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MRIP 2020 Estimates

Overview of Methodology and
Select Catch and Effort Estimates

Main Points

- 2020 Catch and Effort Estimates
 - In general, no unexpected or extreme results
 - 2020 typically in line with prior years or recent trends
 - Impacts of data gaps and imputation variable across states and fishing modes but limited at annual and regional levels
- Review of Data Gaps from COVID-19
- Data Imputation and Estimation Methods
- Catch and Effort Estimates
 - Recent Time Series, 2018-2020
 - 2020 With Imputed Records vs Without Imputed Records
 - Next Steps

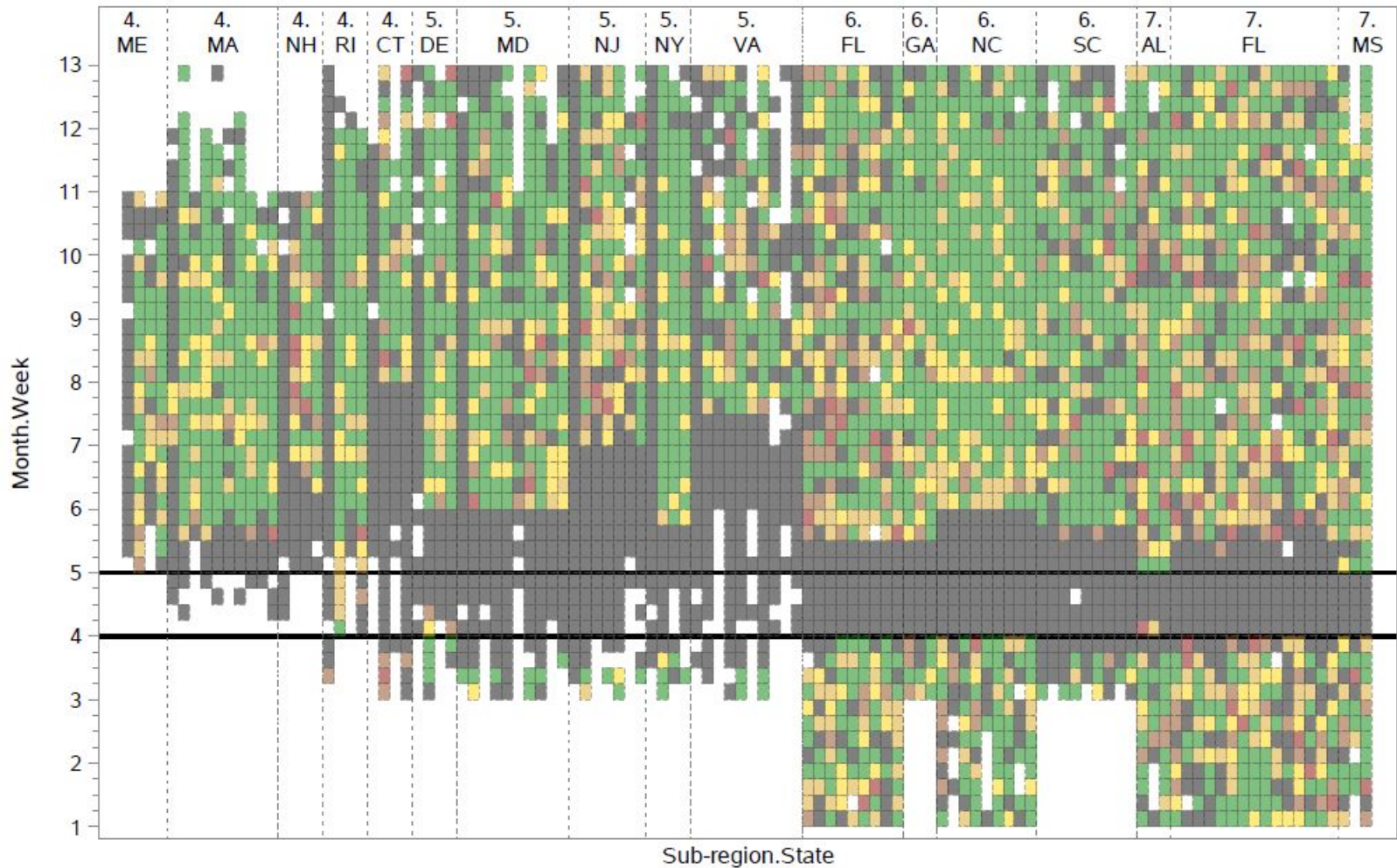


2020 MRIP Data Gaps

- 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
- SE Region Headboat sampling suspended



