**NOAA Fisheries Recreational Data Timeliness Workshop**
**March 15-16, 2011**
**St. Petersburg, Florida**

# KEY OUTCOMES MEMORANDUM

## I. Overview

NOAA Fisheries conducted a Recreational Data Timeliness Workshop March 15-16, 2011, in St. Petersburg, Florida. (See **Attachment 1** for a copy of the workshop agenda.) The workshop, sponsored by the NOAA Fisheries Marine Recreational Information Program (MRIP), focused on three primary objectives:

- Listen to participants' experiences with recreational fishing data timeliness across the different NOAA Fisheries regions
- Share common experiences and approaches to meet new demands (for both data collection and management) related to timeliness
- Explore regionally based solutions/options for moving forward

This Key Outcomes Memorandum is intended to serve as the record of the meeting and summarizes the primary results of the two-day workshop. The synthesis focuses on summarizing main themes discussed at the workshop and presenting, in particular, the results of region-centric discussions regarding recreational data timeliness issues and approaches. Subsequent documents, including the MRIP project report, will identify broader implications and next steps flowing from this workshop.

## II. Workshop Conveners and Participants

Ron Salz with the NOAA Fisheries Statistics Division (F/ST1) served as the workshop convener, working closely with Dave Van Voorhees and Gordon Colvin (F/ST1). The workshop Steering Committee included representatives from the following organizations: Theodore Roosevelt Conservation Partnership, American Sportfishing Association, Coastal Conservation Association, Pew Trusts, and Environmental Defense.

The workshop was attended by about 40 invited participants, including representatives from NOAA Fisheries headquarters, several NOAA Fisheries regions and science centers, state and regional fishery management councils, interstate marine fishery commissions, representatives of the recreational fishing community, and NGOs involved in fisheries management and conservation. Additionally, there were approximately 13 observers from a range of organizations. Several NOAA Fisheries staff, contractors and consultants supported the organization and execution of the meeting. Scott McCreary and Bennett Brooks from CONCUR, an environmental dispute resolution firm specializing in marine resource and water issues, served as workshop facilitators and prepared the draft of this summary. (A full listing of participants is included as **Attachment 2**.)

## Meeting Materials

Materials provided at the workshop included the results of a pre-workshop survey on data timeliness and species fact sheets for each region (South Atlantic, Northeast, Gulf of Mexico, and Pacific Coast). Several PowerPoint presentations were delivered at the workshop; these, as well as the text of prepared remarks are available on the MRIP website at:

http://www.countmyfish.noaa.gov/workshop/datatimeliness.html

## III. Key Outcomes

Below is a summary of the main topics and issues discussed during the meeting.

### A. Welcome and Introductions

The meeting kicked off with a brief review of the meeting purpose by Ron Salz and self-introductions. These were followed by review and confirmation of both the agenda and proposed ground rules. CONCUR noted that, as the participants assembled for the workshop are not a FACA-chartered body, the intent of the workshop is to foster a thoughtful discussion and exchange of ideas of participants. It is not intended to be a consensus-seeking dialogue, though convergent ideas and approaches may be noted. Both the agenda and ground rules were accepted without any revisions or comment. As well, Ron Salz informed the group that Forbes Darby, from the NOAA Fisheries MRIP team, would be conducting video interviews with participants over the course of the workshop. (These interviews were conducted outside the plenary meeting room.) The workshop video blog is available on the MRIP website at

http://www.countmyfish.noaa.gov/mrip_tv/MRIPTV-TimelinessWorkshop/timeliness.html

### B. Background Briefings and Presentations

The workshop included a number of presentations and panel discussions on data timeliness. Below is a brief synopsis of the topics covered and important primary feedback from workshop participants.

- ***MRIP Overview.*** Gordon Colvin, with NOAA's Fisheries Statistics Division, provided an overview of the MRIP Program, including details on its background and impetus, approach and progress to-date, and timeline for implementing changes to recreational data collection. He emphasized the program's early focus on data quality--including accuracy and precision--but noted that the program is now turning its attention to issues of timeliness. He also noted that the program has been proposed to receive an additional $3 million in the President's FY 2012 budget request, of which $2 million is targeted at improving data timeliness. His comments generated a handful of clarifying questions addressing interest in reducing lag time and potential positive utility of the budget increase.

- ***ACL and National Standard One Guidelines.*** Mark Nelson with NOAA's Sustainable Fisheries Division provided background on Annual Catch Limits (ACLs) and National

Standard One Guidelines, explaining the relationship between the Overfishing Limit (OFL), Acceptable Biological Catch (ABC), Annual Catch Limit (ACL) and Annual Catch Target (ACT). He emphasized, in particular, the impact of data timeliness on the relationship between ACLs and ACTs and for triggering Accountability Measures (AMs).

