



MPA Baseline Program

Annual Progress Report



Principal Investigators - please use this form to submit your MPA Baseline Program project annual report, including an update on activities completed over the past year and those planned for the upcoming year. This information will be used by the MPA Baseline Program Management Team to track the progress of individual projects, and will be provided to all MPA Baseline Program PIs and co-PIs prior to the Annual PIs workshop to facilitate discussion of project integration. Please submit this form to California Sea Grant when complete (sgreport@ucsd.edu, Subject [Award Number, project number, PI, "Annual Report"].)

Project Information

Project Year: Sept. 1 2011 – Aug. 31 2012 (Year 1) Study Region: South Coast

Project Title & Number: R/MPA-29 10-049: Establishing Consumptive and Non-Consumptive Human Use Baseline Indicators for MPAs in the South Coast of California

PI name: Dr. Kristen Sheeran (formerly A. Scholz) Co-PI name: Charles Steinback

PI Contact Info

Co- PI Contact Info

(please list additional PIs and contact info in the "Project Personnel" section if necessary)

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Project Goals & Objectives

The primary goal of this effort is to understand the interactions between human uses of the coastal and marine ecosystem and the South Coast marine protected area (MPA) network. To do this, we will 1) create a baseline characterization of human use patterns in the South Coast region; and 2) assess initial changes in interactions between human uses of the coastal ecosystem associated with both MPA implementation itself and any initial ecological changes that occur as a result of MPA implementation. The objectives of this research are to:

- 1. Collect detailed data on the a) demographic characteristics; b) spatial use patterns; and c) economic contributions of California's South Coast region consumptive and non-consumptive coastal and marine user communities;
2. Create baseline estimates of the quantity, composition, spatial distribution, and economic contribution of coastal and marine human use activities in the study region;
3. Conduct an assessment of changes in coastal and marine human use activities since MPA implementation and compare the results to the baseline estimates;
4. Describe the initial spatial response and estimate the economic impact (to user communities and the South Coast economy) of any identified changes in coastal and marine human use activities;
5. Integrate estimates of change with ecological indicators of MPA performance; and
6. Inform the planning and implementation of long-term monitoring, and the development of both key metrics/indicators and a modeling framework for understanding the causal links between ecosystem features, socioeconomic changes, and the implementation of MPAs.

Summary of Project Activities Completed to Date*Overview of Project Year 1 Activities, including progress towards meeting goals & objectives*

Project work to date began with a joint meeting in October 2011 with project partners to plan and coordinate project implementation/methods, outreach strategies, timelines, and roles/responsibilities. The primary outcome of this meeting was a 3-year work plan which will serve as a central coordination and communication piece between internal staff and project partners. As project work progresses, the approaches and methods detailed in this work plan are revised as necessary.

Much progress has been made to address project objectives 1 and 2 during this year. Development of the Coastal Recreation survey instrument began in December 2011, and the instrument was deployed in April 2012 after extensive testing to ensure the mapping component of the survey tool was capturing spatial data at the appropriate scale and in a user friendly manner. We also incorporated modifications based on lessons learned in the deployment of this survey instrument in the North Central Coast region. The survey tool is being deployed in four waves across approximately a year, inquiring about last trip activities/expenditures in the past 3 months to capture the seasonal variation in coastal use patterns.

In total, approximately 4,500 survey responses will be collected over the four waves of data collection. The first and second waves of the survey were completed at the end of August 2012. We received the data from the initial two waves of the coastal recreation survey and will launch the third wave in the beginning of October 2012.

Further work to address objective 1 during this year involved community outreach and data collection preparations to survey commercial and CPFV fishermen in the study region. Project staff carried out field work preparations and extensive outreach efforts with the South Coast fishing community, including interviews and meetings with approximately 35 key fishing community members to test the survey tool, gather preliminary data, and answer questions and concerns about the project. During this process it became clear that many fishermen were hesitant to participate in data collection efforts. Ecotrust assessed the issues and concerns fishermen expressed and communicated these to the Monitoring Enterprise and the California Department of Fish and Game (CDFG), along with a proposed plan to reallocate a portion of project funds to develop a more extensive community engagement effort. However, Ecotrust was informed that state funds must be used for data collection and that the Monitoring Enterprise and the CDFG would develop a strategic plan moving forward to address these issues and build support for the MPA monitoring effort. The Monitoring Enterprise has proposed for Ecotrust to delay data collection efforts for the commercial and CPFV sectors for a year as plans are made and implemented to better engage the fishing community. In the interim, Ecotrust will continue to carry out its work on the Coastal Recreation survey and assist the Monitoring Enterprise and CDFG in promoting community support for a successful data collection effort in 2013.

Highlights from project progress so far, such as successes achieved or interesting stories from the past year

To date, we have successfully developed and launched the coastal recreation survey instrument which has collected over 2,000 survey responses thus far in our first two waves. With lessons learned from the North Central Coast MPA monitoring effort, we have improved the survey design so that trip expenditures may be associated with specific primary activities as well as associated with spatial data—attributing trip expenditures to the location of coastal recreation activities. This advances knowledge on the importance of specific coastal recreation activities, their estimated economic contribution, and the spatial distribution of this economic contribution in the study region.