2020 MRIP Data Gaps



APAIS Weekly Intercept Tally Ratios 2020:3-yr Mean(2017-2019)

0
 >0-0.10
 >0.10-0.25
 >0.25-0.50
 >0.50-0.75
 >0.75

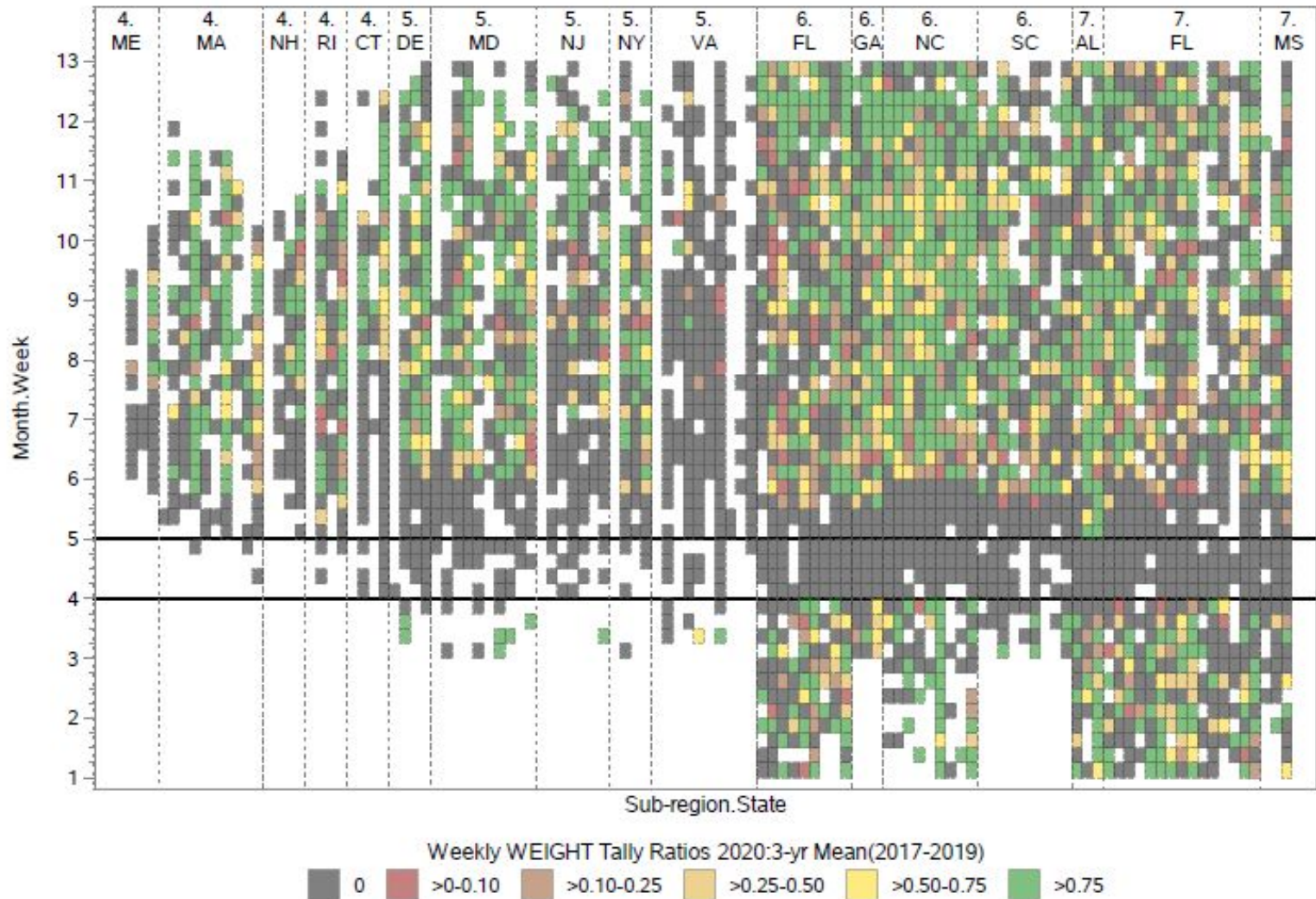


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2020 MRIP Data Gaps: Lengths