- ***Recreational Data Timeliness Case Studies.*** Regional case studies were presented on approaches and timeliness considerations related to key species in particular regions. The presentations focused on the following species: salmon/halibut/bottomfish (Pacific Coast); red snapper/amberjack (Gulf of Mexico); black sea bass (South Atlantic); summer flounder and black sea bass (mid-Atlantic). The presentations highlighted important similarities and distinctions between the approaches. The presenters for the respective regions were Corey Niles, Washington Department of Fish and Wildlife teaming with Lynn Mattes, Oregon Department of Fish and Wildlife; Nick Farmer, NOAA Fisheries; Mike Ruccio, NOAA Fisheries; and Toni Kerns, Atlantic State Marine Fisheries Commission.

- ***Fish Collaborative Blue Ribbon Panel Report.*** Dick Brame with the Coastal Conservation Association provided a summary of the Fish Collaborative's 2010 Blue Ribbon Panel on Recreational Data Issues. His presentation highlighted several key findings and observations related to data timeliness.

- ***Panel on Consistency between Management Structures and Data Availability/Quality.*** A key focus of the Day One discussion centered on the consistency between management structures and data availability and quality, with presenters from each of the four regions discussing their management approaches and the real-world constraints they encountered related to timeliness. Presenters were Jessica Coakley, Mid-Atlantic Fishery Management Council; John Froeschke, Gulf of Mexico Fishery Management Council; Chris Kellogg, New England Fishery Management Council; David Cupka, South Atlantic Fishery Management Council; and Russell Porter, Pacific States Marine Fisheries Commission.

- ***Options for Improving Recreational Data Timeliness***. Several presentations on Day Two laid out the background and potential options for improving recreation data timeliness.

    - Three panelists –Nick Farmer with NOAA Fisheries; Lynn Mattes with Oregon DFW; and John Foster with NOAA Fisheries – summarized their respective experiences using forecasting tools to project in-season effort and harvest.

    - Dave Van Voorhees provided information on opportunities to increase the frequency of estimation as a key factor in data timeliness, explaining both the potential for monthly updates and the corresponding requirements for increased sample size and associated cost in moving to this frequency in order to maintain levels of precision.

    - Ron Salz described the numerous entities involved and the various data processing and error-checking steps required from data collection through production of estimates. His presentation focused on the various strategies for reducing the current MRFSS lag time of 45 days from the end of the 2-month wave until the release of preliminary estimates. Ron highlighted both the potential advantages and the pitfalls associated with streamlining the time required to gather, process and report

recreational fisheries data.

Over the course of the numerous presentations and panel discussions, several cross-cutting themes emerged. These threads centered on the following:

- **Framing the Issue: Why Does Recreational Data Timeliness Matter?**

  - Calls from fisheries managers and the recreational fisheries sector to prevent unnecessary closures are a major driver for improved timeliness.

  - More timely recreational data could help in several ways: (1) reduces potential for overages; (2) helps manage for in-seasons changes and avoid closures; and (3) allows for more timely notice to captains and industry – improves long-term business planning capabilities.

  - Data timeliness, or lack thereof, is a source of management uncertainty, and therefore, is a determinant of the gap set between ACL and ACT. The longer the lag and corresponding uncertainty, the greater the buffer needed between ACL and ACT.

  - The connection between timely generation of data and fishery managers' ability to set targets and AMs for the following season was also noted. The requirement for Councils to report annually on ACL overages places a significant burden on NOAA fisheries to generate timely and accurate year-end data.

  - Several participants noted that early waves are generally not meaningful predictors of recreational fishery landings in subsequent waves. Two-month waves are often a painful lag; you don't know where you're at in Wave 3 (May-June) and it's too late by the time the Wave 4 (July-August) numbers are available. As one workshop participant put it: "We're really in the dark during a period of great activity."

  - The difficulty in and resistance to using previous-year data to manage current year closures has been noted. This is particularly pronounced in the Northeast. As a result of significant inter-annual variability in factors including abundance, stock condition (e.g. length frequency distribution), availability and year class strength for many stocks, there is a downside to using previous year's data to project overages.

  - Concerns have been expressed among some fishery managers that in-season AMs are often a consequence of poor quality data and not actual real-world problems on the fishing grounds.

  - While the lack of data timeliness is problematic in that it increases ACL management uncertainty, it is not the only constraint in managing ACLs (other examples include differing state/federal regulations, angler behavior). Several participants noted that fixing timeliness alone is not a panacea for management of ACLs with AM's.

- **Management Approaches and Challenges**

    - A general theme was that we should consider adapting management to data constraints rather than adapting data to meet management needs. That is, monitoring requirements should map to existing data collection capabilities.

    - A wide range of fishery management strategies are used – from closures and limited openings, to bag, season and depth restrictions – based on data availability and limitations. Participants also underscored the importance of considering options other than closures to respond to overages, as these are typically preferred by anglers and captains.

