Pacific Fishery Management Council Advisory Body Reports Presented to the Ad Hoc Channel Island Marine Reserves Committee

October 2004
Review of Data, Analytical Methods and Range of Alternatives Used in
Staff Preliminary Working Draft Document for Consideration of a Network of Marine Reserves
and Marine Conservation Areas within the Channel Islands National Marine Sanctuary

September 14, 2004

- A Report of the Scientific and Statistical Committee -
Based on a meeting held at the Southwest Fisheries Science Center, Santa Cruz Laboratory
July 19-20, 2004
Background

At the June 2004 Council meeting, the Scientific and Statistical Committee (SSC) reviewed a document prepared by the Channel Islands National Marine Sanctuary (CINMS) entitled Staff Preliminary Working Draft Document for Consideration of a Network of Marine Reserves and Marine Conservation Areas within the Channel Islands National Marine Sanctuary (Exhibit G.1.b, Attachment 2 in the Council’s June 2004 briefing book). This review was conducted in response to a request from the National Ocean Service (NOS) for Council input regarding the data, analytical methods and the range of alternatives contained in the draft document.

SSC discussion with Mr. Chris Mobley (CINMS manager) and the CINMS analysts yielded useful insights into the draft document. However, the SSC requested more time from the Council to review the document and supporting analyses. In response to this request, the Council sponsored a meeting between the SSC Marine Reserve Subcommittee and the CINMS analysts on July 19-20 at the NOAA Fisheries Santa Cruz Laboratory.

Meeting Participants

SSC Marine Reserve Subcommittee members in attendance included Cindy Thomson (chair), Martin Dorn (rapporteur), Andre Punt, Tom Jagielo and Tom Barnes. Representatives from CINMS included Chris Mobley (CINMS manager), Satie Airame, Sean Hastings and Natalie Senyk, and NOS economists Bob Leeworthy and Peter Wiley. Dan Waldeck provided Council staff support. The Subcommittee appreciates the helpful participation of Mr. Mobley and the analysts who accompanied him to the meeting.

Documents

Documents and background information available to the Subcommittee at the meeting included the following:

- **Staff Preliminary Working Draft Document for Consideration of a Network of Marine Reserves and Marine Conservation Areas within the Channel Islands National Marine Sanctuary** (undated)


- Handout provided by CINMS at the meeting, dated July 19, 2004 and entitled *CINMS Preliminary Draft NEPA Discussion with SSC*

- Letter from the Council to the California Fish and Game Commission, dated October 8, 2002, regarding marine reserves in State waters at CINMS, with associated statements
from the SSC and other Council advisory bodies attached.

**Timetable**

The SSC will consider the results of the Marine Reserve Subcommittee’s review of the CINMS draft document at the September Council meeting. This review, once finalized and endorsed by the SSC, will be made available (along with comments from the Council’s other advisory bodies) to the Council’s Ad Hoc CINMS Marine Reserves Committee. The Ad Hoc Committee is scheduled to meet in October to develop recommendations for Council action regarding the CINMS proposal.

The CINMS draft document is a prelude to a Draft Environmental Impact Statement (DEIS), which may be made available to the Council in November. SSC comments provided at this stage are intended to assist CINMS in preparing the DEIS and should not be considered an endorsement in advance of seeing the DEIS. The SSC will need to review the DEIS once it is complete.

**Review of the Working Draft**

**Purpose and need**

Section 1.3 of the draft document identifies six objectives for the proposed action. These objectives flow directly from the National Marine Sanctuaries Act (NMSA) and differ somewhat from the objectives of the closures established in State waters at CINMS under the California Environmental Quality Act (CEQA). Although both biodiversity and fishery benefits were among the objectives considered during the CEQA process, potential fishery benefits are de-emphasized in the Federal phase of this action.

With regard to the specific purposes identified in the draft document, the SSC notes the following:

- One purpose pertains to protection and restoration of “natural” biological communities, another to protection and restoration of “natural” habitats, populations and ecological processes in CINMS. It is important that the DEIS carefully define the meaning of the term “natural” in the context of these objectives, as that definition will have implications for what constitutes a reasonable range of alternatives and how those alternatives are to be evaluated. For instance, if “natural” means “unexploited”, then the alternatives will inevitably focus on no-take reserves, which by definition create unexploited areas.

