

Master List of Brainstormed Regional Objectives Cross-referenced to Provisional Objectives

At the end of each brainstormed objective is the provisional objective or objectives to which it was linked (e.g. 1.1 means goal 1, provisional objective 1). If the brainstormed objective was not used, there is a brief explanation, which is underlined>. This document contains a complete list of regional objectives brainstormed by CCRSG members during the July 8, 2005 work session in Morro Bay or submitted in writing afterward.

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

- a. Protect existing areas of high species diversity. 1.1
- b. Maintain natural diversity of marine communities at desired reference sites (consistent with natural fluctuations). 1.1, 1.3, 3.2
- c. Establish and protect reference areas. 3.2
- d. Identify habitats and species native and unique to a specific area and measure the extent and condition of these areas (identify habitats, conditions—e.g., non-fishing impacts such as pollution effects on water quality—and species of special concern) 2.1, 4.1, 4.2, 5.2
- e. Protect rare endemic listed or other populations of concern and the habitats and ecosystem functions they rely on (Goal 2 as well?). 1.1, 1.2, 2.1, 2.2, 2.3, 2.6, 2.8
- f. Maintain natural size, age structure, and genetic diversity of populations across the network component. 1.3
- g. Minimize socio-economic impact to harbors, communities, fisheries, and the State's food supply. 2.4
- h. Allow for use of marine resources consistent with the goals of each MPA. 2.3, 2.4, 3.1, 3.2, 3.3

Added following the brainstorming work session:

- i. Protect habitat mosaics (areas with diverse habitat types located in close proximity to each other ^ such as mix of kelp and sand, or area that extends from nearshore to canyon depths) [cross reference with Goal #4] 1.2
- j. Protect representative food webs (whole trophic linkages since every species plays a role in „structure, function and integrity% of system) in marine reserves. 1.4
- k. Sustain gene pool large enough to produce healthy populations and avoid inbreeding and loss of geographic range (protect metapopulations and populations throughout their range). 1.3
- l. Protect areas that serve as larval retention areas in MPAs to help enhance/maintain overall diversity and abundance. [cross reference with Goal 2]. 4.1
- m. The natural diversity of marine life populations are restored to or maintained at desired reference points as recommended by the SAT. 1.1, 1.3, 3.2
- n. The function and habitat for marine ecosystems required for focal species survival is restored or maintained and protected. 1.1, 1.2, 1.3, 1.4, 1.5, 2.3

- o. To increase abundance, reproductive capacity and average sizes of focal populations within marine reserves. 1.3, 2.2
- p. Evaluate existing MPAs, closed areas (to harvest) and resource regulations to determine if existing closures satisfy the goal to protect biodiversity and ecosystems (this is part of the process)
 - Specifically evaluate in what ways the Monterey Bay National Marine Sanctuary Marine Protected Area meets the ecosystem integrity goal through its Water Quality, Research and Education programs and its protections against disturbing the sea floor.
 - Is there a need for additional protection? If no: New MPAs are not needed.
 - If yes:
- q. Determine how existing MPAs, closed areas (to harvest), and/or resource regulations may be modified (size, shape and number) to achieve the goal. (this is part of the process)
- r. Evaluate water quality in the existing and/or proposed MPA site. Is a water quality plan needed? Identify specific water quality improvement BMPs; measure for results four times per year. FG Code 2851 (c) 5.2, but also part of the process
 - Or should another site be considered?
- s. If new MPAs are needed to meet the goals of this Act, they should be designed and sited to maximize biodiversity while minimizing the socio-economic impact to harbor communities, fisheries and the State's food supply. 2.4
 - Performance goal: Minimize loss to fishing, e.g. no more than 2 percent economic loss to fisheries or fishing opportunities, within the Central Coast study region.
 - Base decision-making on accurate, peer-reviewed, and current socio-economic evaluation that meets the national standard for a region-wide socio-economic evaluation.
 - Prioritize and phase in new MPAs. FG Code 2857 (e)
- t. Minimize consequences of displaced fishing effort (FGC 2862 – Adverse Impacts in Analysis of Projects) 2.4, 2.7
 - Performance goal: Monitor both biological parameters and fishing efforts inside and a large area outside the MPA every two years
 - Interview fishermen to determine how MPA has affected their business or recreation (where did their efforts go?)
 - Document resource take in the area neighboring the MPA.
- u. Evaluate and quantify the forage effects of sea lions, sea otters and other primary predators and their effects on biodiversity, and abundance of identified species, including in the species juvenile stage. FG Code 2857 (c) (4) 1.4, may be part of monitoring objective 5.1
 - Do any marine mammals exceed their likely historic abundance?
 - Study the diet of large marine mammals and calculate their impact on the ecosystem.
 - Design, site, and create objectives for MPAs accordingly.

