. The WG agreed that, at a minimum, it is necessary for the state to have a long-term plan and strategy in place as the basis for developing funding proposals (e.g. the CoRE Study of the early 1990s, the Cooperative Reef Ecosystem Study that led to research by ODFW on Orford and other kelp-reef areas). Without such a plan or strategy it is unlikely that project funds would be forthcoming.

PROCESS PRINCIPLES

Step 1: Coast-Wide Design:

1. OPAC's role is to develop overall policies and objectives to guide design process;
2. A Scientific and Technical Steering Committee is needed throughout the process;
3. A collaborative process involving fishermen, other ocean users, marine scientists, managers, and others is necessary to design and implement such a limited reserve system;
4. The system design should consider entire continental margin, not just state waters;
5. Habitat mapping and other resource inventory and assessments should be continued to support reserve design;
6. Flexibility in area designations, e.g. time-limits, movable, or "rolling" reserves, should be considered; and
7. Economic effects on existing fisheries and other users must be minimized or avoided, and mitigated where possible;
8. System design must reflect objective of testing effectiveness of reserves in achieving state marine ecosystem and conservation goals;
9. Reserves should consider enforcement as a principal need;
10. Use best available biologic, economic, and social science to design reserve system.

Step 2: Community-based Site Selection

1. Create a highly participatory community-based process to identify and select local sites;
2. Apply overall design criteria and objectives;
3. Involve local fishermen in siting, design, implementation, monitoring;
4. Create incentives for fishermen to participate
5. Build local site management and research designs to utilize and involve fishermen and local knowledge
6. Scientific and Technical Steering Committee to maintain oversight during local processes.

The Working Group briefly discussed the process "bullets" adopted by the OCZMA in January, 2002, which were based on process and involvement principles adopted by the Pacific Marine Conservation Council. The WG agreed that, with one exception (prior funding), these bullets are logical benchmarks for a process to design a limited system of reserves and that they are incorporated in one way or another in to the process described above.

1. *Clear goals must be established for each proposed area (e.g. Why is the reserve being proposed? What are the expected benefits? What will be the timeline and criteria used for evaluating reserve effectiveness?)*

2. *The impacts (social, economic, etc.) on coastal communities, recreational and commercial fisheries must be analyzed. (Exploring potential mitigation for impacted fishermen would be part of this analysis.)*

3. *The fishing community must be involved in the development in a meaningful manner.*

4. *An achievable enforcement plan must be developed and implemented parallel with reserve implementation.*

5. *Initial biological baseline information must be collected and monitoring continued for each reserve area.*

6. *The funding for study, establishment, monitoring and enforcement of MPA's must be provided. Adequate funding must be in place prior to the establishment of MPA's. The activities revolving around MPA's cannot be an unfunded mandate placing additional economic burdens on local governments and fishing communities.*

In addition, to use marine reserves as a fishery management tool that contributes to groundfisb conservation and management goals, marine reserves must have measurable effects, and, marine reserves must be integrated with other fishery management approaches.

Dave Fox suggested, and the Working Group agreed, that a key principle not included in the OCZMA bullets should be "base reserves on the best available scientific information." This policy was captured by the Working Group, above (see Step One).

No Working Group meeting is scheduled for April due to the meeting of the OPAC on April 26. No meeting is scheduled for May due to the need to hold public meetings on this proposal.

The next meeting of the Marine Protected Area Working Group is June 14, 2002; location to be announced.

The meeting adjourned at 3 pm.

Exhibit D.1.b
Supplemental CDFG Overhead Presentation
April 2002

REVIEW PROCESS FOR CHANNEL ISLANDS NATIONAL MARINE SANCTUARY MARINE RESERVES PROCESS

AGENDA/REPORT OUTLINE (APRIL 29 AND MAY 21 MEETING)

1. Overview by California Department of Fish and Game (CDFG)/Channel Islands National Marine Sanctuary (CINMS) Staffs

2. Legal Context - NOAA/Sanctuary Legal Staffs

3. Report Outline:

    a. Background and Purpose (Scientific and Statistical Report)
    b. Role of Council in West Coast Fishery Management and Marine Protected Areas (MPAs)
    c. Council Strategic Plan and Progress to Date
    d. CINMS Local Proposal in Context of Council Regional Fishery Management Plans
        i. Groundfish
            A. Rebuilding Plans (Overfished Stocks)
            B. Bycatch Reduction
        ii. Highly Migratory Species
        iii. Coastal Pelagic Species
        iv. Accuracy, Consistency, and Adequacy
    e. MPA Proposal in the Context of:
        i. Biodiversity
        ii. Scientific Research (Reference Reserves)
        iii. Marine Parks
        iv. Other Considerations
    f. Effect on Environment (California Environmental Quality Act and CINMS National Environmental Policy Act)
    g. Conclusions and Recommendations

HABITAT COMMITTEE COMMENTS ON REVIEW PROCESS FOR CHANNEL ISLANDS NATIONAL MARINE SANCTUARY AND UPDATE ON OTHER MARINE RESERVES PROCESSES

The Habitat Committee supports the concept of creating a review committee such as the committee proposed in Exhibit D.1. If such a committee is formed, the Habitat Committee would be interested in providing a representative. The Habitat Committee feels it is important for the Council to be involved with the Channel Islands Marine Sanctuary process, because there are important links between potential marine reserves and Council responsibilities for groundfish rebuilding, essential fish habitat (EFH), and habitat areas of particular concern (HAPCs). Involvement will provide Council constituents a link into the marine reserve process, and helps ensure that fishermen's knowledge of the resources is incorporated into the discussion of marine reserves. Further, it will provide a framework for review of other marine reserve processes; and will facilitate communication between the Council and other entities proposing marine reserves. If the Council chooses not to convene such a committee, it should work to ensure that review of the Channel Islands Marine Reserves Process is incorporated into the existing Council advisory body structure.

PFMC
04/09/02

GROUNDFISH ADVISORY SUBPANEL STATEMENT ON REVIEW PROCESS FOR CHANNEL ISLANDS NATIONAL MARINE SANCTUARY AND UPDATE ON OTHER MARINE RESERVES PROCESSES

The Groundfish Advisory Subpanel (GAP) reviewed the process for Council consideration of marine reserve issues and offers the following comments.

In general, we believe the Council needs to continue to take an active role regarding marine reserve issues in general and marine reserve proposals for national marine sanctuaries in particular. If the Council does not exercise its option to comment on sanctuary reserve proposals, then by default decisions on such proposals will be made at a level that allows little public comment. The Council forum is the best place for public involvement on the impact of reserve proposals on fishing to occur.

Further, the GAP notes there is no overall Council policy on how reserves will be integrated into the fisheries management process. Although reserves are identified as a tool in the groundfish strategic plan, how we use that tool in conjunction with other more traditional fisheries management measures is an issue that remains unclear. If the intent is to close off large areas of water to fishing, then expending effort on such tasks as inseason management or examination of other management measures is probably a waste. We are approaching groundfish management as a piecemeal process rather than a comprehensive examination of options.

There is also continuing confusion over the integration of the sanctuary process with California State law. A clear, agreed upon process needs to be established. There also needs to be a clear problem statement for reserves against which reserve proposals can be judged.

