Integrative Assessment of baseline ecological and socioeconomic conditions and initial changes within the South Coast MPA region

Pls: Jennifer Caselle (UCSB), Carol Blanchette (UCSB)

Project Goals & Objectives:

Our goal in modifying the budget and workplan has been to retain most of what we feel to be the core goals and objectives of our project:

The overall goals are to:

- 1) Provide a coordinated approach to monitoring across these ecosystem features, so that data can be easily shared and analyzed in a unified framework
- 2) Ensure a standards-based approach to data and metadata management across projects, Facilitate data analysis and synthesis through dedicated workshops and working groups,
- 3) Produce an integrated dataset and series of data-based products (papers, presentations, outreach materials) providing a baseline characterization of ecological and socioeconomic conditions of the entire south coast region across ecosystem features as well as an assessment of initial changes in these conditions within the initial period of baseline monitoring.

The specific objectives of this of this integrative project are to:

- 1) Ensure integration and planning of all groups starting in year1
- 2) Facilitate collaboration among groups through bi-monthly conference calls and webinars
- 3) Manage data from all groups to ensure compatibility and adherence to a common set of standards and work with the Monitoring Enterprise (ME) to refine those standards for the South coast
- 4) Lead the data analysis and synthesis effort in by hosting a series of collaborative analysis workshops modeled on similar workshops conducted during the Channel Islands five year review process and the MLPA Central and North central coast study regions
- 5) Develop, in collaboration with the ME, easy to understand outreach products for the public and policy makers

We have revised our integrative project to include the finalized list of funded projects:

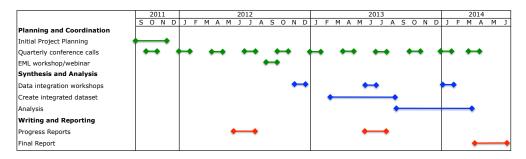
- Surveys of rocky intertidal ecosystems Carol Blanchette, University of California, Santa Barbara; Pete Raimondi, University of California, Santa Cruz; Jennifer Burnaford and Jayson Smith, California State University, Fullerton; Julie Bursek, Channel Islands National Marine Sanctuary
- Surveys of sandy beach and surf zone ecosystems Jenifer E. Dugan and Henry Page,
 University of California, Santa Barbara; Karina Nielsen, Sonoma State University; Julie Bursek,
 Channel Islands National Marine Sanctuary
- Citizen-science scuba surveys of rocky reef ecosystems Jan Freiwald and Gregor Hodgson, Reef Check California
- Baseline assessments of California spiny lobster populations, incorporating a collaborative fisheries approach – Kevin Hovel, San Diego State University; Ed Parnell, Scripps Institution of Oceanography; Doug Neilson, California Department of Fish and Game
- Remotely operated underwater vehicle (ROV) surveys of deep-water habitats James Lindholm, California State University, Monterey Bay and Dirk Rosen, Marine Applied Research & Exploration
- Scuba surveys of kelp and shallow reef ecosystems Daniel Pondella, Occidental College and Jennifer Caselle, University of California, Santa Barbara
- Surveys of seabird ecology and habitat use Dan Robinette and Jaime Jahncke, PRBO Conservation Science
- Socioeconomics and demographics of coastal use Astrid Scholz and Charles Steinback,

- Ecotrust; Chris LaFranchi, NaturalEquity
- High-resolution aerial imaging and habitat mapping of nearshore substrate Jan Svejkovsky, Ocean Imaging Corp.

Schedule of work/tasks to be performed

Our project will begin in September 2011 with an initial planning phase focused on setting up tools for communication (GoTo meeting accounts, skype, wikis, and file sharing areas) and hosting a series of conference calls to synthesize plans for data collection in the first year among participating groups. We will host quarterly conference calls focused on coordination in the early part of the project and more on planning syntheses and analyses towards the latter part of the project. We will host a workshop on Ecological Metadata Language (EML) in late summer 2012 when most groups will have finished with their first year of data collection. This workshop will focus on the basic structure and use of EML for documenting metadata, as well as various EML metadata editors. We will recruit various members of the ecoinformatics group at NCEAS (the developers of EML) to participate in this workshop and provide hands-on assistance.

We will host 3 integration workshops, starting in fall 2012 to begin the process of synthesizing data across research groups and ecosystem features. The first workshop will largely focus on synthesis of data, and the second two workshops will focus on analysis and data products. Following the first synthesis workshop we will work with project participants to build an integrated dataset to facilitate synthetic analyses. We will deliver annual reports on our progress as well as a final report containing the results of our analyses, data products, as well as a synthetic dataset.



Work products/ deliverables

As part of this integrative proposal we will provide, at a minimum:

- 1) Raw data and associated metadata for any integrated datasets created from all or part of the individual project datasets
- 2) Annual progress reports that address the progress toward collaborative goals of the consortium
- 3) A synthetic final report that integrates all projects and provides a synthetic analysis of data along with a comprehensive recommendation for future monitoring both baseline and long term. More importantly, this project will provide the framework for production of specific products (i.e. presentations, papers and outreach products) as part of the collaborative effort of the participants.

The integration of baseline monitoring data and contextual information across a wide range of ecosystem features will allow us to assist the ME in the creation of summary and public and policy-friendly data products describing the condition of marine resources in all the South coast MPAs. This highly synthetic information may be represented in simple formats, such as "Condition Reports. Our proposed project will provide the data and expert opinions from each of the ecosystem components to generate these relative assessments. This type of integration is absolutely critical to be able to provide a complete characterization of resources.

Note: While individual PIs will be responsible for providing their data and metadata, annual progress report(s) and a final report based on their individual projects, we (Integrative PIs) will ensure that the formats meet the requirements of the ME and CDFG. These will describe progress towards specified project goals, and provide timelines (progress in meeting milestones) for work completed and remaining. As per CDFG standards they will also provide updated financial information including budgeted costs and actual expenditures and justifications for variances.