



Year 1 Progress Report for Seabird Monitoring Within the North Central Coast Study Region of California's Marine Life Protection Act (Sea Grant# RMPA-6A)

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Background

In 2010, PRBO Conservation Science (PRBO), in collaboration with the U.S. Fish and Wildlife Service (USFWS), successfully completed its first year of monitoring seabirds within the North Central Coast Study Region (NCCSR) of the Marine Life Protection Act (MLPA). Seabird monitoring represents one component of a larger effort to collect baseline data within the NCCSR. The seabird component was funded as a three-year project, with the first 2 years dedicated to data collection and the third to data analysis and report synthesis.

The overarching goal of the seabird monitoring project is to determine how seabirds are using coastal habitats inside and outside of newly established Marine Protected Areas within the NCCSR. Specific tasks for seabird monitoring include 1) disturbance surveys, 2) foraging surveys, and 3) breeding colony surveys. Disturbance surveys focus on Special Closures designed to keep human activities away from important seabird breeding colonies. Data on human disturbance rates are being collected by USFWS within Special Closures and by PRBO at control sites in the Bodega and Tomales Point areas. Foraging surveys focus on the use of State Marine Reserves (SMRs) and State Marine Conservation Areas (SMCAs) by foraging seabirds. PRBO and USFWS are conducting surveys at three SMR/SMCA clusters: Bodega Head SMR/SMCA, Point Reyes SMR/SMCA, and Montara SMR/Pillar Point SMCA. Foraging rates are measured inside each SMR and SMCA and at control sites designated for each cluster. Breeding colony surveys focus on five species identified in the MLPA Master Plan as likely to benefit from marine protected areas: Pigeon Guillemot, Pelagic Cormorant, Brandt's Cormorant, Common Murre, and Black Oystercatcher. The goal of these surveys is to 1) estimate annual population size for all species and 2) estimate annual rates of productivity for all species except Pigeon Guillemots. Additionally, USFWS will complete a NCCSR-wide breeding population census during the 2011 breeding season.

Progress Towards Proposed Goals

The seabird monitoring project is a collaborative effort between Dan Robinette (PRBO) and Gerry McChesney (USFWS). PRBO is collecting data in two areas (Duncan Point to Tomales Point and Montara to Pescadero) while USFWS is collecting data around Point Reyes and Drakes Bay (Figure 1). Figure 2 shows the original proposed milestone chart for grant RMPA-6A in addition to milestones reached during Year 1 (April 1, 2010 – March 31, 2011) of the monitoring project. PRBO successfully completed all monitoring surveys on a weekly basis from April 15 through July 31, 2010. Additionally, PRBO continued to follow nests in the Bodega area through August until all young had fledged. All data have been entered into PRBO’s database and quality checked. PRBO is currently working with the Monitoring Enterprise in their effort to develop metadata standards for use across all NCCSR projects.

Expenditures as of February 28, 2011

As of February 28, 2011, PRBO has billed \$52,302 to grant RMPA-6A. This is \$5,919 less than what was originally budgeted for Year 1. There is a surplus in all spending categories except for travel in Year 1. There was more travel than anticipated due to the need to coordinate and standardize data collection among sites during this first year. We project the final balance at the end of Year 1 (March 31, 2011) to be approximately \$3,000. This will be a five percent surplus for the first year. As of February 28, 2011, there was \$83,173 remaining in the three-year budget. We anticipate finishing the three-year project within the proposed budget.

Table 1. Funds billed to grant RMPA-6A as of February 28, 2011. Also shown are the proposed budgets and remaining funds for Year 1 (April 1, 2010-March 31, 2011) and Years 1 through 3.