- Purpose 6 (“To create models of and incentives for ways to conserve and manage the resources the Sanctuary”) is a meta-objective that pertains to the process of establishing reserves in the CINMS. This objective appears to have limited utility in distinguishing...
among alternatives.

With regard to the need for action to achieve the objectives, it is important that evidence for such need focus on CINMS waters to the extent possible. The statement of need should provide information (as available) regarding which populations are depleted in CINMS waters, which habitats are likely degraded and whether there are indicators of ecosystem stress. The shortcomings of existing broad-scale management to protect local populations within CINMS should also be described.

To the extent that the draft document (and ultimately the DEIS) are intended for a broad audience, it may be helpful to characterize CINMS in terms of well known classifications (e.g., by IUCN) that are likely to be familiar to the general reader.

**Description of baseline and monitoring plans**

Adequate baseline information is essential for monitoring the effectiveness of the reserve network. The draft document includes consideration of both an ecological and a socioeconomic baseline.

*Ecological baseline*

CINMS is proposing to use a comprehensive biogeographic analysis to describe the baseline and to evaluate alternatives. This analysis, as described to the Subcommittee, includes a GIS project that maps habitat suitability indices. The analysis, which was not available for review at the meeting (but will become available shortly), bears some similarity to the type of analysis that was done for the Council for groundfish essential fish habitat (EFH), except that it also includes invertebrates, seabirds, and marine mammals. The Subcommittee is generally supportive of this effort, but cautions (as the SSC did in its review of the groundfish EFH analysis) against over-interpreting mapping exercises based on sketchy data.

The description of the affected ecological environment in the draft document is basically an inventory. Available information on the status and trend of populations within CINMS needs to be added.

The areas proposed for marine reserves (MRs) and marine conservation areas (MCAs) may differ, depending on the extent to which habitats have been degraded and local populations depleted. This may allow a contrast to be made between the “protection” and “restoration” objectives of the proposed action. An area that is relatively pristine would score higher for the “protection” objective, while a degraded habitat would score higher under the “restoration” objective. An assessment of historical fishing impacts in the proposed MRs/MCAs would be needed to make this contrast.
Description of the ecological baseline should utilize (in descending order of preference):

- Information specific to CINMS waters (e.g., surveys, censuses)
- Stock assessment information on general population trends for species found in CINMS waters. Peer-reviewed stock assessments are the most authoritative source for stock status and trend; Council staff can provide the most up-to-date information for groundfish and coastal pelagic assessments. It is important that assessment trends be accurately interpreted. For instance, if a stock was initially unfished, a decline of one-half to two-thirds is consistent with sustainable harvesting, so stock declines of this magnitude would not necessarily indicate a problem from a sustainability perspective
- Literature that is not directly related to CINMS but that provides inferential information concerning the status of CINMS habitats and populations
- Anecdotal information.

The Subcommittee suggests home range size centered on rookery sites as a potentially useful approximation to spatial use patterns of seabirds and marine mammals at CINMS.

**Socioeconomic baseline**

Socioeconomic baseline conditions should reflect the State MRs/MCAs within CINMS, recent groundfish management actions to rebuild depleted groundfish stocks (including the Rockfish Conservation Area (RCA) and Cowcod Conservation Area), and harvest rate policies and other regulations adopted under California’s Nearshore Fishery Management Plan. Given the somewhat fluid boundaries of the RCA, it would be best to rely on the most up-to-date definition of those boundaries, as described in the Council’s 2004 groundfish specs EIS. Extensive closures reduce the ability of fishers to mitigate the loss of access to the proposed reserves.

It was noted that the spot prawn trawl fishery has been closed and that the California Fish and Game Commission has issued eleven permits for conversion of spot prawn trawlers to spot prawn traps. New trap permit holders may operate in previously trawled areas, as gear interference is no longer an issue in such areas. Baseline conditions should reflect these changes. Close attention to the prawn fishery is warranted since this appears to be the fishery most likely to be affected by the Federal deepwater closures being considered in CINMS.

