

Key Outcomes Memorandum

Date: August 31, 2007

To: Members, MLPA North Central Coast Regional Stakeholder Group

From: Scott McCreary and Eric Poncelet, CONCUR, Inc.

Re: Key Outcomes Memorandum – August 22-23, 2007 Meeting

cc: MLPA Initiative Staff and California Department of Fish and Game MLPA Staff

Executive Summary – Key Outcomes

On August 22-23, 2007, the Marine Life Protection Act (MLPA) Initiative North Central Coast Regional Stakeholder Group (NCCRSG) participated in its third meeting, in San Rafael, CA. **Key outcomes** from the meeting are as follows:

- NCCRSG considered initial MLPA Master Plan Science Advisory Team (SAT) guidance and revised the provisional regional goals and objectives. NCCRSG forwarded one final question for SAT consideration. NCCRSG will consider the SAT response and discuss final adoption of the provisional regional goals and objectives at its October 16-17, 2007 meeting.
- NCCRSG initiated the process of developing initial MPA recommendations. This process will build on three work groups composed of a balanced cross section of NCCRSG members. Interim work group sessions are scheduled for September 7 and 25, 2007.
- NCCRSG received informational briefings and participated in ongoing joint fact-finding. Key topics discussed included: oceanographic features, fish biology and ecology, recreational fisheries, and SAT size and spacing guidelines.
- I-Team staff reviewed the process by which science questions would be framed and reviewed by the SAT. The NCCRSG identified additional science questions for SAT consideration.
- NCCRSG received an update on revisions to the draft regional profile and reviewed next steps to revise the document. The I-Team will convene an NCCRSG regional profile work group in September to review the revisions made.
- NCCRSG received an overview of DORIS, the MPA decision support tool, and participated in hands-on demonstrations of the tool.
- The I-Team staff announced the appointment of two additional alternates to the NCCRSG: Nick Tipon (Federated Indians of Graton Rancheria) and Hedley Prince (Port of San Francisco).

Key **next steps** include:

- Prepare for and convene work group (emerald, jade, and turquoise work groups) sessions on September 7 and 25, 2007 (San Rafael, Four Points Sheraton)
- Prepare for and convene a regional profile work group meeting in September (date TBD)

I. Meeting Participants and Materials

Twenty-three NCCRSG primary members and fourteen alternate members participated in the August 22-23, 2007 meeting.

MLPA Master Plan Science Advisory Team members participating in the meeting included: Sarah Allen, Steve Gaines, Caroline Hermans, Steve Morgan, and Karina Nielsen. Meg Caldwell participated on behalf of the MLPA Blue Ribbon Task Force (BRTF).

MLPA Initiative and California Department of Fish and Game (DFG) staff—collectively known as the “I-Team”—staffed the meeting. NCCRSG members were provided with brief descriptions of I-Team staff roles. An updated version of this document appears as Attachment 1.

Meeting materials, including copies of the PowerPoint presentations, may be found on the MLPA website at: http://www.dfg.ca.gov/mrd/mlpa/meeting_082207.html

II. Key Outcomes

A. NCCRSG received provisional SAT guidance and revised the north central coast regional goals and objectives

1. I-Team presentation of provisional SAT guidance

I-Team staff presented provisional SAT responses to questions on the draft regional goals and objectives identified at the July 10-11, 2007 NCCRSG meeting. This guidance was prepared by SAT sub-teams that were initiated at the August 16, 2007 SAT meeting. The guidance was considered “provisional” as it had not yet been reviewed and adopted by the full SAT.

I-Team staff clarified that while NCCRSG members are encouraged to take SAT guidance into account, the NCCRSG does not require formal SAT approval to come to agreement on north central coast regional goals and objectives.

2. NCCRSG agreement on key revisions

NCCRSG members, with input from an informal NCCRSG work group that met over lunch on day 1, came to unanimous agreement on revisions to the document. The revised provisional regional goals and objectives are attached as Attachment 2. Key changes included:

- Revised the text in several objectives to increase measurability, drawing on recommendations from the SAT sub-teams.
- Moved goal 1, objective 2 to the design considerations section.
- Split goal 2, objective 2 into two separate objectives to add clarity.
- Revised goal 3, objective 1 to make it applicable to both consumptive and non-consumptive recreational uses.
- Added key indicators to goal 3, objective 2 to enhance the objective’s measurability.
- Identified “unique” habitats for the north central coast study region in goal 4, objective 1, drawing on a SAT sub-team recommendation.

- Added a new design consideration stating: “To the extent possible, preserve the diversity of recreational, educational, commercial, and cultural uses.”

3. One remaining question for SAT consideration

NCCRSG members agreed to forward one additional question to the SAT for guidance on the provisional regional goals and objectives:

- Goal 4, objective 1: NCCRSG members seek guidance as to whether the deep-water benthic and water column habitats are also deemed “unique” and therefore worthy of inclusion in this objective.

The SAT will consider this question during its September 17, 2007 teleconference.

4. Next steps to adoption at October 16-17, 2007 NCCRSG meeting

NCCRSG members agreed to consider the document for adoption at their October 16-17, 2007 meeting. The focus of these deliberations will be on the one remaining question where SAT guidance has been requested. The NCCRSG will not reconsider the goals and objectives agreed upon at its August 22-23, 2007 meeting.

B. NCCRSG initiated the process of developing initial MPA recommendations

1. Sharing of NCCRSG interests

As a strategy to build broader understanding of the range of interests represented in the NCCRSG, each member was given the opportunity during a plenary session to share “what is important to them” in the study region. Some NCCRSG members described the origins of their interest in the initiative. Others described the particular resources or resource uses of greatest concern. Still others described their core interests in the study region. Key recurring themes among the interests expressed included the following:

- Interest in the creation of good public policy and the use of good science and information.
- Interest in adequate public access for multiple uses.
- Interest in sustaining marine resources and cultural/community heritage for future generations.
- Interest in finding mutual gains and win-win solutions.

A summary of the stakeholder interests shared is attached as Attachment 3. This information will also be used to inform development of initial MPA recommendations (see description of work group activities below).

2. Description of work group process

I-Team staff outlined the process toward developing initial MPA proposals over the next two months. A handout describing this process, including group composition, is attached as Attachment 4. Key elements of the process include:

- This approach builds on the Day 1 interest sharing activity.

