RECREATIONAL FISHERIES CONSTITUENTS ECONOMICS WORKSHOP

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Recreational Fisheries Constituents Economics Workshop

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Background

A singular insight gained from the 2010 Recreational Saltwater Fishing Summit (Summit) was the importance the saltwater angling community places on socioeconomic information. Indeed, two of the top 10 Potential Future Actions identified at the Summit were:

a) Improve social and economic data (# 2), and

b) Improve economic data timeliness so that they can be included in assessment of management actions (#6)

Each of these Actions was identified by Summit participants as the **TOP** priority potential future action for two of the four broad visions of a successful future. That is, improving social and economic data was identified as the top priority action for improving data and science (Vision 2). Likewise, improving the timeliness of economic information for management emerged as the top priority action for ensuring that fishery management decisions were based on a more complete understanding of the socioeconomic conditions of the fisheries and fishing communities (Vision 3).

Summit participants identified four broad visions of a successful future:

1. Improved open communication, cooperation, and trusting interaction.
2. Improved robust, timely, and accurate data and science on fisheries, habitat and water quality.
3. Fishery management decisions based on a more complete understanding of the social and economic contributions of both the recreational and commercial saltwater fishing communities.
4. Ensure broad access to the greatest possible range of recreational fishing opportunities.

Accordingly, the 2010 Recreational Saltwater Fisheries Action Agenda also reflected the urgency to improve economic and social data as well as to improve the timeliness of providing socioeconomic information in the fishery management process.

2014 Economics Workshop

In addition to improving the socioeconomic data and its timeliness, it has also been the Agency's goal to improve its outreach and communication with the recreational saltwater fishing community. The **2014 Recreational Fisheries Constituents' Economics Workshop** (Workshop) provided the Agency an opportunity to directly engage with constituents and get direct feedback on recent data collection and research activities, hear their perspective on how socioeconomic information is used in the Fishery Management Council process, and get their suggestions for both how the Agency can improve *WHAT* it is doing as well as *HOW* we are doing it.

To ensure that the feedback received at the Workshop reflected a 360 degree perspective on the Program, Workshop participants came from all NOAA Fisheries regions and a broad cross-section of saltwater fishing perspectives and backgrounds. The Workshop was organized to provide constituents with a broad understanding of the Agency's Economics & Human Dimensions Program's recreational saltwater fishing portfolio. Over the two-day workshop NOAA Fisheries economists and social scientists from the Science Centers and Headquarters presented on recent data collections, models, and decision support tools. In addition, constituents as well as Agency partners were also invited to present. Ample time was given to discussion for each presentation and with a diverse set of participants, all aspects of the information chain (data, model, decision support tool, management advice) associated with each presentation was in play.

The constituents at the workshop demonstrated a deep understanding of the fishery management process and also proved to be savvy users of economic and social information. They asked questions and were even-handed in giving both criticism and credit for a job well done. In the next section, we provide a brief summary of the discussions that occurred at the Workshop, highlighting the themes that emerged from this event. The final section is forward looking and focuses on next steps.

Overview of NOAA Fisheries Activities

Doug Lipton, the NOAA Fisheries Chief Economist, provided an overview of the Agency's recreational fisheries economics program, including the progress to date on the 2010 Summit Goals and the 2010 National Action Plan. In particular, Lipton pointed to the expansion of the for-hire data collection holdings from only one survey in 2005-2009 to conducting these surveys in 6 out of 7 regions since 2010 as evidence of NOAA Fisheries' programmatic approach to its recreational fisheries economics program. In a similar vein, he noted NOAA Fisheries' recent development of two decision support tools, discussed below, as evidence of a maturing research portfolio that was progressing beyond single model applications to the development of relevant tools for management.

It is not possible to cover the full suite of presentations and discussions in this summary. Instead herein we capture selected highlights that are illustrative of the issues raised at the Workshop[1]. For example, considerable feedback was given on the results from the National Saltwater Angler Attitudes & Preference Survey. While Workshop participants felt that overall the national results from the survey validated what was known about angler preferences (anglers care about fishing with family and friends, the importance of future generations being able to enjoy saltwater angling, and conservation), they pressed for additional information in the regional reports. They also felt outreach could have been better. NOAA Fisheries fully intends to utilize the feedback received at the Workshop to inform the regional report as well as to guide future survey outreach efforts.

NOAA Fisheries Progress

NOAA Fisheries responded to angler feedback received at the 2010 Recreational Fishing Summit with a number of strategic activities:

- Since 2010, for-hire surveys have been conducted in 6 out of 7 regions and the national angler expenditure survey was conducted in 2011, as planned
- Improved economic data – current regional survey efforts are all informed by past surveys in their regions, improving the utility of the recent surveys
- Progress on recreational fisheries economic models and two decision support tools: BLAST, a bioeconomic modeling tool being piloted in the Northeast, and the Social Indicators Toolbox

It is essential to conduct for-hire cost and earnings surveys: the software NOAA Fisheries uses to assess economic impacts does not accurately reflect some key features of this important sector (i.e., NOAA Fisheries must "customize" IMPLAN using survey data).