The GAP reviewed the draft proposal to establish a separate committee to review the Channel Islands and California documents that are being forwarded to the Council. As it has in the past, the GAP endorses the idea of having the work done by a separate committee. However, this endorsement is qualified, as the tentative committee structure provided to the GAP contains no representation of users. It is essential, in order to avoid the problems that have already occurred with lack of user involvement, that the GAP have a minimum of two members as full participants on the committee. If such representation is not provided, the GAP opposes the formation of a separate committee.

In addition, the GAP understands that draft revised charts of marine reserve areas may have already been constructed by Channel Islands staff. The GAP believes those materials should be provided to the Council and the public as soon as possible.

Finally, California members of the GAP expressed concern over the way in which advisory committees were formed under the Marine Life Protection Act. Although this is a state issue and not a matter for the Council, the California members believe it should be noted as an example of how the public perceives their participation is being denied.

PFMC
04/09/02

Exhibit D.1.c
Supplemental SSC Report
April 2002

REVIEW PROCESS FOR CHANNEL ISLANDS NATIONAL MARINE SANCTUARY AND UPDATE ON OTHER MARINE RESERVES PROCESSES

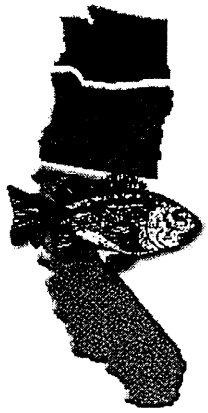
Mr. Jim Seger briefed the Scientific and Statistical Committee (SSC) on the current status of marine reserves at the Channel Islands National Marine Sanctuary. The State of California is developing a California Environmental Quality Act (CEQA) document and is requesting that the Council form a committee to review the document. The committee, consisting of Council members and members of Council advisory committees (including the SSC), would meet on April 29 and perhaps again in May. The exact charge of the committee is not yet defined.

If the purpose of the proposed review committee is to evaluate the scientific content of the CEQA document, the SSC requests that its Marine Reserves Subcommittee have the opportunity to conduct a full review of the document. If the Council agrees with this suggestion, the SSC requests it be provided with state guidelines for how such documents should be reviewed. Given the Council's public meeting requirements and the expected length of the CEQA document, the SSC notes that a technical review would take significant time to complete and could not be accomplished by April 29.

If the purpose of the review committee is to determine consistency with the Magnuson-Stevens Fishery Conservation and Management Act and with Council fishery management plans, the SSC suggests that one of its members attend to observe the review committee's April 29 meeting and report back to the SSC. Scheduling conflicts with other meetings will make it impossible for the SSC economists and most of the SSC groundfish biologists to participate in the April 29 meeting. However, the SSC would ensure that at least one of its members would be available to participate.

The SSC understands it is the state's prerogative to make decisions about marine reserves in state waters, and the CEQA document may not be fully reviewed in the Council process. However, it is important to note that Council consideration of the CEQA document is not a substitute for full review of the National Environmental Policy Act analysis regarding effects of reserves in federal waters once that becomes available.

PFMC
04/09/02



PACIFIC MARINE CONSERVATION COUNCIL
PO Box 59, Astoria OR 97103
Tel. (503) 325-8188

FISHERMEN'S FORUM ON MARINE PROTECTED AREAS JANUARY 2002

The Fishermen's Forum on Marine Protected Areas (MPA): Information Sharing and Improving Communication, was sponsored by the Pacific Marine Conservation Council (PMCC) and took place at the Embassy Suites Hotel in Portland, Oregon on January 24-26, 2002. PMCC sponsored this meeting as the first step towards the organization's goal of "facilitating meaningful fishing community participation in West Coast MPA processes."

PMCC had been following federal, state, and non-governmental organizations' (NGO) discussions and plans for establishing MPAs and became concerned that the interests of fishing and coastal community residents were not being adequately represented in these processes. PMCC was not advocating the use of MPAs at this Forum, but was seeking recommendations from the Forum participants on improving communication as well as ways in which fishing and coastal community residents could have meaningful input. There were two goals for the meeting. The first was to share information on the full range of current and planned MPA activities along Washington, Oregon, and California, and was accomplished through speaker presentations on the panels the first full day of the Forum. Information was presented to give all participants a working knowledge of MPA science and procedure, bring people 'up to speed' on who is doing what, and be used as background information for the discussions in the port breakout groups on the second full day. It was these breakout groups, comprised of individuals from fishing communities, that accomplished the second goal of the meeting, which was to recommend ways to improve communication between the managers, scientists, and conservation organizations addressing the issue of marine protected areas and the fishing communities that will be directly impacted by their development.

Invitations to participate in the Forum were first sent to fishermen, each of whom was asked to nominate another marine-interested person in their community to attend with them. Nominees could be other fishermen, Sea Grant agents, port directors, harbormasters, economic development directors, or others who could assist in bringing information from the Forum back to the individual communities.

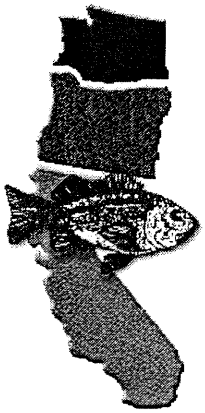
As a result, the Fishermen's Forum brought together over 150 people, including fishermen and coastal community residents from 8 communities in Washington, 19 communities in Oregon, and

36 communities in California. They were joined by Sea Grant agents, county commissioners, port directors, and others selected by members of the fishing community for their insight, knowledge, and ability to communicate information within their communities. Speakers included representatives of federal and state management agencies, fishermen from both the West and East coasts with MPA experience, social and MPA scientists, and representatives of NGOs advocating MPAs.

Recommendations were developed by nine facilitated breakout groups, presented at the end of the meeting, and placed, unedited, one week after the meeting on a listserve developed specifically for the Forum (mpaforum@onenw.org) to allow the participants who drafted the recommendations time for comment. A summary of the Forum recommendations is attached in this packet and will be distributed to all participants, as well as state and federal agencies, fishing and NGO organizations, and any other interested parties. Both edited and unedited versions will be available on the PMCC website. PMCC is also producing a Forum CD which will include poems by the fisher-poets who opened the meeting, interviews with participants and speakers, recommendations, and additional information on the meeting from the Forum packet sent out to all participants. PMCC will send a copy to the Council office when it becomes available the first week of May. As part of this process PMCC also encouraged follow-up community meetings, two of which took place in Port Orford, Oregon, and in Central California and is investigating next steps of publishing information in our newsletter and additional individual community meetings.

PMCC will be distributing the Forum recommendations widely and encourage their use in informing decision-making processes. We recommend considering and applying the issues and solutions proposed within them to everyone participating in MPA discussions. It is through the incorporation of these ideas into daily routines and management processes that true improvement of communication will be realized.

We would like to thank all of those who participated in the Forum for their time, energy, and commitment to improving communication on West Coast fisheries issues, particularly marine protected areas. The success of the Forum is a direct result of their participation.



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PO Box 59, Astoria OR 97103
Tel. (503) 325-8188
www.pmcc.org

FISHERMEN'S FORUM ON MARINE PROTECTED AREAS JANUARY 24-26 2002

RECOMMENDATIONS SUMMARY

The Fishermen's Forum on Marine Protected Areas (MPAs): Information Sharing and Improving Communication, was sponsored by the Pacific Marine Conservation Council (PMCC), and took place at the Embassy Suites Hotel in Portland, Oregon on January 24-26, 2002. PMCC was not advocating the use of MPAs at this Forum, but was seeking recommendations from the Forum participants on improving communication as well as ways in which fishing and coastal community residents could have meaningful input in West Coast MPA processes.

