

Request for Internal Proposals in FY2011 to Improve Assessment Methods

Jointly sponsored by the Assessment Methods Working Group and the Habitat Assessment Improvement Plan Team

Research proposals are requested for funding in FY2011 under the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Stock and Habitat Assessment Improvement Plans. The scope of this RFP is for projects designed to improve analytical methods for stock assessment and/or projects designed to improve the use of habitat information in stock assessments.

The Assessment Methods WG coordinates projects to improve stock assessment methods. Its goal is to support development, testing, standardization, and documentation of analytical methods for stock assessment. Major components of the program include: the Toolbox project which provides graphical interfaces for assessment software and a web-based repository for these programs, the ongoing NMFS support for the ADMB project (www.admb-project.org), and this competitive grant opportunity. Background material on the current suite of models can be found on the Toolbox web site: <http://nft.nefsc.noaa.gov/>.

A major focus of the Habitat Assessment Improvement Plan (http://www.st.nmfs.noaa.gov/st4/documents/habitatAssesmentImprovementPlan_052110.PDF) is to improve stock assessments through the incorporation of habitat information. Most stock assessments currently lack integration of habitat data, aside from depth and geographic stratification of fisheries-independent surveys. Uncertainty in the estimates of species abundance may be reduced by considering how habitats affect: the design of fisheries-independent surveys and resultant estimates of stock size; catchability coefficients; vital rates, such as natural mortality, growth, and reproduction, and stock-recruit functions. Furthermore, ecosystem-based management of habitat and coastal and marine spatial planning require more information regarding habitat usage during various life stages, ecosystem effects of habitat disturbance, and the spatial and temporal scales of animal movements.

The number of awards and the total amount of funding available are contingent upon the final FY2011 appropriation, but plans are to fund between 6 and 10 projects. It is anticipated that awards will range between approximately \$20,000 and \$100,000. In FY2010, \$400,000 and \$150,000 were made available for stock assessment and habitat assessment proposals, respectively, and a similar proportion between the two categories is planned for FY2011.

Potential stock assessment methods projects include:

- Design and conduct a national workshop and produce a report on best practices for an analytical topic.
- Conduct an evaluation of the performance of an assessment method or methods using simulated data.
- Develop, test, and document an augmentation of an assessment method.
- Conduct a comparative analysis of assessment methods/configurations with emphasis on how the respective model results affect fishery management decisions.

Potential habitat-related projects include:

- Improve stock assessment through a case study using existing habitat information or the development of protocols to incorporate habitat-specific data.
- Estimate the catch efficiency of survey gear in relation to different habitats and use this information to improve estimates of true stock size.
- Measure habitat-related life-history parameters for incorporation into a stock assessment.
- Identify the locations of habitat critical to a species or life history stage using a model or surveys, and use this information in a simulated or actual stock assessment.

Although not a requirement, inter-disciplinary collaboration and collaboration between science centers is encouraged. Lower priority will be given to projects that focus on use of environmental time series to reduce overlap with the FATE RFP.

Proposals should include:

- *Background*
- *Approach*
- *Benefits* (i.e. addressing how the results will be used in stock assessment, how they will benefit management, and/or help in addressing ecosystem assessments)
- *Deliverables*
- *Budget*
- *Budget Justification* (brief narrative to support each budget category)

Please include two-page curriculum vitae for all participants in the project (including a list of collaborators over the past 48 months). The duration of the proposed research should not exceed two years. The project description should clearly state objectives and must include statements of work for both years one and two. Proposals should be in Times New Roman with 12 point font, preferably as Word or PDF documents. Project description must not exceed 2 pages (inclusive of everything except references, budget, budget justification, and CVs). Proposals following these guidelines will qualify for further consideration. A project progress report will be required 12 months after the project is funded. At least one of the investigators must be a NOAA employee. If other investigators are not NOAA employees, please include a statement as to how funds would be transferred if the proposal is selected for funding. Funding is contingent upon availability of Federal appropriations. The financial contact must be within NOAA, so that funds can be BOP'd from the Office of Science and Technology to the receiving FMC. These will be FY11 funds, so they must be spent or obligated to a contract/grant prior to standard cut-off dates.

The **Proposals should be sent to Richard Methot, Richard.Methot@noaa.gov, by Friday, January 7, 2011.** The proposals will be reviewed by the Assessment Methods Working Group, with the assistance of the Habitat Assessment Improvement Plan team as appropriate. Proposals will be rated according to the following criteria: scientific and technical merit (40%); importance, relevance and applicability to improved stock assessments (35%); project costs (10%); and project management and qualifications of applicant(s) (15%). Proposal funding decisions will be announced as soon as the FY2011 budget is received and the Office of Science and Technology spend plan is approved.

The Budget should include funding amounts requested for the following categories:

1. Personnel (provide time and cost for each person)
2. Fringe Benefits
3. Travel
4. Equipment (non-expendable property with a unit cost of \$5,000 or more)
5. Supplies
6. Contractual (provide separate itemized budgets for each contract & in the Budget Justification describe products/services to be obtained)
7. Other
8. Total Direct Charges (sum of 1-7)
9. Indirect Charges (provide rate and charges)
10. Totals (sum of 8 and 9)