2020 MRIP Data Gaps: Weights



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

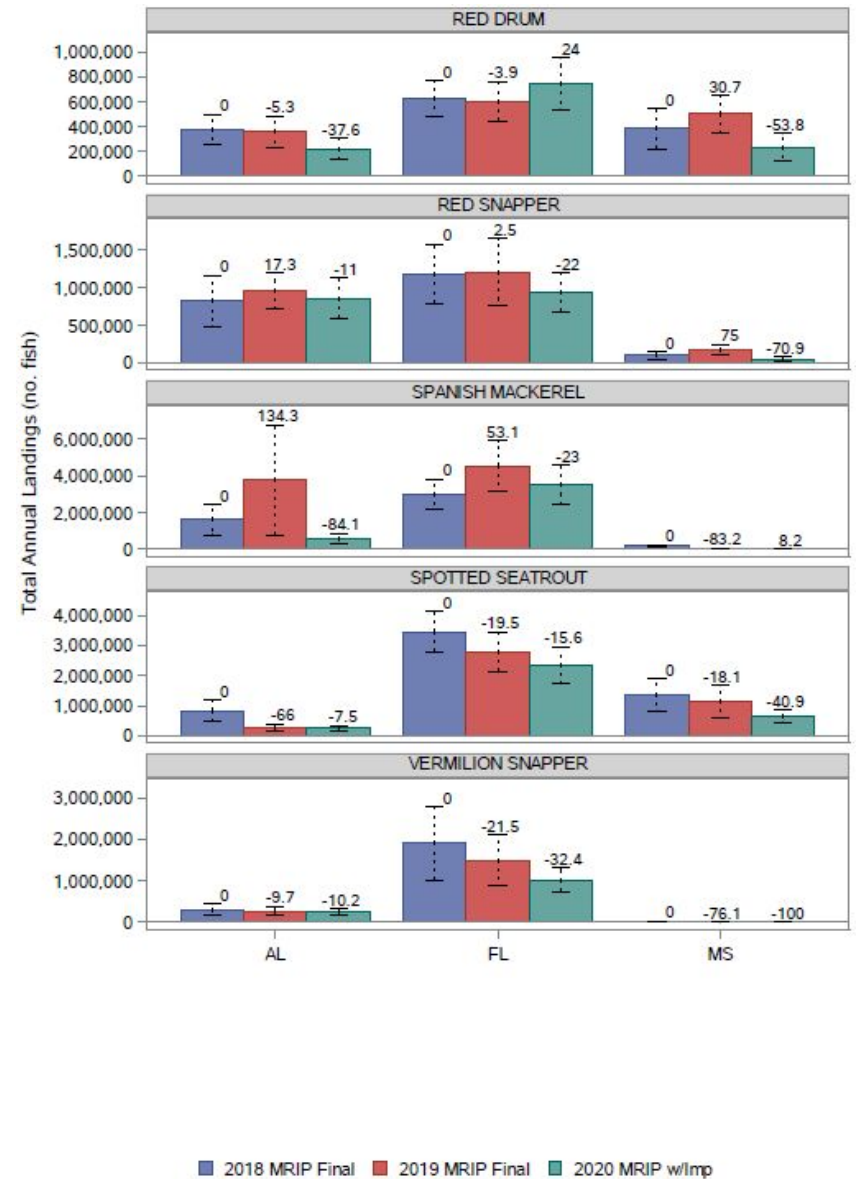
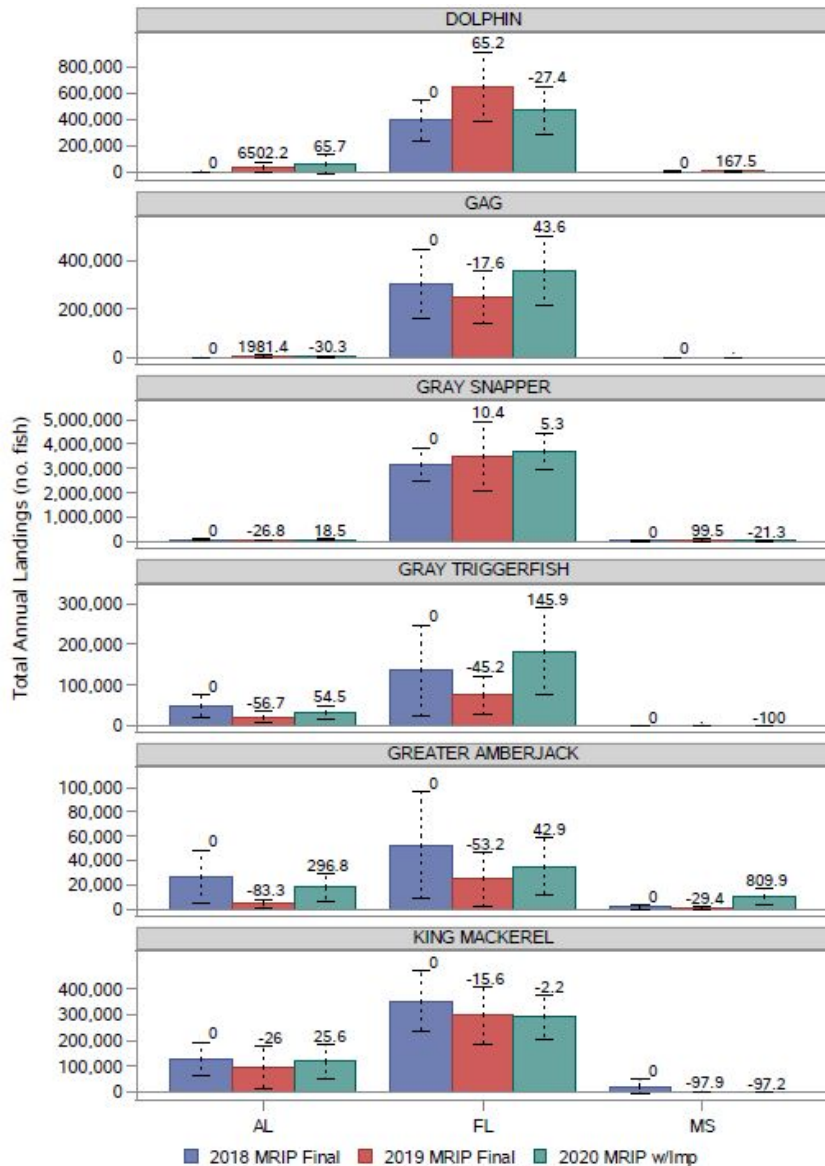
- More complex methods were considered
 - Resource intensive
 - Larger deviation from standard MRIP estimation methodology
 - Auxiliary information
- Auxiliary Information
 - OST developed modifications to APAIS questionnaire (May 2020)
 - Changes to survey questionnaires must be approved as required 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