    - The potential and interest in using multi-year averages for ACLs to smooth data was noted by several participants. Multiyear averages have the advantage of smoothing big peaks and valleys and offering a coping strategy to offset a long lag. Some disadvantages were also noted. For example, the utility of multiyear averages is confounded by the prevalence of inter-annual variability and a single high-year overage could have multi-year ramifications.

    - More conservative targets can be set so as not to disrupt recreational fishing with in-season closures. Some participants noted the mentality to "get the last fish" and not leave any fish on the table can lead to more frequent quota overages.

    - There was considerable discussion about the buffer between ACL and ACT as it relates to data timeliness. Since ACLs must have associated AM's if exceeded, ACTs can be viewed as a type of proactive AM that reduce the risk of exceeding an ACL.

    - One suggestion, currently used by the Gulf Council, is a tiered approach that considers timeliness along with data quality and data availability in determining the reduction from ACL to ACT.

    - An important distinction was made between in-season AMs which rely on more timely preliminary in-season wave estimates versus post-season AM's which are more dependent on timeliness of final (year-end) estimates. A similar distinction was made between proactive AMs (e.g. ACT, in-season closures) and reactive AMs applied in future fishing years. Some regions use year-plus-one strategies to apply AMs due to data timeliness constraints.

    - A question was raised whether management entities can respond quickly enough to more timely in-season landings updates. The inability of management to respond quickly limits the effectiveness of in-season closures as a management tool. If NMFS is not given in-season closure authority it would need to be done by emergency action, which could take several more weeks. This varies by region: e.g., Gulf Council does not give NMFS closure authority, Mid-Atlantic and South Atlantic Councils do. The ability of states to react quickly is highly variable. Pacific Coast states can react within days (Or & WA) or a few weeks (CA) and landings laws

effectively extend state regulations to federal waters. On the Atlantic Coast some states can react quickly in-season by proclamation or emergency rule but others can take up to 4 months.

- Several challenges related to institutional coordination were identified for situations where there is joint management between federal and state entities (Councils, Commissions, and States). The involvement of multiple agencies increases the complexity of coordination and can complicate timeliness of management responses. For example, the ASMFC has not developed complementary measures regarding ACLs and AMs to those developed by the MAFMC.

- Consider the strategy of shortening seasons instead of increasing size limits. As a corollary, consider the overall strategy of "stacking seasons" so that there is "always something to fish for."

- In general, managers should recognize that changes in fishing effort are often correlated with changes in the status of a stock and that it is angler behavior, rather than stocks, that are being managed with fishery regulations.

- The point was raised that while data quality and availability can constrain management regulatory options, management options can in-turn impact data quality, particularly precision of estimates. That is, the various catch and effort control combinations for restricting landings (e.g. restrictive seasons, bag limits, and size limits) will likely have different impacts on landings estimate precision. Impacts on data collection and data quality are often overlooked in the regulatory process.

- The potential impacts– both positive and negative – of partitioning ACTs and ACLs for recreational and commercial fisheries should be recognized and assessed.

- The Pacific States have sharing agreements for some fisheries whereby if one state exceeds their recreational limit they can borrow from a state that may be under its limit.

- The South Atlantic Council is considering establishing grouped species ACLs in their ACL amendment to deal with some of the data quality and timeliness issues in their region.

- **Options for Improving Recreational Data Timeliness**

  - Extensive interest was expressed in targeting shorter waves at particularly critical time periods ("core fishing seasons") during the year (i.e., summer in Northeast). Similarly, it may be possible to lengthen waves at less critical times with minimal impact to fisheries management. Participants stressed that the sequence of Wave importance varies by region and by fishery.

  - Similarly, fleet size, structure and access locations greatly impact the potential to collect data on a timelier basis.

- Availability of "raw" catch data throughout the wave (i.e. continuous reporting system) that could be used to inform management decisions was discussed. However, it was suggested that release of "raw" uncleaned data could be in violation of the federal Data Quality Act.

- Regional variation exists in the extent to which forecasted or projected landings are used as an in-season management tool. Some Councils rely heavily on forecasting catch/landings while others have decided not to use forecasting as an in-season management tool (e.g. Mid-Atlantic concerned about instability in projected data).

- Other predictors or correlates of landings that could be used to reduce management uncertainty (e.g. angler behavior, trip demand, species trade-offs, economic factors) should be investigated.

- Some regions/species are more dependent than others on recreational data timeliness to meet management needs. In certain cases the need for data timeliness is driven by factors such as species importance (biologic or economic) and court-ordered requirements (i.e., ESA and tribal considerations).

- There was some discussion about the potential timeliness improvements that can be gained from use of electronic data collection and reporting options.

### C. Regional Breakout Sessions on Data Timeliness

A key focus of the deliberations centered on regional breakout sessions intended to spark discussions on promising approaches to addressing recreational data timeliness issues.