- v. Similar types of marine habitats and communities shall be replicated, to the extent possible, in more than one Marine Life Reserve in each biogeographical region (of which the CCR is a subset). FG Code 2857 (c) (3). 3.2
- w. Evaluate coastal development impacts (not directly related to MLPA)
 - Housing, industry, agriculture
 - Identify mitigating factors to reduce or contain impacts
- x. Establish a budget for above efforts. Part of process, related to optional objective in goal 5

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

- a. Protect rare endemic listed or other populations of concern and the habitats and ecosystem functions they rely on (Goal 1 as well?) 1.1, 1.2, 1.3, primarily 2.1
- b. Site MPAs to prevent fishing effort shifts to relatively unfished areas. 2.7
- c. Prevent alien and invasive species and genotypes from being established. (not directly related to MLPA)
- d. Protect from new pollution sources. (not directly related to MLPA, but see 5.2
- e. Develop MPAs sited to address ecosystem and species threats. 1.5, 2.1
- f. Help facilitate rebuilding and sustaining of harvested populations, where identified. 2.1, 2.2, 2.3
- g. Evaluate water quality in existing and proposed MPA sites. 5.2
- h. Design MPAs with adequate size and spacing to enhance reproductive capacity and reproductive success of species of interest. 2.2
- i. Buffer vulnerability to natural perturbations that make populations both more susceptible to environmental perturbations and slow to recover (this objective refers to the “resiliency” of populations). 1.5
- j. Protect populations of focal species for extractive or non-extractive use from harvest at sites and/or life history stages where they become vulnerable. 1.1, 1.2, 1.3, 2.1, 2.3
- k. In areas where fisheries exist that do not benefit from marine reserves (e.g., salmon), use marine conservation areas (SMCA) to allow protection of threatened species and habitat without preventing harvest of non-focal species as long as this is consistent with the goals of the MPA. 2.3
- l. 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 (NFMP objective) 2.6
- m. 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 (NFMP objective) 2.6
- n. Include some areas known to enhance distribution or retain larvae of NFMP species (NFMP objective) 2.6
- o. 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 (NFMP objective) 2.6

- p. Consist of areas that replicate various habitat types within each region including areas that exhibit representative productivity (NFMP objective) 2.6

Added following the brainstorming work session:

