Marine Recreational Information Program Update

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ECS Federal In Support of
NOAA Fisheries
Office of Science and Technology
• Fishing Effort Survey (FES) Calibration
• MRIP Strategic Plan
• Regional Implementation Plans
• MRIP Certification
New Fishing Effort Survey (FES)

- National Academies: “The methodologies, including the address-based sampling survey design, are major improvements from the original Coastal Household Telephone Survey that employed random-digit-dialing.”
- This mail survey is a *more accurate* method for estimating shore and private boat fishing effort on the Atlantic and Gulf Coasts.
  - Better coverage
  - Higher response rates
  - Better chance of reaching people who fished
- In pilot studies the FES produced considerably *higher estimates* of fishing effort than the telephone survey.
- Plans for continued development
  - Evaluation of electronic reporting options in 2018
Transitioning to New Surveys

• Immediate implementation of the new FES would cause a major disruption
  • Stock assessments and fisheries management rely on having a comparable time series of recreational catch statistics
  • A calibration is needed to convert historical catch estimates based on legacy surveys into estimates compatible with those produced by any new surveys
  • We need numbers in the same “currency”

• Calibrations are needed to account for both the switch to the new FES and the recent change in the APAIS design
Transition and Calibration Timeline

**Step 1**
2015-2017
- FES/CHTS Benchmarking

**Step 2**
2016-2017
- FES calibration model development
- FES calibration model peer review
- APAIS calibration model development

**Step 3**
2018
- APAIS final calibration model peer review
- Re-estimation of historical catch and effort

**Step 4**
mid-2018
- Calibrated catch and effort time series available for use in stock assessments and management

- **Three-year transition period** from current phone survey estimates to new mail survey estimates
- **Phone survey estimates will be used for science and management** until the calibration models are developed, peer-reviewed, adopted and used to update stock assessments and annual catch limits
- Plan **developed with extensive regional and state-level input** through Atlantic and Gulf subgroup of the Transition Team
FES/CHTS Calibration Model Overview

• Developed with MRIP consultants at Colorado State University and Westat

• Application of small area estimation methods using Fay-Herriot Model (linear mixed effects model)

• Separate models for fishing modes
  • Private boat
  • Shore

• Separate effects for states, waves, and states by waves
FES/CHTS Calibration Model Overview

  • Generally larger effect that adjusts the entire time series

  • Generally smaller effect that adjusts recent years attenuating to no adjustment prior to 2000

• Approach allows for calibrating to FES or CHTS series
FES/CHTS Calibration Model Peer Review

- June 27-29 Workshop held in Silver Spring, MD
- Review Panel:
  - Chair: Paul Rago (MAFMC SSC)
  - 3 CIE Reviewers:
    - Cynthia Jones (Old Dominion Univ.)
    - Rob Hicks (College of William & Mary)
    - Ali Arab (Georgetown Univ.)
  - 3 Non-CIE Reviewers:
    - Patrick Sullivan (NEFMC SSC)
    - Fred Serchuk (SAFMC SSC)
    - Jason McNamee (ASMFC/Rhode Island DEM)
- Workshop was accessible by webinar and fully recorded
  - Recordings and materials will post on MRIP website
- Panel’s initial findings presented during workshop were positive
- Independent reviews and Chair’s summary due soon
Next Steps in Transition

1. MRIP response to peer reviews
2. Post peer reviews and response on website
3. Apply FES/CHTS model to run preliminary calibrated effort estimates for prior years
4. Complete evaluation of models proposed for APAIS design change calibration
5. Peer review selected APAIS model
6. Apply both models to produce final calibrated effort and catch statistics by mid-2018
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The Plan

- Includes appropriate responses to the National Academies recommendations.
- Establishes overall program goals and strategies including enhanced communications and outreach efforts.
- Identifies timelines for achieving objectives.
- Establishes program performance measures.

One recommendation was made

- “NOAA Fisheries should develop a comprehensive strategy to guide [MRIP’s] data collection efforts.”

December 2015

- The Government Accountability Office (GAO) issued its final analysis of MRIP.

Final draft made available for partner and stakeholder review

- A strategic planning process for the program was initiated.

NOAA concurred

- Establishes overall program goals and strategies including enhanced communications and outreach efforts.
MRIP Strategic Plan (2017-2022)

• Strategic plan finalized
  • Responded to > 150 comments and recommendations provided by States, Councils, Interstate Commissions and Individuals

• Six major goals:
  • Meeting customer needs, providing quality products, engaging key stakeholders, ensuring sound science, operating collaboratively and meeting program resource and funding needs

• Plan emphasizes collaboration with regional partners (e.g., Interstate Commissions, Fishery Management Councils and States)

• Approach - Three phased process
  • Evaluation, Innovation (emerging technologies), and Implementation
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Regional Implementation Plans

• Received Plans from: Gulf States, Atlantic States, Caribbean, Atlantic HMS

• Pacific States, Western Pacific Islands (draft completed) and Alaska plans in preparation

• Gulf States and Caribbean Plans approved by MRIP ESC
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MRIP Certification

• Several Gulf States are in the latter stages of review.
  • LA: State responding to reviewer evaluations
  • AL: Expecting the peer review to be completed this month
  • MS: Next in line for review
  • FL: Initial Peer Review Workshop to be rescheduled
• CA: Requested Certification, FHTS also in the queue
Next Steps

• Complete decision-making on certification of LA Creel and supplemental surveys

• Conduct a 4th workshop in early 2018 to determine how best to:
  • Integrate supplemental surveys with general MRIP surveys
  • Ensure comparability of survey estimates across states
  • Benchmark and calibrate as needed to support a smooth transition from the legacy survey approach to a new integrated approach for Gulf red snapper

• Determine funding support for implementation of the new integrated MRIP approach for the Gulf of Mexico