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Office of Science
and Technology

Marine
Recreational
Information
Program

Status Update on the NOAA Fisheries' MRIP 2020 Recreational Fisheries Catch Estimation Process

Gulf Of Mexico Fishery Management Council Meetings
April, 2021

Overview

- Description of disruptions to survey Operations
 - Effort Surveys
 - Catch Surveys
- Data Gaps
- 2020 Catch Estimation Strategy
 - Introduction to methods
- Publication Schedule
- Beyond 2021

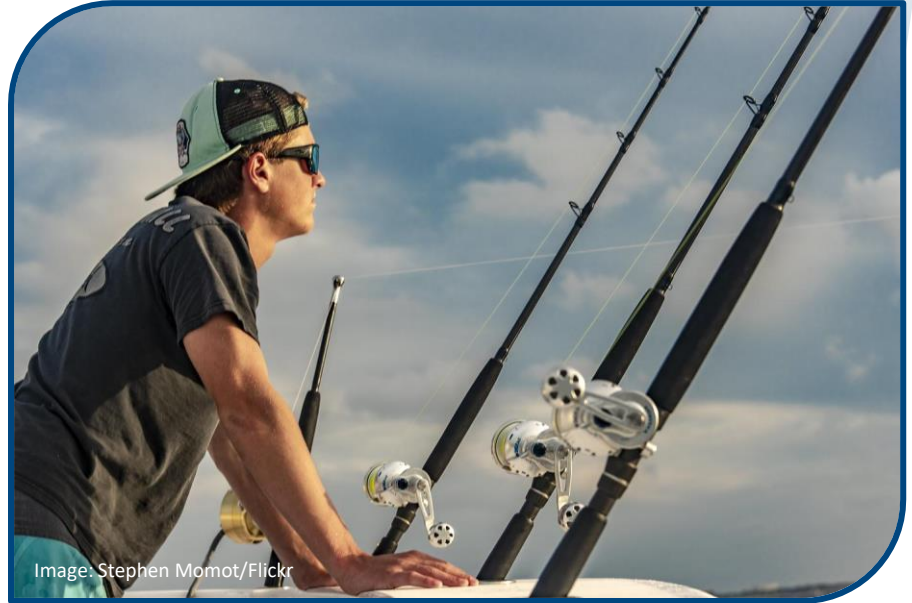


Image: Stephen Momot/Flickr