Recent regulatory actions may have affected both the level and spatial distribution of consumptive and non-consumptive activities at CINMS. The Subcommittee prefers to see levels of major activities (including catch and effort levels) and spatial distributions updated to 2003. This may not be easily accomplished, depending on data availability. In some cases the changes may be minor and not worth the extra effort. However, given the significant regulatory changes that have occurred in recent years, any decision to continue using 1996-1999 levels of commercial fishing activity and 1999 levels of recreational activity as the baseline (as done in the previous CEQA analysis) will need to be justified.
It is important that the description of the socioeconomic baseline distinguish between fishery trends and stock trends. Catches can go up and down for any number of reasons, including not only stock size but also local availability, market conditions, regulations, weather and alternative fishing opportunities. It is important to be aware of the assumptions being made when a decline in catches is used to infer that a stock is not being sustainably harvested.

The baseline value for recreational fishing, as described in Section 10.2.10 of the draft document and on the Errata page of the 2003 Leeworthy/Wiley analysis, was based on per-trip estimates of consumer surplus provided by Wegge et al. (1985), subsequently converted by the analysts from a per-trip to a per-day basis. The assumptions underlying that conversion (that a 22-hour trip translates into three days of fishing, that half the trips taken are single-day and half are multi-day) inaccurately reflect actual use patterns in the fishery and result in under-estimation of the value of the fishery as portrayed by Wegge. If the analysts wish to rely on the Wegge estimates, the per-trip to per-day conversion of those estimates needs to be based on more accurate assumptions regarding fishing behavior. (For instance, a 22-hour trip likely implies one day of fishing, with anglers sleeping in transit to the fishing grounds. Data sources such as the intercept portion of the Marine Recreational Fishery Statistics Survey should be consulted to determine the percentage of trips that are single-day versus multi-day.) Any use of the Wegge estimates should be accompanied by the caveat that they were derived from a nonrandom sample of subscribers to a sportfishing magazine. Another option would be to convert the consumer surplus estimates provided by Rowe et al. (1985) from a per-choice-occasion to a per-day basis. Hanemann (in a 1986 contract report entitled Economic Value of Changes in the Catch of Sacramento River Chinook Salmon, pp. 45-49) provides an example of how to do this. The Subcommittee can provide the analysts with a copy of the Hanemann report. Given the wide range of value estimates contained in the Wegge and Rowe studies – and in other marine recreational valuation studies as well, according to Freeman (1995) – uncertainty in such estimates should be explicitly addressed in the DEIS.

Available logbook data are useful for monitoring some types of fishing activities. Information on non-consumptive activities is much more limited. The Sanctuary Aerial Monitoring and Spatial Analysis Program (SAMSAP) is an aerial survey that provides information on non-consumptive as well as consumptive use patterns. Current levels of sampling effort provide general distribution patterns but may not be suitable for quantitative analysis. Interpretation of SAMSAP data is complicated by a number of factors. For instance, the survey is conducted during daylight hours, usually several times per month; thus night fishing is not observed and the ability to capture within-day changes in activity is limited. The survey is not conducted when the marine layer is below 1000 feet; since seas are calmer under such conditions, fishing could potentially occur further offshore than indicated by the survey. In some cases it may be difficult to detect whether pleasure craft are engaged in consumptive or non-consumptive activities. If SAMSAP is intended to be an component of the CINMS monitoring plan, it will be worthwhile to address potential biases such as detection functions, interactions between weather (presence of a marine layer) and the distribution of fishing effort, and conduct a power analysis to ensure that
sampling effort is sufficient to detect significant changes. There also seems to be a need for a study to ground truth activity types, since some misclassification may occur.

**Range of alternatives**

Since the State-Federal reserve network was originally designed as a whole, the Federal alternatives are by necessity constrained by the locations of existing State MRs/MCAs at CINMS. However, the purposes for which the reserve network was originally designed have been modified under the proposed action (with fishery benefits de-emphasized). The DEIS should discuss why juxtaposing the Federal and State MRs/MCAs does not unduly constrain the range of alternatives being considered relative to the purposes of the proposed Federal action. Further elaboration on how the Marine Reserve Working Group deliberation process contributed to the current range of alternatives may be helpful in this regard.

The range of MR/MCA alternatives identified in the draft document is quite narrow. The nested nature of the alternatives (alternative 1 being a geographic subset of alternative 2, which is in turn a geographic subset of alternative 3) makes them variations on the same theme rather than locationally distinct alternatives.