Ron Salz emphasized the meeting's focus on timeliness, and introduced a series of conceptual alternatives for handling data timeliness relative to the duration of waves (one month or two months) and lag time as at touchstone for discussion (Table 1). Anticipated trade-offs between timeliness, cost, and data quality (precision and accuracy) associated with each Alternative were also presented. Workshop participants were asked to consider and discuss these trade-offs during group breakout sessions.

**Table 1- Data Timeliness Alternatives**

| | **Lag Time** | | |
|---|---|---|---|
| **Frequency of Estimation** | 45 Days | 38 Days | 31 Days |
| Bi Monthly | Status Quo Alt 0 | Alternative 1 | Alternative 2 |
| Monthly | Alternative 3 | Alternative 4 | Alternative 5 |

Ron emphasized that he wanted groups to consider the questions thoughtfully, but also noted that he expected some regional variation in the emphasis and level of detail that the breakout groups

would generate. He also indicated that he welcomed groups to invent alternative options beyond those identified in Table 1.

**Organizing Questions for Breakout Groups**

Breakout groups were asked to first identify three to four high priority species.

Next, for those priority species, breakout groups were asked to consider the following organizing questions:

1. What are the positive and negative impacts of each of the five recreational data timeliness alternatives?
2. What are the anticipated tradeoffs between timeliness and data quality?
   Is it acceptable to sacrifice data quality for timeliness?
   Would you accept lower precision on catch estimates in exchange for monthly estimates?
   If estimates are produced on a monthly (rather than bi-monthly) basis, where are increased sample sizes needed to achieve (or maintain) precision?
3. Is forecasting of recreational landings currently used as a management tool?
   If not, consider whether forecasting should be explored for this species and what improvements in terms of data timeliness, quality (accuracy/precision) might be needed to effectively forecast estimates.
   If forecasting is currently used, in what ways might the models be improved to provide more reliable/predictive estimates for management purposes?
4. Are there solutions to the problem of data timeliness that can be addressed by a different management approach?
   Is the current management regime for this species/stock consistent with the availability, quality and timeliness of recreational data?
   If there is a mismatch, are there management changes that can be recommended to work better with the available data?
5. What additional steps or approaches are needed in terms of recreational data availability, quality and timeliness?

Four breakout sessions were organized – Gulf of Mexico/Caribbean/Hawaii (led by Sera Drevenak), South Atlantic (led by Kathy Knowlton), Northeast (led by Sarah Heil) and Pacific Coast (led by Kevin Duffy). Participants were asked to associate with one breakout group and stay with it through the course of the deliberations. Each breakout group conducted focused deliberations on the topics above. While the discussion varied somewhat across groups in level of detail and focus on the particular questions, each group generated important observations in response to each organizing question, and then spent time summing up and synthesizing their results. Summaries for each group are provided below.

## South Atlantic Breakout Session

The group began its deliberation by underscoring several "facts recognized." These included:

- Current survey design is not species specific.
- Cost is a reality, and so it makes sense to design the optimum survey request to mesh with priorities for funding levels. If funding were maintained at current levels, then the status quo should be maintained for timeliness (i.e., not willing to trade-off precision for timeliness). Table 2 shows the series of steps up associated with increasing funding increments.

**Table 2: Potential Relationship between Increased Funding Increments and Corresponding Survey Requests**

| Funding Increments | Corresponding Survey Request |
|---|---|
| Third Step Up | Switch to Monthly Catch Estimates for Waves 4, 5, and 3 (in that priority order) |
| Second Step Up | Switch to Monthly Catch Estimates for Wave 4 Only |
| First Step Up | Switch to Monthly Estimates of Effort |
| Current Funding Increment | Maintain Status Quo |

Top priority species: Black sea bass was identified as a sentinel species with a very recent history of recreational closure.

1. Positive and negative impacts of five management alternatives.
The overarching positive impact noted for improvements in lag time and wave length was improved public confidence in the MRIP program.

Several positive impacts related to improving public confidence in the MRIP were noted, including:

- Increased presence at intercept sites for peak periods
- Tangible improvements in the data delivery timeline
- Improved advanced notice to the public
- Reductions in proportional standard error (PSE)
- Improvements in business planning
- Improved timeliness helps management of all species

One negative impact noted was the possibility of increased PSE for rare event species -- unless sampling intensity for that species is proportionally higher.

2. Tradeoffs between timeliness and data quality: precision vs. timeliness.

- The Southeast breakout group considered that lower monthly precision would be acceptable if cumulative precision were constant or improved. They also noted that QA/QC should be dynamic.
- The group noted that stratification of state subregions, Wave 1 sampling, and increased sampling for particular modes could all be desirable, but none of these steps are central factors in shaping timeliness.

