Virginia Saltwater Development Fund
Evaluation of a Proposal for the Development of a Research or Data Collection Project

Project Number: 1206-18 **Date: 4-24-07**

Title: R) Estimate and Assess Social and Economic Importance and Value of Menhaden to Chesapeake Bay Stakeholders and Region (3 Year Study)

> "The Virginia Saltwater Recreational Fishing Development Fund is to be used solely for the purpose of conserving and enhancing finfish taken by recreational anglers, enforcing laws related to natural resource conservation, improving recreational fishing opportunities, obtaining necessary data and conducting research for fisheries management, and creating or restoring habitat for species taken by recreational fishermen."
> Code of Virginia, Section 28.2-302.3

NOTE: Please read the entire scoresheet before beginning, then provide comments, and circle ( ) the appropriate score for each item. Thank You.

A. Problem Description and Resolution (20 points)

1. Comment on the adequacy of the problem description, background information, knowledge of available literature/data sources, and anticipated benefits.

The problem description is excellent. The PI has identified the main sources of value of the menhaden resource and the ways in which it contributes directly and indirectly to the regional economy. The background information is sufficient. The PI has done justice to the complexity of trading off commercial and recreational values that come from changing the stock of menhanden.

The proposal provides little detail about the available literature. The PI is a well-known fisheries economist, so I'm not concerned about knowledge of that literature. Moreover, collaborators (e.g. McConnell and Strand) have made seminal contributions to recreation demand, non-market valuation, and links with commercial fisheries. What concerns me most is how little detail there is about the ecological interdependencies of the relevant fish stocks and the effects of menhaden on water quality. I realize that surveying this literature is part of the project, but it would be useful to have some summary up front. Also, for such a large proposal, it would help to have an ecologist involved.

Much of the data for the project will be collected, particularly for the non-market valuation portions. I assume that the stock assessment has data on commercial menhaden, but there is little detail in the proposal.

If the project is successful, the benefits would be substantial. It would provide a cornerstone for trading off extractive and non-extractive values of menhaden. It would also serve as an important example for other applications that involve competing uses of a marine resource and, more broadly, ecosystem-based fishery management.

2. Describe your views on the conceptual approach to solve the problem.

The input/output model is standard for doing regional impact analysis and appears appropriate for this setting. Considering both revealed and stated preference methods for nonmarket valuation is also reasonable.

What is missing is a modeling strategy for integrating nonmarket values with commercial harvest values. Here, a bioeconomic model would make sense, but I'm not sure that the authors intend to do this.

SCORE (Circle one)	Poor				Excellent
	0	5	10	$\boxed{15}$	20

B. <u>Soundness of Project Design/Technical Approach (25 points)</u>

1. Is there sufficient information to technically evaluate the proposal?

Not really. This is not entirely the fault of the PI because, as pointed out in the proposal, there is a sequential nature of this work. Getting to the last step requires taking all of the previous ones. I am confident that the individual pieces of the project will be done well, but I would like to see more about the integration of the pieces.

2. What are the strengths/weaknesses of the project design (thoroughness, practicality, methods, integration with other work, etc.)?

The two biggest strengths are the policy relevance of the project and the combination of multiple methods in one proposal. Most economists set out to study just some portion of nonmarket (or commercial value). This project aims to put all of the information together that a policy analyst needs to make a sound decision. That is extremely refreshing.

The main weakness is the lack of connection to the water quality and ecological science. The proposal alludes to connections with ongoing work at VIMS, but there is little to go on in the proposal itself.

SCORE (Circle One)	Poor					Excellent
	0	5	10	15	20	25

C. **Project Management and Experience/Qualifications of Personnel (15 points)**

What is your opinion of the experience and capabilities of the Principal Investigator(s) to manage and conduct the work, the availability of facilities, and education and experience of assisting personnel.

No cv's were provided, but I am familiar with the research of Kirkley, Hicks, Lipton, McConnell, and Strand. All are highly qualified to do this research. It appears from Kikrkley's website that he has significant project management experience.

I'm not familiar with the other personnel involved in the project.

SCORE (Circle one)	Poor			Excellent
	0	5	10	15

D. **Project costs (15 points)**

Is the budget realistic and reasonable? Indicate any unreasonable costs.

Without a doubt, nonmarket valuation is expensive. And providing numbers on a variety of different values and impacts adds time and effort. However, this budget seems rather huge. It's unclear why so many researchers with somewhat overlapping skills have to be involved in the project. Also, is it really the case that Kirkley will spend 75% of his time on this project over the next three years? To me, that means no teaching for three years and limited other research projects.

It also seems unfortunate that a $1 million project that requires no expensive equipment does not include any support for graduate students.

SCORE (circle One)	Poor			Excellent
	0	5	10	15

E. **Value of the Project to Fisheries Managers (25 points)**

Do you believe the results of this project will further management of the species described? Will the results be useful to managers?

Absolutely yes. The results will be very useful for managers to trade off consumptive and non-consumptive values of menhaden.

SCORE (circle one)	Poor					Excellent
	0	5	10	15	20	25

PLEASE ADD ANY FURTHER COMMENTS ON THE PROPOSALS BELOW:

To me, much of the action for policy relevance will be in Task 8 in year 2. This is where more detail would help a lot. It seems that the proposal was written for non-economists, so the level of technical detail is low. If the investigators would like to provide a technical appendix, I would be happy to review it.

Task 9 in year 2 suggests that new estimation algorithms will be developed. I'm unclear why. Even random parameters logit models have standard estimation algorithms available. With more technical detail, the need for an alternative estimation strategy might be clearer.