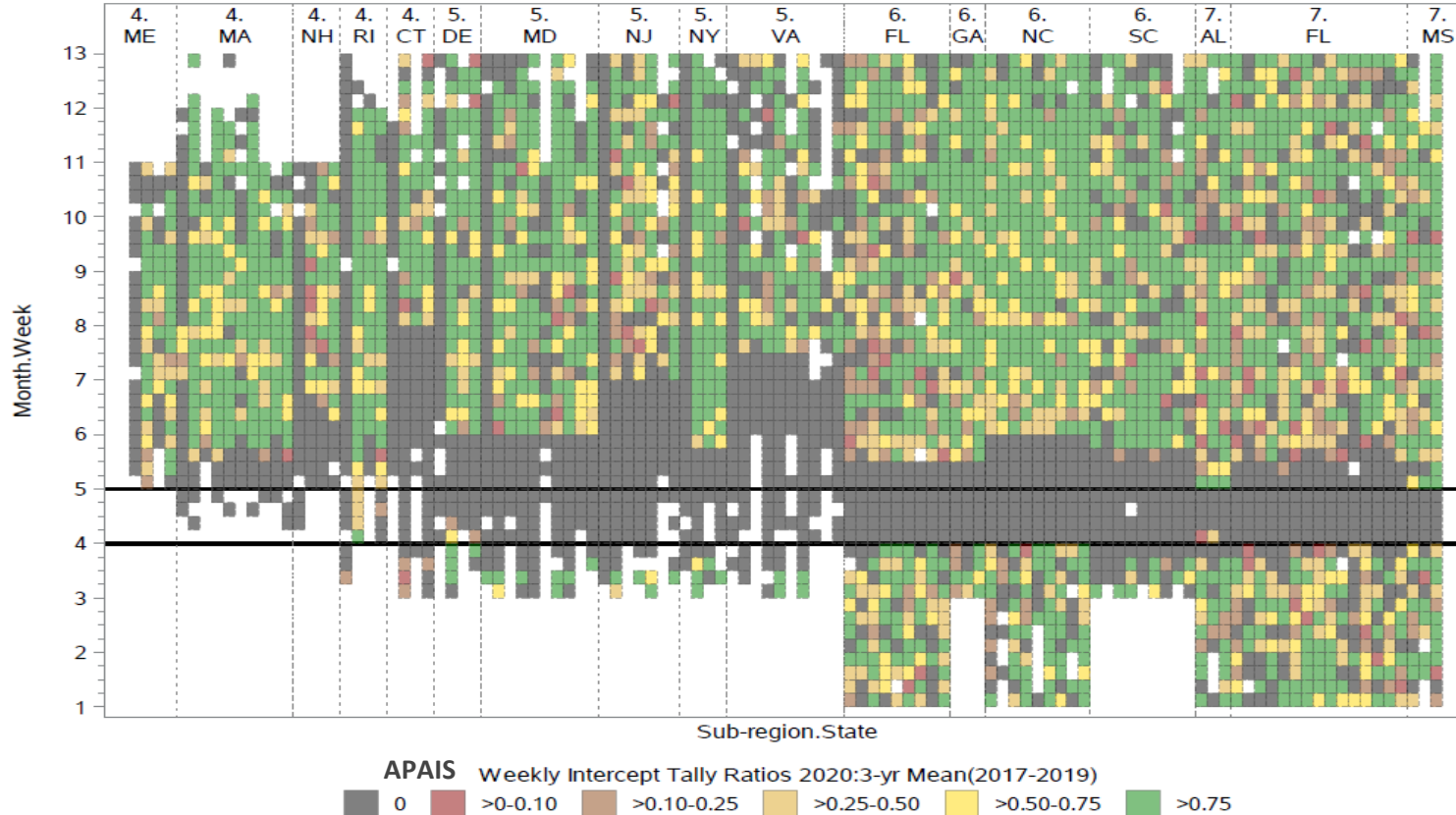
2020 MRIP Data Gaps

- Access Point Angler Intercept Survey (APAIS)
 - Source of catch rate and supplemental effort information
- Wave 2 (Mar/Apr)
 - Primarily April but some states suspended in late March
 - Most states resumed sampling at some point in May
- Connecticut, New Jersey, Virginia
 - These states did not resume sampling until July or August 1
- Headboat Mode
 - No state has resumed headboat sampling
 - APAIS sampling is at-sea or ride-along
 - Mid-Atlantic and New England Regions