The range of alternatives includes both MRs and MCAs. The DEIS should include a rationale for why certain types of fishing are allowed in some areas but not others. Given that the alternatives are limited to consideration of MRs/MCAs, the discussion should also include a rationale for why area management of this type is better than the types of management measures employed under the no action alternative for achieving the objectives of the proposed action.

If other relevant management tools were considered but rejected as part of the proposed action, the DEIS should include a discussion of these other tools and the rationale for their rejection.

Issues concerning overlap/abutment of State and Federal MRs/MCAs need to be explained more clearly in the draft document.

**Comparison of alternatives**

The Subcommittee suggested a general approach to making the analysis more manageable in terms of relating the myriad habitats and species to the alternatives considered in the draft document. First, produce a detailed table that describes areas being considered for protection by species of interest and by habitat type. Next, produce a set of intermediate tables (or graphs) that aggregate by significant groups or themes - deep versus shallow waters, soft versus hard bottoms, seabirds, marine mammals, pelagic species, etc. Finally, produce a one-page summary table that evaluates each alternative according to the general reserve design criteria.

One way to enhance the clarity of the analysis would be to focus on aspects that provide a
meaningful basis for discriminating among alternatives. Another suggestion would be to consider use of formal multi-criteria decision analysis tools.

To help the Council determine whether any of the CINMS alternatives should be accompanied by changes to regulations for rebuilding overfished rockfish stocks, the analysis should include an evaluation of the extent to which the take of overfished species would be reduced under each alternative.

The Subcommittee is comfortable with the manner in which conclusions regarding socioeconomic effects are expressed in the 3rd and 4th paragraphs of Section 5.1. The predictions made regarding changes in consumptive and non-consumptive activity associated with the proposed action are qualitative in nature, as is appropriate given the limitations of available information.

The qualitative prediction in Section 5.1 of the draft document that non-consumptive activities “are generally expected to benefit or see no change economically from the establishment of marine reserve and marine conservation areas” contrasts with the certain, positive and quantitative changes claimed in Section 10.3.6.3 and on pp. 89-100 of the 2003 Leeworthy/Wiley analysis. While the Subcommittee recognizes that the draft document is a work in progress, it will be important that the DEIS ensure consistency between conclusions that are drawn and whatever analyses are referenced to support those conclusions.

The monetary estimates of changes in non-consumptive use and passive-use values associated with the establishment of reserves – as discussed in Section 10.3.6.3 and Section 10.3.10 of the draft document and on pp. 89-112 of the 2003 Leeworthy/Wiley analysis – are highly uncertain, and do not contribute meaningfully to the comparison of alternatives. The Subcommittee recognizes that these values exist and are important to consider, particularly under the objectives of the NMSA and the proposed action. However, using values from unrelated studies, or a range of arbitrary values when no estimated values are available, gives a false impression of scientific rigor. Since marine reserves are a relatively novel type of environmental amenity, contingent valuation (CV) surveys that assess their passive-use values directly are needed. However, given the relatively small differences among the alternatives described in the draft document relative to the magnitude of changes in environmental amenities customarily valued in CV surveys, it is not clear whether even a properly designed and conducted CV survey would be capable of capturing the differences in value among the CINMS alternatives. The Subcommittee recommends that the DEIS acknowledge passive-use value as a potentially important benefit of the reserve alternatives but refrain from attempting to provide quantitative estimates of such value.

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* Non-consumptive value, as referred to in the CINMS draft document, is the economic value associated with non-consumptive use of CINMS resources (i.e., whale watching, non-consumptive diving, sailing, sightseeing/kayaking). Passive-use value pertains to the economic value attached to CINMS resources by passive users, that is, individuals who do not use CINMS resources but nevertheless obtain satisfaction from the existence of those resources.
Section 10.3.0 of the draft document suggests numbers of researchers using MRs/MCAs in CINMS as an indicator of the research benefits of the proposed action. The Subcommittee recommends that the analysis instead focus on whether the particular areas set aside in MRs/MCAs under each alternative have the potential to increase research quality or the types of issues that can be addressed by research.