- q. Design MPAs to enhance reproductive capacity and reproductive success of species of interest (ensure adequate size and spacing of MPAs, make sure you protect larger, older, females and full size range) 1] Rockfish of different ages, for example, spawn at different times, so are more likely to catch a window of good conditions if the population includes a full size range. 2.2
- r. Provide buffer against environmental fluctuations [NB: this may be a given for any network of MPAs, unless one is designing to buffer a specific fluctuation whose direction and magnitude is known] 1.5
- s. Provide buffer or insurance against reductions or depletions of marine life populations caused by mismanagement outside of MPAs, by accidents like oil spills or by natural environmental fluctuations. [cross reference with Goal #1] 1.5
- t. Include as part of the network MPAs that prohibit take of depleted species, sited in areas that were historically productive for those species. 2.1
- u. Protect areas that serve as larval sources and sinks in MPAs to help sustain marine life populations. [cross reference with Goal 2] 2.2, 4.1
- v. Site MPAs “downstream” from terrestrial protected areas. 5.2
- w. Site MPAs in areas contiguous with, or downstream of, terrestrial areas with water quality “best management practices” for control of point and non-point water pollution. 5.2
- x. Prohibit oil and mineral extraction, pollutant discharges and seabed alterations (if not otherwise prohibited). (not directly related to MLPA)
- y. Prohibit personal watercraft, sonar testing sound sources, underwater explosives use, and other loud and potentially damaging sound sources within each MPA, and within 1 nautical mile of MPA boundaries. (not directly related to MLPA)
- z. Prohibit outfall or intake pipes that discharge to, or draw waters from, an MPA or from within 1 nautical mile of an MPA boundary. (not directly related to MLPA)
- aa. Develop conservation, protection and recovery goals that are not in conflict with the state or federal Endangered Species Acts, or the federal Marine Mammal Protection Act. (Note: similar to but more specific than 5b). 2.1
- bb. Protect and conserve marine life populations for its’ intrinsic and economic value by rebuilding depleted populations. 2.1
- cc. Identify habitats and species native and unique to a specific area and measure the extent and condition of these resources 2.1, 4.1, 4.2, 5.2
- Identify habitats, conditions (e.g. non-fishing impacts such as pollution effects on water quality) and species of special concern
- Examples:

- Sea otters
 - Coral & sponges
 - Retain and revitalize existing Pismo clam MPAs
- dd. Evaluate existing state and federal fishery management and water quality regulations for their effectiveness in meeting this conservation goal. Integrate existing resource management with the objectives of this conservation goal 5.2 (this is part of the process)
- Determine if an MPA is the appropriate / best tool to conserve species identified
- ee. Evaluate existing MPAs, closed areas (to harvest)(including federal and state closures) and resource regulations to determine if existing closures coupled with existing management regulations satisfy the goal to sustain, conserve and protect the specified marine life. (this is part of the process)
- Specifically evaluate in what ways the Monterey Bay National Marine Sanctuary Marine Protected Area helps meet this conservation goal through its Water Quality, Research and Education programs and its protections against disturbing the sea floor.
 - Is there a need for additional protection? If no: New MPAs are not needed.
 - If yes:
- ff. Determine how existing MPAs, closed areas (to harvest), and/or resource regulations may be modified (size, shape and number) to achieve the goal. (this is part of the process)
- gg. Evaluate water quality in the existing and/or proposed MPA site. Is a water quality plan needed? Identify specific water quality improvement BMPs; measure for results four times per year. FG Code 2851 (c) 5.2, but also part of the process
- Or should another site be considered?
- hh. If new MPAs are needed to meet the goals of this Act, they should be designed and sited to help sustain, conserve and rebuild marine species, while minimizing socio-economic impact to harbor communities, fisheries and the State's food supply. 2.4
- Performance goal: Minimize loss to fishing, e.g. no more than 2 percent economic loss to fisheries or fishing opportunities, within the Central Coast study region.
 - Base decision-making on accurate, peer-reviewed, and current socio-economic evaluation that meets the national standard for a region-wide socio-economic evaluation.
 - Prioritize and phase in new MPAs. FG Code 2857 (e)
- ii. Minimize consequences of displaced fishing effort (FGC 2862 – Adverse Impacts in Analysis of Projects) 2.4, 2.7
- Performance goal: Monitor both biological parameters and fishing efforts inside, and a large area outside the MPA every two years
 - Interview fishermen to determine how MPA has affected their business or recreation (where did their efforts go?)
 - Document resource take in the area neighboring the MPA.