3. Forecasting as a management tool.

Forecasting is used as a tool in the South Atlantic. The group felt that forecasting should be used more proactively rather than primarily as a tool for predicting quota overages. Closures have a socioeconomic impact and the ability to make forecasts helps business planning. A series of important considerations were recommended for forecasting: account for the rebuilding plan, forecast changes in average size, and be clear about expressing uncertainty. Forecasting approaches can be improved by incorporating additional information (e. g. angler behavior, the economy) into models to reduce uncertainty.

4. Management approaches.

The breakout group recommended changes to improve headboat reporting timeliness -- including enforcement of reporting requirements, and linking permit renewals and suspensions to timely reporting. They also recommended aligning Council meetings with the schedule of data availability.

5. Other Steps and Approaches.

Members of the South Atlantic breakout session suggested a number of other management considerations and potential strategies. One suggestion was to use specialized methods for golden tilefish and red snapper (these specialized methods were not specified). Another was to use corollary indicators such as fuel prices and tackle sales.

## Gulf of Mexico Breakout Session

Top priority species: The Gulf Breakout session identified the following topic priority species: Red snapper, gag grouper, amberjack.

1. Positive and negative impacts of five management alternatives.

The Gulf of Mexico breakout group considered the five timeliness alternatives and concluded that they are not particularly helpful with these three species. A major driver in the Gulf is that short seasons mean that the alternatives do not have a big impact. With the prevailing shorter seasons, the utility of reducing lag time is lower. Fishing seasons would need to be substantially longer than the lag time for any in-season adjustments to be feasible. Accordingly, the timeliness alternatives identified would likely be a factor if seasons are lengthened.

The Gulf of Mexico breakout group also noted that there is no authority for in-season closure, which makes timeliness alternatives less effective. The Gulf of Mexico breakout group was split on the effectiveness of reducing from 2 months to 1 month waves. Some in the group thought it

would not provide much benefit for the high priority species while others believed there were advantages to shortening the wave length (see comment in Q3 on forecasting for amberjack below).

2. Tradeoffs between timeliness and data quality: precision vs. timeliness.
The Gulf of Mexico breakout group considered tradeoffs between timeliness and data quality given the factors at play in their region. They noted that precision is important because seasons are very short, and fisheries managers are trying to set extraction close to the limits.

3. Forecasting as a management tool.
- The breakout group noted that more intensive (1 month waves) in summer months would increase projection ability and reduce overages for Great Amberjack.
- For red snapper, historical models used as predictors are not very helpful.

4. Management approaches.
- The Gulf of Mexico group recognized the reality that management needs to set targets based on the data available.
- The breakout group noted that the Councils are hesitant to use catch targets to manage these species.
- For red snapper, the current season is too short for in-season adjustments to be useful.
- The breakout group noted that extending the season and going down to a 1 fish red snapper bag limit could be one management strategy.
- Reporting by mode may be helpful – if for example, the modes are charter, private. In that case, managing modes separately would be useful in this scenario.

5. Other Steps and Approaches.
Members of the Gulf breakout session suggested a number of other management considerations and potential strategies. One suggestion was to utilize charter/head boat logbooks as a potentially more timely data source. Would need to consider more serious consequences for non-compliance with mandatory logbook programs to improve the timeliness of these reports. Participants also noted that the QA/QC process seems very long relative to the types of management decisions that need to be made. Another suggestion was to move away from the waves of data analysis to a continuously updated system of data gathering and reporting.

Increasing sampling and precision at peak times of the year was suggested. It was observed that migratory species do not fit into this model, and that forecasting is less helpful given constant management changes of Gulf species. Other ideas included: (1) The charter sector can provide proxy data for the private sector; (2) Use of species-specific permits would help identify targeted effort, which would help precision, but not timeliness; and (3) management of the whole system could use simulation guidance. Folding in cost estimates for different survey designs (e.g., monthly versus bi-monthly waves) can help identify the most efficient solution.

**Northeast Region Breakout Session**

Top priority species: The Northeast region identified Summer flounder, black sea bass, and Atlantic Cod as three key species for consideration.

1. Positive and negative impacts of five management alternatives.
Some of the alternatives might allow management to modify or adjust management measures in season, rather than having to implement closures. The Northeast group noted that all of the five alternatives keep in place the existing challenges for in-season management, and that all of them are heavily constrained. The group expressed that they would like to see additional exploration of hybrid options.

The breakout group saw potential in a hybrid timeliness option in which savings could be realized by employing differential approaches to key waves—Waves 3 and 5, potentially Wave 4 in Massachusetts and the Northeast generally. This may be more important as quota is approached. As well, increased frequency could improve and refine managers understanding of seasonal variability in the fishery. Mid-Atlantic representatives noted that increased frequency for Wave 5 could allow data to become available before the technical advisors meet at the beginning of the specification-setting process; technical advisors would have the opportunity to look at the data and provide additional advice to managers.

