MEMORANDUM

October 27th, 2015

To: Atlantic Menhaden Management Board
From: The Committee on Economics and Social Sciences
RE: Socioeconomic Study of Menhaden Fisheries - Request for Proposals Update

As discussed at the August meeting of the Atlantic Menhaden Management Board (Board), the Committee on Economics and Social Sciences (CESS) is developing a Request for Proposals (RFP) to conduct a study on the socioeconomics of Atlantic menhaden commercial fisheries. The research will be funded through a cooperative agreement with NOAA Fisheries. The CESS met in September to discuss the direction of the RFP and potential project deliverables. The CESS decided that a characterization of the coastwide menhaden fishery is a necessary first step in order to then perform economic analyses to describe the trade-offs of various allocation strategies and assist fishery managers in allocation decisions. The research should build on a previous study, Kirkley et al. 2011, as a general framework and expand the research to the coastwide level. These data are needed before economic analyses can be performed to optimize allocation. Information from the project will be made available to researchers and future RFPs designed to explore allocation trade-offs.

The CESS generated an anticipated set of deliverables the project should generate to inform management decisions, while being cognizant of budgetary and time constraints. In an October call, a subcommittee of the CESS reviewed and refined the project deliverables, and determined primary and secondary project objectives. The primary objective of the project will be to explore social equity and the distributional consequences of management change on both the Atlantic menhaden commercial bait and reduction fisheries. The research contract is anticipated to begin in early 2016, with deliverables expected in early 2017.

While the CESS understands that analyses exploring the trade-offs among allocation options may be a top priority of the Board, the Committee believes that a characterization of the commercial fishery is necessary before these analyses can be performed. This project will still provide valuable social and economic information. The suggested list of primary project deliverables can be found below. However, the CESS suggests that the Board allocation subgroup meet with the CESS RFP subcommittee to provide feedback on project objectives and deliverables to ensure that the information collected is the most beneficial to the management objectives of the Board. If the Board agrees that the allocation subgroup should meet with the CESS RFP subcommittee, additional time will be necessary for RFP development, leading to a short delay in the project starting, but deliverables will still be expected early 2017. The CESS will ask the Board to provide suggestions on how to proceed during its November 3rd meeting.
**Primary Objective:** Define social equity and the distributional consequences of management change on both the Atlantic menhaden commercial bait and reduction fisheries.

Identify political and social resources: individuals, families, firms, and communities (including social organizations, power, and leadership)

**Anticipated project deliverables:**

**Characterize the bait fishery coast-wide in context**

The harvesting sector of the fishery:

- Trend in pounds caught per year (by state)
  - Concentration in specific ports
- Trend in average and total revenues from menhaden (by state and year)
  - Distribution of revenues
  - Operational costs
- Vessel and gear characteristics
- Participant information
  - Demographics, education, distribution, longevity in fishery, income
- Employment in the sector
  - Alternative employment opportunities (by state/county)
  - Annual revenue shares by species/state to identify alternative targets and sources of fishery revenues
- Participation in fishery (direct dependence)
  - Number of fishermen and boats (historic and current employment, including crew)
    - Identify what extent fishermen focus on menhaden as a primary catch and during what seasons
    - Attitudes, beliefs, norms, values, perceptions
      - Job satisfaction, health safety
      - Importance of menhaden
        - Directly or via ecosystem services
    - Networks (crew, friends, family)
- Identify in-/direct subsidies, e.g., fuel subsidies, tax breaks etc.
- Identify substitute bait products and their average dockside prices by state

**Processing and distribution sector:**

- Number of bait retailers and wholesalers that sell menhaden (by state)
  - Number/types of employees
    - Income by position
  - Total bait sales and proportion of menhaden sales
- Distribution of the product
  - Identify the clients or purchasers (both commercial and recreational)
    - Identify the product forms and prices
      - Wholesale with prices and area
      - Retail with prices and area
• Preferred form for each targeted fish species and user type

**Characterize the reduction fishery in context:**
The harvesting sector of the fishery:

• Trend in landings and revenues ideally with operational costs
• Time series with capacity utilization and fixed costs
• Time series in quantity of quota allocated, quota landed, and menhaden processed
• Participation in fishery (direct dependence)
  o Trend in number and demographics of employees
    ▪ Estimate the share of income these employees represent in their communities
    ▪ Attitudes, beliefs, norms, values, perceptions
      • Job satisfaction, health safety
      • Importance of menhaden
        o Directly or via ecosystem services
    ▪ Networks (crew, friends, family)
• Population, education of communities of interest
  o Vulnerability
  o Alternative employment opportunities

Shoreside entities:

• Importance in the community in terms of how many direct and ancillary jobs supported, etc.
  o Change over time
• Uses of the reduction fishery product with info about supply chains
  o Substitutes for the product
  o Trends in prices for possible substitutes
• Identify in-/direct subsidies, e.g., fuel subsidies, tax breaks etc.

References: