

# **EVALUATING THE EFFECTIVENESS OF MARINE PROTECTED AREA (MPA) EDUCATION AND OUTREACH PRODUCTS AND ACTIVITIES**

## **EXECUTIVE SUMMARY**

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Implementation of California's network of marine protected areas (MPAs), which began in 2004 and concluded in 2011, was a long and contentious process. By 2012 California had a comprehensive network of 124 MPAs spanning the coast from Oregon to Mexico, protecting 16% of state coastal waters. With evidence suggesting that an increase in knowledge of conservation topics can lead to compliance with conservation regulations, the task of outreach became a major priority for the state (Cornelisse & Duane 2013, Leisher et al. 2012, George & Crooks 2006). Despite years of outreach, there has been little formal evaluation of the efficacy of individual MPA outreach tools in communicating with target audiences. In order to determine whether information is presented effectively, it is imperative that education and outreach materials are evaluated. My internship project was focused on assessing the efficiency of specific outreach activities in raising awareness and understanding of MPAs.

My Professional Science Master's internship was conducted with the California Marine Sanctuary Foundation (CMSF), a non-profit based in Monterey, CA. Established in 1995, CMSF serves an important niche in California's coastal nonprofit community by cultivating innovative, collaborative, private/public partnerships for ocean and coastal conservation. Since 2007, CMSF, in partnership with local, state, federal and tribal organizations, has facilitated a diverse

array of coastal conservation programs to increase the understanding and stewardship of California's network of MPAs and coastal resources.

My internship project consisted of designing and implementing an evaluation of the efficacy of MPA education and outreach tools in increasing understanding of MPAs among key audiences. Specific tools evaluated include a MPA regulatory brochure, MPA PowerPoint trainings, and a MPA social media campaign (Figure 1). The results from the evaluation highlight the need for continued evaluation of outreach and education tools to determine their utility among different user groups. Because different audiences have vastly different needs, MPA education and outreach cannot be undertaken with a one size fits all approach. Awareness, understanding and perceptions are imperative to the success of conservation initiatives. Because of this, it is crucial to include key stakeholders that can help define audience specific needs when updating existing education and outreach materials or developing new materials.

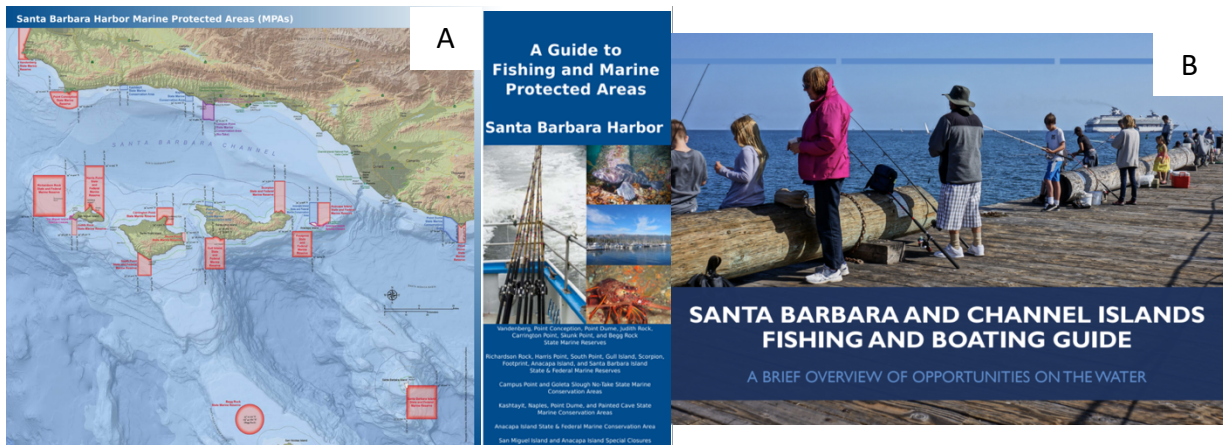


Figure 1. Tools evaluated. (A) MPA Regulatory Brochure; (B) MPA PowerPoint Training

My goals for this internship project were to learn about the various methods of evaluation, develop survey and interview skills, build upon previous statistical knowledge to understand how to evaluate the success of educational activities among diverse audiences, and

to enhance my communications skills. Through the duration of my internship, I was able to gain valuable skills related to social research, evaluation plan design, and evaluation implementation. This experience has been invaluable in helping me connect two of my greatest passions: marine conservation and the human dimension of natural resource management.

The results of my internship project will be used to inform the future development of MPA education and outreach resources for diverse audiences, as well as the allocation of future MPA education and outreach funding. Additionally, the evaluation metrics developed as a part of this internship project are also readily adaptable and can be easily modified to evaluate MPA education and outreach materials not yet assessed such as interpretive brochures and the various forms of existing signage.

By engaging me in this internship work, CMSF saved valuable funds that would have been spent on an evaluation contractor. In their past work with an evaluation professional, CMSF staff mentioned that it required a lot of conversations to get the contractor up to speed on the MPA network and the nuances associated with the many different target audiences CMSF communicates to. Not only did CMSF save money by not contracting this work out, but I believe that the seven years of experience I have acquired working in education and outreach for California's network of MPAs was invaluable for providing a thorough understanding of not only the MPA network, but the sensitivities associated with each audience targeted for this project.

In summary, this internship experience has afforded me with invaluable skills that will not only benefit me in future endeavors, but also benefit the California Marine Sanctuary

Foundation. Upon graduation, I will continue my work with CMSF. The evaluation methods utilized can serve as a template for evaluation of other existing education and outreach resources, including interpretive brochures, various forms of signage and more. With these evaluation skills in-house, I will also be able to help implement evaluation protocols for all of CMSF's existing programs that go beyond the MPA program.

### **References:**

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