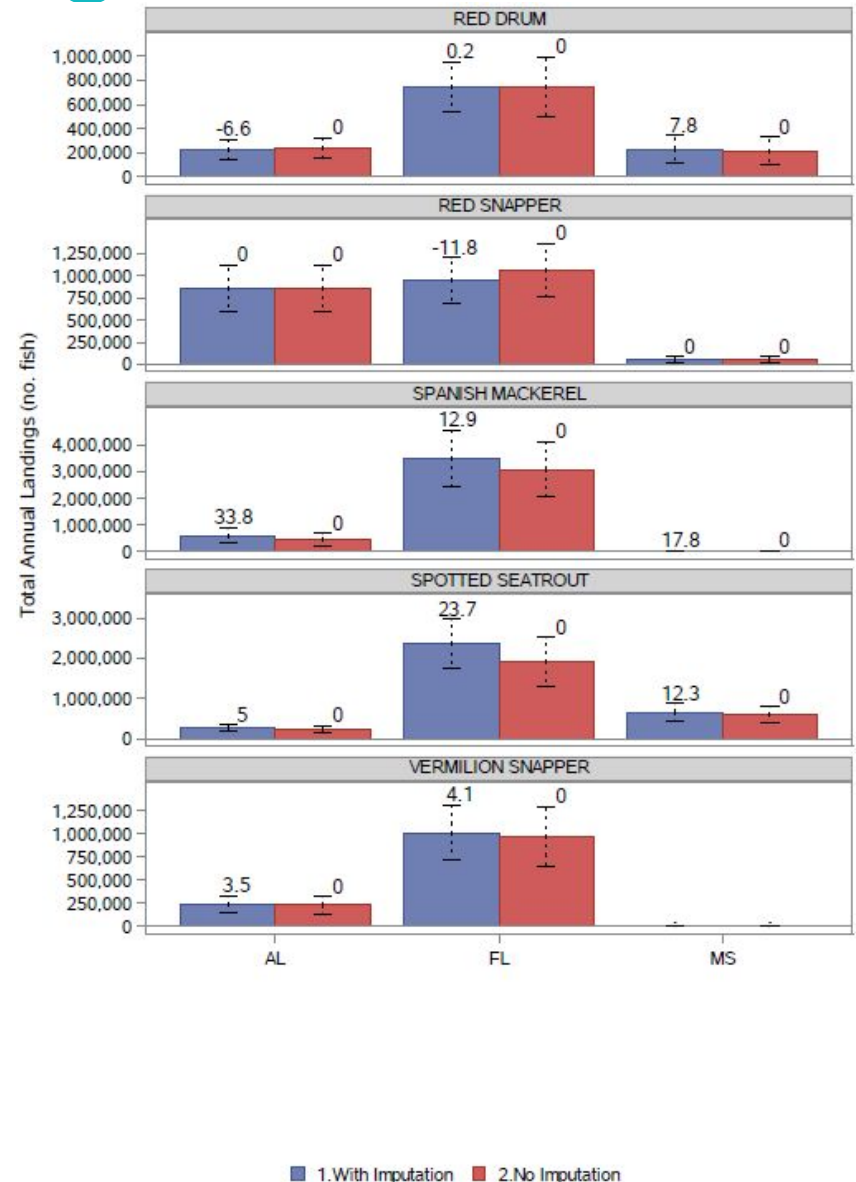
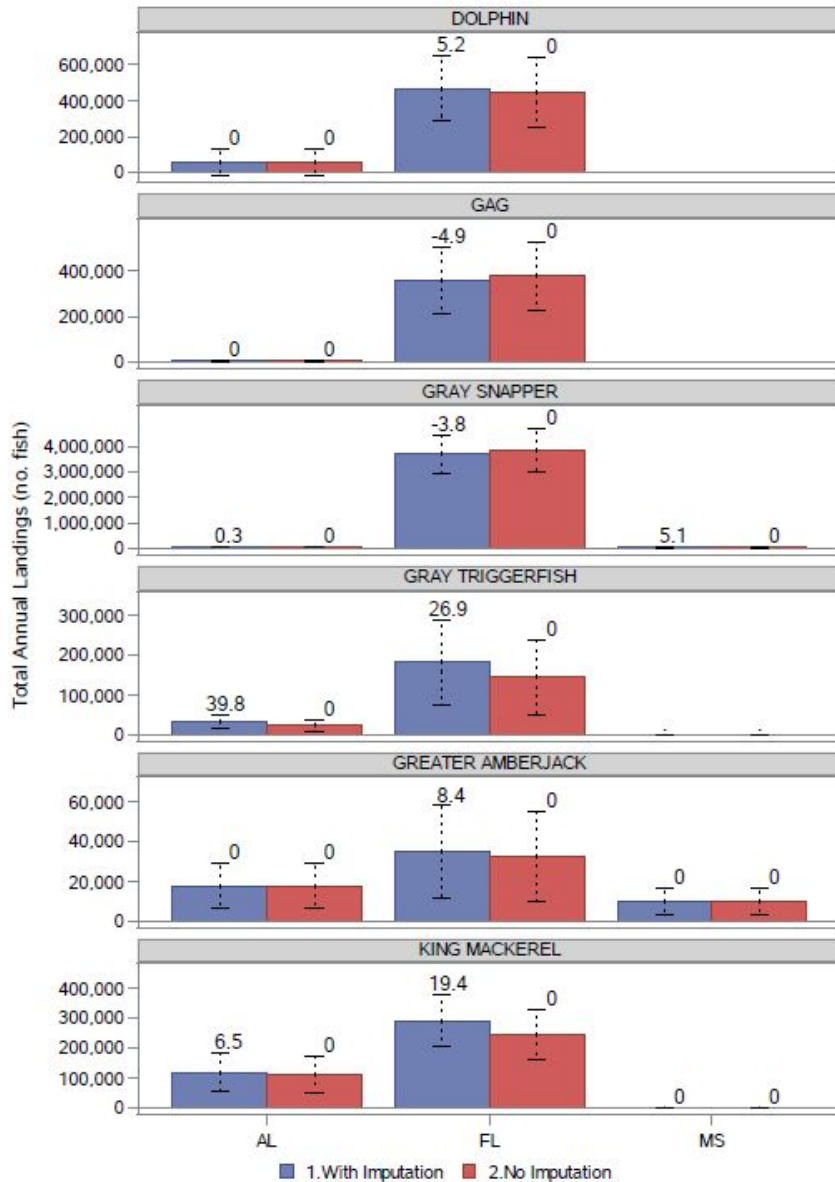
Catch Estimates