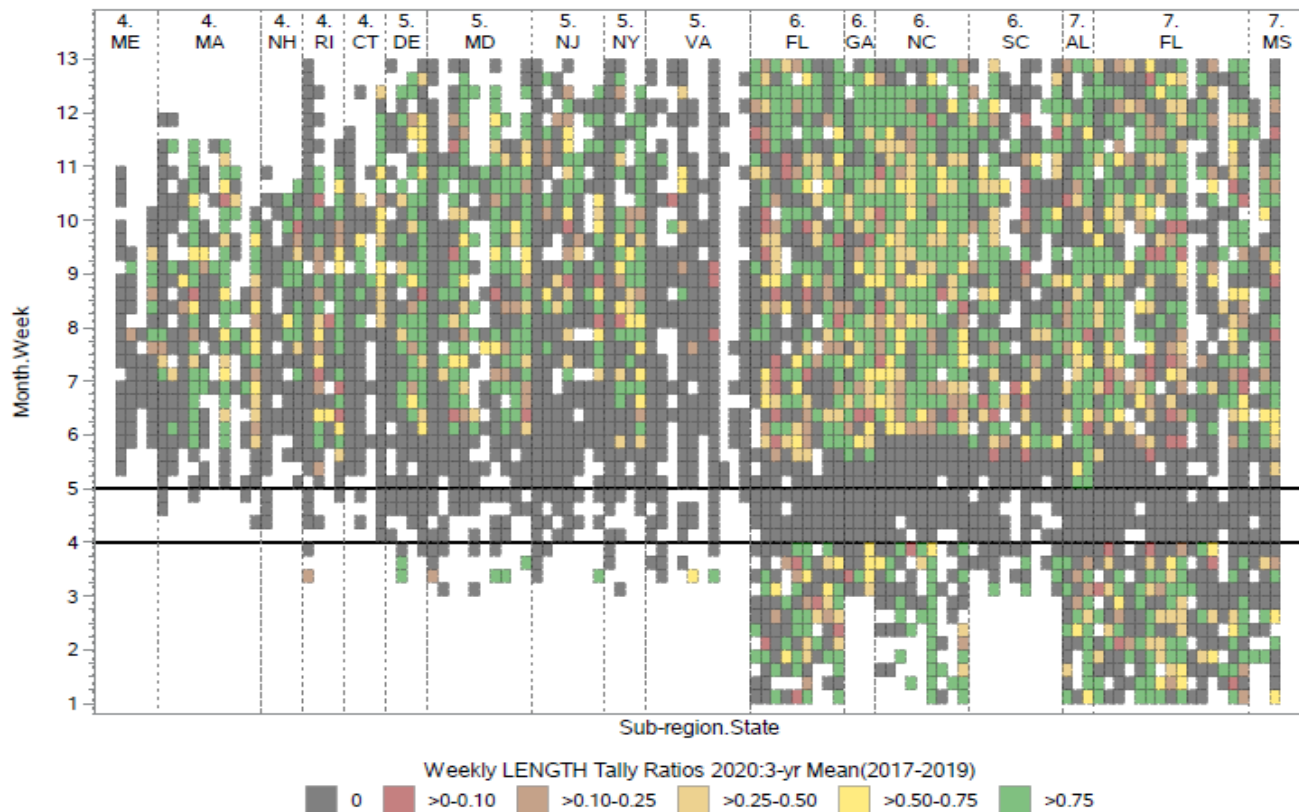
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2020 MRIP Data Gaps: Intercept tallies