- jj. Evaluate and quantify the forage effects of sea lions, sea otters and other primary predators and their effects on biodiversity, and abundance of identified species. 1.4, may be part of monitoring objective 5.1
 - Do any marine mammals exceed their likely historic abundance?
 - Study the diet of large marine mammals and calculate their impact on the ecosystem.
 - Design and site MPAs accordingly.
- kk. Use MPAs where possible to provide Essential Fishery Information (EFI) that may lead to the relaxing of some existing fishing regulations. 2.5
- ll. Integrate the role of the NearShore Management Plan, as defined by the NSMP, into the goals of the MLPA: 2.6

“Marine Protected Areas: The NFMP uses marine protected areas (MPAs) to ensure that the MLMA’s objectives for protection of habitat and ecosystem integrity, recognition of non-consumptive uses and sustainable fisheries are met. The NFMP recognizes the authority of the Marine Life Protection Act (MLPA) to design a Master Plan for MPAs in California. The Master Plan will make recommendations on specific sites for MPAs, implementation and phasing, funding monitoring enforcement, and management. The NFMP includes an approach to MPAs, citing the biological criteria.” (Section 1, Chapter 3, pg.101-102)
- mm. Integrate other FG Codes and State law, which values the socio-economic contributions of fishing to Coastal Communities and the people of the State. (not quite sure how this fits in, possibly 2.4
- nn. Integrate the Goals of the NearShore Management Plan (Section 1, Chapter 3, Pg.109-110) 2.6
 1. “Ecosystem biodiversity-Protect representative and unique marine habitats, ecological processes, and population of interest, which include, but are not limited to, habitats such as rocky reefs and kelp forests used by multiple species, and populations that are valued for their consumptive and non-consumptive uses.
 2. Risk Management-Provide a buffer against environmental fluctuations, which affect recruitment success and uncertainties associated with fisheries management. Reduce the risk of management mistakes and uncertainties associated with fisheries management.
 3. Research-Acquire baseline data to assess natural and human impacts in both protected and non-protected areas. Evaluate the short-and long-term effectiveness of MPAs as a management tool.
 4. Sustainable fisheries-Achieve sustainable fisheries by integrating MPAs into fisheries management. Help ensure depressed fisheries are rebuilt to the highest sustainable yields and maintained at productive levels. Ensure current stock levels are maintained.
 5. Intrinsic value-Improve recreational and educational opportunities provided by marine ecosystems that are subject to minimal human disturbance. Protect marine natural heritage which includes the

aesthetic and non-consumptive values of California's living marine resources."

- oo. Evaluate coastal development impacts (not directly related to MLPA)
 - Housing, industry, agriculture
 - Identify mitigating factors to reduce or contain impacts
- pp. Establish a budget for above efforts. Part of process, related to optional objective in goal 5

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

- a. Promote personal and organized visits for direct observation and study. 3.1, 3.3, 3.5
- b. Link monitoring and research projects evaluating MPAs to support classroom science curriculum and youth fishermen in collaborative studies with fishermen. 3.3
- c. Facilitate scientific research that broadens the understanding and appreciation of the natural world. 3.1, 3.2, 3.3
- d. Develop standardized data gathering protocols (that can be used by a variety of user groups) for evaluating MPAs. 5.1
- e. Provide replicate reference areas for research and monitoring to assess impacts of different activities, including human use and natural events. [Goal 5 as well?]. 3.2
- f. Protect or enhance recreational experience by ensuring natural size and age structure of marine populations for divers to observe and photograph. 3.4
- g. Ensure quality of recreational opportunities provided by MPAs can be experienced at accessible points along shorelines, close to population centers, and with safe and reasonable access to water and parking in areas not prone to overuse disturbance. 3.1
- h. Provide access for recreational fishing in traditional fishing grounds (for reasons of safety, ease of access, fuel savings). 2.3
- i. Standardize research summaries in one page (i.e., make research findings concise and accessible). (too much detail, part of implementation)
- j. Promote collaborative research among scientists and various users of the marine environment. 3.3
- k. Produce educational brochures for all Central Coast MPAs. 3.5

Added following the brainstorming work session:

- l. Site MPAs to provide for quality educational opportunities near marine research facilities, schools, and urban areas. 3.1
- m. Provide for MPA study opportunities with safe and easy access, close to marine labs, schools, etc. to facilitate ongoing monitoring and research. [cross reference with Goal #5] 3.1, 5.3
- n. Create reference areas that can provide baseline data for better understanding fishing impacts. [cross reference with Goal #5] 3.2