2. Tradeoffs between timeliness and data quality: precision vs. timeliness.
The Northeast breakout group identified overall data quality as a more important parameter than timeliness. The idea of striving for increased timeliness was preferred, though some observed that lower precision was unacceptable. It was also noted that point estimates are used now, so that if data are available—regardless of precision—is unlikely to be utilized. The breakout group noted that some tradeoff of PSE by increased in-season data frequency would be acceptable to facilitate in-season management so long as the annual estimate is unaffected. Responses to this question varied by species. For the Gulf of Maine cod stock, overall data quality is a more important parameter than timeliness. For the Mid-Atlantic species (summer flounder and sea bass), improved timeliness was preferred by most, even at the cost of precision, as long as PSEs of annual estimates was relatively unaffected (i.e. willing to trade some precision for improved in-season management)

3. Forecasting as a management tool.
Currently management in the Mid Atlantic and New England does not use projections/forecasting for in-season AMs. However, the group expressed that if the frequency and quality of data supported forecasting, this management tool might be used by these Councils in the future. The group did feel there was value in forecasting to potentially keep catches below the pertinent ACLs.

4. Management approaches.
The breakout group noted that mismatches in management and data need to be avoided but did not generate additional detail. There was also discussion about the need to explore changes to management timing, specifications process, or recreational measures development to better match the availability of recreational data. The Northeast group noted that improved efficiencies

could make intercept data instantly available (real-time) and that may help management decision making.

5. Other Steps and Approaches.
Several ideas were suggested. The breakout group noted the introduction of web-based accounting and other technological solutions for improved timeliness. Sub state geographic delineation was suggested as a useful strategy. "We want to kick the tires and really get into the details of how the timing occurs to explore efficiencies." While the geographic distribution and species variety make a census-based approach untenable, the group noted the potential for test cases on a smaller scale.

**Pacific Breakout Session**

Top priority species: Yelloweye rockfish, cowcod, black rockfish.

1. Positive and negative impacts of five management alternatives.
The Pacific recreational survey programs already produce monthly estimates with about a 30-day lag for most species (some species such as salmon and halibut are significantly more timely). Therefore, this group was instructed not to use the Alternatives provided to the other groups but rather to discuss the particular data timeliness needs for their region and brainstorm alternatives for addressing these.

2. Tradeoffs between timeliness and data quality: precision vs. timeliness.
The Council uses monthly reporting, which was characterized as "an expensive proposition"--one that has to sacrifice total sampling as a tradeoff. Currently, primary sampling is in ocean boat mode (shore mode not sampled in OR and WA), with minimal to no sampling in winter months. The months of October to February presently have very low effort; however, estimates are provided based on extrapolations from sampled months. This approach is being reevaluated with MRIP funding.

3. Forecasting as a management tool.
Forecasting is used in the Pacific region for both in-season management and for establishing harvest specification through the Council. Methods for improved forecasting are now being evaluated through the Council, GMT, and SSC review. Could consider adding factors to models such as economics and weather. In California, the RecFin database incorporates metadata on weather to aid in retrospective analysis but not for forecasting estimates.

4. Management approaches.
Currently, fisheries are not managed in season with consideration of potential for a future payback. As data delivery and in-season management actions are deemed reasonably effective in West Coast states, no management changes are recommended at this time. West coast has a history of tailoring fishing opportunities to monitoring capabilities, which includes timeliness. The three West Coast states have the ability to take action prior to NOAA Fisheries action. These States are able to respond more quickly than the Council or NOAA Fisheries in their

respective regulatory processes. "Port of landing" regulations means that states can effectively regulate fishing in federal waters.

5. Other Steps and Approaches.
Other approaches may be warranted for emerging fisheries and species such as albacore tuna and thresher shark. As well, future listings under the ESA, or similar laws may dictate additional sampling efforts.

**Cross-Cutting Themes from Breakout Sessions**

• There was broad support for the concept of focusing on "core waves" and the idea that managers should customize the need for timeliness during the more important periods.

• Several breakout groups observed that forecasting models can and should be improved with such inputs as angler behavior, fuel prices and other economic factors.

• Some breakout groups voiced a willingness to trade off some degree of precision in particular waves/months for improved timeliness so long as the overall estimate precision was maintained or improved.

### D. Public Comment

One participant opted to provide comments during the Public Comment period during the first day. The speaker complimented the MRIP program for organizing the workshop and encouraged participants to press for a continuous reporting system, suggesting even a month-long reporting lag is too long to support effective recreational fisheries management.

A member of the Fishing Rights Alliance attended as an observer and web-broadcast a portion of the workshop deliberations to that organizations web site. The web broadcast was neither arranged for nor endorsed by NOAA Fisheries. Workshop participants were informed about the web broadcast and offered an opportunity to comment or ask questions (no comments or questions were made).

## IV. Next Steps

The discussion generated two next steps. These are:

- ***Use of Workshop Results.*** Ron Salz explained to participants that the outcomes from the workshop deliberations have the potential to inform two distinct dialogues. NOAA Fisheries and MRIP partners will draw on the ideas and recommendations from the workshop to inform decisions regarding future MRIP data collection designs. He also voiced his expectation that the exchange of ideas and management strategies for addressing recreational sector ACLs and data timeliness issues will inform future management decisions and challenges ahead.

- ***Key Outcomes Memorandum.*** CONCUR has prepared a draft Key Outcomes Memorandum summarizing discussion themes, work products and next steps. CONCUR will work with Ron Salz to refine the draft memo. Ron will then distribute a near-final draft to invited workshop participants to identify key gaps or essential needed clarifications. A final memorandum will be distributed to all invited participants and will be posted on the MRIP website.

- ***Web-based Materials.*** The conveners will confer with the presenters regarding posting of their presentations (or text of the presentations that did not use PowerPoint). With the concurrence of presenters, presentations and other workshop materials will be posted on the MRIP web site.

Ron Salz will handle final editing and transmittal of the Key Outcomes Memorandum. Participants are also welcome to direct questions or comments regarding this summary to Bennett Brooks or Scott McCreary with CONCUR. Bennett can be reached at 212-678-0078 or via email at bennett@concur.net; Scott, 510-649-8008 or scott@concurinc.net.

**Attachment 1: Agenda**

# Recreational Data Timeliness Workshop

**March 15-16th**

**St. Petersburg III Room, Hilton Bayfront, St. Petersburg Florida**

**FINAL AGENDA**

## Tuesday March 15th

12:45 Arrival and Sign-in

1:00 Introductory Remarks, Review Agenda, Ground Rules
Ron Salz, NOAA Fisheries, Fisheries Statistics Division / Facilitator, CONCUR, Inc.

1:15 MRIP Overview - Gordon Colvin, NOAA Fisheries, Fisheries Statistics Division

1:45 Overview of Annual Catch Limits and National Standard One Guidelines
Mark Nelson, NOAA Fisheries, Sustainable Fisheries Division HQ

2:00 Recreational Data Timeliness Case Studies (15 minutes each, 5 minutes for questions)
Pacific Coast Species - Corey Niles, Washington Dept. of Fish and Wildlife and Lynn Mattes, Oregon Department of Fish and Wildlife
South Atlantic and Gulf of Mexico Species – Andy Strelcheck, NOAA Fisheries, Southeast Regional Office, Sustainable Fisheries
Black Sea Bass (Northeast) - Mike Ruccio, NOAA Fisheries, Northeast Regional Office, Sustainable Fisheries
Summer flounder - Toni Kerns, Atlantic States Marine Fisheries Commission

3:20 Break

3:35 Fish Collaborative Blue Ribbon Panel Summary on Recreational Data Timeliness
Dick Brame, Coastal Conservation Association (10 minutes, 5 minutes Q&A)

3:50 Consistency between Management Structures and Data Availability/Quality
Topic Presentation: Jessica Coakley, Mid-Atlantic Fishery Management Council (20 minutes)
Panelist Presentations (10 minutes each)
Panelists: John Froeschke, Gulf of Mexico Fishery Management Council; Chris Kellogg, New England Fishery Management Council; Russel Porter, Pacific States Marine Fisheries Commission; David Cupka, South Atlantic Fishery Management Council.
Discussion/Questions (15 minutes)

5:05 Public Comment

5:20 Synthesis of Day 1 / Preview of Day 2 - Facilitator, CONCUR, Inc.

5:40 Adjourn Day 1

**Wednesday March 16th**

8:30 Welcome Back / Preview of Day 2 - Facilitator, CONCUR, Inc.
8:35 Options for Improving Recreational Data Timeliness: Forecasting Recreational Catch Estimates
Panelist Presentations (15 minutes each)
Panelists: 1) Nick Farmer, NOAA Fisheries, Southeast Regional Office, Sustainable Fisheries; 2) Lynn Mattes, Oregon Department of Fish and Wildlife; 3) John Foster, NOAA Fisheries, Fisheries Statistics Division
Discussion/Questions (15 minutes)
9:35 Options for Improving Recreational Data Timeliness: Increase Frequency of Estimation
Dave Van Voorhees, NOAA Fisheries, Fisheries Statistics Division (20 minutes, 5 minute Q&A)
10:00 Options for Improving Recreational Data Timeliness: Reducing Lag Time
Jun Rossetti, ICF Macro International / Ron Salz, NOAA Fisheries (25 minutes, 5 minute Q&A)
10:30 Break
10:45 Regional Break-out Session Introduction
Alternatives for Addressing Recreational Data Timeliness Needs – Ron Salz, NOAA Fisheries
Species Fact Sheets – Ron Salz, NOAA Fisheries
Session Instructions and Objectives - Facilitator, CONCUR, Inc.
11:15 Regional Break-out Session: Part One
Regional Leaders:
Northeast – Sarah Heil, NOAA Fisheries, Northeast Regional Office, Sustainable Fisheries
South Atlantic – Kathy Knowlton, Georgia Department of Natural Resources
Gulf of Mexico and Caribbean – Sera Drevenak, Pew Environmental Group
Pacific and Western Pacific – Kevin Duffy, NOAA Fisheries, Northwest Regional Office, Sustainable Fisheries
12:15 Lunch
1:30 Regional Break-out Session: Part Two
2:45 Break
3:00 Regional Groups Report Out (10 minute reports for each group)
3:45 Public Comment
3:50 Workshop Wrap-up and Next Steps - Facilitator, CONCUR, Inc.
4:30 Adjourn Workshop