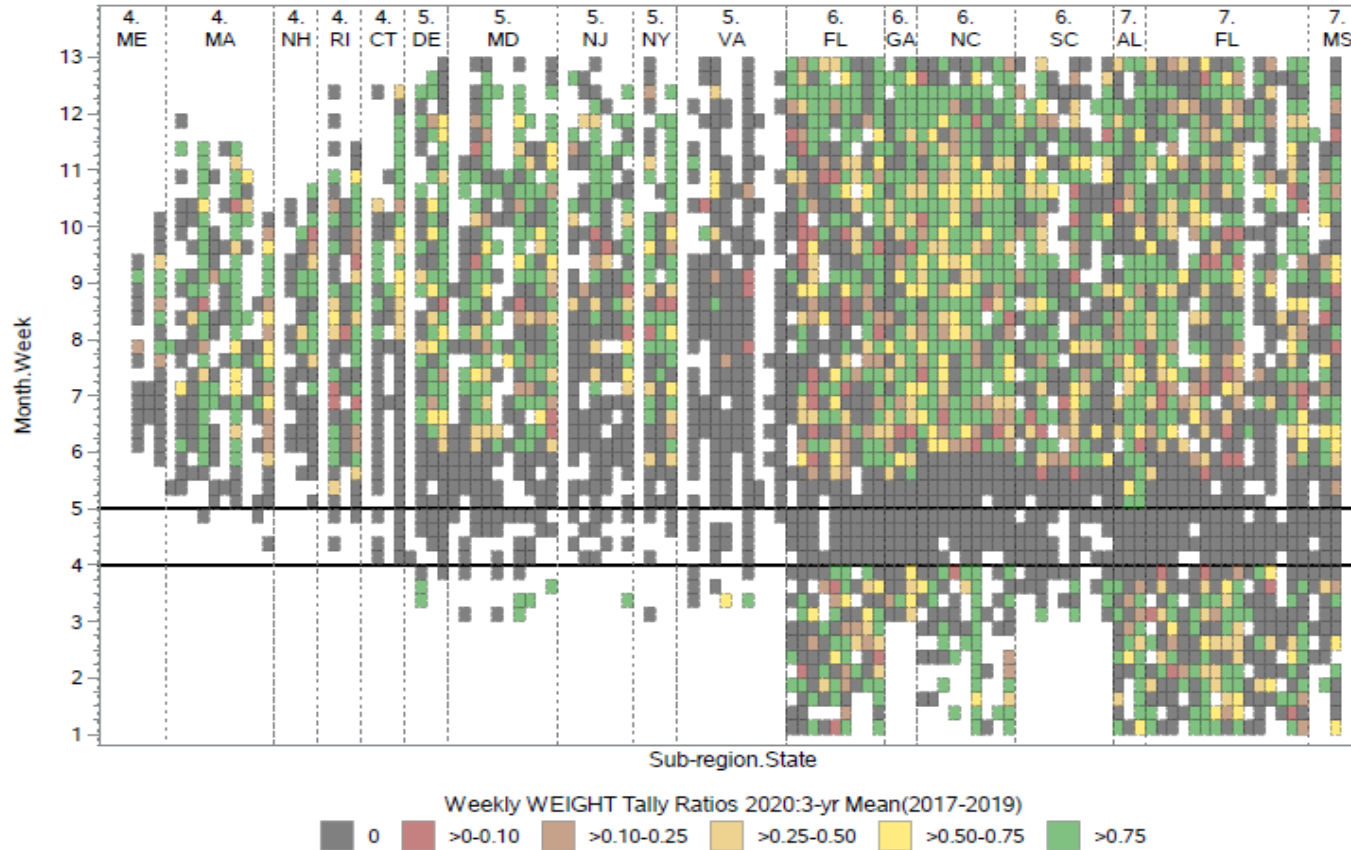
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2020 MRIP Data Gaps: Lengths