Description of any unforeseen events and substantial challenges, and resulting effect on data collection

As mentioned above, the lack of fishing community support for MPA monitoring efforts has delayed our data collection efforts with the commercial and CPFV sectors. Gaining community support will be critical for a successful data collection season in the second year of this project. Proceeding with data collection without community support compromises the success of this project in regard to both the representative quality of data collected as well as Ecotrust's future ability to work within the South Coast fishing community. Ecotrust had proposed to develop a community engagement effort we believe would build support, engage fishermen in project design and foster a sense of ownership over the project, and provide a forum for both the Monitoring Enterprise and the CDFG to develop a dialogue and relationship with the fishing community in regard to long term MPA monitoring. However, we were informed that state funds must be used for data collection and that the Monitoring Enterprise and the CDFG would develop a community engagement effort, including the use of the Monitoring Enterprise's OceanSpaces website (<http://oceanspaces.org/>) to build community support. Apart from OceanSpaces, through which users can join an online community and connect with researchers and agency staff through the website or directly contact the Monitoring Enterprise, Ecotrust is not aware of any progress on a community outreach and engagement effort. This may have an impact on the project team's ability to successfully execute next year's data collection season, which is scheduled to begin in April 2013.

Data status (i.e., paper/raw format or digitized; if digitized, what format?)

All data collected to date is in raw digital format—both as ArcGIS files and Microsoft Excel files.

Activities Planned for following Project Year 2 (if applicable) – Please describe remaining work and approximate timelines for completing that work, including any anticipated budget variances necessary to complete the project.

In project year 2 we plan to complete the coastal recreation survey by collecting the third and fourth waves of data by June 2013 and completing analysis of the survey and spatial data by September 2013. In year 2 we also aim to begin the first year of data collection for the commercial and CPFV sectors which is scheduled to begin in April 2013. This involves hiring and training field staff and preparing all field work materials, survey tool, and logistics. If there is community support and we are able to initiate a data collection season we anticipate completing commercial and CPFV data collection in September 2013.

Project Personnel – Please indicate additional project personnel involved in your MPA baseline project, including students and volunteers, or additional PI contact information if necessary.

	<i>Students Supported</i>	<i>Student Volunteers</i>
<i>K-12</i>	<i>N/A</i>	<i>N/A</i>
<i>Undergraduate</i>	<i>N/A</i>	<i>N/A</i>
<i>Masters</i>	<i>N/A</i>	<i>N/A</i>
<i>PhD</i>	<i>N/A</i>	<i>N/A</i>

Number of other Volunteers not counted above:

N/A

Additional PI contact info not listed on first page:

N/A

Cooperating Organizations and Individuals - Please list organizations or individuals (e.g., federal or state agencies, fishermen, etc.) that provided financial, technical or other assistance to your project since its inception, including a description of the nature of their assistance.

Name of Organization or Individual	Sector (City, County, Fed, private, etc.)	Nature of cooperation (If financial, provide dollar amount.)
California Department of Fish and Game	State	Provided landings data and technical support on landings data analysis
Joel Greenburg	Private	Provided guidance on networking and outreach with CPFV community
South Coast Fishing Community: Bob Bertelli; Pete Halmay; Josh Fischer; John Law; Ken Franke; Mike Thompson; Paul Romanoski; Volker Hoehne; Joe Farlo; Joe Villareal; Chris Hoeflinger; Rodger Healy; Dave Rudie; Stephanie Mutz; Chris Voss; Bruce and Diane Pleschner-Steele; Merit McCrea	Private	Provided project feedback, review of survey design, information on community attitudes/perceptions towards MPA monitoring effort, initial information on the impacts of MPAs, and recommendations on how best to approach other fishermen in the region, etc

Additional Information – Please provide any other project-relevant information, such as descriptions of attached materials, media coverage your project has received, etc.

Two documents which were disseminated during outreach efforts this year are included as supplementary attachments to this report:

1. 2-page project description sheet, **Monitoring Fisheries Uses and Values in the South Coast of California**
2. Letter to the California South Coast fishing community

The goal of the Monitoring Fisheries Uses and Values project is to better understand the influence and socioeconomic impact of marine protected areas (MPAs) on commercial fishing and CPFV activities along California's South Coast. We will research both commercial fishing and CPFV uses of the region, extending from Point Conception in the North to the Mexico border in the South.

This project will directly inform the 5-year review of the South Coast MPAs which will provide a baseline characterization of the ecological and socioeconomic conditions and changes within the South Coast region since MPA implementation. This project and the 5-year MPA review are administered by the MPA Monitoring Enterprise (http://www.calost.org/monitoring_ent.html), a program of the California Ocean Science Trust, in collaboration with the California Ocean Protection Council (OPC), California Department of Fish and Game, and California Sea Grant.