	Funds Billed	Year 1		All 3 Years	
		Budgeted	Remaining	Budgeted	Remaining
Salaries & Benefits	35,088.99	38,077	2,988.26	98,950	63,861
Equipment	2,289.77	3,500	1,210.23	3,430	1,140
Travel	4,462.92	3,000	-1,462.92	6,000	1,537
Indirect Costs	10,460.43	13,644	3,183.57	27,095	16,635
Total Costs	52,302.11	58,221	5,919.14	135,475	83,173

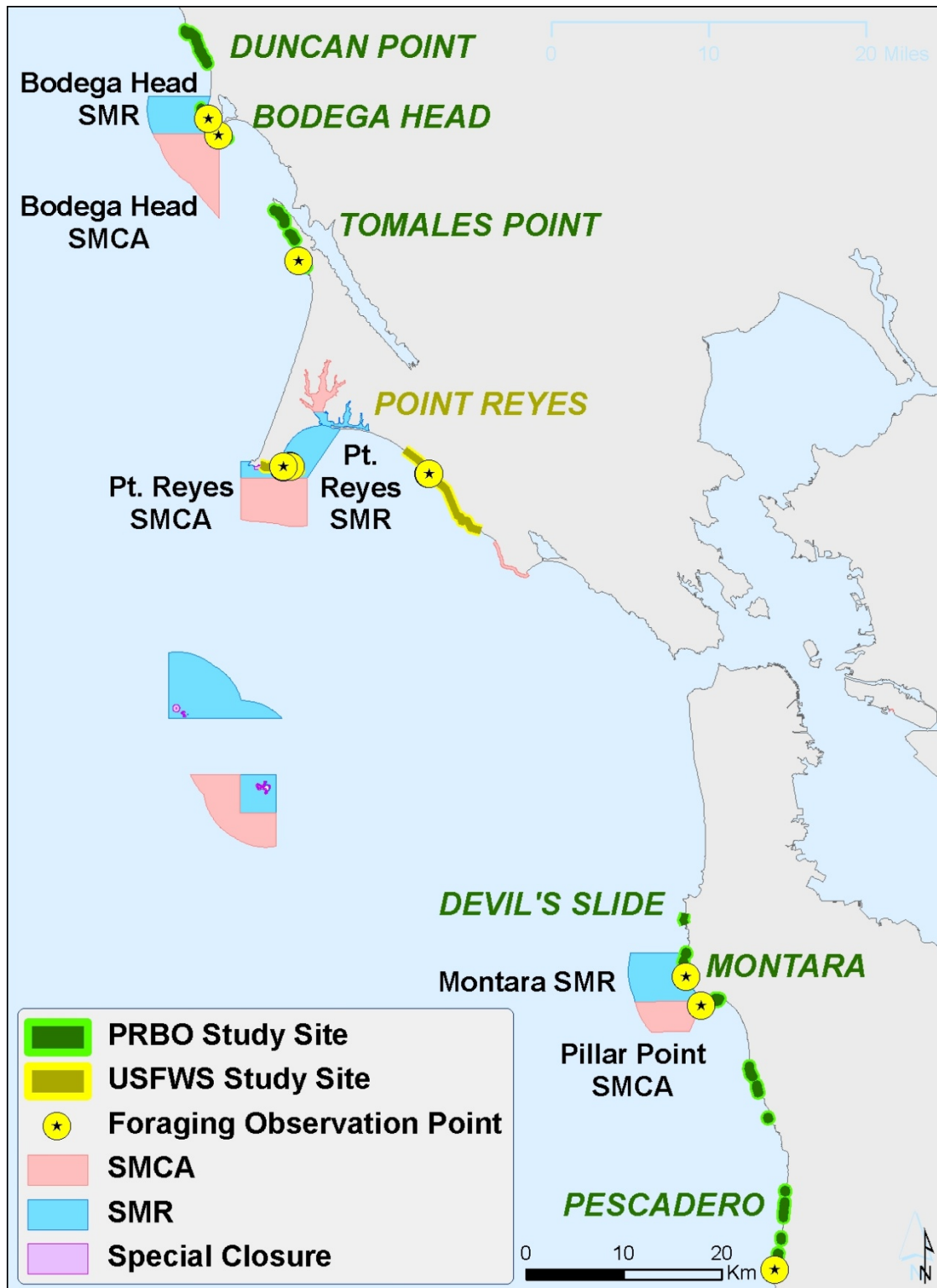


Figure 1. Map of NCCSR showing seabird monitoring focal areas for PRBO Conservation Science (Robinette) and U.S. Fish and Wildlife Service (McChesney)

