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8 August 2018

Dear Adrian,

I am writing on behalf of the Santa Barbara Coastal Ecosystem LTER (SBC LTER) to express our strong interest in collaborating with you and your collaborators on your proposed project "*Benefits beyond biomass: Bio-physical feedbacks within Marine Protected Areas may promote ecosystem resilience in the face of global climate change*". Developing a mechanistic understanding of how kelp forests may provide an environmental buffer for key kelp forest consumers during episodes of hypoxia and low pH is relevant to the sustainability of coastal ecosystems worldwide, and is central to SBC LTER's goal of determining the effects of climate change on the ecological structure and function of kelp forest communities. The dramatic differences in abiotic conditions within the kelp forest revealed by SBC LTER's ongoing collaboration with your research group highlight the need to understand how kelp will influence biogeochemical cycles within the forest throughout projected future fluctuations of pH and oxygen. Your proposed research will fill a critical knowledge gap in our understanding of the interactive effects of resource management (protected areas) and multiple climatic stressors on fundamental aspects of kelp forest ecology that contribute to the persistence of these critical coastal ecosystems.

As an active collaborator, SBC LTER will provide access to previous and ongoing high frequency time-series data of oceanographic properties (e.g., pH, O_2, temperature, chlorophyll fluorescence, water velocity, and wave height) measured at complementary sites nearby your study sites in the shallow coastal waters of the Santa Barbara Channel. Additionally, we will work with you to estimate net primary production of the kelp canopy based on relationships that we have developed at our nearby study sites. We will be happy to host and archive all of your proposed project's metadata and data on the SBC LTER server, and will work with your research team to make this information readily available to all interested parties by including them in the SBC LTER data catalog, which is compatible with and linked to the National Science Foundation's Biological and Chemical Oceanography Data Management Office (BCO-DMO) and discoverable via DataONE. This is a natural way for our two projects to interact.

We wish you the best of luck with your proposal. Your prior research in this area has been extremely successful and influential, and we look forward to continuing our productive and valuable collaboration.

Sincerely,

Dan Reed
Lead Investigator, SBC LTER