The potential for congestion due to displaced effort is addressed in Section 10.3.7 of the draft document by citing a theoretical model suggesting that, for reserves comprising up to 50% of the total area, fishery benefits outside reserves can more than compensate for congestion effects associated with displaced effort. CINMS analysts agreed that is this not the best way to deal with this issue, and instead plan to compare the magnitude of displaced effort associated with each alternative to the baseline effort within CINMS.

Distributed throughout the draft document are citations from the literature regarding various benefits of marine reserves. To ensure that the DEIS focuses on the proposed action, such citations should be limited to references that relate to the purposes of the proposed action and from which reasonable inferences can be drawn regarding the effects of the reserve alternatives at CINMS.

**General Comments**

The CINMS analysts have been receptive to the initial SSC review comments provided in June and to the additional suggestions made by the Subcommittee in July – particularly with regard to ecological aspects of the analysis. The Subcommittee is appreciative of their engagement in the discussions and their efforts to ensure that the analysis is on track to produce a technically sound DEIS.

The Subcommittee notes the importance of ensuring that the DEIS follow the overall analytical approach recommended in the SSC’s June statement. The DEIS should include a clear definition of objectives, justification of the need for the proposed action, criteria for evaluating progress toward meeting the objectives, a rationale for the particular alternatives considered, a description of the baseline, an analysis of how well each alternative addresses the stated criteria relative to the baseline.

The NOS economists believe that the sum of the non-consumptive and passive-use values of marine reserves at CINMS is larger than the cost to displaced recreational and commercial fisheries. This may be true, but the Subcommittee was not convinced by the “what if” approach used in the socioeconomic analysis to estimate these values. The Subcommittee’s concern is particularly notable with regard to the passive-use value, as this value is pivotal to the overall conclusion of the analysis. Other aspects of the socioeconomic analysis – e.g., the methods used to derive baseline spatial distributions of fishing activity – are generally quite reasonable given the information constraints faced by the analysts, although the Subcommittee recognizes that
some adjustments to these methods may be required in order to redefine the baseline for purposes of the DEIS.

It will be important that the DEIS acknowledge uncertainty in both ecological and socioeconomic benefits and costs, and describe sources of uncertainty and how they affect conclusions.

A network of reserves on the scale being considered at CINMS (the largest on the West Coast) is an experimental management tool. Greater consideration should be given to “adaptive” management. While CINMS is subject to a 5-year sanctuary management plan review process, a strong upfront commitment to evaluation and potential modification would help to alleviate concerns regarding the efficacy of this tool. If the Council chooses to become involved with drafting fishing regulations within CINMS, a process of periodic review that involves the Council may be appropriate.

As indicated by CINMS staff, Council responsibilities under the NMSA differ from its responsibilities under the Sustainable Fisheries Act (SFA). Under the NMSA, the Council has the opportunity to draft fishing regulations for species in sanctuary waters that are not covered by Council fishery management plans (FMPs). Management alternatives would be developed and evaluated based on the objectives of the proposed action under NMSA, not under SFA national standards, which is how the Council usually operates. SFA national standards would be used as guidance “to the extent that the standards are consistent and compatible with the goals and objectives of the proposed designation.”

The NMSA appears to provide a new and expanded role for the Council. The Council and its advisory bodies should be fully apprised of the implications of this role. While the NMSA provides the Council with an opportunity to draft regulations for non-FMP species, this opportunity (and its attendant responsibilities) are not accompanied by any commensurate increase in authority. The Council’s role in defining the relevant range of alternatives and selecting a preferred alternative under the NMSA appears to be advisory – in contrast to its explicitly influential role under the SFA. The SSC is not in a position to comment on the appropriateness or desirability of the Council’s role under the NMSA. However, given the SSC’s reliance on Council authority to ensure adherence to SSC advice and the Council’s lack of authority under the NMSA, the SSC’s role in reviewing sanctuary documents appears to be that of a nonbinding outside reviewer. The SSC requests clarification of its role in this regard.
HABITAT COMMITTEE REPORT ON
REVIEW OF PROPOSAL FOR MARINE RESERVES IN STATE WATERS OF THE
CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

The Habitat Committee (HC) recommends establishing a marine reserve at the Channel Islands National Marine Sanctuary (CINMS), but rather than endorsing the preferred alternative, or deferring to the MLPA, the HC prefers the alternative that protects the most habitat. There are several current developments in fisheries management that led the HC to this conclusion. Among these are concerns over rebuilding overfished species, potential closures in marine protected areas, and potential management closures on the continental shelf, which may result in shifts in fishing effort. Also, the Sanctuary’s Science Advisory Panel recommended that marine protected areas protect a minimum of 30% to 50% of all available habitat. While none of the options meet this target, the HC feels that the greatest area protected provides the greatest potential for improved biological productivity.