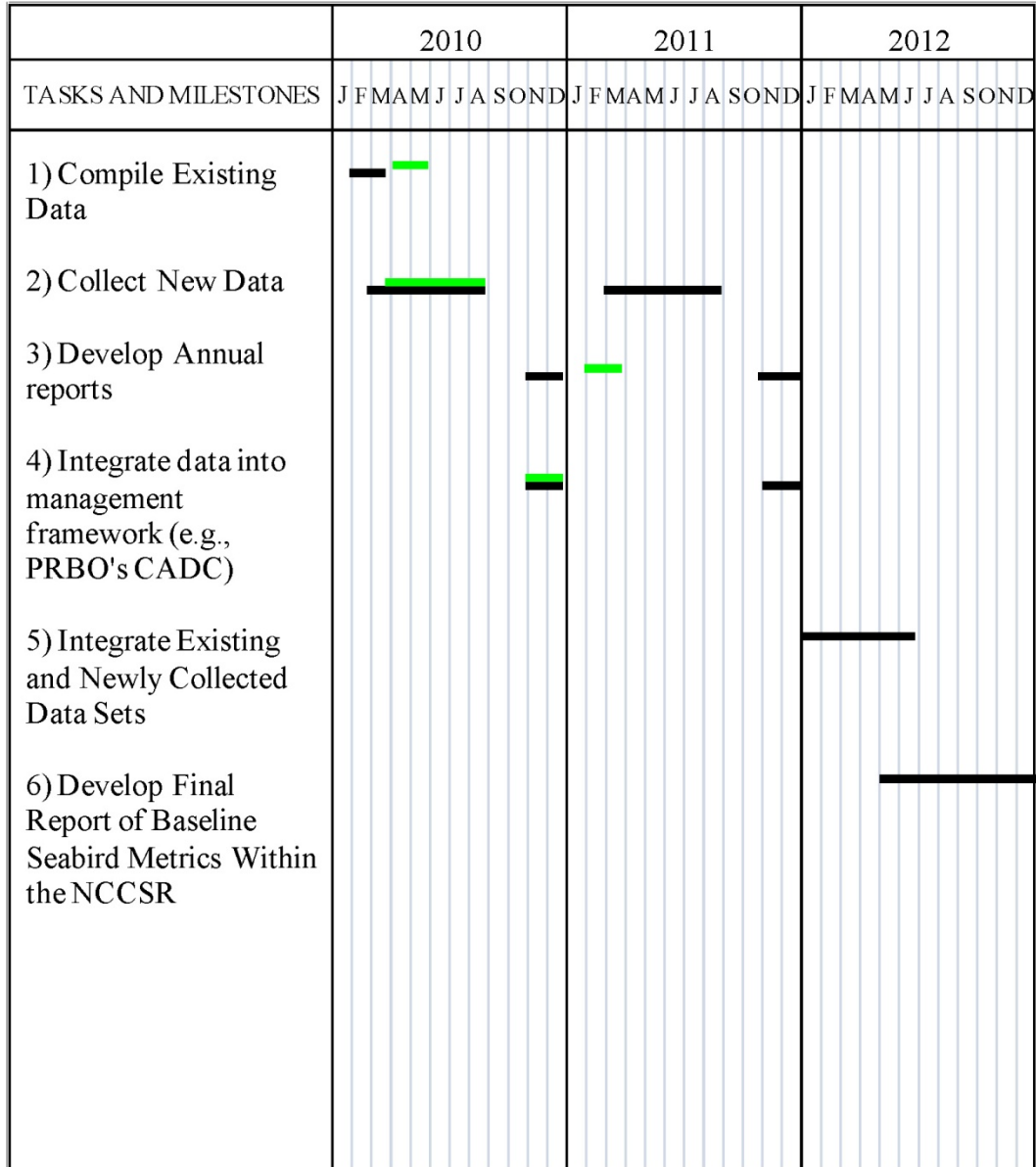


Figure 2. Milestone chart for tasks associated with grant RMPA-6A. Black lines showed proposed timelines for accomplishing tasks while green lines indicate tasks that have been completed.