- o. Establish signage at already-established signage points (e.g., co-locate with signage for MBNMS, CCNM, coastal access points, launch ramps). 3.5
- p. Provide docent-led educational outreach at public access points. 3.5
- q. In addition to schools and NGOs, work with aquaria and marine labs to spread the MPA message. 3.5
- r. Site marine reserves to provide for quality educational opportunities near marine research facilities, schools, and urban areas. 3.1
- s. Provide for marine reserves study opportunities with safe and easy ocean access, close to marine labs and educational institutions to facilitate ongoing monitoring and research. 3.1
- t. Provide quality recreational experiences in marine reserves by restoring the natural size and age structure of marine populations for divers to observe and photograph. 1.3, 3.4
- u. Ensure that people can experience recreational benefits of marine reserves by siting some reserves close to population centers with safe and easy ocean access and parking areas. 3.1
- v. To maintain the diversity of marine resources harvested by equitably sharing the loss of access to harvested grounds among all parties to the extent practical when designing marine reserves. 2.4
- w. To maintain areas of particular importance that support traditional nonconsumptive uses. 3.1, 3.2, 3.4
- x. To create and maintain opportunities in marine reserves for outdoor recreation, as well as the pursuit of activities of a spiritual or aesthetic nature. 3.1, 3.4, 4.1, 4.2
- y. Identify “unfished” (e.g. wilderness) habitats and ecosystems native and unique to the area and measure the extent and condition of the ecosystems and resources (this is part of the process), but also see 4.1
 - Identify habitats, conditions (e.g. non-fishing impacts such as pollution effects on water quality) and ecosystems of special interestExamples:
 - Monterey submarine canyon
 - Areas of minimal use
 - Popular recreational areas
 - Reference sites to evaluate fishery management assumptions, measure “inside / outside” effects to evaluate MPA theory
- z. Evaluate existing state and federal fishery management and water quality regulations for their effectiveness in meeting this goal. 2.5, 5.2
 - Integrate existing resource management with the objectives of this goal
 - Determine if an MPA is the appropriate / best tool to achieve this goal
- aa. Evaluate existing MPAs, closed areas (to harvest) (including federal and state closures) and resource regulations to determine if existing closures coupled with existing management regulations satisfy this goal. (part of the process)
 - Specifically evaluate in what way the Monterey Bay National Marine Sanctuary Marine Protected Area meets this multiple-use goal through its Water Quality, Research, Education programs, protections against

- disturbing the sea floor, and its mandate to facilitate multiple-use opportunities.
- Is there a need for additional protection? If no: New MPAs are not needed.
 - If yes:
- bb. Determine how existing MPAs and/or resource regulations may be modified (size, shape and number) to achieve the goal. (part of the process)
- cc. Evaluate water quality in the existing and/or proposed MPA site. Is a water quality plan needed? Identify specific water quality improvement BMPs; measure for results four times per year. FG Code 2851(c) 5.2, but also part of the process
- Or should another site be considered?
- dd. If new MPAs are needed to meet the goals of this Act, maximize biodiversity while minimizing socio-economic impact to harbor communities, fisheries and the State food supply. 2.4
- Performance goal: Minimize loss to fishing, e.g. no more than 2 percent economic loss to fisheries, within the Central Coast study region.
 - Base decision-making on accurate, peer-reviewed, and current socio-economic evaluation, which meets the national standard for a region-wide socio-economic evaluation.
 - Phase in new MPAs. FG Code 2857(e)
 - For any new MPA:
 - Do not place MPAs in areas that cause a safety risk to small-boat fishermen
 - Consider dedicating MPAs for recreational, educational, or research uses, individually. Do not increase these uses at the cost of commercial uses, if possible
 - Integrate these uses with the other 5 goals of the MLPA
 - Make recommendations to increase new dive-site access.
- ee. Minimize consequences of displaced fishing effort (FGC 2862 – Adverse Impacts in Analysis of Projects) 2.4, 2.7
- Performance goal: Monitor both biological parameters and fishing efforts inside, and a large area outside the MPA every two years
 - Interview fishermen to determine how MPA has affected their business or recreation (where did their efforts go?)
 - Document resource take in the area neighboring the MPA.
 - Measure impacts on biodiversity and abundance of increased recreational, educational and science opportunities on “wilderness” areas, and MPAs generally. Determine if increased human use is in conflict with the goals of increasing biodiversity and abundance.
 - Keep human disturbance in marine reserves to a minimum.
- ff. Evaluate and quantify the forage effects of sea lions, sea otters and other primary predators and their effects on biodiversity, and abundance of identified species. Design and site MPAs accordingly. 1.4, may be part of monitoring objective 5.1