Outreach is essential for developing surveys and ensuring constituent buy-in. Staff also noted that including attitude and perception questions on surveys was important to stakeholders and can improve survey response rates.

"This [economic impact] study is invaluable to the charter industry."
– Captain David Monti, Charter Boat Captain

The two presentations on West Coast for-hire cost earnings surveys and, in particular, the economic impact study were well received by Workshop participants, who found it very encouraging that NOAA Fisheries was collecting this type of information. Workshop participants were particularly struck by the findings from the Oregon and Washington survey, which demonstrated that for-hire operations outlook was highly correlated with the timing of their entry into the fishery (more recent entries able to adapt to fishery circumstances by purchasing smaller boats, which are proving more cost-effective than the larger boats used by the more veteran operations). In addition, both studies received high marks for outreach.

The Massachusetts angler valuation survey did not receive high marks for outreach and there were also considerable concerns expressed about the timing of the survey. That is, concerns were expressed that the study, which assessed the value anglers place on having access to fishing via the value they placed on possessing an annual fishing license, may have harmed angler compliance with the recently instituted saltwater fishing license. This said, the same Workshop participant that raised this issue also concluded that despite his concerns he was glad NOAA Fisheries conducted the survey because the Agency needs this type of information. In addition, he believes that survey results demonstrate that investment in recreational fishing infrastructure is a good investment and thus can help guide state budget decisions.

[1] *A more detailed summary of each presentation and the associated discussion is provided online at:* ***http://www.st.nmfs.noaa.gov/economics/fisheries/recreational/2014-rec-econ-constituent-workshop/index****. In addition, two facts sheets, one on the Agency's recreational fisheries economic data holdings and the other on economic models, are also included on the website.*

The presentation on the BLAST decision support tool generated considerable discussion. Briefly, BLAST, which stands for Bioeconomic Length–structured Angler Simulation Tool, is a fully integrated and dynamic decision support tool for assessing the benefits associated with recreational fishing management options, including changes in bag limits, size limits, season length, and re-building plans. A key feature of the model is that it integrates recreational fishing behavior with age-structured stock assessment models, enabling NOAA Fisheries to realistically project future economic and biological conditions. Changes in both regulations and stock structure indirectly affect the welfare of recreational participants by altering the number of kept and released fish encountered on a trip.

"The two major advances of BLAST are 1) it is embedded in the fishery management process and doesn't leave it up to the Council members to figure out how to use the economic information; 2) it uses a coupled biological–behavioral model [instead of an isolated economic model]."
– Doug Lipton, NOAA Fisheries Chief Economist

"I hope the [BLAST} model can be worked on to address shortcomings; it would be a step backward not to use this cutting edge tool."
– Captain Patrick Paquette, Basic Strategies

"Thinking broadly about the portfolio of projects [NOAA Fisheries] has presented, this (BLAST) is what the program must do."
– Ted McConnell, University of Maryland

Workshop participants considered BLAST a game-changer in how economic information is used in the fishery management process. One Workshop participant from Massachusetts noted that BLAST allowed the Council to know for the first time the effect of a broad suite of proposed recreational management options (e.g., bag limits, size limits, etc.) on angler catch, effort, and welfare prior to making the decision. Although BLAST underestimated 2013 recreational haddock mortality, the constituents from the Northeast felt that BLAST remained the best source of economic information and encouraged NOAA Fisheries to continue to improve the model. Over the course of the 2-day Workshop, a number of constituents continued to encourage NOAA Fisheries to programmatically expand the use of this tool to key fisheries.

The presentation on the web-enabled Social Indicator Toolbox, released immediately prior to this Workshop, also generated considerable discussion. Briefly, the Toolbox currently provides 13 social indicators of coastal community resiliency and vulnerability for over 2,900 coastal communities from Maine through Texas, with plans to expand to other regions in 2014/2015. The Toolbox has broad applications, including MSA National Standard 8 (sustained participation of fishing communities), NEPA Social Impact Assessments, and Environmental Justice. This information was also used in a rapid assessment of the socioeconomic impacts of Hurricane Sandy to identify key recreational and commercial fishing communities. Participants were particularly excited about the web-based mapping tool, which gives them quick access to the social indicators in a format that is easily understood. An additional benefit one Workshop participant noted is that having this information at the community level is very important to recreational fishing constituents, who are often advocating on issues at the community level.