- NCCRSG members will be organized into three multistakeholder work groups (titled the “emerald,” “jade,” and “turquoise” work groups). These work groups were characterized by a balance across interests and expertise. Work group composition will be assigned by the I-Team. This approach is based on several lessons learned from the central coast process. In particular, this approach helps ensure cross-interest dialogue and full participation in the initial phases of MPA proposal development. It also helps generate a range of options.
- The I-Team recognizes that other groups (single or multiple-interest) may also be developing MPA proposals simultaneously. NCCRSG members are welcome to bring these ideas into the work group process. Cross work group collaboration is also encouraged.
- Work groups will meet at least twice between the August and October NCCRSG meetings to help initiate the development of initial MPA recommendations. In-person work sessions are currently scheduled for September 7 and 25, 2007. These sessions will be supported by I-Team staff.
- Initial MPA recommendations will be due to the I-Team by October 1, 2007. Initial MPA recommendations are to be as complete as possible.
- Work groups will present their initial recommendations to the full NCCRSG at the October 16-17, 2007 meeting. Work groups will revise their recommendations based on NCCRSG comments and other information presented and resubmit them to the I-Team by the end of the October 16-17, 2007 NCCRSG meeting. The work groups should also identify any areas of disagreement. I-Team staff will then forward the revised initial MPA “proposals” to the SAT and BRTF for review and evaluation.
- MPA proposal development is to be informed by the best readily available information.
- At the October 16-17 NCCRSG meeting, the NCCRSG will reassess how to move forward with MPA proposal development. This may include continuing with the work groups or forming new work groups.

NCCRSG members asked clarifying questions about the work group approach. Several NCCRSG members expressed a strong desire to arrive at a single or preferred MPA proposal. I-Team staff expressed support for this objective and assured NCCRSG members that the near-term work group approach is consistent with this aim.

3. Identification of key “areas of importance”

NCCRSG members participated in a breakout session activity, organized by the work groups identified above. Each work group member was given the opportunity to identify on maps two or three core areas of interest within the study region. Work group members were also asked to indicate whether those areas of importance pertained to interests of: 1) habitat representation, ecosystem protection, and sustaining marine life populations; 2) consumptive recreational and commercial activities; 3) non-consumptive recreational and commercial activities; and/or 4) educational and study opportunities.

I-Team staff captured these core areas of importance in both text and GIS format. The results of all three work group discussions will be used to inform the work group sessions on September 7 and 25.

4. Work group next steps

I-Team staff will establish list-serves for each of the three work groups to facilitate intra-group communications. Members of specific work groups are also invited to use the list-serves to communicate and coordinate with other groups.

I-Team staff will send details for the September 7, 2007 work group sessions several days in advance. The sessions will all take place from 10:00 AM – 3:00 PM in San Rafael at the Four Points Sheraton.

C. NCCRSO received informational briefings and participated in ongoing joint fact-finding

NCCRSO members received several informational presentations intended to inform the MPA planning process.

1. Presentations on specific features of the MLPA North Central Coast Study Region

SAT members and I-Team staff provided informational briefings on several key topics:

- 1) Oceanographic features (John Largier, Bodega Marine Lab).
- 2) Fish biology, ecology and ecosystem interactions (Steve Ralston, National Marine Fisheries Service)
- 3) Recreational fisheries (Jason Vasques, DFG, with input from several NCCRSO members)

Following each presentation, presenters and NCCRSO members offered additional detail or made clarifying comments. Key comments included the following:

- John Largier walked through the sub-regions identifying key areas of importance. I-Team staff will add this information to the sub-regional summaries section of the regional profile.
- NCCRSO members noted that it is especially helpful to know the longitudinal ranges where particular species are found.
- NCCRSO recreational fishing representatives reiterated the importance of safe access to salmon fishing, in particular, to the recreational fishery in the north central coast study region.

2. Presentation on science guidelines and MPA connectivity

SAT member Steve Gaines presented on the science guidelines in the master plan for MPAs to be used in evaluating MPA proposals. NCCRSO members asked a number of clarifying questions. Some of these were identified as questions meriting consideration by the full SAT (see section II.D below). Other key comments and clarifications included the following:

- The SAT's size and spacing guidelines apply to the MLPA goals addressing ecosystem protection.
- The NCCRSO may elect to propose MPAs smaller than the "minimum" recommended size or spaced farther away than the "maximum" recommended

spacing for the purpose of achieving other (i.e., non-ecosystem protection) goals in the MLPA.

- The NCCRSG will have to make choices regarding size and spacing of MPAs. These will be driven by tradeoffs regarding the benefits to different species.
- Other existing regulations (e.g., Rockfish Conservation Area) provide some protection in areas outside of MPAs. This should be considered in the MPA development process.
- The characterization of “levels of protection” for specific MPAs proposed for the central coast process was based on the specific regulations proposed for those areas. It is not “deterministic” for the north central coast study region.
- It would be helpful if the SAT could provide additional information regarding “levels of protection”—in particular, to answer the question: “If you allow x take (of particular species), what level of protection will be provided?”
- In the central coast process, Tom Barnes with DFG’s groundfish staff provided input on total allowable catch (TAC) adjustment in response to MPAs. Based on early analysis, he felt TACs would not need to be adjusted in response to MPAs because existing management already included precautions that would absorb MPAs up to at least 20% of available habitat for any given stock. Note: DFG staff will produce a policy memo that will address this and other TAC issues more specifically. They intend to provide the memo to the SAT at its November meeting and distribute a final memo to the NCCRSG at its December 11-12, 2007 meeting.

3. Guidance on bag limits, size limits, and catch and release fishing in MPAs

I-Team staff presented DFG guidance on bag limits, size limits, and catch and release fishing in MPAs. NCCRSG members posed the following clarifying comments:

- Confirm whether catch and release could work for shore fishermen.
- The issues raised are complex. NCCRSG members suggested that the DFG memorandum be considered part of an ongoing dialogue on this subject.

4. Presentation on central coast study region adopted MPAs

I-Team staff provided an overview of the adopted central coast MPAs and highlighted how SAT size and spacing guidelines were applied for this region.

D. NCCRSG identified additional science questions for SAT consideration

1. SAT process for responding to NCCRSG questions

NCCRSG members and I-Team staff discussed the process by which the SAT will respond to science questions raised by the NCCRSG. Key steps in the process include:

- a. Members of the Science Sub-Team to the MLPA North Central Coast Project will attend all NCCRSG meetings and will be responsible, along with I-Team staff, for clarifying and recording questions generated during the meeting. NCCRSG members will confirm the framing of science questions prior to the conclusion of each NCCRSG meeting.