- Do any marine mammals exceed their likely historic abundance?
 - Study the diet of large marine mammals and calculate their impact on the ecosystem.
- gg. Evaluate coastal development impacts (not directly related to MLPA)
- Housing, industry, agriculture
 - Identify mitigating factors to reduce or contain impacts
- hh. Establish a budget for above efforts. Part of process, related to optional objective in goal 5

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

- a. Protect important aesthetics of outstanding areas that encompass seascape, adjoining coastal landscape, or possess other scenic or visual qualities. 4.1, 4.2
- b. Identify representative and unique habitats, and include in MPAs. 4.1, 4.2
- c. Facilitate ease of access to natural features without compromising their value, uniqueness, or protection. 3.1

Added following the brainstorming work session:

- d. Include representatives of all marine habitat types across a range of depths and environmental conditions in marine reserves as required in FGC Section 2857 (c) (2). Include upwelling centers, freshwater plumes and retention areas as recommended by SAT. 4.1, 4.2
 - e. Protect habitat mosaics (areas with diverse habitat types located in close proximity to each other ^ such as mix of kelp and sand, or area that extends from nearshore to canyon depths) [cross reference with Goal #1] 1.2
 - f. Representative marine life habitats are protected for their aesthetic and intrinsic value. 4.2
 - g. Identify representative habitats and ecosystems native and unique to a specific area and measure the extent and condition of the ecosystems and resources 4.1, 4.2
 - Identify habitats, conditions (e.g. non-fishing impacts such as pollution effects on water quality) and ecosystems of special interestExamples:
 - Monterey submarine canyon
 - Habitat types listed in MLPA: rocky reefs, intertidal zones, sandy or soft ocean bottoms, underwater pinnacles, kelp forests, submarine canyons and seagrass beds
 - Identify historic levels of habitat and species of special concern.
 - h. Evaluate existing state and federal fishery management and water quality regulations for their effectiveness in meeting this goal. (part of the process, bur see 2.5 and 5.2
- Integrate existing resource management with the objectives of this goal