Key Takeaway Messages

While constituents commented on all aspects of the data collections, models, decision support tools as well as the management process, four key themes emerged repeatedly over the course of the Workshop. These themes call for:

1. **Increased communication of research goals and priorities for NOAA Fisheries' recreational fishing economics program.** Constituents repeatedly expressed their desire for a well-articulated statement of socioeconomic research priorities that can serve as a roadmap for future research activities. Constituents expressed their interest in helping to develop this plan which be based on management needs and would include a list of both national and regional priorities.

2. **Improve incorporation of socioeconomic information into the fishery management process.** While NOAA Fisheries staff cited the increased availability of socioeconomic information in the Council process, the constituents, in contrast, expressed concerns that the use of such information in shaping fisheries management decisions is still limited. A Workshop participant reconciled these seemingly disparate views, suggesting that while there is increased discussion of socioeconomic data and models at the Councils' Scientific and Statistical Committees (confirming NOAA Fisheries' perception), these discussions are rarely shared in Council meetings. Additional reasons cited for not including socioeconomic information in the management process were a lack of understanding of this type of information and its appropriate use, lack of timely data, and the sheer volume of both biological and other data presented to the Councils.

3. **Improved communication, cooperation and collaboration.** This recurring theme, prominently mentioned at the 2010 Summit, remains an ongoing concern of the marine recreational fishing constituents. Constituents remain deeply vested in improving the communication among anglers, the recreational and commercial industry, fishery managers, and scientists. Constituents expressed an interest in working more closely with NOAA Fisheries on all stages of socioeconomic work including priority setting, survey design, survey implementation, and understanding and sharing results. They also recommended that NOAA Fisheries staff be given increased opportunities to share their research at regular (annual or bi-annual) meetings.

4. **Improved socioeconomic information.** Constituents' concern about the lack of social and economic data available for assessing recreational fisheries management options was the #2 concern emerging from the 2010 Summit, second only to including the value of recreational fishing in NOAA's mission statement. From this Workshop, it is clear that this remains a major concern for stakeholders, underpinning every discussion and each and every recommendation made by constituents at the Workshop.

What We Heard

Our socioeconomic research priorities and goals are not well understood. Constituents would like to be involved in setting this research agenda.

Socioeconomic information could be better utilized in fishery management decisions.

Constituents want to be more informed and engaged in our socioeconomic work.

Socioeconomic information needs to be improved.

"Socioeconomics is rarely discussed during Council public meetings. It is always off on the side; how do we bring this more center and build trust in socio-economic information?"
– Ken Haddad, American Sportfishing Association

"From the outside looking in, it still strikes me as a piecemeal approach; we need to see the roadmap. And then we need to see how this information is fed into the management process."
– Mike Leonard, American Sportfishing Association

Next Steps

The four key areas identified by Workshop participants as issues that need to be addressed within the NOAA Fisheries recreational fisheries economics program are inherently different and, as such, resolution to these issues will also vary.

1. **Develop a clearly articulated plan to improve understanding of NOAA Fisheries socioeconomic priorities and activities.** It is important to us that stakeholders understand what we are doing, why, and where they can contribute. Moving forward, we will work with the stakeholder community to develop a well-defined research agenda that clearly conveys how our various data collections, models and decision support tools support management needs.

2. **Increase awareness and appropriate use of socioeconomic information in the fishery management process.** Although evident from workshop discussions that fishery management decisions would benefit from the increased use of socioeconomic information, it was clear that the use of this information needs to be more widespread. In 2014, NOAA Fisheries will reach out to internal and external stakeholders and establish a working group to examine the scope of the problem and to design a path forward for increased utilization of socioeconomic information.

3. **Provide opportunities for meaningful engagement and information sharing.** Since the 2010 Summit, the NOAA Fisheries socioeconomic program has been seeking out opportunities to engage with our constituents both regionally and nationally, such as the many outreach efforts associated with recent for-hire cost and earnings surveys across the country and with the 2011 National Marine Recreational Fishing Expenditure Survey. In 2011, several constituents spoke with us about the impact fishery management decisions were having on bait and tackle retail outlets. Without economic data on these important components of the coastal community, they argued, the impact on these businesses was largely unrecognized in the decision-making process. Working closely with the tackle industry, we are developing a study to better understand the economic importance of retail bait and tackle stores. This survey will launch in summer 2014 with the broad awareness and support of the fishing tackle industry. This collaboration is just one of the many ways that NOAA Fisheries and the fishing community can work together to improve our understanding of the socioeconomic aspects of recreational fishing.

4. **Improved socioeconomic information on saltwater recreational fishing and recreational fishing communities for fisheries management.** This is the overarching objective of each of the actions identified above. In addition to these activities, NOAA Fisheries will continue to work on improving the timeliness, accuracy and robustness of its data and science to help ensure that fishery management decisions are based upon a more complete understanding of the social and economic consequences of management options.