There were two goals for the meeting. The first was to share information on the full range of current and planned MPA activities along Washington, Oregon, and California, and was accomplished through speaker presentations on the panels the first full day of the Forum. Information was presented to give all participants a working knowledge of MPA science and procedure, bring people 'up to speed' on who is doing what, and be used as background information for the discussions in the port breakout groups on the second full day. It was these breakout groups, comprised of individuals from fishing communities, that accomplished the second goal of the meeting, which was to recommend ways to improve communication between the managers, scientists, and conservation organizations addressing the issue of marine protected areas and the fishing communities that will be directly impacted by their development. A summary of those recommendations follows.

1. **<u>Issue:</u> Communication needs to improve between fishermen, agencies and environmentalists. Environmental groups don't have anything to lose; whereas fishermen are losing their livelihoods and will have to pick up and move.**

   <u>Proposed solutions:</u>
   - Everyone involved should commit to an open and inclusive process.
   - More one on one communication with environmental group, such as making a point of inviting one another to attend meetings, finding common projects and goals,

avoiding inflammatory rhetoric, and establish a formal commitment between environmentalists and fishing communities to communicate.

- Those advocating MPAs should clearly identify the problems that the closed areas would solve.
- Increase accountability for agency staffs and organizations, be honest and tell fishermen the whole story.
- Clearly define the MPA language.
- Involve fishermen earlier in the process, before laws are established (i.e. MLPA).
- Hold meetings within 100 miles of any/all ports affected and not on the opening day of fishing seasons.
- Fishermen need to reach out to all user groups, especially agencies and NGOs, and identify mutual goals.
- Show sensitivity for the "human factor".
- Recognize fishing and fishing communities as a cultural resource.

2. **<u>Issue:</u> Fishermen feel that they don't know how to communicate productively at meetings.**

<u>Proposed solutions:</u>

- Reprint the PFMC handbook on giving public testimony, complete with an acronym list.
- Schedule the PFMC subcommittee meetings so that they are not concurrent with the Council meeting.
- Give testimony from a community, rather than an individual perspective.
- Ask managers and Council members for the background information that informed their decisions.
- Increase the geographic representation of fishermen on advisory panels.
- Provide legal/mediation/arbitration representation, paid for by the states.

- Provide courses in facilitation and communication to fishermen.

- Identify clear rights and responsibilities of participants and committee members at meetings.

3. **Issue: Fishermen need to be more proactive and level the playing field of information.**

Proposed solutions:

- Establish a clearing house website where fishermen can go for information.

- Reduce the divide and conquer tactics through:
  - Leveling the playing field by sharing knowledge and information.
  - Correcting misinformation and using objective information.
  - Addressing fishing practices of concern with objective information.
  - Finding funding for problem solving.

- Find compensation to ease the financial burden of participating in the MPA process and meetings.

- Set realistic timelines to allow for stakeholder input.

- Fishermen should be proactive and organize locally through outreach and education, get to know their local officials, and take informed delegates to state and federal agencies and meetings.

- Outreach can be done effectively through:
  - Dock and marine store bulletin boards.
  - Local press and radio.
  - Workshops run by industry/community members.
  - Written reports from meetings.
  - Organizing small group leaders.
  - Encouraging marine broadcasts.
  - Checking out the 'Heads-up' website: www.heads-up.net

- Identify representatives for each port who will participate in a larger network (with recreational and commercial interests) and provide funding for outreach and organizing. Some models are:
  - Alliance of Communities for Sustainable Fisheries
  - Coalition of Coastal Fishers

- Improve fishermen's meetings through:
  - Training
  - Meeting management and facilitation

4. **Issue: Improve participation of fishermen in MPA data collection and science.**

Proposed solutions:

- Fishermen should develop criteria for MPAs before criteria are mandated.
- Have agencies and MPA advocates consider how areas are being used and how closure of these areas would impact the users as well as the areas outside of the closures when identifying sites.
- Complete a survey inventorying existing protected areas including defacto reserves due to:
  - gear modifications
  - terrain
  - quotas
  - capacity reduction efforts
  - cable corridors
- Give equal value to social and economic sciences in MPA processes.
- Participate in cooperative research with scientists, managers, and NGOs.
- Identify funding for monitoring, baseline data collection, and enforcement before the MPA is established.
- Encourage the inclusion of fishermen's experiential data in decision-making processes.
- Develop clearly defined and quantifiable goals for MPAs.
- Provide a more balanced science approach by including fishery scientists in MPA debates.
- Develop data sharing and presentation protocols so fishermen and scientists can understand each other.

5. **Issue:** **The Pacific Fishery Management Council is in a reactive position instead of a proactive position on the issue of MPAs.**

Proposed solutions:

- The PFMC needs to identify a proactive role for itself in MPA processes.
- Require formal PFMC response to public comment.

Alliance of Communities for Sustainable Fisheries
P O Box 1309, Carmel Valley, CA 93924 (831) 659-2838

March 8, 2002

Bob Eaton, Executive Director
Pacific Marine Conservation Council
P O Box 59
Astoria, OR 97103

Subject: Open Letter to MPA Forum Attendees

Dear Bob:

On behalf of the Alliance of Communities for Sustainable Fisheries, thank you to you, your staff and the Pacific Marine Conservation Council for hosting the Fishermen's Forum on MPAs. We feel that it is timely to focus on improved communication between all parties and exchange information.

In the spirit of furthering communication on the important topic of MPAs, we would like to share some observations, conclusions, and questions, resulting from our participation in the Forum. The points made in this letter express a wide variety of direct experiences from many people who fish from Santa Barbara to San Francisco. The points raised in this letter reflect our assessments thus far, but we stress that we are in a dynamic process, and the points are areas of concern that require further study. Hopefully this letter will be used as an "open letter" to attendees and other interested NGOs and agencies, and be distributed accordingly.

1. We understand and appreciate that many citizens have a real concern about the condition of the ocean, and we applaud that concern. However, we do have a concern that the marine reserve movement is missing the mark. Many fishermen see marine reserves as an extreme measure that overreacts, to their detriment, rather like trying to keep a child safe by never letting him/her out to play. To some degree the push for marine reserves represents the acceptance of failure - the failure to do the real work of the science of fishery management. To fishermen, marine reserves also represent a desire for the easy solution that is sometimes seen in our society: we want our wars to be quick and painless, our hamburgers fast and cheap, and we tend to love the quick fix. If there are needs in fishery management, marine reserves do not necessarily address the real issues, but may be a band-aid, placed on the wrong wound. We have heard marine reserves referred to as "an insurance policy against our ignorance". Why institutionalize ignorance? Why not provide the resources to understand and properly manage ALL of our ocean areas and resources? The wound that needs treatment is the lack of funding support for the science of fishery management! This is not the scientist's fault. As a specific recommendation, we

suggest a new commitment, through all means possible, to obtain this better science and to make sure responsible agencies use it. Had this been the topic at our Fishermen's Forum, there would have been little dissension and great enthusiasm across the board.

2. There is a tendency to portray the entire ocean as in absolute crisis, and fishermen as the cause and as villains. This occurs in the media and we hear it directly from some environmental groups. Each one of these portrayals is a stand-alone premise in the marine reserve movement, and they create their own inner logic. If West Coast fisheries are not in crisis, then why do we need marine reserves - so the assertion of crisis is required. If fishermen are not villains, but low stocks are due to other factors (regime shifts, pollution, predation...), then why do we need marine reserves? Hence "over fishing" as the cause must be asserted to get marine reserves. If traditional management pressure is put in place and is working, that can't be acknowledged because it would cause the need for marine reserves to be questioned. If a particular stock shows low numbers, that is all you ever hear about. If fisherman question the crisis premise, well, they're the villains, aren't they? So we can't believe them! Marine reserves have become their own end game.