- i. Evaluate existing MPAs, closed areas (to harvest) (including federal and state closures) and resource regulations to determine if existing closures coupled with existing management regulations satisfy this goal. (part of the process)
 - Specifically evaluate in what ways the Monterey Bay National Marine Sanctuary Marine Protected Area meets this conservation goal through its Water Quality, Research and Education programs, and its protections against disturbing the sea floor.
 - Is there a need for additional protection? If no: New MPAs are not needed.
 - If yes:
- j. Determine how existing MPAs and/or resource regulations may be modified (size, shape and number) to achieve the goal. (part of the process)
- k. Evaluate water quality in the existing and/or proposed MPA site. Is a water quality plan needed? Identify specific water quality improvement BMPs; measure for results four times per year. FG Code 2851 (c) 5.2, but also part of the process
 - Or should another site be considered?
- l. If new MPAs are needed to meet the goals of this Act they should be designed and sited within the habitat type, maximize biodiversity while minimizing socio-economic impact to harbor communities, fisheries and the State's food supply. 2.4
 - Performance goal: Minimize loss to fishing, e.g. no more than 2 percent economic loss to fisheries, within the Central Coast study region.
 - Base decision-making on accurate and current socio-economic evaluation that meets the national standard for a region-wide socio-economic evaluation.
 - Phase in new MPAs. FG Code 2857 (e)
 - MPA network should avoid interfering with commercial abalone/kelp companies need to obtain kelp for their operations. FG Code 2857 (d)
 - For any new MPA: consider safety of use and unintended consequences.
- m. Minimize consequences of displaced fishing effort (FGC 2862 – Adverse Impacts in Analysis of Projects) 2.4, 2.7
 - Performance goal: Monitor both biological parameters and fishing inside, and a large area outside the MPA every two years
 - Interview fishermen to determine how MPA has affected their business or recreation (where did their efforts go?)
 - Document resource take in the area neighboring the MPA.
- n. Evaluate and quantify the forage effects of sea lions, sea otters and other primary predators and their effects on biodiversity, and abundance of identified species. Design and site MPAs accordingly. 1.4, may be part of monitoring objective 5.1
 - Do any marine mammals exceed their likely historic abundance?
 - Study the diet of large marine mammals and calculate their impact on the ecosystem.

- o. Evaluate coastal development impacts (not directly related to MLPA)
 - Housing, industry, agriculture
 - Identify mitigating factors to reduce or contain impacts
- p. Establish a budget for above efforts. Part of process, related to optional objective in goal 5

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

- a. Provide replicate reference areas for research and monitoring to assess impacts of different activities, including human use and natural events. [Goal 3 as well?] 3.2
- b. Integrate existing regulatory structures into the design of MPAs. 2.5, 5.2
- c. Site MPAs adjacent to land-based parks, marine labs, or other “eyes on the water” to facilitate enforcement and monitoring. 5.3
- d. Update management overlays (i.e., jurisdictional maps) and changes annually and clearly. 5.7
- e. Phase the implementation of new MPAs to allow time to fill resource data gaps, build on knowledge gained from existing MPAs, and also to build the resources to manage and enforce the network. 5.4
- f. Site MPAs to take advantage of existing long-term studies and monitored sites. 5.6
- g. Tie enforcement to a stringent monitoring program. 5.1, 5.7
- h. Develop regional management and enforcement measures that can be effectively used and adopted statewide. 5.7
- i. Develop cooperative enforcement agreements. 5.7
- j. Develop a comprehensive long-term monitoring plan for both habitat and biomass. 5.1
 - Establish baseline and measure size and abundance of resident species, water quality and census of primary predators at least once per year for 10 years
 - Monitoring plan should have clear goals and measurable objectives to determine success or failure
 - Monitoring plan to address the four primary sources of scientific uncertainty: casual, natural variation, natural processes, measurement.
 - Utilize the knowledge and resources of both science and fishing communities in long-term monitoring.
- k. Develop long-term monitoring program. 5.1

Added following the brainstorming work session:

- l. Site MPAs to facilitate use of volunteers to assist in management (i.e., where volunteer divers have reasonable access to dive sites where they can conduct monitoring programs). 5.5