- b. The list of questions recorded on flip charts will be reviewed by the MLPA staff and the SAT co-chairs to determine their appropriateness for the SAT review. Some may more appropriately be directed to MLPA staff, DFG legal counsel, or other groups.
- c. SAT support staff may conduct background research and draft responses to some questions. Questions and draft responses will be disseminated to the SAT prior to the next SAT meeting.
- d. Draft responses to the questions will be discussed at the next SAT meeting. Depending on the timing of the next in-person SAT meeting, a conference call meeting may be organized to discuss questions and finalize responses. Staff will record SAT support for the responses.
- e. SAT responses will be conveyed to the NCCRSR.

2. Additional science questions identified for SAT consideration

I-Team staff reviewed the questions identified at previous NCCRSR meetings that are currently under consideration by the SAT. At the August 22-23, 2007 meeting, NCCRSR members identified the following additional questions for SAT consideration:

- 1) Finish consideration of the provisional DRAFT Goals and Objectives and develop responses to outstanding questions.
- 2) Are the deep-water benthic habitats and water column habitat around the Farallon Islands unique and therefore worthy of inclusion in goal 4, objective 1?
- 3) Specifically – where do subtidal waters or the subtidal zone start? Do they only span to the extent of state waters or do they extend to XX depth (and if so, what depth)?
- 4) What level of protection would you assign to MPAs that allow take of: salmon, abalone, urchin, clams (*halibut, white seabass, crab*)?
- 5) What is the range and pattern of movement for the various life-stages of yellow-eye rockfish, surfperch, greenling, cabezon, monkeyfaced prickleback, halibut, and white seabass?
- 6) The recommendation to extend MPAs to the 3-mile state waters limit to cover the range of depths and species that utilize the range of depths was appropriate for the central coast study region. The north central coast study region is largely homogenous out to the 3-mile limit. Is it still appropriate that MPAs extend to the 3-mile state boundary for the north central coast study region?
- 7) List of species – Will a presentation on the “list of species likely to benefit from MPAs” be made to the RSG? Or, will a handout suffice?
- 8) How will the SAT evaluate proposals relative to goal 2, objective 2 for the protection of foraging, nursery and rearing areas? Specifically, how will seabirds, mammals, and sharks be considered?
- 9) Estimate the number of pinnipeds in the area and estimate the corresponding weight of fish taken.
- 10) Is it possible to disaggregate the 10-100 km category for home ranges into a finer set? More specifically, if we apply a set of intermediate size categories, how many species might be protected.

Note: Following the NCCRSR meeting, individual NCCRSR members requested that additional science questions be passed on to the SAT. These include:

- 11) The SAT guidelines suggest that marine assemblages may differ depending on the substrate type, even within the broad 'hard bottom' category. Specifically, they suggest there may be differences in assemblages in and over granitic and sedimentary substrate on the Central Coast. In this regard:
 - a) Does the same hold true for granitic, sedimentary, and Franciscan substrate on the north central coast?
 - b) If so, does the SAT know of some way to predict where these substrates occur given the Kvitek data or otherwise?
- 12) Can the SAT provide more information on what the composition of the assemblages is likely to be in and over these different substrate types? (so we know what we're trying to protect, if necessary)

E. NCCRSG received update on revisions to draft regional profile, and next steps

I-Team staff reported that revisions to the draft regional profile are nearing completion.

During the meeting, NCCRSG members also offered additional comments on the draft regional profile. Key comments included:

- NCCRSG members noted that map #7 in the regional profile shows catch data but has been labeled as “hot spots” in the table of contents. The I-Team agreed to make the revision in the next iteration of the document.
- More generally, NCCRSG members requested that the maps in the regional profile include appropriate metadata and definition of key terms so the information content of each map is clear.

The I-Team will convene an NCCRSG work group meeting to review the revisions to the profile. This meeting will take place in September. Work group volunteers include: Ed Tavasieff, Paul Pierce, Bill Bernard, Karen Reyna (or Irina Kogan), Bob Breen, Samantha Murray, Santi Roberts, and Fred Smith. The I-Team will provide a track changes version of the regional profile.

I-Team staff intends to have the next round of revisions completed by the October 16-17, 2007 NCCRSG meeting.

F. NCCRSG received an overview of DORIS (MPA decision support tool)

I-Team staff presented an overview of DORIS, a key decision support tool to assist NCCRSG members in MPA planning. NCCRSG members participated in detailed hands-on demonstrations of the tool. I-Team staff reminded NCCRSG members that the naming convention for proposed MPAs is described on page 14 of the DORIS User's Manual.

G. Update on NCCRSG membership

I-Team staff announced that two additional alternates had been appointed to the NCCRSG: Nick Tipon (representative of the Federated Indians of Graton Rancheria; alternate for Nelson Pinola), and Hedley Prince (representative of the Port of San Francisco; alternate for Peter Grenell). With these additions, membership of the NCCRSG is considered to be complete. An updated NCCRSG roster is attached as Attachment 5.

H. Public comment

The meeting included designated public comment periods on both day 1 and day 2. Several members of the public provided comments. Key comments included:

- The NCCRSG needs to be mindful of people with disabilities when considering issues of public access in designing MPAs.
- It is important to have buy-in from fishermen in the development of MPAs.
- Additional information on sharks needs to be incorporated into the regional profile.
- NCCRSG member Francesca Koe invited members of the NCCRSG to two events during the weekend of August 25-26, 2007.

I. Upcoming Tour Invitations

Jay Yokomizo and Tom Mattusch invited NCCRSG members on a boat tour of the Farallon Islands and other areas of the north central coast study region. The tour will also include some recreational fishing. The tour is scheduled for October 3, 2007 (all day). I-Team staff will assist by sending email invitations to the full NCCRSG.

J. Objectives for NCCRSG Meeting #2

The next NCCRSG meeting is scheduled for October 16-17, 2007 in Gualala, CA. Key objectives for the meeting are to:

- Consider additional SAT feedback and adopt provisional regional goals and objectives
- Building on interim work group activities, continue and complete development of initial suite of MPA proposals for review by the SAT and BRTF
- Receive SAT responses to science questions
- Continue joint fact-finding and development of the regional profile
- Present informational briefings (potential topics include: water quality, preliminary results of socioeconomic analyses)

III. Recap of Next Steps

A. Key next steps for NCCRSG members

1. Participate in work group activities to develop initial MPA recommendations. Work group sessions are scheduled for September 7 and 25, 2007. The meetings will take place in San Rafael at the Four Points Sheraton.
2. Regional profile work group (volunteers include Ed Tavasieff, Paul Pierce, Bill Bernard, Karen Reyna (or Irina Kogan), Bob Breen, Samantha Murray, Santi Roberts, and Fred Smith) to meet in September (date to be determined) to review revisions to draft regional profile.

