UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
National Centers for Coastal Ocean Science
Silver Spring, Maryland 20910

MEMORANDUM FOR: The Record

FROM: Steven Thur, Ph.D.
Acting Director

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SUBJECT: Categorical Exclusion for RESTORE Act Science Program Award #NA17NOS4510100, "Living shoreline site suitability model transfer for selected water bodies within the Gulf of Mexico: A GIS & remote sensing-based approach"

NOAA Administrative Order (NAO) 216-6A, Environmental Review Procedures, requires all proposed projects be reviewed with respect to environmental consequences on the human environment. This memorandum addresses the determination that the activities described below for Award #NA17NOS4510100, "Living shoreline site suitability model transfer for selected water bodies within the Gulf of Mexico: A GIS & remote sensing-based approach", qualifies to be categorically excluded from further National Environmental Policy Act review

Project Description

The RESTORE Act Science program is funding a three-year project to Troy University researchers and sub-awardees to modify and transfer the existing Mobile Bay living shoreline site suitability model tool to tidal shorelines in four waterbodies in the Gulf of Mexico.

The current trend in the Gulf of Mexico (GOM) is to install hard structures, such as bulkheads and rip-rap, on the shoreline to protect waterfront coastal property from erosion. Hard structures are reducing critical habitat needed for wildlife, recreational opportunities, nutrient recycling, and sustainable fisheries. In Mobile Bay, Alabama and Tampa Bay, Florida more than 38% of property owners have built some form of hard structure for shoreline protection. This project will modify and transfer the existing Mobile Bay living shoreline site suitability model tool to tidal shorelines in four waterbodies in the Gulf of Mexico (Perdido Bay/Wolf Bay/Ono Island, Complex, Alabama; Lake Pontchartrain, Louisiana; Galveston Bay, Texas; and Tampa Bay, Florida).

The Living Shoreline Suitability Model calls for specific data from existing GIS files as a way to evaluate site condition, and then follows a decision tree logic pathway to come to its final output or recommendation. The following data would be acquired by the investigator for each water body; marsh, erosion, tree cover, roads, beach presence, shoreline armoring, bank data, bathymetry, sand spit, and off shore features at data resolution low enough to run the model. Workshops would be held in each of the four states (TX, LA, AL, FL) in the first year to build knowledge, interest, and "buy in" for the model. In addition the workshops would help to determine any local, or regional permitting issues, liability concerns, and homeowner perceived biases that need to be addressed. The model would then be run and

the final results would determine the upland and shoreline best management practices. The researchers would then create an interactive query computer interface Decision Support Tool that will allow land owners, governments, and regulatory agencies to rapidly assess upland and living shoreline options and best management practices. The tool would be made available through NOAA's Digital Coast and project partner websites. Stakeholder workshops would be conducted in each waterbody to present the model and tool to ensure its use near the end of the project.

Effects of the Project and Extraordinary Circumstances

All activities (data compilation, analyses, model implementation and user interface and tool development) associated with this project would be conducted in an office setting using existing data, statistical algorithms and software. All work would be conducted within existing facilities using existing infrastructure. There would be no fieldwork conducted as part of this project. Thus, there would be no uncertain adverse environmental impacts, unknown risks or cumulative impacts associated with this project. Further, the proposed project does not involve air, noise, or water quality impacts; and does not otherwise have a significant impact on the human environment. These activities are not the subject of controversy based on potential environmental consequences and do not establish a precedent or decision in principle about future proposals. In addition, as there are no field activities, there is no impact on geographically- or ecologically-critical areas, (sanctuaries, wetlands, watersheds), National Historic Sites, and no adverse impacts to marine mammals, essential fish habitat or threatened and endangered species or their critical habitat. Low-income and minority populations would not be adversely affected by project activities. Thus, there are no extraordinary circumstances present that may require further analysis in an EA or EIS.

Categorical Exclusion Determination

This action would not result in any changes to the human environment. This project's activities are covered by the E1 Categorical Exclusion, as Defined in Appendix E of the NAO 216-6A Companion Manual. E1, describes activities conducted in laboratories and facilities where research practices and safeguards prevent environmental impacts and fall within the scope of the E1 categorical exclusion, the proposed project is conducted in a laboratory where research practices and safeguards prevent environmental impacts. Cumulative effects are negligible. As such, project activities are categorically excluded from further NEPA review.