The HC also recognizes that:
• California’s Channel Islands are a unique ecosystem
• The CINMS proposal contributes to meeting the biodiversity goals of California Department of Fish and Game (CDFG) and CINMS
• The Channel Islands contain essential fish habitat and are likely to contain habitat areas of particular concern, and contribute to meeting these protection goals
• CINMS would contribute to the cumulative effects of a network of marine protected areas
• The CINMS proposal would provide the first opportunity on the West Coast to have a network of marine protected areas (MPAs) and associated control sites for study purposes
• The specific effects of the marine protected area will vary according to management decisions
• San Miguel Island, the area known as the “footprint,” and the Gull Island parcel are particularly valuable for cowcod, bocaccio, lingcod, and potentially yelloweye.

The HC would also like to emphasize the importance of ensuring research funding for continued monitoring and enforcement and to study the habitat impacts of fishing on the boundaries of the area, and displacement of effort to other areas.

We support the Scientific and Statistical Committee’s conclusion that this marine reserve is not likely to have stock-wide benefits for rebuilding, but it may have local population-level benefits. Additionally, these reserves may become part of a system which cumulatively could have stock-wide benefits. Our comments are given in the context of both state and federal waters proposed for MPAs.

PFMC
06/20/02
Additional Comments of the Groundfish Advisory Subpanel on the “Staff Preliminary Working Draft Document for the Consideration of a Network of Marine Reserves and Marine Conservation Areas within the Channel Islands National Marine Sanctuary”

At the June, 2004, Council meeting, the Groundfish Advisory Subpanel (GAP) provided some initial comments on the referenced document. At the meeting, given the size and complexity of the referenced document and the lack of time available for anything more than a cursory review, the GAP indicated that it would attempt to provide more substantive comments prior to the meeting of the Council’s Ad Hoc Channel Islands Marine Reserve Committee.

The following comments were provided to GAP members by email for their review. Because not all GAP members were able to respond in time for the comments to be submitted to the Council, these comments should be considered the views of the majority of the GAP but do not necessarily reflect the views of all GAP members.

Among members of the GAP who did respond, a minority believed that the GAP comments were deficient in that they did not provide substantive information that could fill the analytical holes in the draft document. Further, the minority stressed that establishment of marine reserves in the Channel Islands could serve as an excellent scientific test case.

**Section 1 - Need and Purposes for Action:** The discussion of commercial and recreational fishery impacts makes several broad assertions but provides no documentation to support these statements, the citations in each case being “references to follow”. Thus, there is no way for the GAP to determine whether these are personal communications, articles from the popular press, or peer-reviewed scientific studies directly applicable to the Channel Islands National Marine Sanctuary (CINMS). Statements such as “many targeted species are considered overfished” with no data to back them up lead the GAP to suspect that rhetorical excess is being used to justify a pre-ordained course of action; the GAP notes that only eight of the 82 species of groundfish managed under the Pacific Groundfish Fishery Management Plan are designated as overfished, and two of these species (darkblotted rockfish and widow rockfish) are unlikely to be found in substantial numbers within CINMS.

Given that the need for action is both undocumented and unclear, the GAP cannot justify the purposes for action.

**Section 2 – Background and History:** The GAP notes a blatant bias towards marine zoning in the discussion of management background. While discussion of management authority by the Council and the State of California are relatively factual and straight-
forward, the author of the draft document waxes rhapsodic about the benefits of marine zoning, relying on unpublished manuscripts to do so. If there is to be a detailed discussion of the benefits of a single management action, then a similar discussion should be included of all types of management actions taking place within CINMS.