B. Key next steps for I-Team staff

1. Prepare for interim work group activities:
 - I-Team will establish list-serves for each of the three work groups (note: this task is complete)

- Prepare for September 7 and 25, 2007 work group meetings; send meeting materials (e.g., agenda, summary of NCCRSG member core interests, summary of stated “areas of importance”, other guidance documents) to work group members in advance of the meetings.
- 2. Complete and distribute revised draft regional profile. Schedule regional profile work group meeting to review revisions to the draft regional profile.
- 3. Assist Jay Yokomizo and Tom Mattusch in planning a recreational fishing tour of the study region on October 3, 2007. Send email invitations to full NCCRSG and request RSVPs.
- 4. Prepare a policy memo that will address potential TAC issues. Provide the memo to the SAT at its November meeting and distribute a final memo to the NCCRSG at its December 11-12, 2007 meeting.

Attachments Referenced

1. List of I-Team staff and their roles in the MLPA Initiative
2. Provisional North Central Coast Regional Goals and Objectives, revised August 22, 2007 based on NCCRSG discussions at August 22-23, 2007 meeting. (Note: This version of the document identifies one question to be forwarded to the MLPA SAT for consideration during the SAT’s September 17, 2007 meeting).
3. NCCRSG stakeholder identified interests in the North Central Coast Study Region
4. Work group guidance for initial MPA proposal recommendations
5. Updated NCCRSG roster

California Marine Life Protection Act Initiative
List of MLPA Staff and their Roles in the MLPA Initiative
August 31, 2007

Brian Naslund – Captain: Enforcement coordinator for MLPA and marine issues. Provides direct input to stakeholder group and staff on enforcement concerns. [DFG]

Bryan Crouch – Biologist: Provides process and data support. [DFG]

Chamois Anderson – Media Relations: Assists DFG and the MLPA Initiative with media relations and communications. Develops media strategies and written materials for distribution. [MLPA Initiative]

Delbra Gibbs – Logistics Coordinator: Provides logistical support for all MLPA Initiative meetings by organizing meeting locations, materials, meals, etc. [MLPA Initiative]

Dennis Michniuk – Environmental Scientist: Provides process and data support, including GIS and scientific technical support. [DFG]

Elizabeth Pope-Smith – Biologist: Outreach and information specialist. Prepares materials for public and stakeholder group use. [DFG]

Eric Poncelet – Facilitator: Co-facilitates both regional stakeholder group and statewide interests group meetings, provides strategic planning and process design support, and helps to prepare meeting materials [MLPA Initiative].

Evan Fox – I-Team Coordinator and Assistant Planner. Coordinates activities of the MLPA Initiative team and provides data summary and analysis support. [MLPA Initiative]

Jared Kibele – GIS Data Specialist (Pacific States Marine Fisheries Commission): Provides technical and analytical support for geospatial data sets and processes. [DFG]

Jason Vasques – Associate Biologist: Science and monitoring oversight. Provides technical advice and assistance to Science Advisory Team process and stakeholder group [DFG]

John Ugoretz – Marine Habitat Conservation Program Manager: DFG coordinator and policy advisor for all marine protected area issues. Provides overall DFG support for MLPA and DFG representative to the MLPA Master Plan Science Advisory Team. [DFG]

Kathie Magnuson – Office Assistant: Provides administrative support for MLPA Initiative activities. [MLPA Initiative]

Ken Wiseman – Executive Director: Oversees the MLPA Initiative process, directs and manages staff, and reports to the MLPA Blue Ribbon Task Force. [MLPA Initiative]

Mary Gleason – Principal Planner: Provides data and scientific oversight and support. Provides primary support to the MLPA Master Plan Science Advisory Team and oversight of all geo-spatial (GIS) products. [MLPA Initiative]

Matt Merrifield – GIS Analyst: Provides GIS support for analysis and data development, and systems and database administration for decision support tools. [MLPA Initiative]

Melissa Miller-Henson – Program Manager: DFG employee on assignment to the MLPA Initiative. Provides project management, planning and communications oversight for the MLPA Initiative. [MLPA Initiative]

Nicole Douglas – Assistant Marine Planner: Provides planning support to the regional stakeholder group and science advisory team. Assists with data summary and analysis. [MLPA Initiative]

Paulo Serpa – Research Analyst II: GIS oversight, coordination and support. Provides technical and analytical support for geospatial data sets and processes. [DFG]

Rebecca Studebaker – Biologist: Provides support in developing outreach, scientific and other materials. [DFG]

Scott McCreary – Facilitator: Co-facilitates both regional stakeholder group and statewide interest group meetings, provides strategic planning and process design support, and helps to prepare meeting materials. [MLPA Initiative]

Steve Martarano – Supervising Information Officer: Manages MLPA media relations, disseminates information to the media, responds to inquiries. [DFG]

Susan Ashcraft – Senior Biologist Supervisor: Regional coordinator for north central coast process and MPA project supervisor. Primary DFG seat on regional stakeholder group planning process. [DFG]

Will McClintock – Database Manager: Maintains GIS information stored in the MLPA geodatabase and provides support in the creation of data management and decision support tools. [MLPA Initiative]

**California MLPA North Central Coast Regional Stakeholder Group
Revised Provisional Regional Goals and Objectives for
Review and Adoption by the NCCRSB at its October, 2007 Meeting
Revised August 22, 2007**

The text below reflects revisions made at the NCCRSB's August 22, 2007 meeting. At the meeting, the NCCRSB unanimously agreed to use these goals and objectives as provisionally adopted and forward a final question to the SAT.

Introduction

The members of the North Central Coast Regional Stakeholder Group (NCCRSB) agree that regional goals, objectives, and design and implementation considerations are all very important in the development of an effective system of marine protected areas (MPAs) that have stakeholder support. Regional goals are statements of what the regional MPAs are ultimately trying to achieve (Pomeroy et al. 2004)¹. The regional goals are largely taken directly from the Marine Life Protection Act (MLPA) itself. Regional objectives are more specific measurable statements of what MPAs may accomplish to attain a related goal (Pomeroy et al. 2004). The NCCRSB recognizes that MPAs are one among a suite of tools to manage marine resources.

