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

**Statement of Problem:** Governments worldwide have recently e of South Carolina owns the copyrmbarked on might to the Code of Laws of Southany expensive restoration projects involving barrier islands, coastal marshes and mangrov Carolina, 1976, as contained here forests following catastrophic disturbance A commonly-held perception among the general public, policy-makers, and some scientein. Any use of the text, sectioists is that coastal ecosystems provide significant measurable protection to human habitation during extreme storms ann headings, or catchlines of the d tsunamis. Restoration activitie1976 Code is subject to the termss have be of federal copyright and other aen particularly intensive after the December 2004 pplicable laws and such text, sectsunami in the Indian Ocean and the 2005 hurricane season in the Gulf of Mexico. Yet, the scientific etion headings, or catchlines may vidence is equivocal. Field observations and some modeling studies cast doubt on these widely held beliefs. The scientific question can be cast in terms of thenot be reproduced in whole or in interactions between coastal ecosystems and extremepart in any form or for inclusion events. Firstly, how are coastal ecosystems impacted by extreme events? And secondly, do coastal eco in any material which is offeredsystems mitigate the extreme event, that is, under what con for sale or lease without the exditions do they afford some form of protection, and if so, how much?

**Objectives:** First, thoroughlypress written permission of the C review the literature concerning the role of coastal ecosystems in mitigating damaghairman of the South Carolina Lege to build a publicly accessible cislative Council or the Code Commomprehensive database of actual observations that can be used for analyses. This literature review will also provide insights into how these perceptions issioner of South Carolina.This scame about and htatutory database is current throow 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 mangroveugh the 2001 Regular Session and s. Howevethe 2001 Extra Session of the Sour 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-policth Carolina General Assembly. Chy makers and appropriate anges to the statutes enacted by government entities to ensurethe 2002 General Assembly, which the recommendations are included iwill convene in January 2002, wiln the planning process.

**Relevance and Impact:** The cost of restoril be incorporated as soon as possng coastal ecosystems and communities is huge. Restible. Some changes enacted by thoration must be based on sound science and the general public and decision makers must understae 2002 General Assembly may take nd their options.

**Partnerships:** A number of scientists from all disciplines in USGS haimmediate effect. The State of Sve expertise pertinent to this project. Federal partneouth Carolina and the South Carolrs include the National Park Service and Fish and Wildlife Service, both of which have coastal unitsina Legislative Council make no w along all arranty as to the accuracy of the data, and usersUS coastlines. The US Army Corps of Engineers would be extremely interested in the results.