   The great majority of fishers are in fact, absolutely committed to fisheries managed in a way that can be sustained for generations to come. We are more a part of the solution than the problem. We would greatly value the cessation of this rhetoric, and are very willing to work cooperatively with the conservation community on real issues. This is what the Alliance is attempting to do by working with the Monterey Bay National Marine Sanctuary, and the local conservation and science communities, to formally look at marine reserves. When we are done with that (if ever!), we want to work cooperatively on other issues, such as by-catch, gear modifications, and regulatory reform.

   We want to be treated with respect for the knowledge we possess and for our commitment to properly managed fisheries.

3. We think that the best arguments FOR marine reserves lie in the scientific value of creating baseline data, and we acknowledge that a section of society sees intrinsic value (biodiversity) in having some wild areas set aside, just to know that they are there. However, the value of marine reserves becomes muddy when used as a fishery management tool, and not just any tool, but one proposed to dominate the toolbag. It is even less clear when the marine reserve is proposed to stop fishing for pelagic fish. Scientific study has shown that the benefits of marine reserves decrease in ratio to the degree to which external areas are regulated - and in fact marine reserves can have a negative environmental effect if 100% of the fishing effort is displaced to neighboring areas. There are enough tried and true, flexible, traditional fishery management tools in the toolbag, tools that can have the benefit of increased science, as described above. We respectfully suggest that the conservation community, who represent concerns for bio-diversity, intrinsic value, and for the benefits of creating a scientific baseline, should stay with those principles, and not try to sell marine reserves as a fishery management tool, at least on the West Coast. We feel strongly that the conservation community would benefit from this tactic and have an easier time

convincing both fishermen and the general public of the value of their mission. If this would occur, one of the primary roles of the fishing community would be to help place the reserves so that they can meet science and conservation goals, but not harm our fisheries.

4. Fishers are more than dubious about the use of marine reserves as a fishery management tool on the West Coast, because our fisheries are already aggressively managed. Although we had no opportunity to hear from them at the Forum, an increasing number of respected fishery biologists are poking holes in the premises and conclusions drawn by other scientists who support marine reserves. We would have liked to hear from them at the Forum, perhaps as a debate between "pro and con". There has generally been a lack of critical thinking and studies regarding what role a marine reserve might play in an already highly regulated fishery and/or for pelagic fishes. The success of marine reserves in third world nations where there are no other management tools does not relate to our situation. Nor does the theory hold true that you will only have large, fecund fish if you have marine reserves.

   Why is there a lack of critical thinking regarding marine reserves as a fishery management tool? We think it's mostly about money! We observe that some fishermen feel that very large foundations are pushing an agenda that says: you will "save" the ocean if you institute severe limits on how humans can use it. We don't know if this is true or not, but we do ask: What would happen if, during the next year, $10 million dollars or so was made available to marine fisheries research institutions to explore critical questions, such as: Are marine reserves needed to assure sustainable fisheries? If not a single new marine reserve is placed off the West Coast, what is the probability of continuing to have sustainable fisheries? Are there gear and or regulatory modifications that are needed to assure that a population of large, fecund groundfish continues to survive? Can the placement of marine reserves within the context of a highly regulated fishery actually be counter-productive? How can the knowledge that experienced fishermen have be used to improve scientific collection and the evaluation of fishery data? What are the implications for fishery managers when natural regime shifts occur, changing the resident fish populations? How will natural predation affect marine reserves? What can our existing marine reserves tell us - and why haven't they been more thoroughly studied? What kinds of regulatory reform and/or gear modifications can be made to reduce by-catch? Why is it that so many marine reserves, even in tropical climates, are failing to meet their stated objectives?

5. We think both the science and conservation communities have lessons to learn about the social implications of the marine reserve movement. "Social" meaning in part, human relationships. As a social implication, there is a very basic point that the fishing community would like to make to the science community. In all the touting of the benefits of marine reserves, nowhere is it mentioned that there is and will be a powerful, influential benefit directly to the science community in the form of increased funding for research projects specific to marine reserves. Because of the private foundations described earlier, marine reserves offer a funding opportunity for the science community that is not necessarily related to developing broad knowledge about sustainable fisheries. In this regard they may

actually divert funding the real work of fishery science that needs to be done. We would like to see funding stay focused on real fishery management issues, of which marine reserves play only a part. As fishermen's concerns are often dismissed as stemming only from concerns for financial loss, we suggest that many scientists be more forthright in stating their economic interest. You should be aware that some fishermen believe that the push for marine reserves is really about taking a public resource away from one set of users and instead turning it over to another set (scientists), as their near-exclusive laboratory. We suggest that the science community be more forthcoming with the fact that they have economic gain at stake, just like us.

We believe that the conservation community also needs to be more forthright in dealing with the social and economic implications of marine reserves. The fact that large scale marine reserves will put a lot of Americans out of business and will change forever the culture of many communities, needs to be addressed head-on by the conservation community. If the conservation community doesn't understand or believe that fact, then the need for formal social and economic science is underscored. As a related point, please remember that according to the Federal Economic Development Administration, every one-dollar of fish value brought across the docks generates nine more dollars as it moves through our economy. The conservation community needs to fully address this. The loss of American jobs and the likelihood of increased reliance on foreign fish imports are real. And please--we hope that no one thinks that a few extra "eco-tourism" jobs that may come from marine reserves will make up for this, but if it is the goal to replace our work with eco-tourism, we'd like to hear that straight-up. If it is the intention of at least some conservation organizations to reduce fishing capacity (i.e., take people off the water), we suggest that those organizations take the straight path to this goal and fund-raise to buy boats and permits. Will the conservation community support adequate compensation for the loss of jobs and income that result from any large-scale implementation of marine reserves?

The conservation community also needs to address the social and environmental implications of displaced fishing effort. This occurs as a negative impact in the likelihood of over-fishing the areas outside the reserves (if the marine reserves take the most productive fishing grounds as has been proposed.) It also occurs on an international basis, as marine reserves decrease local fish production and the demand for fish expresses itself by an increased import market. Herein is the irony which the conservation community must face up to: marine reserves in U.S. waters are very likely to contribute to the over-fishing of the waters of developing nations, where far less (if any) fishery management occurs. It seems to set the stage for a dynamic for which our nation receives frequent criticism: we rip-off the resources of developing nations for our own benefit.

We also point out the ominous parallel with the demise of the small family farm, as fishermen are most fundamentally food producers. Fishing could end up being only corporate fishing by a few outfits with a few large vessels, supplemented by lots of foreign imports and farmfish. Real environmental protection and resource management has historically been done more effectively by small economic units who have immediate stakes in the outcomes. The work of Wendell Berry, who writes so eloquently about the role of the small family farm

in America's local culture and economy, offers insight into the dilemma of fishing communities as well. We should not forget a basic law of socio-economics: The true wealth of a nation is created and sustained when its labor utilizes its own natural resources, turning those resources into finished products, for use and consumption by its own people, and for export.