Design considerations are additional factors that may help fulfill provisions of the MLPA related to facilitating enforcement, encouraging public involvement, and incorporating socio-economic considerations, while meeting the act's goals and guidelines. Design considerations will be applied as the location, category (reserve, park or conservation area), size and other characteristics of potential MPAs are being developed. Design considerations are cross cutting (they apply to all MPAs) and are not necessarily measurable. MPA alternatives developed by the NCCRSB should include analysis of how the proposal addresses both regional goals and objectives and design guidelines.²

¹ Pomeroy R.S., J.E. Parks, and L.M. Watson. 2004. How is your MPA doing? A Guidebook of Natural and Social Indicators for Evaluating Marine Protected Area Management Effectiveness. IUCN, Gland, Switzerland and Cambridge, UK. xvi + 216 p. (Accessed 17 January 2004).
<http://effectivempa.noaa.gov/guidebook/guidebook.html>.

² John Kirlin Memo, August 22, 2005.

Provisional Regional Objectives

Goal 1. To protect the natural diversity and abundance³ of marine life, and the structure, function, and integrity of marine ecosystems.

1. Protect species diversity and abundance consistent with natural fluctuations by including and maintaining areas of high native species diversity and representative habitats. ~~Protect/Include areas of high species diversity and maintain species diversity and abundance, consistent with natural fluctuations, of populations in representative habitats. [Question for SAT: does the SAT have comments on the respective measurability of these alternate terms (objectives 1 and 2)?]~~
2. ~~Protect/Include areas with diverse habitat types in close proximity to each other. [Propose moving to a design guideline as this is about efficiency of design not adaptive management]~~
3. Protect natural size and age structure and genetic diversity of populations in representative habitats.
4. Protect natural trophic structure and food webs in representative habitats.
5. Protect ecosystem structure, function, integrity and ecological processes to facilitate recovery of natural communities from disturbances both natural and human induced.

Goal 2. To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.

1. Help protect ~~and/~~ or rebuild populations of rare, threatened, endangered, depressed, depleted, or overfished species, where identified, and the habitats and ecosystem functions upon which they rely.⁴
2. Sustain or increase ~~reproductive capacity~~ reproduction by ~~of~~ species most likely to benefit from MPAs through retention of large, mature individuals⁵, ~~protection of larval source areas, and/or~~

³ *Natural diversity* is the species richness of a community or area when protected from, or not subjected to, human-induced change (drawn from Allaby 1998 and Kelleher 1992). *Natural abundance* is the total number of individuals in a population protected from, or not subjected to, human-induced change (adapted from Department 2004 and Kelleher 1992).

⁴ The terms "rare," "threatened," "endangered," "depressed," "depleted," and "overfished" referenced here are designations in state and federal legislation, regulations, and fishery management plans (FMPs)—e.g., California Fish and Game Code, Marine Mammal Protection Act, Magnuson Stevens Fishery Conservation and Management Act (MSA), California Nearshore FMP, Federal Groundfish FMP). Rare, *endangered*, and *threatened* are designations under the California Endangered Species Act. *Depleted* is a designation under the federal Marine Mammal Protection Act. *Depressed* means the condition of a marine fishery that exhibits declining fish population abundance levels below those consistent with maximum sustainable yield (California Fish and Game Code, Section 90.7). *Overfished* means a population that does not produce maximum sustainable yield on a continuing basis (MSA) and in the California Nearshore FMP and federal Groundfish FMP also means a population that falls below the threshold of 30% or 25%, successively, of the estimated unfished biomass

3. Sustain or increase reproduction by species most likely to benefit from MPAs through protection of breeding, foraging, rearing or nursery areas.

3.4. Protect selected species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of state marine conservation areas and state marine parks.

Goal 3. To improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbances, and to manage these uses in a manner consistent with protecting biodiversity.

1. Ensure some MPAs are close to population centers, coastal access points, and/or research and education institutions and include areas of educational, ~~and non-consumptive~~ recreational, and cultural use.
2. ~~Protect Sustain~~ or enhance cultural, ~~and~~ recreational, ~~and educational~~ experiences, ~~including collecting and recreational fishing,~~ by ... ~~[Comment: Science team, craft something measurable—including minimal human disturbances~~ improving catch rates, high scenic value, lower congestion, or increased size or abundance of species.
3. To enhance the likelihood of scientifically valid studies, replicate appropriate MPA designations, habitats or control areas (including areas open to fishing) to the extent possible.
4. Develop collaborative scientific monitoring and research projects evaluating MPAs that link with fisheries management information needs, classroom science curricula, volunteer dive programs, and fishermen, and identify participants.

Goal 4. To protect marine natural heritage, including protection of representative and unique marine life habitats in north central California waters, for their intrinsic value.

1. Include within MPAs the following habitat types: estuaries and ~~other habitats identified by the MLPA science advisory team as unique to the north central coast study region. [Comment: the SAT will discuss this at its next meeting.]~~ the intertidal and subtidal waters around the Farallon Islands. [are the deep water benthic and water column habitats unique as well and worthy of inclusion?]
2. Include, and replicate to the extent possible [practicable], representatives of all marine habitats identified in the MLPA or the *California MLPA Master Plan for Marine Protected Areas* across a range of depths.

⁵ An increase in lifetime egg production will be an important quantitative measure of an improvement of reproduction.

Goal 5. To ensure that north central California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.

1. Minimize negative socio-economic impacts and optimize positive socio-economic impacts for all users, to the extent possible, and if consistent with the Marine Life Protection Act and its goals and guidelines.
2. For all MPAs in the region involve interested parties to [help](#); develop objectives, a long-term monitoring plan that includes standardized biological and socioeconomic monitoring protocols, and a strategy for MPA evaluation, and ensure that each MPA objective is linked to one or more regional objectives.
3. To the extent possible, effectively use scientific guidelines in the *California MLPA Master Plan for Marine Protected Areas*.

Goal 6. To ensure that the north central coast's MPAs are designed and managed, to the extent possible, as a component of a statewide network.

1. Develop a process to inform adaptive management that includes stakeholder involvement for regional review and evaluation of management effectiveness to determine if regional MPAs are an effective component of a statewide network.
2. Develop a mechanism to coordinate with future MLPA regional stakeholder groups in other regions to ensure that the statewide MPA network meets the goals of the MLPA.

Design Considerations

The NCCRSG recognizes several issues that should be considered in the design and evaluation of marine protected areas. Like the “Considerations in the Design of MPAs” that appears in the *California MLPA Master Plan for Marine Protected Areas*, these considerations may apply to all MPAs and MPA proposals regardless of the specific goals and objectives for that MPA. The design considerations below will be incorporated with the provisional goals and objectives and provided to the MLPA Master Plan Science Advisory Team, MLPA Blue Ribbon Task Force, and California Fish and Game Commission. Design considerations with long-term monitoring components will be used in developing monitoring plans and to inform the adaptive management process.