**Section 3 – Alternatives:** Once again, the bias of the document’s author is apparent. Along with a description of marine reserves that “cherry picks” scientific articles that are favorable towards reserves but ignores those which would call into question the efficacy of a reserve designation in protecting pelagic species (for example) or temperate water species, all of the alternatives other than “no action” assume establishment of marine reserves, the only difference being the size. Like the proverbial encounter between the traveling salesman and the lady of the evening, we are told the outcome and left merely to haggle over the price.

The GAP believes that this section needs a much more complete discussion of the “no action” alternative, especially since no action regarding establishment of marine reserves does not equate with no action to protect marine resources within CINMS.

The GAP notes references to one or two possible forthcoming alternatives which are not described or discussed. Since these may prove to be viable alternatives, the National Environmental Policy Act (NEPA) process should take the time to consider them.

Finally, the GAP notes that all of the alternatives (other than “no action”) being contemplated assume an extension of existing State of California marine reserve areas. There is no discussion as to whether areas that do not abut the state areas were even considered, or if so, why they were rejected.

**Section 4 – Affected Environment:** The GAP notes that the discussion of commercial fishing values in subsection 4.2.2.1 and table 4-1 are horrendously out of date, using average revenues and single-year revenues that are from 5 to 7 years old. Further, all revenues are stated in terms of ex-vessel value; no attempt is made to apply an appropriate multiplier or use the Council’s methodology of community impact values. This section of the document is seriously in need of updating, especially since the values are used to justify effects in Section 5.

**Section 5 – Environmental Consequences of Alternatives:** The effects of the proposed alternatives are woefully understated. Even using the out-of-date and incomplete values for the commercial fishery (see discussion above), the document tries to downplay the effects of the alternatives by comparing them to the effects of the existing state protected areas. In doing so, it ignores the cumulative economic effects of the proposed action, which equate to a 41% - 43% decrease in total ex-vessel revenue (using the document’s 1999 values) from adopting anything but the “no action” alternative. This is compared to an unspecified, undocumented, and wholly speculative increase in economic value from non-consumptive activities.
This section also discusses network conductivity and indicates that larval transport between proposed reserve areas is a normal occurrence. The GAP notes that larval transport is a natural phenomenon and would occur regardless of whether marine reserves were put in place.

At the same time, the discussion of catastrophic events – while admitting that reserve designation will not act as a preventative mechanism – ignores the prior discussion of larval flow and the cumulative impacts that could occur if an event took place.

The GAP suggests that this entire section is incomplete, poorly written, lacks essential data, and should be totally revised.

Section 6 – Federal Environmental Process: The document discusses the changes in the CINMS designation document that would be necessary in order to establish marine reserve zones. The GAP again makes clear, as it has on other occasions, that it opposes such changes in the designation document that would allow the National Marine Sanctuary to regulate fishing.

Subsection 8.1 – Commercial fishing: The GAP recommends that this section be reviewed and updated to reflect more current activity data, changes in stock status derived from more recent stock assessments (e.g. lingcod and whiting), and recent regulations.

Subsection 8.2.1 – Bycatch: As with the section on commercial fishing, this subsection is in serious need of both fact-checking and revision. Broad statements are made with no justification about the status of stocks and the impacts of gear. Figures on numbers of permits are 5 years out of date. This entire section should be rejected until it is cleaned up and bears some vague resemblance to fact.

Subsection 8.2.2 – Impacts of Fishing Gear on Habitat: This section is at least honest in containing author’s notes about the need to examine data, define gear types, and make sure the facts are correct. However, the GAP is fascinated by the author’s note on page 78 which suggests the need to add anecdotal information about the horrors of commercial fishing gear, given that anecdotal data from fishermen about stock abundance is normally rejected out of hand.

Subsection 8.3 – Economic Overview: Again, the GAP believes that this section is seriously deficient in relying on landing data and values that are 5 to 8 years old. The GAP strongly disagrees with the author’s contention that a range of landing values from 1996 – 1999 is most reflective of the value of the fishery. Beginning in 1998, significant harvest reductions have been made in major fisheries and substantial modifications have been required in gear and fishing areas. At least one, if not two, El Nino events influenced landings subsequent to 1999. This section needs to incorporate recent data.

