

## **Reef Check California**

### **1<sup>st</sup> Annual Progress Report**

#### **NCCSR Baseline Monitoring, R/MPA13 Grant# 09-015**

Reef Check was awarded funds to participate in the North Central Coast study region (NCCSR) baseline monitoring in March of 2010. The award of this grant coincided with a change in leadership for Reef Check California as Cyndi Dawson moved on and Dr. Jan Freiwald enthusiastically joined the team as the Director of the California program. This change came at an opportune time and, far from negatively affecting the progress towards our goals for the NCCSR baseline monitoring, Reef Check's abilities to fulfill the requirements of this grant were further augmented. Dr. Freiwald has recently completed his PhD under Dr. Mark Carr and, therefore, is very familiar with both the MLAP monitoring, baseline monitoring proposal for the NCCSR, and with the integration and implementation of subtidal survey protocols such as Reef Check's. As such this transition facilitated the integration of the two programs in this region even further.

Immediately following the award of this grant, Reef Check California (RCCA) began its search to fill the newly funded part time position of a NCCSR baseline coordinator. This search concluded in the hiring of Narineh Nazarian on May 1<sup>st</sup> 2010. Filling this position was essential in order to properly conduct the proposed work in this region since Reef Check did not have any staff located in the region north of San Francisco prior to the project's beginning. Ms. Nazarian has a great deal of diving experience in northern California and recently graduated with a BS in marine biology and a minor in scientific diving from Humboldt State University (HSU). Over the months of May and June we coordinated and developed plans for the field season with our partners, especially with Mark Carr's Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) group at University of California Santa Cruz (UCSC). At the same time Ms. Nazarian was trained and certified in the Reef Check survey method, and a protocol for the Abalone/Urchin surveys to be conducted in conjunction with Carr's group was developed. This protocol was designed, developed and agreed upon by RCCA and Dr. Carr. Overall, the first year of the NCCSR baseline monitoring project was a great success. Below I will address progress towards each of the goals.

#### **Progress towards specific goals over the first year of the project**

##### *1. Continue to monitor existing sites*

The field work in the region started in June with surveys of the previously established sites that RCCA has been monitoring in this region for the last four to five years. A team of very experienced and long-time volunteers located in the study region surveyed these sites. In total four of these sites were surveyed—several of them twice (Figure 1). We were not able to survey one of our existing sites, Ocean Cove, due to the weather conditions. Several attempts were made throughout the field season to by our local survey team and a last attempt was made during a survey trip in October when conditions again prohibited the entry of divers at this site. Nevertheless RCCA has already collected data at this site over

three years previous to the baseline monitoring and can provide this data as part of the baseline evaluation for this site. We will attempt to survey this site again in the 2011 field season.

2. *Add abalone and urchin size distribution surveys to PISCO sites*

RCCA's baseline coordinator collaborated with the UCSC PISCO team over the months from August to October to conduct the abalone and urchin density and size frequency surveys at the PISCO survey sites in the study region. A total of 34 sites were surveyed by the collaborative team over this time period and abalone/urchin surveys were completed at all sites (Figure 1). This far exceeds the proposed number of abalone and urchin surveys (10 sites) and will provide a much more detailed picture of the abalone and urchin populations within and outside of MPAs at the time of implementation of the MPAs. This success highlights the benefit and synergistic effects of collaborative efforts in the baseline monitoring of difficult and expensive-to-access subtidal habitats.

3. *Add full RCCA survey w/in Stewarts Pt. SMR*

Unfortunately, we were not able to add a new RCCA survey site in the Stewarts Point SMR this year. Despite several attempts to add a new site we were not able to dive due to the conditions and thus failed to collect any data. This site was chosen under the assumption that we would be able to use a boat to access it. Since RCCA does not have boats we were reliant on using boats either from a partner group (e.g., PISCO, DFG) or charter a boat to establish this new site. Access to partner boats was limited especially at times with good weather conditions and due to reduced boat time of DFG vessels. Additionally, Dive charter boats are not able to go to this site at reasonable cost to RCCA due to its remote location and the limited availability of dive charters in this region. In hindsight this was not an ideal choice of a survey location for us. During next year's field season we will put our resources towards surveying a more accessible site instead.



