

## **MITIGATING THE IMPACT OF CORAL BLEACHING THROUGH MARINE PROTECTED AREA DESIGN.**

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The 1998 El Niño-1999 La Niña bleaching event produced some clear patterns in coral bleaching and related mortality. This raises the question of whether these patterns yield useful information that might be incorporated into the design of marine protected areas (MPAs) for coral conservation to help mitigate the impact of bleaching events. We believe that the elevated sea water temperature induced bleaching and subsequent mortality patterns at four sites (Komodo National Park), Palau Rock Islands, Kisite Marine National Park and Chumbe Island Coral Sanctuary) provide insights into the factors influencing these patterns and show us a way to increase the resettlement of corals in communities sustaining near complete mortality. We present some preliminary ideas here for discussion and solicit guidance from participants in this special session on how to use MPA design to enhance recovery of coral communities sustaining high levels of mortality linked to elevated seawater temperature induced bleaching. Our goal is to enhance the survival prospects for coral communities in the MPAs in which we work and, if effective, to provide guidelines for MPA selection and design that could require a review of all coral reef MPAs globally.