

## **Characterization of the Rocky Intertidal Ecological Communities Associated with Southern California Areas of Special Biological Significance**

Peter Raimondi<sup>1</sup>, Ken Schiff<sup>2</sup> and Dominic Gregorio<sup>3</sup>

<sup>1</sup> *University of California, Department of Ecology and Evolutionary Biology, Santa Cruz, CA*

<sup>2</sup> *Southern California Coastal Water Research Project, Costa Mesa, CA*

<sup>3</sup> *State Water Resources Control Board, Division of Water Quality: Watershed, Ocean, and Wetland Section, Sacramento, CA*

### **EXECUTIVE SUMMARY**

ASBS have been designated to protect marine species or biological communities from an undesirable alteration in natural water quality. Furthermore ASBS provide intrinsic value or recognized value to man for scientific study, commercial use, recreational use, or esthetic reasons. The 2009 Ocean Plan states: “Waste shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.” When granting exceptions to the Ocean Plan discharge prohibition, the State Water Board must determine that the public interest is served, and that protections of beneficial uses are not compromised. Despite the prohibition against waste discharges to ASBS, in 2003 there were approximately 1,658 outfalls to these marine water quality protected areas (SCCWRP 2003). As a result, the State Water Board has initiated regulatory actions, establishing special protections through the Ocean Plan’s exception process.

The key attribute that underlies the ASBS water quality regulations is the standard of “natural water quality”. The logic of the standard is that natural water quality is attainable using limited spatial regulations (prohibition of discharges in some areas) and essential for certain biological communities. Unfortunately, at least for southern California ASBS, coastal waters are no longer pristine. This is not simply due to discharges, as even if land based discharges were to be eliminated, aerial contaminants and pollutants carried by oceanic currents would influence water quality conditions.

Since a definition of natural water quality did not exist, a committee of scientists, termed the ASBS Natural Water Quality Committee, was formed to provide such a definition for the State Water Board. In 2010 the ASBS Natural Water Quality Committee provided the State Water Board with its findings (Dickson 2010), including an operational definition of natural water quality with the following criteria. These criteria address the two tenets of ASBS protections.

- 1) It should be possible to define a reference area or areas for each ASBS that currently approximate natural water quality and that are expected to exhibit the likely natural variability that would be found in that ASBS.
- 2) Any detectable human influence on the water quality must not hinder the ability of marine life to respond to natural cycles and processes. Such criteria will ensure that the beneficial uses identified by the Ocean Plan are protected for future generations.

### **Full Text**

[ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/703\\_ASBS\\_Characterization.pdf](ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/703_ASBS_Characterization.pdf)