- 2018-2020 Time series
 - Annual Landings by State and Region for Select Species
- 2020 With vs Without Imputed Records
 - Annual Landings by State and Region for Select Species

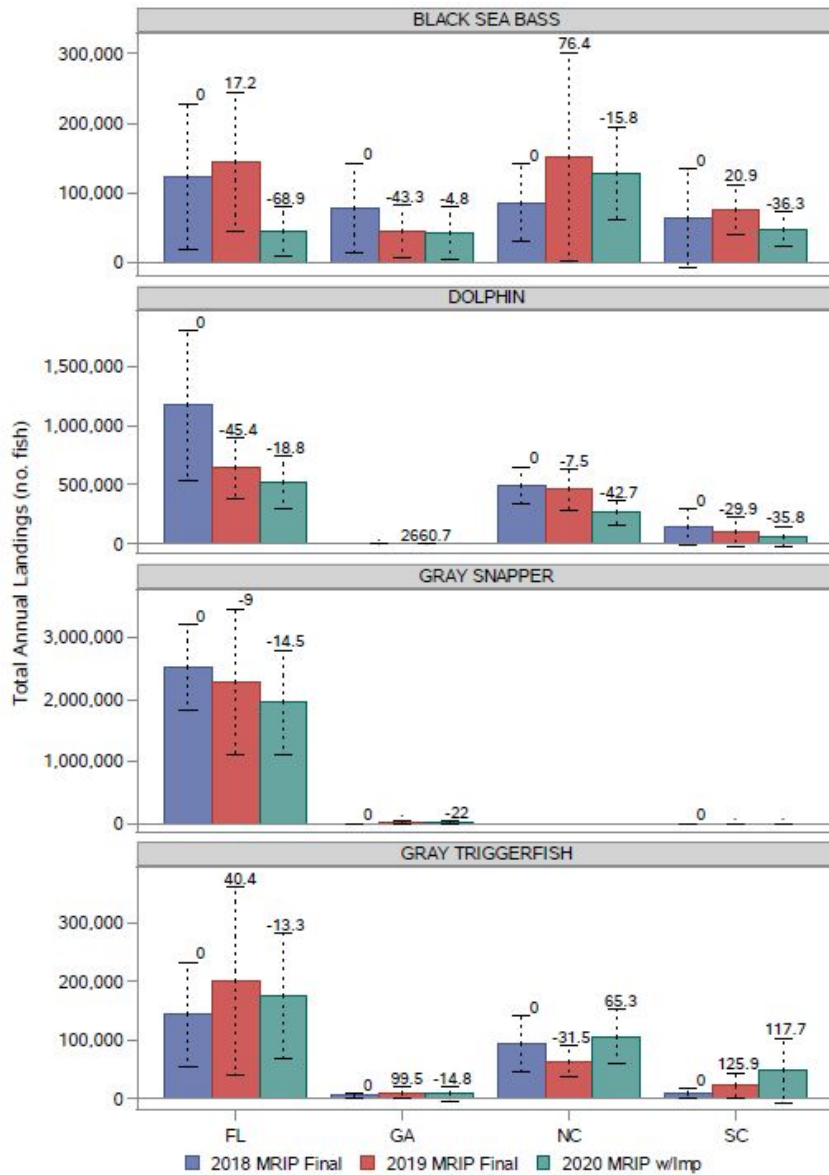
2018-2020 Annual Landings - Glf. Mx.