1. In evaluating the siting of MPAs, considerations shall include the needs and interests of all users.
2. Recognize relevant portions of existing state and federal fishery management areas and regulations, to the extent possible, when designing new MPAs or modifying existing ones.
3. To the extent possible, site MPAs to prevent fishing effort shifts that would result in serial depletion.
4. When crafting MPA proposals, include considerations for design found in the Nearshore Fishery Management Plan⁶ and the draft Abalone Recovery and Management Plan.⁷
5. In developing MPA proposals, consider how existing state and federal programs address the goals and objectives of the MLPA and the north central coast region as well as how these proposals may coordinate with other programs.

⁶Design considerations from Nearshore Fishery Management Plan:

1. Restrict take in any MPA [intended to meet the NFMP goals] so that the directed fishing or significant bycatch of the 19 NFMP species is prohibited.
2. Include some areas that have been productive fishing grounds for the 19 NFMP species in the past but are no longer heavily used by the fishery.
3. Include some areas known to enhance distribution or retain larvae of NFMP species
4. Consist of an area large enough to address biological characteristics such as movement patterns and home range. There is an expectation that some portion of NFMP stocks will spend the majority of their life cycle within the boundaries of the MPA.
5. Consist of areas that replicate various habitat types within each region including areas that exhibit representative productivity.

⁷Design considerations from Abalone Recovery and Management Plan:

Proposed MPA sites should satisfy at least four of the following criteria.

1. Include within MPAs suitable rocky habitat containing abundant kelp and/or foliose algae
2. Insure presence of sufficient populations to facilitate reproduction.
3. Include within MPAs suitable nursery areas, in particular crustose coralline rock habitats in shallow waters that include microhabitats of moveable rock, rock crevices, urchin spine canopy, and kelp holdfasts.
4. Include within MPAs the protected lee of major headlands that may act as collection points for water and larvae.
5. Include MPAs large enough to include large numbers of abalone and for research regarding population dynamics.
6. Include MPAs that are accessible to researchers, enforcement personnel, and others with a legitimate interest in resource protection.

6. To the extent possible, site MPAs adjacent to terrestrial federal, state, county, or city parks, marine laboratories, or other "eyes on the water" to facilitate management, enforcement, and monitoring.
7. To the extent possible, site MPAs to facilitate use of volunteers to assist in monitoring and management.
8. To the extent possible, site MPAs to take advantage of existing long-term monitoring studies.
9. To the extent possible, design MPA boundaries that facilitate ease of public recognition and ease of enforcement.
10. Consider existing public coastal access points when designing MPAs.
11. MPA design should consider the benefits and drawbacks of siting MPAs near to or remote from public access.
12. Consider the potential impacts of climate change, community alteration, and distributional shifts in marine species when designing MPAs.
13. To the extent possible, preserve the diversity of recreational, educational, commercial, and cultural uses.

Implementation Considerations

Implementation considerations arise after the design of MPAs as the California Department of Fish and Game and any other responsible agencies implement decisions of the California Fish and Game Commission and, if appropriate, the California Park and Recreation Commission, with funding from the Legislature or other sources.

1. Improve public outreach related to MPAs through the use of docents, improved signage, and production of an educational brochure for north central coast MPAs.
2. When appropriate, phase the implementation of north central coast MPAs to ensure their effective management, monitoring, and enforcement.
3. Ensure adequate funding for monitoring, management, and enforcement is available for implementing new MPAs.
4. Develop regional management and enforcement measures, including cooperative enforcement agreements, adaptive management, and jurisdictional maps, which can be effectively used, adopted statewide, and periodically reviewed.
5. Incorporate volunteer monitoring and/or cooperative research, where appropriate.

California MLPA North Central Coast Regional Stakeholder Group Stakeholder Identified Interests in the North Central Coast Study Region *Revised August 30, 2007*

During the first day of the August 22-23, 2007 meeting of the MLPA North Central Coast Regional Stakeholder Group (NCCRSG), stakeholders had the opportunity to share key interests in the study region with the broader group. This document summarizes the information shared by each stakeholder during plenary session.

This summary is not intended to reflect a verbatim account of what each stakeholder said, but rather captures general themes and interests expressed. This summary may be useful in considering the broader context for how marine protected areas (MPAs) in the north central coast should be designed and to identify opportunities for cross-interest collaboration.

During this activity, stakeholder group members were asked to consider the question:

"What areas within the study region are important to you, and what do you want other NCCRSG members to know about them?"

Below are the summarized responses for each primary NCCRSG representative present (or alternative, if the primary was unavailable). We recognize that this list of interests is only partial. The I-Team will continue to invite NCCRSG members to express their interests throughout the north central coast process.

Dirk Ammerman: Representing the Sea Urchin fishery and divers. Wants MPAs to benefit not just this fishery but the whole ocean. Especially concerned about the stocks at the Farallon Islands, Point Arena, and the two sub-regions to the south.

Bill Bernard: Represents the abalone fishery, which is now in recovery status. Important areas include: Robison Point, Horseshoe Point, Tomales Point, Gualala Point, Salt Point, and Point Arena, among others. Index points are also important – Arena Cove, Salt Point, Ocean Cove, Timber Cove, Fort Ross State Park. Defacto depth reserve is the breath hold length.

Bob Breen: Advocating for invertebrates and macroalgae. Subregion 5 has been his focus. Moss Beach is very diverse for macroalgae. Invertebrate collection for consumption needs to be considered.

Christopher Chin: Represents a conservationist viewpoint. Wants to have healthy, productive oceans for future generations. Wants to see species level return to where they were before the impact of modern industrialism. Promotes a long-term ecosystem perspective

Josh Churchman: Representing the nearshore fishery. Is interested in sustaining small coastal communities, their fishermen, and their heritage. Emphasized the importance of transparent sharing of objective technical information and analyses.

Henry Fastenau: Primary interest is subtidal diving research sites. Has worked in certain areas for over 20 years. Would like to see research sites that are accessible by beach or by

boat without having to spend several hours to get there. Secondary interest is non-consumptive recreation.

Karen Garrison: Wants to protect the whole range of species and habitats represented; wants to protect heritage sites for future generations; wants respectful process and good policy results based on sound scientific information; wants mutual gains to be achieved; and wants a design that can be improved along the way.