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2020 MRIP Data Gaps: Weights



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Data Imputation & Estimation

- APAIS sampling suspensions and resulting data gaps vary by state but are known
 - 2020 Sampling Status Tracker
- Simple imputation approach to fill gaps
 - All APAIS data from 2018 and 2019 collected within the corresponding 2020 data gap periods combined with available 2020 data
 - Original sample weights for 2018 and 2019 data down weighted by a factor of 2 to account for using two years of data
 - Method discussed with MRIP statistical consultants
- Standard 2-month wave estimation
 - Standard MRIP methodology used for both catch and effort estimates
 - 2020 estimates will be available at the 2-month wave level



Data Imputation & Estimation

- More complex methods were considered
 - Resource intensive
 - Larger deviation from standard MRIP estimation methodology
 - Auxiliary information
- Auxiliary Information
 - OST developed modifications to APAIS questionnaire (May 2020)
 - Changes to survey questionnaires must be approved as required by the Paperwork Reduction Act
 - Whitehouse OMB Office of Information and Regulatory Affairs ultimately blocked proposed modifications (Summer 2020)
- OST will revisit 2020 estimates when complete APAIS data are available for 2021
 - Evaluate changes to 2020 estimates using imputed records from 2019,2021 vs 2018,2019



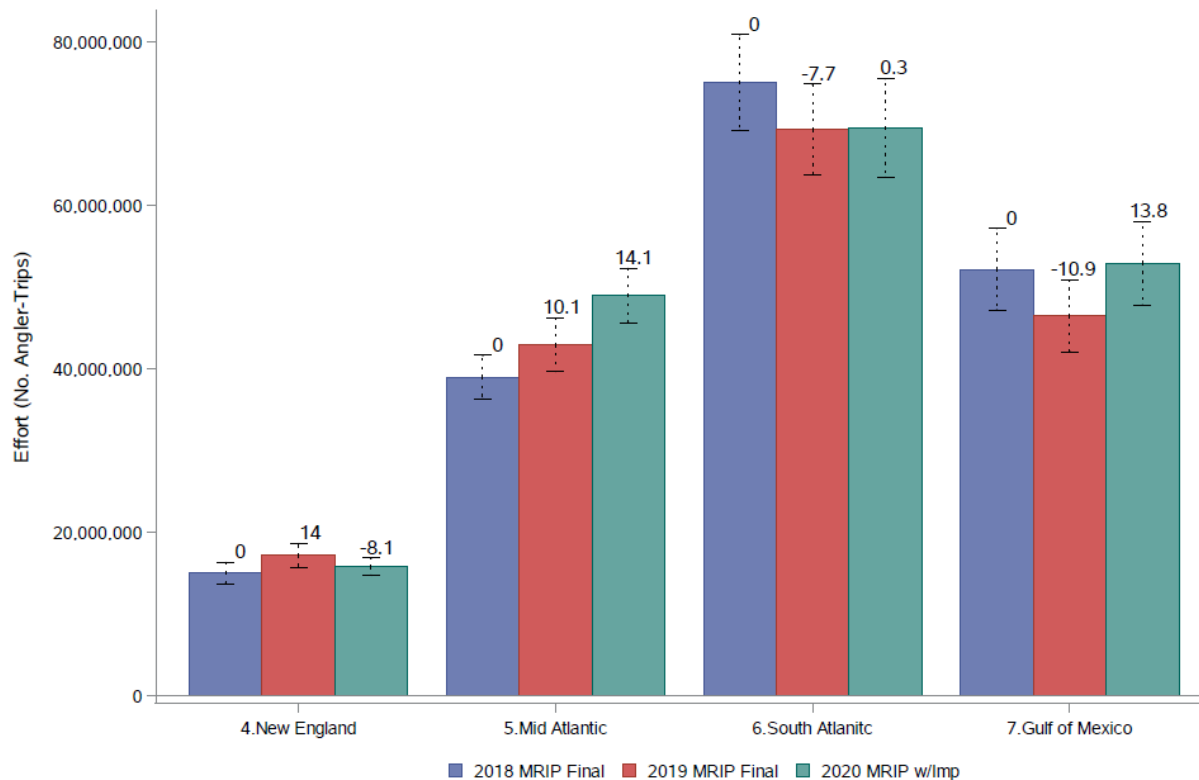
Effort Estimates

- 2018-2020
 - Annual Effort by Region
 - Annual Effort by Region for Charter and Headboat modes
- 2020 With vs Without Imputed Records
 - Annual Effort by Region



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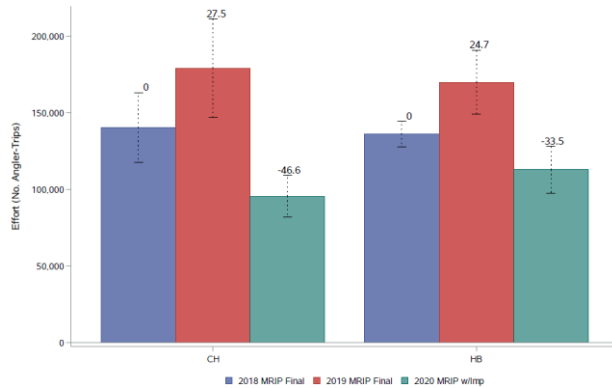
2018-2020 Effort Estimates



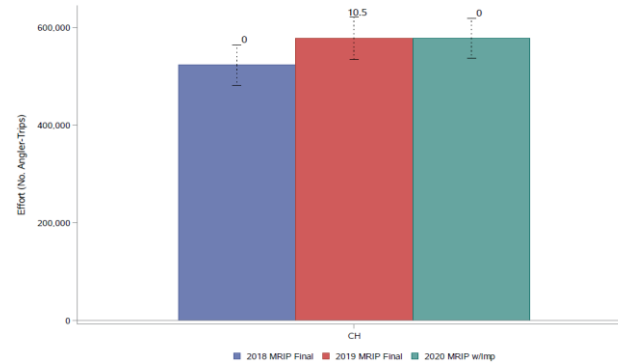
Data labels give % changes relative to prior year

