**Title:** Copyright and DisclaimerThe State of South Carolina owns the copyright to the Code o Do Coastal Ecosystems Mitigate Storm Surges and Tsunamis

**Statement of Problem:** Governments worldwide have recently embarked on many expensive restoraf Laws of South Carolina, 1976, as contained herein. Any use of the text, section htion projects involving barrier islands, coastal marshes and mangrove forests following catastrophic disturbance A commoneadings, or catchlines of the 1976 Code is subject to the terms of federal copyrightly-held perception among the general public, policy-makers, and some scientists is that coastal ecosystems provide significant measurable protection to human habitation during extreme storm and other applicable laws and such text, section headings, or catchlines may not bes and tsunamis. Restoration activities have been particularly intensive after the December 2004 tsunami in the Indian O reproduced in whole or in part in any form or for inclusion in any material which icean and the 200s offered for sale or lease without the express written permission of the Chairman o5 hurricane season in the Gulf of Mexico. Yet, the scientific evidence is equivocal. Field observations and some modeling studies cast douf the South Carolina Legislative Council or the Code Commissioner of South Carolina.bt on these widely held beliefs. ThThis statutory database is current through the 2001 Regular Session and the 2001 Exte scientific question can be cast in terms of the interactions between coastal ecosystems and extreme events. Firstly, howra Session of the South Carolina General Assembly. Changes to the statutes enacted 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 literaby the 2002 General Assembly, which will convene in January 2002, will be incorporatture concerning the roed as soon as possible. Some changes enacted by the 2002 General Assembly may take le 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 hoimmediate effect. The State of South Carolina and the South Carolina Legislative Cow 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 ofuncil make no warranty as to the accuracy of the data, and users rely on the data en restoring coastal ecosystems and communities is huge. Restoration must be based on sound science and the general public and decision makers must understatirely at their own risk.The Legislative Council by law is charged with compiling annd their options.

**Partnerships:** A number of scientists from all disciplines in USGS have experd publishing the 1976 Code and it is maintained in a database which may be accessed tise pertinent to this project. Federal partners include the National Park Service and Fish and Wildlife Service, both of which have cfor commercial purposes by contacting the Legislative Council or the office of Legislative Prinoastal units along all US coastlines. The US Army Corps of Engineers would be extremely interested in the results.