Peter Grenell: Three areas of importance: (1) improving the whole process so that the north central coast study region is adequately taken care of while establishing an improved model for the rest of the MLPA effort; (2) improving monitoring and assessment; (3) integrating MPAs appropriately with other existing management tools.

Ken Jones: Representing pier and nearshore anglers. Wants to ensure that some areas are kept open for this fishing because it provides a low-cost activity for families and kids, especially in rural areas.

Francesca Koe: Representing diving (free and scuba). Specific areas of interest are Subregion 1 and 2, as well as Farallon Islands. Believes that education, acquired through diving experiences and otherwise, is key to achieving good stewardship of resources.

Irina Kogan: Representing Gulf of the Farallons National Marine Sanctuary. Main interests are in maintaining healthy populations with an ecosystem focus. Wants biological hotspots to be considered and best available science to be used.

Michael McHenry: Representing the wetfish community. Expressed an interest in the economic sustainability of the wetfish fishery. He also expressed some personal conservation-based interests. Important areas include the Farallon Islands.

Craig Merrilees: Representing commercial fishing folks and conservation interests. Salmon, crab, and rockfish fisheries are important, as well as small coastal communities. Monitoring and enforcement are a key to the success of the MLPA.

Kellyx Nelson: Doesn't have interest in a particular outcome, but rather in an open, inclusive policy process resulting in a win-win scenario.

Don Neubacher: Representing Golden Gate National Recreational Area and Point Reyes National Seashore. Wants to ensure that the final network system is sufficient to benefit the full suite of species and habitats, especially unique ones like Tomales Bay and Drake's Estero.

Nelson Pinola: Representing Native American tribes including Miwok, Southern Central Pomo, and others. Looking to preserve cultural resources including gathering of traditional food and materials for religious/ceremonial purposes; the use of areas for religious/ceremonial purposes. Onshore and nearshore access is important.

Santi Roberts: Represents Oceana, an international marine conservation organization. Wants to see ecosystem-level protection and is interested in linking the MLPA process with the entire west coast ecosystem. Monitoring and adaptive management are very important.

Ben Sleeter: Representing the Coastside Fishing Club. Areas of importance: Duxbury Reef, Point Reyes, Farallon Islands, and areas close to ports. Ensuring salmon and Dungeness crab fisheries is very important. Good conservation based on sound science in the nearshore marine environment.

Fred Smith: Many areas are connected and therefore important. Wants to see an overall abundance and diversity of marine wildlife, and a really balanced plan that works.

Craig Swolgaard: Representing California State Parks, of which there are 16 state parks in this study region. Interested in preserving biodiversity and providing recreational opportunities. Wants an effective system of MPAs along the coast. Public access to parks is a key interest.

Ed Tavasieff: Representing hook and line halibut fishermen. He is interested in several areas, such as the Pescadero area, Bonita Cove, South Cove, Duxbury, and others. Since the boats are small, fishermen aren't able to traverse long distances and are very weather-dependent.

Cassidy Teufel: Representing California Coastal Commission. Wants to preserve existing coastal access points; wants to enhance marine productivity for intrinsic value and for future users' enjoyment.

Sean White: Representing recreational fishing, particularly kayak fishing, in addition to fishery scientists. Wants to protect hotspots similar to those used by recreational fishers, but also less used remote areas.

Jay Yokomizo: Sportfishing anglers and charter boats are most interested in areas nearshore, Duxbury reef, Farallon Islands, as well as areas accessible during bad weather, in addition to rocky structures. Need to have access to sandy areas certain parts of the year, and need to preserve some areas for Dungeness crab and Sanddab.

Work Group Guidance for Initial MPA Proposal Recommendations

California Marine Life Protection Act Initiative

North Central Coast Study Region

Work group charge

Three cross-interest work groups will be convened with the charge of developing initial recommendations for marine protected area (MPA) proposals for the MLPA North Central Coast Study Region for presentation and discussion at the October MLPA North Central Coast Regional Stakeholder Group (NCCRS) meeting. These initial recommendations should be as complete as possible given the timeframe for developing them; they should identify areas where the group agrees an MPA is appropriate (and proposed designation and regulations if possible). The work groups should also identify areas of disagreement within the group. In these cases, work groups should suggest options for consideration by the full NCCRS.

Staff do not expect these initial recommendations to be fully formed proposals, but they should follow the general format of the MPA proposal template. Staff acknowledge that other groups (single or multiple interest) may also be developing MPA proposals simultaneously and we encourage those ideas to be brought into the work group process. It should be noted that during this timeframe (August-October), I-Team staff support will be focused on these work groups.

Proposals should be developed based on the best information available, acknowledging that not all information that is forthcoming is yet available. Key information sources include the draft *Regional Profile of the North Central Coast Study Region (Alder Creek near Point Arena to Pigeon Point, California)* and associated maps, GIS data layers available on the Internet map service website and in the MPA decision support tool (Doris, available at www.marinemap.org/mlpa), information gathered during joint fact-finding activities, and stakeholder personal knowledge.

Work group structure

NCCRS members (primaries and alternates) are asked to participate in one of three work groups. Composition of work groups is pre-assigned to ensure a broad balance across interests and expertise. This approach encouraging cross-interest dialogue and full participation by NCCRS members responds to lessons learned from the central coast process. Work group composition is as follows:

Emerald Group	Jade Group	Turquoise Group
Bob Wilson	Ben Sleeter	Ben Becker
Bud James	Cassidy Teufel	Bill Bernard
Craig Swolgaard	Christopher Chin	Bob Breen
Hedley Prince	Craig Merrilees	Dave Schaub
Henry Fastenau	Dave Yarger	Ed Tavasieff
Irina Kogan	Dirk Ammerman	Ellen Faurot-Daniels
Jay Yokomizo	Don Neubacher	Francesca Koe
Josh Churchman	Fred Smith	John Mellor
Kellyx Nelson	Jim Hobbs	Nelson Pinola
Ken Jones	Karen Garrison	Patricia King
Michael McHenry	Karen Reyna	Richard Charter
Neil Desai	Lance Morgan	Santi Roberts
Paul Pierce	Michael Corden	Sean White
Phil Sanders	Nick Tipon	Tom Baty
Rick Johnson	Peter Grenell	Tom Estes
Samantha Murray	Russell Herring	Tom Mattusch

Schedule, timing, and organization of work group activities

Each work group will have the opportunity to meet twice with staff support between the August 22-23 and October 16-17 NCCRSG meetings. Work group meeting dates with staff support are September 7 and 25 (locations to be determined). Participation by teleconference is a fallback possibility, but in-person participation is strongly preferred. Each work group meeting will be supported by MLPA Initiative and DFG staff (i.e., planning, GIS, facilitation). Outside of the staff supported meetings, work groups are encouraged to meet by phone or in person to complete their task.