2018-2020 Charter/Headboat Effort

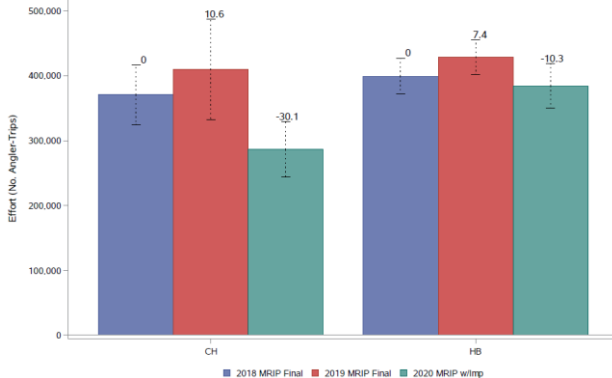
4. New England



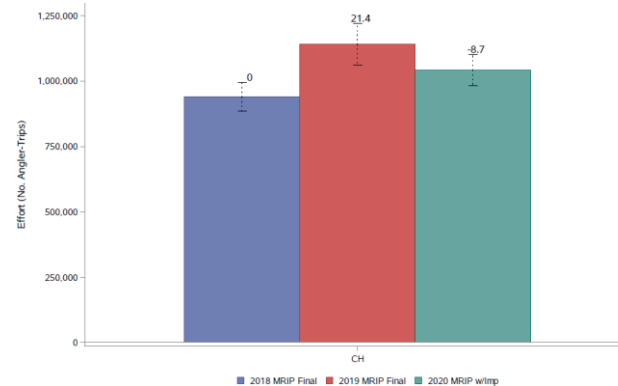
6. South Atlantic



5. Mid-Atlantic

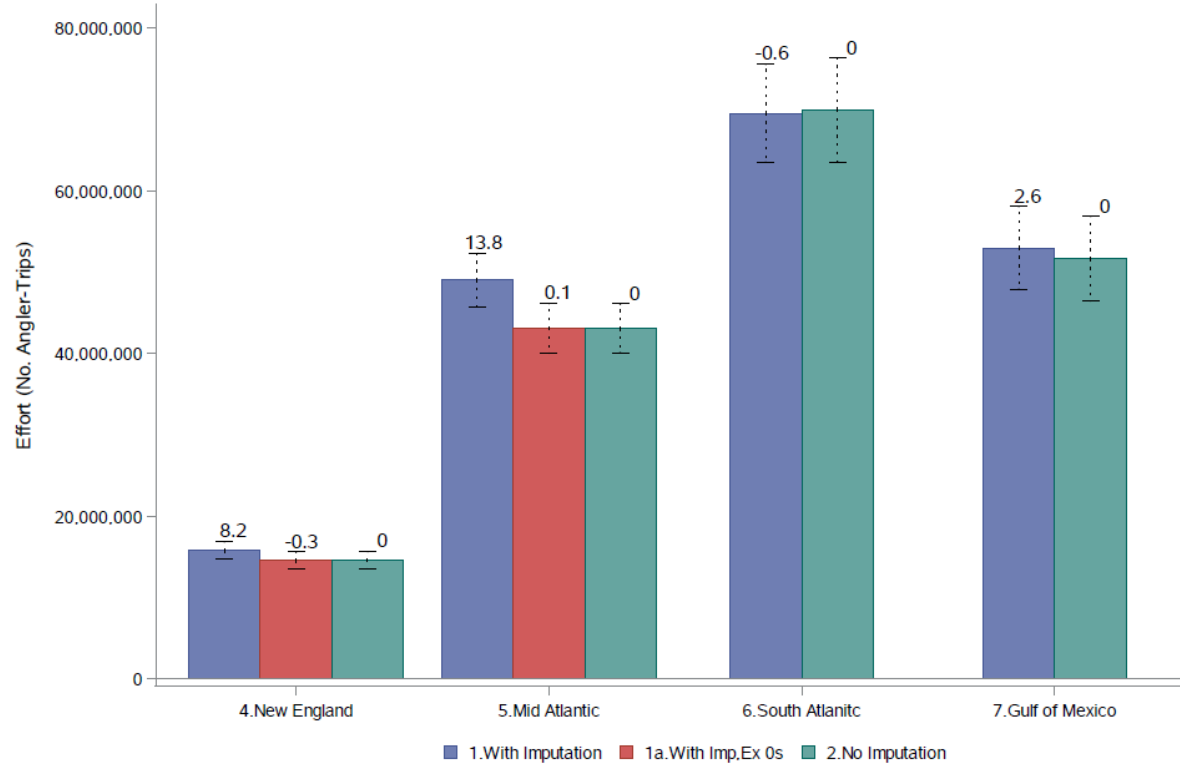


7. Gulf of Mexico



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2020 Effort Estimates



Data labels give % changes relative to the 2. No Imputation series

Next Steps

- Estimate Review
 - OST has completed an initial review, following up on a limited number of cases
 - MRIP Internal Review Team (GARFO/NEFSC and SERO/SEFSC) has finished review of estimates
 - OST will investigate any estimates flagged by the IRT
- Estimate Release
 - Targeting mid-April to follow standard schedule
 - Results of IRT review and any subsequent data investigations
 - Communications Roll-out
 - Continuing communications in the Regions



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