That last social issue that we want to address relates to the legal basis for removing large areas from general usage and limiting public access. There are landside precedents for this, such as land-use/zoning laws, but there are coastal/ocean laws that seem contrary to that. In California the Coastal Act gives deference to the needs of the fishing community. The Doctrine of the Public Trust for State (California) Tidelands guarantees that tidelands will be used for "Commerce, Navigation, and Fisheries." In California, marine reserve status can also mean that all human uses may be excluded, including vessel anchoring, surfing, and non-extractive diving. Most people don't know this and we think that these points and their implications have not been adequately debated.

6. While we continue to have many questions about marine reserves as a primary tool in the fishery
management toolbox, there may be specific areas of fishery management where they are useful. An example of some work that has begun on this question is the paper written by Parrish, Segar and Yoklvich titled Phase I Technical Analysis for Marine Reserves to Supplement Management of West Coast Groundfish Resources. This paper details a process of analysis, species by species, of the appropriateness of a marine reserve as a management tool, and alternatives. This is an attempt at the process of science, not political science, and it shows that there is no "one size fits all" marine reserve.

   It takes a very special fish life history for marine reserves to be an effective management tool, meaning a reasonably sedentary adult life history but highly dispersive larval stages - so marine reserves can't be an effective tool for most West Coast commercial fishes because they move too much. MPA's are one form of spatial management that would be really useful for some invertebrates, but the spatial scale that is appropriate for one species won't necessarily be appropriate for another. We need to move to spatial management, but MPA's are too blunt an instrument. We also need more basic information about which species really benefit from marine reserves - and which would not.

   A main concern among fishermen is that marine reserves may only create management redundancies. In fact we wonder if marine reserves offer anything that conventional management can't accomplish with more flexibility and adaptability. This is one of our central questions. The focus of marine reserves is on human extraction being the main cause of stock depression, while mortality from non-point sources (sound testing, ultra-violet, pollution, etc) and predation, are not addressed. An advantage of an annual management process is that it allows for new information to be incorporated and adjustments made - adaptive management. Generally our thoughts right now are that marine reserves should be utilized as a management tool only if the desired goal cannot be achieved through gear modifications and/or conventional management measures.

7. We heard loud and clear that social science and economic science need to be done concurrently
with biological science when considering marine reserves. Additionally, they should be given equal weight. Without this, who will value the culture and heritage of our fishing communities? Fishermen are far more at risk of being lost to our communities than there is danger of any West Coast fish becoming extinct.

8. Leadership in the consideration of marine reserves should be undertaken by the NMFS/PFMC and by State Fish and Game Agencies - and not by the National Marine Sanctuary Program. The Channel Island marine reserve process was, and is, a mess, and we need to learn from that experience. The PFMC's Science committee's peer review of the CINMS-MRWG Science panel's percentage conclusion (30-50% reserves) indicated that it was more policy than science. This is one example among many as to why this process was such a poor example of public decision making. As one participant pointed out at the Forum, the Sanctuary Program does not have the scientific expertise, nor the unbiased public decision making process, to be in a leadership role. The Sanctuary Program is not a neutral facilitator, but rather a stakeholder, just like us; therefore, the Program should not be put in charge of the decision-making process. As a related point, we certainly do not want States or the PFMC to abdicate their responsibilities and let the Sanctuary Program establish policy for marine reserves. The use of the Sanctuaries Act zoning authority would skip important evaluations required in the Magnuson-Stevens Act.

9. What our Alliance has attempted to do in setting up our own Marine Reserves Study Group, then inviting representatives from the Sanctuary Program and the Science and Conservation communities to work with US, is to provide leadership to this problem. This is not a game or a trick on our part. After watching the outcomes of other processes, we believe that you have to lead or be trampled. You will have to offer constructive suggestions and engage in discussion, appreciate other points of view, and work towards a common good. To avoid the "confuse, divide, wear-out, and get conquered" syndrome we must be organized, inclusive, and stay constructively focused on the issue. "Inclusive" means all gear types, recreational fishermen, divers, etc. Remember Ben Franklin's quote in 1776: "If we don't hang together, we will hang separately".

10. One point, which was developed during one of the Forum's breakout groups, contained the
realization that the fishers and conservationists don't talk enough to each other. This is true, but odd, in as much as most fishermen consider themselves to be conservationists, and most conservationists we know love to eat fresh fish. To try to improve this situation, the Alliance of Communities for Sustainable Fisheries will make the offer to the conservation community, (and agency people, and the science community), to come down to our harbors, go on our boats, and get to know us. Anyone who wants to do this through the Alliance can contact us at the Alliance main phone number and we can arrange a visit. We also hope that other fishermen and fishermen's groups will extend similar offers up and down the coast. We know this letter contains some blunt opinions, but we want everyone to know that the street runs both ways... we are listening as well.

Most policy statements regarding the addition of marine reserves in coastal waters (including the "Scientific Consensus Statement on Marine Reserves and MPA's", signed by 161 scientists), include the following: For marine reserves to work, whether it be for intrinsic value or as a fishery management tool, they must have the support and acceptance of the fishing community, both sport and commercial. To gain that support, the ideas and questions we have posed must be addressed.

"*Marine reserves are a solution looking for a problem*"
Anonymous California Fisheries Scientist

"*You've got to be careful if you don't know where you are going, because you might not get there.*"
Yogi Berra

Sincerely,

Kathy Fosmark
Co-Chair, ACSF
Moss Landing

Steve Scheiblauer
Board Member, ACSF
Monterey Harbormaster

Roxanne Jordan
Board Member, ACSF
Moss Landing

Duncan MacLean
Board Member, ACSF
Half Moon Bay

Tom Canale
Board Member, ACSF
Santa Cruz

Chris Miller
Member, ACSF
Santa Barbara

Craig Barbre
Member, ACSF
Morro Bay

Steve Fosmark
Member, ACSF
Moss Landing

Peter Halmay

Wayne Moody

Member, ACSF
Santa Barbara

Member, ACSF
Morro Bay

Steve Reebuck
Member, ACSF
Morro Bay

Donna Solomon
Member, ACSF
Moss Landing

Kurt Solomon
Member, ACSF
Moss Landing

Bill James
Member, ACSF
Port San Luis

Supporting Associations & Organizations

Pacific Coast Federation of Fishermen's Associations
Port San Luis Commercial Fishermen's Association
Morro Bay Commercial Fishermen's Association
Monterey Commercial Fishermen's Association
Fishermen's Association of Moss Landing
Santa Cruz Commercial Fishermen's Association
Half Moon Bay Fishermen's Marketing Association
Fishermen's Alliance
Western Fish Boat Owners Association
Ventura County Commercial Fishermen's Association
Federation of Independent Seafood Harvesters
Golden Gate Fishermen's Association
Port San Luis Harbor District
City of Morro Bay Harbor
City of Monterey Harbor
Moss Landing Harbor District
Santa Cruz Port District
Pillar Pt. Harbor, San Mateo County Harbor District

Advocates for Wild, Healthy Oceans

Pacific Regional Office
116 New Montgomery Street
Suite 810
San Francisco, CA 94105

415.979.0900 Telephone
415.979.0901 Facsimile
http://www.oceanconservancy.org

Formerly the Center for
Marine Conservation

The Ocean
Conservancy

18 March 2002

Bob Eaton, Executive Director
Pacific Marine Conservation Council
PO Box 59
Astoria, OR 97103

Subject: Response to Open Letter from Alliance of Communities for Sustainable Fisheries

Dear Bob:

I was pleased to receive a copy of an open letter dated March 8 and addressed to you from the Alliance of Communities for Sustainable Fisheries. The letter shared ten observations, conclusions, and questions regarding marine protected areas (MPAs).

