



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

SUBJECT: Categorical Exclusion for RESTORE Act Science Program Award #NA17NOS4510098, "Ecosystem Modeling to Improve Fisheries Management in the Gulf of Mexico"

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 Project #2624091, "Ecosystem Modeling to Improve Fisheries Management in the Gulf of Mexico", qualifies to be categorically excluded from further National Environmental Policy Act review

### **Project Description**

The RESTORE Act Science program is considering funding a three-year project to the University of Florida and sub-awardees to refine and improve two existing Gulf of Mexico ecosystem models to integrate information on ecosystem stressors (such as red tides, hypoxic zones, or oil spills) and predator-prey interactions into the fisheries assessment and management process for gag and Gulf menhaden. The improved models would account for spatially explicit processes and stressors that routinely occur in the Gulf of Mexico.

Two existing Ecopath with Ecosim & Ecospace (EwE) ecosystem models would be updated and expanded. The first is a West Florida Shelf (WFS) EwE model developed at the University of Florida and the Florida Fish and Wildlife Research Institute. The second is a Gulf-wide EwE model developed at the NOAA Southeast Fisheries Science Center. During Year-1, both models would be modified and updated to address ecosystem-based Terms of Reference, developed at a dedicated Scoping Workshop with stakeholders, for gag and Gulf menhaden. Model updates would be determined in part by results of the workshop, but would include upgrading the models to EwE version 6.5, adding model functional groups, integrating new datasets, enhanced spatial resolution, and improving species-environment relationships. The current project builds on past modeling efforts by completely parameterizing the stochastic simulation module, translating policy optimization and management strategy evaluations into useful products for managers (i.e. reference points and harvest control rules), and testing new environmental forcing functions. The Ecospace spatial-temporal framework would be implemented to allow for reading of time-dynamic habitat maps. Intensive modeling and simulation would occur during the second year, focused on validating the spatial simulations and developing products for management. The second science workshop in Year-3 would review preliminary results and plan management



scenarios to implement in the models. Final products for management would be available during Year-3, with training conducted 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.