**Attachment 2: Roster of Attendees—Invited Participants**

| ***Name*** | ***Organization*** |
|---|---|
| Alexei Sharov | MD Department of Natural Resources and Blue Ribbon Panel |
| Andy Strelcheck | Southeast Regional Office |
| Brad McHale | NOAA Fisheries, Highly Migratory Species Division |
| Bruce Freeman | Jersey Coast Anglers Association |
| Chris Kellog | New England Fishery Management Council |
| Corey Niles | Washington Department of Fish and Wildlife |
| Dave Van Voorhees | NOAA Fisheries Statistics ST1 |
| David Cupka | South Atlantic Fishery Management Council |
| Dick Brame | Coastal Conservation Association / BRP |
| Don Barry | Environmental Defense Fund |
| Ed Sapp | Gulf of Mexico Fishery Management Council |
| Elizabeth Fetherston | Ocean Conservancy (replacing Chris Robbins) |
| Frank Blount | Northeast Fishery Management Council |
| Geof White | ACCSP |
| George Cooper | ASA / Theodore Roosevelt Conservation Partnership |
| George Geiger | South Atlantic Fishery Management Council |
| Gordon Colvin | NOAA Fisheries Statistics ST1 |
| Hongguang Ma | Pacific Islands Science Center |
| Jessica Coakley | Mid-Atlantic Fishery Management Council |
| John Boreman | NC State University (also Chair of MAFMC SSC) |
| John Foster | NOAA Fisheries Statistics ST1 |
| John Froeschke | Gulf of Mexico Fishery Management Council |
| Kathy Knowlton | Georgia Department of Natural Resources |
| Kelly Fitzpatrick | SEFSC SE Headboat Survey |
| Ken Brennan | SEFSC SE Headboat Survey |
| Kevin Duffy | Northwest Regional Office |
| Lynn Mattes | Oregon Dept. Fish and Wildlife |
| Mark Fisher | Texas Parks and Wildlife Dept. |
| Mark Nelson | NOAA Fisheries, Domestic Fisheries Division |
| Michael Misurek | Theodore Roosevelt Conservation Partnership |
| Mike Ruccio | Northeast Regional Office |
| Nick Farmer | Southeast Regional Office |
| Rick Robbins | Mid Atlantic Fishery Management Council |
| Ron Salz | NOAA Fisheries Statistics ST1 |
| Russ Porter | PSMFC |
| Sarah Heil | NOAA NERO SF |
| Scott Hickman | Charter Boat Industry - Texas |
| Sera Drevenak | PEW Environmental Group (replacing Chad Hanson) |
| Steven Turner | South East Fishery Management Council |
| Toni Kerns | Atlantic States Marine Fisheries Commission |

**Observers**

| *Name* | *Organization* |
|---|---|
| Britni Tokotch | Southeast Regional Office |
| Dennis O'Hern | Fishing Rights Alliance |
| Geoff Mullins | Theodore Roosevelt Conservation Partnership |
| Joe O'Hop | Florida Fish and Wildlife Research Institute |
| Katie Latanich | Duke University |
| Michael Larkin | Southeast Regional Office |
| Miguel Lugo | Southeast Regional Office |
| Nikhil Mehta | Southeast Regional Office |
| Peter Hood | Southeast Regional Office |
| Rich Malinowski | Southeast Regional Office |
| Rick Roberts | Snook Foundation |
| Steve Atran | Gulf of Mexico Fishery Management Council |
| Chris Bradshaw | Florida Fish and Wildlife Research Institute |

**Workshop Support Team**

| *Name* | *Organization* |
|---|---|
| Anjunell Lewis | NOAA Fisheries Statistics ST1 |
| Elan Nardi | NOAA Fisheries Statistics ST1 (contractor) |
| Forbes Darby | NOAA Fisheries / MRIP Outreach Team |
| Jun Rossetti | NOAA Fisheries Statistics ST1 (contractor) |
| Scott Ward | Outreach Consultant, Fifth Estate |

**Workshop Facilitators**

| *Name* | *Organization* |
|---|---|
| Bennett Brooks | CONCUR, Inc. |
| Scott McCreary | CONCUR, Inc. |