- m. Site MPAs to facilitate use of marine labs, academic institutions, graduate students to assist in management (i.e., close to labs, where they can access the water to do surveys, etc). 5.3
- n. Adopt MPA locations, regulations, size, and shapes that facilitate enforcement. 5.8
- o. Follow SAT Guidelines regarding replicates, provide for scientifically valid comparisons of no-take, no commercial take, and no recreational take MPAs. [cross reference the Goal #3] 3.2, 5.9
- p. Follow SAT Guidelines in siting and design of MPA network. [cross reference with Goal #6] 5.9, 6.1
- q. Develop standardized monitoring protocols that can be implemented by various parties over time and space [cross reference with Goal #3] 3.3, 5.1
- r. Develop an implementation plan that includes regular (annual, 5-yr, 10-yr) review and re-evaluation checkpoints. 5.7
- s. Use a core group of CCRSG stakeholders as long-term implementation team members. 6.3
- t. MPAs objectives define to the central Coast component goals as subscribed by the SAT recommendations in the Master Plan Framework. 5.9
- u. The central California's MPAs have measurable adaptive management plans, human and financial resources to be effectively managed. 5.1, 5.4, 5.7, optional objective
- v. Central California's MPAs are based on the SAT Master Plan Framework recommendations and the best readily available science. 5.9, 6.1
- w. Each individual MPA should have specific, timely, and measurable objectives 5.1
- x. Science advice for any proposed MPA network should be fully peer reviewed before implementing a network of MPAs with theoretical benefits to avoid causing economic harm to fishing communities (peer review is part of the process)
 - Private special use funds should not contribute more than 10 percent of the total cost of design, implementation and long-term monitoring of an MPA network.
- y. Sufficient funding for long-term monitoring and enforcement must be secured before any new or expanded MPAs are implemented. (optional objective under goal 5)
 - The use of State General Funds will insure the long-term commitment of the Legislature and people of California to the MLPA.
- z. MPAs should be implemented with a five-year and 10-year review mechanism, and with flexibility built into the management system to remove or modify any MPA in the network that does not meet performance goals. 5.7
- aa. Develop a comprehensive long-term monitoring plan for both habitat and biomass. 5.1
 - Establish baseline and measure biodiversity, size and abundance, water quality and census of primary predators at least once per year for 10 years

- Monitoring plan should have clear goals and measurable objectives to determine success or failure
 - Monitoring plan to address the four primary sources of scientific uncertainty:
 - Casual
 - Natural variation
 - Natural processes
 - Measurement
 - Utilize the knowledge and resources of both science and fishing communities in long-term monitoring
- bb. Develop an enforcement strategy 5.4, 5.7, 5.8
- Utilize existing enforcement agencies and develop a plan that incorporates local governments and the boating / fishing community
- cc Prioritize and phase the implementation of new MPAs to allow time to fill resource data gaps, build on the knowledge gained from existing MPAs, and also to build the resources to manage and enforce the network. (FG Code 2857 (c) 5.4

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

- a. Develop regional review and evaluation of implementation effectiveness (to see if MPAs are effective components of a statewide network). 5.7, 6.2
- b. Incorporate federal fisheries management areas to the greatest extent possible. 2.5
- c. Link MPA siting to consideration of federal MPAs. 5.2
- d. Effectively utilize SAT guidelines (including size and spacing of MPAs) in the overall design of the Central Coast MPA network. 6.1
- e. Produce a one-page graphic and story that shows a result of the review and evaluation of the network for the public. 3.5
- f. Coordinate with future RSGs to ensure consistency of network integrity. 6.3

Added following the brainstorming work session:

- g. Facilitate communication between stakeholders and MPA managers within the network to create „human network%” to increase compliance and management effectiveness 6.3
- h. To assist with statewide consistency, information flow and peer-group support, encourage on-going CCRSG and SAT sub-team member involvement in future MLPA study group activities outside the central coast area. 6.3
- i. The central coast's MPAs are designed to function, the extent possible, as a self-contained component of a statewide network based on the best available science. 6.1, 6.2
- j. Prioritize and phase the implementation of new MPAs to allow time to fill resource data gaps, build on the knowledge gained from existing MPAs, and

- also to build the resources to manage and enforce the network. (FG Code 2857 (c) 5.4
- k. Achieve the “network” by ensuring that the State has realized all of the goals (FG Code 2853 (a) (1-6) and guidelines (FG Code 2857 (c) (1-5) of the MLPA when viewing the State’s MPAs, closed areas, and other pertinent management measures, as a whole. 6.1, 6.2
 - l. Create a process to evaluate, modify, or decommission MPAs that do not meet MLPA goals. Evaluation to occur every five years. (a process already exists) also see 5.7
 - m. Consistent with other California law. Individual MPAs and the network must be constructed and managed to be consistent with other California laws, such as the Coastal Act (which highly values the continued existence of fishing opportunities and public access). 5.2