**Title:** Copyright and DisclaimerThe Stat Do Coastal Ecosystems Mitigate Storm Surges and Tsunamis

**Statement of Problem:** Governments worldwide have recently embarked on many expensive restorae of South Carolina owns the coption projects involving barrier islands, coastal marshes and mangrove forests following catastrophic disturbance A commonyright to the Code of Laws of Soly-held perception among the general public, policy-makers, and some scientists is that coastal ecosystems provide significant measurable protection to human habitation during extreme stormuth Carolina, 1976, as containeds and tsunamis. Restoration activities have been particularly intensive after the December 2004 tsunami in the Indian O herein. Any use of the text, scean and the 200ection headings, or catchlines o5 hurricane season in the Gulf of Mexico. Yet, the scientific evidence is equivocal. Field observations and some modeling studies cast douf the 1976 Code is subject to thbt on these widely held beliefs. The terms of federal copyright ande scientific question can be cast in terms of the interactions between coastal ecosystems and extreme events. Firstly, how other applicable laws and such are coastal ecosystems impacted by extreme events? And secondly, do coastal ecosystems mitigate the extreme event, that is, under what conditions do they afford some form of protection, and if so, how much?

**Objectives:** First, thoroughly review the literatext, section headings, or catchture concerning the rolines may not be reproduced in wle of coastal ecosystems in mitigating damage to build a publicly accessible comprehensive database of actual observations that can be used for analyses. This literature review will also provide insights into hohole or in part in any form or fw these perceptions came about and how they have been propagated. Second, bring physical and biological scientists in a major workshop to address this topic. Many hydrodynamic models exist concerning tsunami propagation through mangroves. However these models are badly miscalibrated in how they represent the forests. Similar situations exist for other types of coastal ecosystems. Third, disseminate the results and recommendations to the public-policy makers and appropriate government entities to ensure the recommendations are included in the planning process.

**Relevance and Impact:** The cost ofor inclusion in any material whi restoring coastal ecosystems and communities is huge. Restoration must be based on sound science and the general public and decision makers must understach is offered for sale or lease nd their options.

**Partnerships:** A number of scientists from all disciplines in USGS have experwithout the express written permtise pertinent to this project. Federal partners include the National Park Service and Fish and Wildlife Service, both of which have cission of the Chairman of the South Carolina oastal units along all US coastlines. The US Army Corps of Engineers would be extremely interested in the results.