As you know, I have a decade of experience with marine reserves—MPAs closed to all forms of extractive use. During that time I have shaped the science of reserve design with a special focus on likely costs and benefits to fishing communities. I am one of the few scientists to date who have actually examined short-term impacts, including having compared reserves to other fishery management measures in this context. I have also been involved with the establishment of marine reserves as a scientific advisor, an advocate for fishing men and women, and an advocate for the conservation community. My efforts have contributed to the successful establishment of marine reserves around several Caribbean islands, ongoing processes to examine and possibly establish reserves at several sites in the United States and around the world, and government deliberations about marine reserve policies here and internationally.

I really appreciate the Alliance's letter (and PMCC's efforts on the Fishermen's Forum on MPAs) because it provides us with a chance to engage in real dialogue about these issues. In that spirit, I would like to share on the six pages that follow some thoughts on each of the Alliance's ten observations, conclusions, and questions. Please treat this as an open letter to anyone you know who might be interested and distribute it accordingly. Also, please be aware that the opinions in this letter are mine. I know that other members of the conservation community will want to weigh in with their own thoughts and trust they will be able to do so as this dialogue continues.

To make this letter more accessible, I have paraphrased the Alliance's ten points. However, I encourage everyone to read their letter for a better and invariably more accurate depiction of their perspectives and concerns.

1. The Alliance raised concerns that the marine reserve movement is advocating an extreme measure that overacts, that reserves as an insurance policy would institutionalize ignorance, and that we should all be able to agree on the need for better science.

   Response: We can all agree on the need for better science. We can also agree on not wanting to institutionalize ignorance. The problem, though, is that we are extremely ignorant about fished populations and the ecosystems of which they are a part. While scientific efforts can and should move us towards improvements in management, the information gaps are too large to close anytime soon. The conservation community lobbies for better research, but we also assert the need to address the ignorance through management in the meantime.

   It is also important to look realistically at what we could ever learn. Current management systems typically have no cap on catches (e.g., California market squid prior to 2002), rely on a total cap that stays the same every year regardless of ocean conditions or the status of the stock (e.g., non-assessed groundfish), or set a fixed proportion of fish that are allowed to be caught based on estimates of current abundance (e.g., fully assessed groundfish[1]). Scientific research has shown that the first two of these systems are extremely unstable and in danger of crashing if scientific information about the stocks is not perfect. Even the last of these policies can crash if information is off by modest amounts. The best way to avoid crashes when information is uncertain is to set aside a proportion of the unfished population safe from any fishing[2]. There are a few different management tools that can accomplish this feat[3], and marine reserves stand out as the best of these for multispecies non-pelagic fisheries. Pelagic fisheries are discussed below in response to point number 3.

   Marine reserves are as well supported by theoretical and field evidence as any other fishery management technique. People are often misled by the lack of scientific "proof" that marine reserves enhance fish catches. However, this sort of proof is lacking for all fishery management techniques because it is virtually impossible to achieve given the variability of conditions and lack of scientific controls. Reserves won't address every management challenge (like allocation or capacity reduction), but strong scientific evidence supports their ability to perform valuable fishery management functions.

   I am not surprised to see the Alliance's characterization of marine reserves as an extreme measure that overacts. This is a common initial reaction to marine reserves most places I have worked. However, over time fishing communities from New Zealand to the eastern Caribbean have embraced marine reserves as a valuable tool for managing fisheries. I cannot say I fully understand the resistance to marine reserves, but I can say that my research on the costs of reserves versus other techniques to provide insurance or rebuild depleted fisheries typically surprise fishing men and women[4]. These results suggest that reserves are

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[1] Note that the 40-10 policy does reduce catch caps below this level at times. However, the Council has the discretion under this policy to allow quotas up to F_{MSY} and has exercised this discretion when stocks dropped to very low levels so as to allow landing of some bycatch.

[2] See my recent paper, Sladek Nowlis, J, and B Bollermann. In press. Methods for increasing the likelihood of restoring and maintaining productive fisheries. *Bulletin of Marine Science*.

[3] For example, minimum size limits if undersized fish do not become bycatch, and 40-10-like quota systems if they are strictly followed and then only if bycatch is not an issue.

[4] See my paper, Sladek Nowlis, J. 2000. Short- and long-term effects of fishery management tools on depleted populations. *Bulletin of Marine Science* 66(3): 651-662.

not only effective but also get the job done with fewer lost fishing opportunities than using other techniques.

2. The Alliance expressed their dismay that the whole ocean is portrayed as in crisis, with fishing men and women as the villains. They dispute the extent of crisis and suggest that traditional management works far more often than we hear about. They also expressed their commitment to responsible management that they share with many fishers, and want respect for this commitment and the knowledge they possess.

   Response: I share the fishing communities concern that the media and some groups can portray the entire ocean as in absolute crisis. It is an unfortunate fact that the media looks for conflict and is not the best forum to have reasoned discussion over an issue. I appreciate the Alliance's letter in part because it allows us to communicate directly about these matters without a conflict-charged atmosphere that so often pervades these subjects.

   While I strongly support the contention that fishing is not the only impact on the ocean, I nevertheless believe that fishing has caused dramatic declines in species and wholesale changes to marine ecosystems. Of the few stocks that are considered known, many have been categorized as overfished—I prefer the term depleted myself. Along the West Coast, we have seen a number of fisheries come and go. I am most familiar with California where we have seen the boom and bust of sardine (now finally reemerging but perhaps at lower levels), abalone, rockfish, and sea urchin. Not every fishery has crashed and that is important to acknowledge as well, but many are in poor condition.

   Pollution, coastal development (something I've also researched), and global warming can all also affect the productivity of fished populations. I do not find value in assigning blame for the past; it is better to figure out what we need to do to make it better in the future. If a fish stock is depleted because it was fished too heavily, obviously fishing needs to be scaled back. If it declined because of other factors, it is likely that fishing needs to be scaled back because of the decreased productivity, at least until other causes are addressed and the stock has rebuilt. Whether stocks are depleted or healthy, responsible management needs to include a form of insurance, and reserves are our best insurance option in many cases.

   Finally, I believe there is a great deal of respect from the conservation community for the commitment of many fishing men and women to responsible fisheries management, and for the knowledge of these people who have spent a career studying patterns of ocean life. We want to work with the fishing industry and in fact dedicate substantial staff time and financial resources to doing just that every year on the West Coast. We have advocated participatory processes for designating marine reserves on the West Coast and recognize the value of the extensive experience many fishing men and women have with the resource and with management systems. We do so because we recognize the value of incorporating their ideas, values, and experience into the design of marine reserves. They would simply not be as effective without extensive involvement by people who fish.

3. The Alliance identified reserves as valuable if used as a source of baseline data or for the intrinsic value of having some ocean wilderness areas. They raised doubts about the need for reserves as a fishery management tool, especially for pelagic fish. They asked the conservation community to stick to our core values represented by baseline data and intrinsic values and not press for reserves as a fishery management tool. Finally, they suggested that if

we take their recommendation, they could play a key role in placing reserves to meeting science and conservation goals without harming fisheries.