Sections 9 – 13: Individuals, including members of the GAP, who are familiar with the Sanctuary’s reserve processes and the economic and ecological impact analyses included
in the document have commented on the need to make significant revisions. Unfortunately, the GAP does not have the ability to collectively review all of the data presented, nor the local knowledge to comment effectively. However, we believe that the Council should pay close attention to testimony from those who are knowledgeable about this area.
HABITAT COMMITTEE COMMENTS ON
FEDERAL WATERS PORTION OF THE CHANNEL ISLANDS NATIONAL MARINE
SANCTUARY (CINMS) SCHEDULE UPDATE

Mr. Chris Mobley, superintendent of the Channel Islands National Marine Sanctuary (CINMS), spoke to the Habitat Committee (HC) about the schedule for developing the environmental document for creating marine reserves in the federal waters portion of CINMS. The HC recommends that the CINMS Marine Reserves Subcommittee convene to review this document prior to the September Council meeting. The HC will also discuss the document in more detail at the September meeting. If the Council chooses to convene the CINMS Marine Reserves Subcommittee, HC members will coordinate input with Dr. Robert Lea, the HC representative to the subcommittee, via email.

PFMC
06/14/04
The Coastal Pelagic Species Advisory Subpanel (CPSAS) reviewed the Staff Preliminary Working Draft Document for Consideration of a Network of Marine Reserves and Marine Conservation Areas within the Channel Islands National Marine Sanctuary (CINMS). The CPSAS appreciates the opportunity to review the draft CINMS document. At the time the CPSAS report was finalized the conservation position on the CPSAS was vacant.

The CPSAS recognizes the need to protect the biodiversity of marine resources. However, the CPSAS contends that the goals and objectives of existing state and federal resource laws and regulations (e.g., Magnuson-Stevens Fishery Conservation and Management Act, and California Marine Life Management Act, Nearshore Fishery Management Plan and Marine Life Protection Act) are similar to the Purpose and Needs goals stated in the staff draft CINMS document. Existing laws are able to protect biodiversity while effectively providing for conservation and management of marine resources. The CPSAS remains concerned about National Marine Sanctuary Programs attempting to manage fisheries, especially efforts to modify Sanctuary designation documents to authorize management of fishery resources within Sanctuary boundaries. This is in direct violation of promises made to the fishing industry when the Sanctuaries were created. The CPSAS remains opposed to any change to Sanctuary designation documents that would authorize the transfer of resource management to the Sanctuary.

The CPSAS expresses concern that the ecological and socioeconomic analyses presented in the staff draft utilized flawed data, leading to an incorrect statement of biological benefits and fishery impacts.

The CPSAS questions the overarching need for marine reserves in the federal waters of CINMS to accomplish the goals and objectives outlined in the CINMS document. Additional “no take” zones would have increased adverse socio-economic impacts on coastal pelagic species (CPS) fisheries while providing no measurable biological benefit to CPS resources. The CPSAS opposes moving forward with the current process.

Specific Recommendations:

CINMS should include the most recent information on fishing effort and management information, as dramatic changes have occurred since the 1996-1999 period. These updates should be reflected in Section 8.1 (Commercial Fishing), 8.3 (Economic Overview of Commercial Activities) and 10.3 (Potential Economic Impacts).
Section 8.1.4 Coastal Pelagic Species (Anchovy, Sardine, Mackerel, and Squid)

For further information about CPS, the CINMS should review the 2001 California Department of Fish and Game Report titled, “California Living Marine Resources: A Status Report,” Pages 293-314. Information about life history, biology, population status, and fishery information are all included in this report and would be helpful to either cite or summarize when preparing the draft Environmental Impact Statement (EIS). This report also contains additional information about all the species listed in this section. It would also be helpful to include the CPS SAFE document.

Section 8.1.4.1 Market Squid

The overview of market squid history, range and behavior, fishery operation and squid’s vital role in the ecosystem are well defined in the draft. However, it should be noted that a final market squid fishery management plan (FMP) was adopted in late August 2004. It would be helpful to cite the adopted management options in the FMP that relate to CINMS marine reserves, including area closures reflected in the Draft EIS.

Section 9.1 The Channel Islands Marine Reserves Process

It would be helpful to include a summary of the independent review of the CINMS Marine Reserves Working Group process conducted after the process was completed.

PFMC