Project Goals and Objectives

The objectives of this research are to:

1. Collect detailed data on the 1) demographic characteristics; b) spatial use patterns; and c) economic profile for key commercial fisheries and the CPFV fleet of the South Coast;
2. Utilizing previous baseline data collected by Ecotrust, conduct an assessment of spatial and socioeconomic changes in key commercial and CPFV fisheries since MPA implementation;
3. Provide contextual information on the direct and indirect effects of MPA establishment and other driving factors attributing to economic change (e.g., general economic decline, closure of fisheries, additional spatial fishing regulations, loss of port infrastructure, etc) within the commercial and CPFV fisheries in the South Coast.

Commercial Fishing and CPFV Operations

Ecotrust conducted commercial and CPFV fishermen interviews in 2008 as part of the South Coast MLPA planning process and the data collected established a baseline on fisheries uses and values across the region. In order to build upon this previous effort and determine economic and spatial fishing patterns changes since 2008, we will be conducting interviews with fishermen who participated in the initial baseline study and other fisherman most active in the fishery. We will focus on these key commercial fisheries: lobster, urchin, rock crab, spot prawn, coastal pelagics, squid, nearshore finfish, sea cucumber, and California halibut. For the CPFV sector, our goal is to interview the full fleet of CPFV operators fishing in state waters across the South Coast region.

MPAs along the South Coast

Effective January 1, 2012 California's South Coast contains 50 MPAs which were designated by the California Fish and Game Commission (CDFG) as part of the state's Marine Life Protection Act (MLPA) Initiative. The MLPA planning process was designed as a participatory public process in which a regional stakeholder group works closely with a science advisory team, CDFG, and Initiative staff and contractors to develop MPA recommendation. Despite this, many fishery stakeholders maintain they felt marginalized during the process and their input inadequately considered. Ecotrust is seeking to bridge this history of the South Coast MLPA process with a more thoughtful and useful socioeconomic assessment tool for the communities involved and the success of the MLPA initiative.

Confidentiality

Ecotrust takes every measure possible to protect the confidentiality of sensitive information provided by fishermen during and after the interview process. These measures include:

- Explicit consent will be obtained from all participants;
- All information on the individual level will remain anonymous and confidential. Only Ecotrust staff (operating under a strict confidentiality protocol) will handle the data collected during the interviews; and
- Analyses and results will be presented only in aggregate form for participating fishermen from each fishery to review before results are finalized.

Ecotrust

Ecotrust's mission is to innovate, invest, and inspire in ways that creates reliable prosperity. This prosperity follows our triple bottom line philosophy in which promoting economic opportunity, social equity, and environmental well-being are all critical measures of success in our work. Ecotrust is headquartered in Portland, Oregon and is a unique organization; creating a range of programs in fisheries, forestry, food, farms and children's health, and developing new scientific and information tools to improve social, economic, and environmental decision-making.

Contact Information

If you have any questions about this project please contact:

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February 2, 2012

To the California South Coast Fishing Community,

Here at Ecotrust we firmly believe that how closely we work with communities and our ability to respond to your concerns are primary measures of success for our projects. Given that, we are writing this letter to provide details on our project to monitor socioeconomic health of your fisheries and how the MLPA marine protected areas (MPAs) have impacted local commercial fishing and CPFV operations. We understand that being transparent and clear on our goals/objectives, intentions, and planned use of data provided by the fishing community are foundational to building trust.

We are back in the South Coast as the State is undergoing efforts to monitor its MPAs and we've been asked for the next three years to monitor how these MPAs have impacted commercial fishing and CPFV operations in the region. Your participation in this project is not only important but an opportunity to help us document how your fishing has been impacted by not only MPAs but other management/policy, economic, or environmental changes in recent years. This project is designed to collect and synthesize quantitative, spatial, historical, and qualitative data to create clear, comprehensive, and useful map products, port profiles, and report on the economic changes in commercial fishing and CPFV operations in the region and the major drivers of that change.

We plan to conduct interviews with fishermen for the following key commercial fisheries: lobster, urchin, rock crab, spot prawn, coastal pelagics, squid, nearshore finfish, sea cucumber, and California halibut. Our goal is to represent at least 50% of the landings (often times representing far beyond that) in each fishery in each port and interview the full fleet of CPFV operators in the region. Interviews will contain questions designed to capture economic changes in fishing operations, mapping fishing grounds to determine spatial shifts/displacement in fishing effort, as well as how MPAs and other major factors have impacted your fishing livelihood.

We'd like to work with the South Coast fishing community to create the best data products and report possible to represent your interests and communicate the economic changes the commercial fishing and CPFV community has and will experience in the upcoming years. Furthermore, we will ensure that the fishing community will have the opportunity to review and comment on any data products and report before they are released. Ecotrust staff are currently in the region conducting outreach within the fishing community. If you have question or would like to meet with our staff to discuss the project, please don't hesitate to contact our Project Manager, Cheryl Chen, at 415-596-3965 or cchen@ecotrust.org.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Steinback".

Charles Steinback
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