Response: While I agree that reserves are crucial as a way of providing baseline data and achieving wilderness areas in the ocean, I disagree that reserves are unnecessary for fisheries management. I have discussed in my response to point 1 why they are valuable as an insurance policy and rebuilding tool for multispecies non-pelagic fisheries. I also agree that reserves are less valuable for pelagic fisheries, but disagree that they are unnecessary. Pelagic fish gather in specific places to feed, reproduce, or to find shelter as they develop into adults. These areas are all great candidates for marine reserves. When fish gather in large numbers they are easily caught. Consequently, catches and catch per unit effort can remain high until the fish have declined to numbers so low that the aggregations start to break up. Some fisheries specialize in targeting these sorts of aggregations, while others may stumble on them occasionally. Either way, some closures are likely to be valuable as insurance.

Another key consideration about pelagic fisheries has to do with enforcement. Generally, closing an area to some types of fishing but not others creates an enforcement nightmare. I am aware of one exception to this rule. The bottom fishing closures on Georges Bank have been effective (although there are reports of increasing infractions with less Coast Guard attention since September 11th). The enforcement effort there has been tremendous, including vessel monitoring system and an active Coast Guard presence. It is unlikely we will be able to muster as effective of an enforcement program on the West Coast anytime soon. In other places where the enforcement effort was small relative to Georges Bank, fully closed areas fared much better than areas where some fishing was allowed[5].

Perhaps the strongest argument for why pelagic fishing should be banned inside marine reserves has to do with fishing opportunities. The idea that pelagic fish will not benefit from marine reserves is based on the premise that they are going to move out of the reserve at some point anyway. If this is the case, then reserves will not reduce fishing opportunities. In that case, isn't it worth the cost of having to wait for the fish to leave a reserve to gain the benefit of much more effective enforcement? Based on these findings, I am generally not supportive of making exceptions to allow some fishing in what otherwise would be a marine reserve, but am always willing to explore the issue with an open mind. I hope that the Alliance and other members of the fishing community are willing to be as open minded about reserves as a fishery management tool and play the valuable role they can in identifying places where reserves may meet conservation and possibly fishery goals with as little short-term impact as possible.

4. The Alliance said that their concern about reserve stems from the aggressive management already taking place on West Coast fisheries. They brought up the fact that not all scientists are supportive of marine reserves, and point out the lack of critical thinking on how reserves fit into an already highly regulated or pelagic fishery. They then raise a number of questions about reserves versus other management techniques, including why so many reserves have failed to meet their objectives.

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[5] See Wallace, SS. 1999. Evaluating the effects of three forms of marine reserve on northern abalone populations in British Columbia, Canada. *Conservation Biology* 13: 882-887. There is a relevant paper about a Hawaiian study by Alan Friedlander and colleagues that is currently in review for publication.

Response: In responses to points 1 and 3 I have laid out the critical thinking and scientific work that has been done on what roles reserves can play in highly regulated and pelagic fisheries. In short, reserves can provide vital insurance against future collapses from inadvertent overfishing, rebuild depleted stocks effectively with relatively small short-term costs, protect pelagic fish when they are especially vulnerable, and dramatically aid in enforcement over areas that are open to some types of fishing. It is hard to find scientific consensus on any issue, but the overwhelming majority of scientists support marine reserves[6]. Nevertheless, we have more to learn about how marine reserves can compliment other management tools. One of the best ways we will learn is by enacting more marine reserves and larger networks of reserves than currently exist. Finally, I dispute the implication in the Alliance's last question that so many reserves are failing to meet their stated objectives. In fact, most reserves that have been studied have succeeded at protecting fish within their borders[7]. Their success has even won over local fishing communities.

5. The Alliance brings up a number of points regarding the social impacts of marine reserves, including stating that scientists are most likely to benefit, and that the conservation community should address a number of social and economic costs that reserves will bring.

   Response: Since I am no longer in academia, I don't feel it is appropriate for me to formally comment on the benefits scientists may derive from the creation of large reserves. I can comment, however, on the social and economic costs likely to be paid if reserves are created. As I mentioned in my response to point 1, I have studied the likely costs of marine reserves as much as anyone else. These costs are real, but they need to be put in perspective. One key question is are the costs worth the benefits that will accompany them? I believe that the need to provide insurance and rebuild depleted fish stocks warrant short-term costs. If we do not take steps in this direction, I believe that more West Coast fisheries are likely to collapse, causing substantial short- and long-term costs. I also believe that we should work cooperatively to make sure the short-term costs of reserve creation are as small as possible while not losing sight of addressing the issues of insurance and rebuilding. Contrary to popular impression, reserves are likely to bring fewer costs than if we were going to try to address these issues using other management tools as I discussed in response to point 1.

6. The Alliance highlighted that marine reserves will only function well for species with a reasonably sedentary adult life history and said West Coast commercial fisheries won't benefit. They also raised the concern that marine reserves may only create management redundancies. They argued that reserves are not adaptive, nor can they address all management challenges.

   Response: I have already discussed what marine reserves can do for pelagic fishes in my response to point 3. We should be clear here that the movement patterns of very few species

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[6] See *Scientific Consensus Statement on Marine Reserves and Marine Protected Areas* from the National Center for Ecological Analysis and Synthesis (http://www.nceas.ucsb.edu/Consensus/); National Research Council 2001. *Marine Protected Areas: Tools for Sustaining Ocean Ecosystems*. National Academy Press, Washington; and Murray and 18 others. 1999. No-take reserve networks: Sustaining fishery populations and marine ecosystems. *Fisheries* 24(11): 11-25.

[7] See Halpern, B. In press. The impact of marine reserves: Do reserves work and does reserve size matter? *Ecological Applications*.

are actually known. This is an emerging field in marine biology, and recent studies have suggested that many reef-associated fish in warm and cold water environments tend to stay put for the most part[8]. Many groundfish are reef-associated and we might assume that some, if not many of them, tend to stay put as adults. There are ongoing research projects to determine the movement patterns of a number of West Coast fishes. Their results are suggesting that many West Coast fish do fit a movement profile likely to benefit from marine reserves. Regarding management flexibility, few people advocate marine reserves as the sole management technique so there is room for adaptive management even if reserves remain unchanged. However, most people I know in the scientific and conservation communities are in favor of periodic review of marine reserves with an eye to making adaptive changes over time.

7. The Alliance pointed out that social and economic studies must accompany biological ones.

   Response: I agree entirely with this view. These studies can be formal and informal, and should seek to identify ways of (1) identifying the likely short-term costs of any management options being considered, (2) minimizing impacts of any new management tool, and (3) predicting the long-term benefits likely to come about from any management options being considered. In my experience, the first of these questions receives the bulk of attention whereas I believe the other two are at least as valuable.

8. The Alliance suggested that the National Marine Fisheries Service (NMFS), the Pacific Fishery Management Council (PFMC), and State Fish and Game agencies should undertake marine reserve leadership. They indicated that the National Marine Sanctuaries Program should not take leadership, using the Channel Islands process as an example.

   Response: A number of different state and federal agencies have mandates to manage or protect marine resources, and thus have the authority to take a leadership role in marine reserves. NMFS and the PFMC have had the chance to take leadership on this important issue but did not do so. The PFMC chose to delay the launching of their marine reserve process despite repeated requests from the conservation community. When they finally did start it, they got through the first phase—which identified that reserves do have potential value in fishery management—but have postponed the second phase of actually implementing them indefinitely. In California, the California Fish and Game Commission has legal authority to regulate fisheries and co-sponsored the Channel Island process along with the National Marine Sanctuaries Program. Agencies like the National Marine Sanctuaries Program do have the authority to create marine reserves. If reserves are going to serve non-fisheries management functions, it just makes sense to include agencies like these because they have a broader mandate that includes these non-fishing considerations and can allow a wider range of regulatory measures.

