Update of Status of Wheeler North Reef

September 15, 2016

SONGS Mitigation Monitoring Project
Marine Science Institute, University of California Santa Barbara
The California Coastal Act Requires Mitigation of Marine Impacts

As mitigation for the impacts to the San Onofre kelp forest caused by SONGS the CCC required SCE to:

1. Construct an artificial reef that creates a minimum of 150 acres of kelp forest habitat to compensate for losses of kelp and kelp bed fish and invertebrates.

2. Provide funding for scientific oversight and monitoring of the mitigation project that is independent of SCE.

Four Absolute Performance Standards

- Hard substrate: Standard met
- Giant kelp area: Standard met
- Fish standing stock: Standard met
- Invasive and undesirable species: Standard not met

![Images of hard substrate, giant kelp, fish standing stock, and invasive species]
11 Relative Performance Standards

- Food chain support
- Resident fish density
- Young-of-Year fish density
- Fish species richness
- Fish reproductive rates
- Fish production
- Sessile Invertebrate percent cover
- Mobile Invertebrate density
- Total Invertebrate species richness
- Algal percent cover
- Algal species richness

Standard met
Standard not met
Status of WNR & Project Compliance

MITIGATION CREDIT

RELATIVE STANDARDS

- Hard substrate
- Giant kelp area
- Fish standing stock
- Invasive and undesirable species

<table>
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Number of years of credit needed ~ 33
Number of years of credit earned = 0