Figure 1. RCCA (red triangles) and PISCO/RCCA (circles) sites surveyed in 2010. RCCA surveys were completed at four sites and PISCO/RCCA surveys at 34 sites.



**Budget report:**

Budget and actual for first year of project:

<b>R/MPA-13</b>	<b>Total budget</b>	<b>Year 1 Budgeted***</b>	<b>Actual Year 1</b>
<b>Salaries and Wages</b>	\$76,361.00	\$ 35,353.00	\$ 44,206.37
<b>Benefits</b>	\$ 37,840.00	\$ 17,095.00	\$ 12,023.11
<b>Contractors</b>			\$ 2,137.00
<b>Supplies</b>	\$21,125.00	\$ 12,275.00	\$ 10,973.52
<b>Travel</b>	\$13,014.00	\$ 6,961.00	\$ 6,568.06
<b>Indirect (not on equip)</b>	\$22,251.00	\$ 10,753.00	\$ 6,128.22
<b>TOTAL PROJECT COSTS</b>	\$170,591.00	\$ 82,437.00	\$ 82,036.28

Overall we spent just under the budgeted amount over the first year. In comparison to the initial budget we spent more on salaries than anticipated. This is in large part due to the much more intensive involvement of the Co-PI Freiwald in the project than anticipated. Also, the Regional Manager was more involved in setting up the baseline monitoring than anticipated especially in the beginning before the Baseline Coordinator (hired specifically for this project) was trained and familiar with the program and project. The funds, shown as contractor expenses, were included in the salary section in the initial summarized version of the budget but are show separately here for clarity. Some of the funds for contractual services, especially for the development of the metadata, were not spent but will be used in the second year as the metadata is completed according the recently finalized standards of the MPA Monitoring Enterprise. We spent less for supplies than anticipated and this is in large part due to our collaborative efforts with Dr. Mark Carr's group and the ability to use some of their boats which greatly reduced the boat costs for this project. Our indirect costs were much lower than anticipated due to the fact that we had other funding to cover these expenses.

*Summaries of PI and Staff responsibilities and work performed*

Co-PI Hodgson oversaw the initial development of the collaboration as the project was implemented. He traveled up to Santa Cruz for a meeting with collaborator Dr. Mark Carr soon after receipt of the grant. Further, Hodgson oversaw the hiring of the NCCSR Baseline Monitoring Coordinator and the progress of the project throughout the year.

Co-PI Freiwald took over the responsibilities of Cyndi Dawson who was identified as Co-PI in the proposal. He was involved in the hiring of the NCCSR baseline monitoring coordinator in the early weeks of the project and oversaw the training of the newly hired staff. He led the development of the abalone/urchin protocol and directed the implementation of the field work. Further, he functions as the liaison between the RCCA and the Carr/PISCO group. He oversaw the field work by the Baseline

Coordinator and Regional Manager and worked with the consultant to develop the metadata for this project according to the MPA Monitoring Enterprise's standards. Freiwald participated in the NCCSR baseline workshops and worked on the integration of RCCA's monitoring with other collaborators.

Northern& Central California Regional Manager (Research Associate level) participated in training in PISCO survey methods and oversaw and conducted the volunteer trainings in this study region. The Regional Manager led the field efforts and provided guidance for the Baseline Coordinator in developing a working volunteer program in the study region.

NCCSR Baseline Coordinator (Research Assistant level) conducted the field work in the study region. In addition to the coordination of volunteers and participation in the field work the Baseline Coordinator also worked with local scuba diver groups, dive shops and clubs to expand RCCA's volunteer base in this region and educate about the newly established MPAs. The baseline monitoring coordinator also functions as the liaison between RCCA and HSU and was involved in their scientific diver training and recertifications of HSU Reef Check certified divers. Together with the Regional Manager, she also insured data quality and control and performed most of the data entry and processing.