   The Channel Islands process has certainly had its share of problems, but it is charting new territory on the West Coast. Overall it got several things right, including assembling a

[8] For example, see Attwood, CG and BA Bennett. 1994. Variation in the dispersal of galjoen (*Coracinus capensis*) (Teleostei: Coracinidae) from a marine reserve. *Canadian Journal of Fisheries and Aquatic Science* 51: 1247-1257; and Holland, KN, CG Lowe, and BM Wetherbee. 1996. Movements and dispersal patterns of blue trevally (*Caranx melampygus*) in a fisheries conservation zone. *Fisheries Research* 25, 279-292.

team of scientists where fishing and conservation communities had veto power over anyone who might be objectionable, and assigning that committee to answer tough requests for scientific-based policy advice, including the question of the total percentage of the management area that should be set aside as marine reserves. There are certainly policy implications of the percentage choice, but the scientists gave their best scientific evaluation of what was necessary to achieve the goals and objectives stated by a group representing many sectors of the general public.

Ultimately, successful processes will engage all relevant agencies, as well as all sectors of the public. I see no reason to prohibit an agency with a relevant mandate from taking the lead on an issue if other agencies have chosen not to.

9. The Alliance affirmed their intentions in setting up a Marine Reserves Study Group as a mechanism for offering leadership on these issues.

   Response: In my experience, the best marine reserves come about when fishing groups work with scientists and conservationists. This is the best mechanism for designing reserves that achieve their goals while minimizing short-term costs and, especially, gaining broad public acceptance. I believe that I speak for my conservation colleagues when I say that we are ready to engage in any forum that appears constructive and fosters communication across public sectors. I personally am not familiar with the Alliance's MRSG but would appreciate more information.

10. The Alliance extended an offer to get to know them better and encouraged other fishermen and fishermen's groups to do the same.

    Response: I not only like to eat fish, but I also love being out on the ocean and catching dinner myself on occasion. I know that I am not alone in the conservation community in seeing the Alliance's offer as a wonderful opportunity. We just have to make the time, and I hope the offer gets some of us out interacting with fishing men and women in an environment that is far superior to a hotel conference room.

I hope that this letter helps to advance this dialogue in the way that the Alliance's letter and your Fishermen's Forum on MPAs have done. I look forward to continued discussion of these important issues.

Sincerely,

Joshua Sladek Nowlis, Ph.D.
Senior Scientist, Fish and Ecosystem Programs

REVIEW PROCESS FOR CHANNEL ISLANDS NATIONAL MARINE SANCTUARY
AND UPDATE ON OTHER MARINE RESERVES PROCESSES

Situation: The following is a summary of the current status of consideration of marine reserves within the boundaries of national marine sanctuaries off the West Coast. California is requesting the Council establish a committee to review its proposals for establishing marine reserves in state waters of the Channel Islands National Marine Sanctuary (CINMS) and make a recommendation for Council action at the June 2002 Council meeting.

CINMS

State Process

California is proceeding with its consideration of marine reserves for the CINMS. The state's current schedule calls for the California Fish and Game Commission (CFGC) to take final action at the August 2002 commission meeting. The June 2002 Council meeting will be the last opportunity for the Council to provide meaningful comment for the state process. The Council is waiting to receive the California Environmental Quality Act (CEQA) "Equivalent Environmental Document" before reviewing the proposals. The CEQA document provides the state's impact analysis for the proposed action. This document is expected to be available by, or soon after, the April Council meeting.

The volume of the state document is expected to be substantial. The California principal state official on the Council has suggested the Council convene a review committee with the following membership:

- One or two Council members from each state (a maximum of 6)
- Scientific and management expertise
  - Fishery economics (2 members of the Scientific and Statistical Committee [SSC])
  - Marine reserves (1 member of the SSC)
  - Rebuilding plans (1 member of the SSC)
  - Groundfish biology and management (2 members of the Groundfish Management Team)
  - Coastal pelagic species biology and management (1 member of the Coastal Pelagic Species Management Team)
  - Highly migratory species biology and management (1 member of the Highly Migratory Species Plan Development Team)
- NOAA General Counsel
  - NMFS (1 representative)
  - National Ocean Service (1 representative)
- NMFS (1 or 2 representatives)

The suggested composition would result in a maximum committee size of 17-18 members. Participation of one or two Council staff have also been recommended to add expertise to the committee and provide normal staffing functions.

If a special committee is appointed, the Council should consider a specific charge for the committee. For example: "Develop, for Council consideration, draft comments and recommendations to the CFGC regarding proposals to establish marine protected areas in the CINMS area."

Given the volume of documents to be reviewed and depending on the controversy of the proposals within the Council, two meetings might be needed to complete the draft document. In anticipation of the possibility that two meetings may be needed and that both meetings would need to occur in advance of the May 29 deadline for the June 2002 briefing book, the Council staff has published a *Federal Register* notice announcing a meeting of this committee for April 25. If the Council decides not to convene a committee along the lines that California has recommended, the notice will be rescinded. If necessary, a second meeting would likely be scheduled for sometime between May 21 and May 23. CINMS and California Department of Fish and Game staffs will make presentations at the first meeting.

Federal Process

Depending on action taken in state waters, there may be an expectation for complementary action in federal waters within and beyond the boundaries of the CINMS. The National Marine Sanctuary Program process for creating marine reserves within the CINMS area will involve amendment of the CINMS designation document ("sanctuary charter"), the sanctuary management plan, and management regulations. In November 2001, the CINMS sanctuary staff indicated to the Council the CINMS intent to proceed with amendment of its designation documents. However, they have not taken action to date and now indicate they intend to await the outcome of the state process. The CINMS staff has stated they intend to consult with the Council in making the changes needed to implement marine reserves, and they intend to provide the Council an opportunity to draft regulations, as required by the National Marine Sanctuaries Act.

National Marine Sanctuaries Joint Management Plan Review for Northern and Central California

The National Marine Sanctuary Program is undertaking a joint review of the sanctuary management plans for Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries. The review will include evaluation of sanctuary regulations and boundaries. Scoping meetings have been held to identify issues and management problems. The scoping process concluded January 31, 2002. The next steps are for the sanctuaries to summarize the scoping comments, seek advice from the sanctuary advisory councils, and use work groups to develop "action plans." Action plans will provide the basis for developing draft amendments to the sanctuary management plans. Changes to allow the creation of marine reserves would require amendment of the sanctuary designation documents to allow the regulation of fisheries. The Council staff will track this process and keep the Council apprized of proposals for marine reserves that arise during the joint review.

Olympic Coast National Marine Sanctuary

The Olympic Coast National Marine Sanctuary (OCNMS) intends to review its sanctuary management plan, however, the OCNMS staff indicates their review will lag the California sanctuary processes by a few years.

Council Action:

1. Provide Direction for Review of State Proposal for Marine Reserves in CINMS.

Reference Materials: None.

Agenda Order:

a. Agendum Overview — Jim Seger
b. Agency Reports and Comments
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action:** Provide Direction for Review of CINMS Proposal

Groundfish Fishery Strategic Plan (GFSP) Consistency Analysis

The GFSP calls for the Council to "use marine reserves as a fishery management tool that contributes to groundfish conservation and management goals, has measurable effects, and is integrated with other fishery management approaches."

PFMC
03/27/02