Staff has provided a template to capture critical information needed in each MPA recommendation (e.g., boundaries, designation, regulations, MPA-specific regulations, etc.). Stakeholders will strive to contribute input from their respective constituencies and will work together toward identifying, at the minimum, areas of “convergence” and “divergence” within their work groups. Sharing among work groups is encouraged.

October 16-17, 2007 NCCRSG meeting

Work groups will each present their initial recommendations at the beginning of the October meeting. NCCRSG members will provide comment to inform revisions. Further revisions to the initial recommendations will also be informed by presentations on the latest information available (e.g., socioeconomic data). Work groups will revise their recommendations into first draft proposals at the October meeting. First round proposals will be “packaged” to be consistent in format.

Staff intend to forward these three draft proposals to the MLPA Master Plan Science Advisory Team (SAT) and MLPA Blue Ribbon Task Force (BRTF) for initial review and evaluation. As such, we ask that initial proposal recommendations be completed by the end of the October meeting.

At the end of the October meeting, we will reassess how to move forward with MPA proposal development. Next steps may include continuing with the work groups or forming new work groups. Additional MPA proposal development will take place in both work group and plenary settings.

Post-October meeting next steps

Preliminary evaluations based on the science guidelines will be provided by staff and the SAT North Central Coast Evaluation Sub-team to the full SAT for review at its November 13, 2007 meeting and to the BRTF at its November 29-30 meeting. SAT and BRTF feedback and guidance will be provided to NCCRSG members to inform ongoing MPA proposal development.

Contact information for support during MPA planning

- General planning support: Mary Gleason (mgleason@tnc.org, 831-333-2049), Evan Fox (evanwfox@gmail.com, 650-387-9306), or Nicole Douglas (nicoledouglas.mlpa@yahoo.com, 831-359-3773)
- Spatial data layers (GIS) or analysis: Paulo Serpa (pserpa@dfg.ca.gov, 831-649-7143)
- Internet map service (IMS) site or Doris (MPA decision support tool): Will McClintock (mcclintock@msi.ucsb.edu, 805-893-8782)
- Meeting logistics: Delbra Gibbs (dga_mlpa@sbcglobe.net, 916.424.8897)

California Marine Life Protection Act Initiative
Members of the North Central Coast Regional Stakeholder Group
August 25, 2007

Dirk Ammerman, Owner, Pacific Rim Seafoods

Tom Baty, independent sportfisher and conservationist (alternate for Craig Merrilees)

Ben Becker, Pacific Coast Science and Learning Center Director, Point Reyes National Seashore
(alternate for Don Neubacher)

Bill Bernard, Member, Abalone Advisory Group

Bob Breen, educator

Richard Charter, Associate, Defenders of Wildlife Marine Program (alternate for Karen Garrison)

Christopher Chin, Executive Director, Center for Oceanic Awareness, Research and Education
(alternate for Samantha Murray)

Josh Churchman, commercial fisherman

Michael Corden, Member, United Pier and Shore Anglers Association (alternate for Ken Jones)

Neal Desai, National Parks Conservation Association (alternate for Frederick Smith)

Tom Estes, commercial fisherman (alternate for Michael McHenry)

Ellen Faurot-Daniels, Oil Spill Supervisor, California Coastal Commission

Dr. Henry C. Fastenau, Diving and Boating Safety Officer, Bodega Marine Laboratory, UC Davis

Karen Garrison, Co-Director, Natural Resources Defense Council Ocean Program

Peter Grenell, General Manager, San Mateo County Harbor District

Russ Herring, Secretary/Treasurer, Southern Pacific Sinkers Fish Club (alternate for Bill Bernard)

James Hobbs, recreational kayaker (alternate for Sean White)

Bud James, President, Dive Club of Silicon Valley (alternate for Francesca Koe)

Rick Johnson, docent and teacher (alternate for Bob Breen)

Ken Jones, President, United Pier and Shore Anglers of California

Francesca Koe, VP and Managing Director, Underground Ads

Patricia King, ocean conservationist and docent (alternate for Kellyx Nelson)

Irina Kogan, Resource Protection Specialist, Gulf of the Farallones National Marine Sanctuary

Tom Mattusch, Owner, Hulicat Sportfishing, (alternate for Jay Yokomizo)

Michael McHenry, commercial fisherman

John Mellor, commercial fisherman (alternate for Josh Churchman)

Craig Merrilees, educator and recreational fisherman

Dr. Lance E. Morgan, Chief Scientist, Marine Conservation Biology Institute (alternate for Dr. Henry Fastenau)

Samantha Murray, Ecosystem Program Manager, The Ocean Conservancy

Kellyx Nelson, Executive Director, San Mateo County Resource Conservation District

Don Neubacher, Point Reyes National Seashore Superintendent, National Park Service

Paul Pierce, Coastside Fishing Club (alternate for Ben Sleeter)

Nelson Pinola, Chairman, Manchester-Point Arena Band of Pomo Indians

Hedley Prince, Port of San Francisco (alternate for Peter Grenell)

Karen Reyna, Resource Protection Specialist, Gulf of the Farallones National Marine Sanctuary
(alternate for Irina Kogan)

Santi Roberts, California Project Manager, Oceana

Phil Sanders, Member, California Abalone Association (alternate for Dirk Ammerman)

Dave Schaub, Natural Resources Program Manager, California Department of Parks and Recreation
(alternate for Craig Swolgaard)

Ben Sleeter, Political Advocate/Scientist, Coastside Fishing Club

Craig Swolgaard, Natural Resources Program Manager, California Department of Parks and
Recreation

Frederick Smith, Executive Director, Environmental Action Committee of West Marin

Ed Tavasieff, Owner, California Fresh Fish and Secretary, Pacific Fisheries Enhancement Foundation

Cassidy Teufel, Coastal Program Analyst, California Coastal Commission (alternate for Ellen Faurot-
Daniels)

Nick Tipon, Member, Federated Indians of Graton Rancheria (alternate for Nelson Pinola)

Sean K. White, Owner, Great White Kayak Company and Fisheries Biologist, Sonoma County Water
Agency

Robert J. Wilson, Policy Liaison, The Marine Mammal Center (alternate for Santi Roberts)

Dave Yarger, Past President, Fisherman's Marketing Association of Bodega Bay (alternate for Ed
Tavasieff)

Jay Yokomizo, Captain, Emeryville Sportfishing