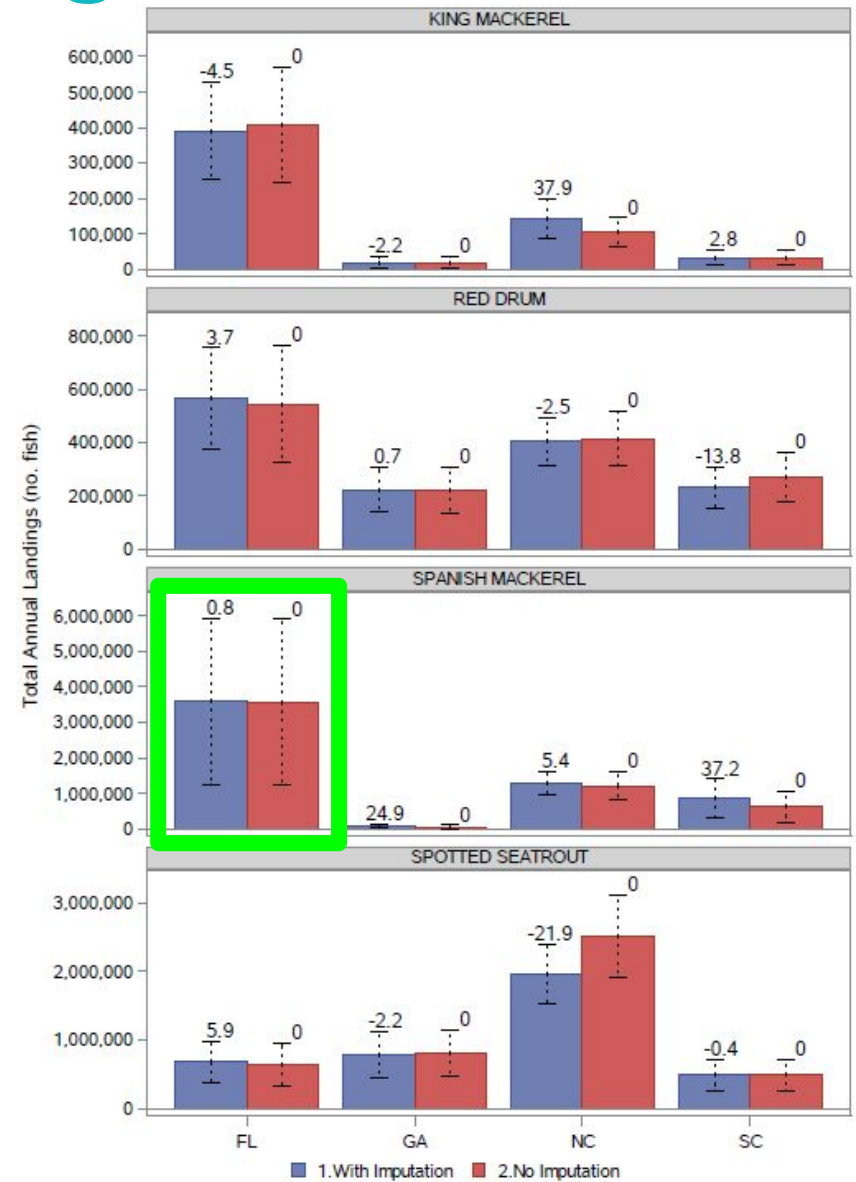
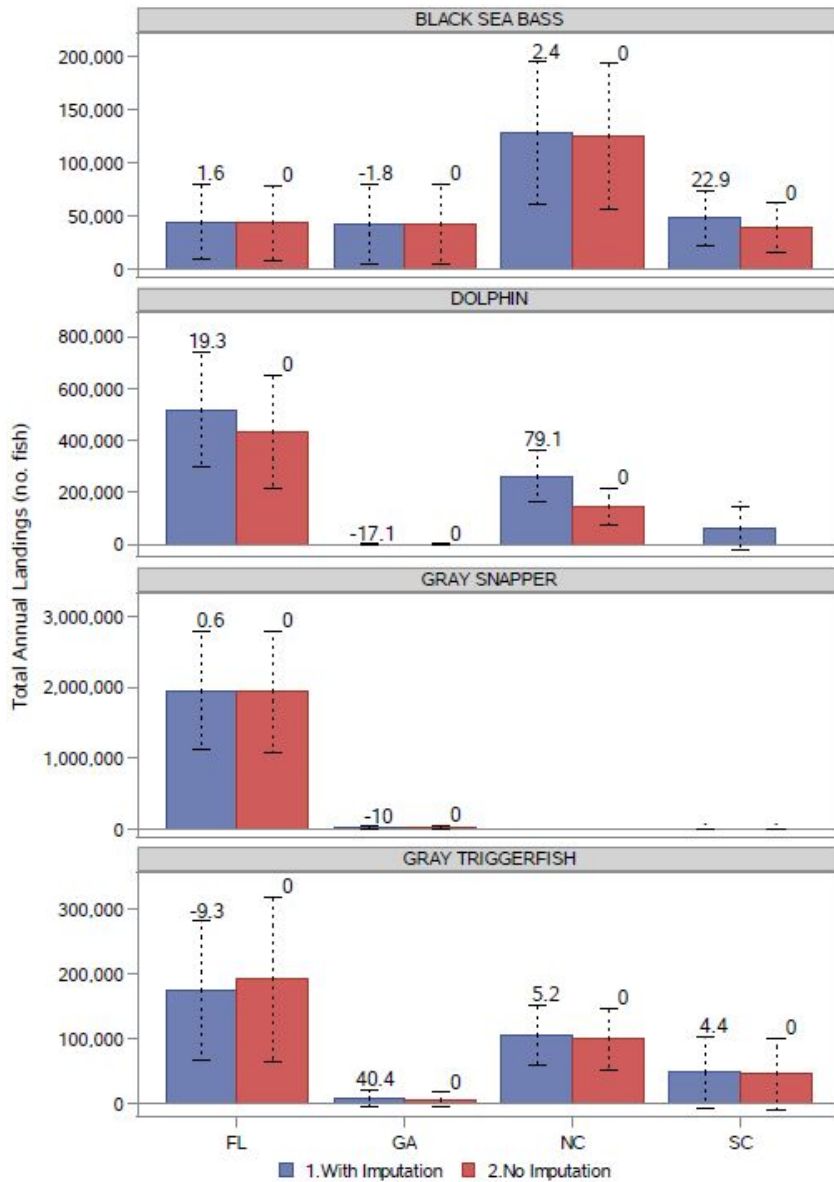
2020 Annual Landings - Glf Mexico



2018-2020 Annual Landings - S. Atl.

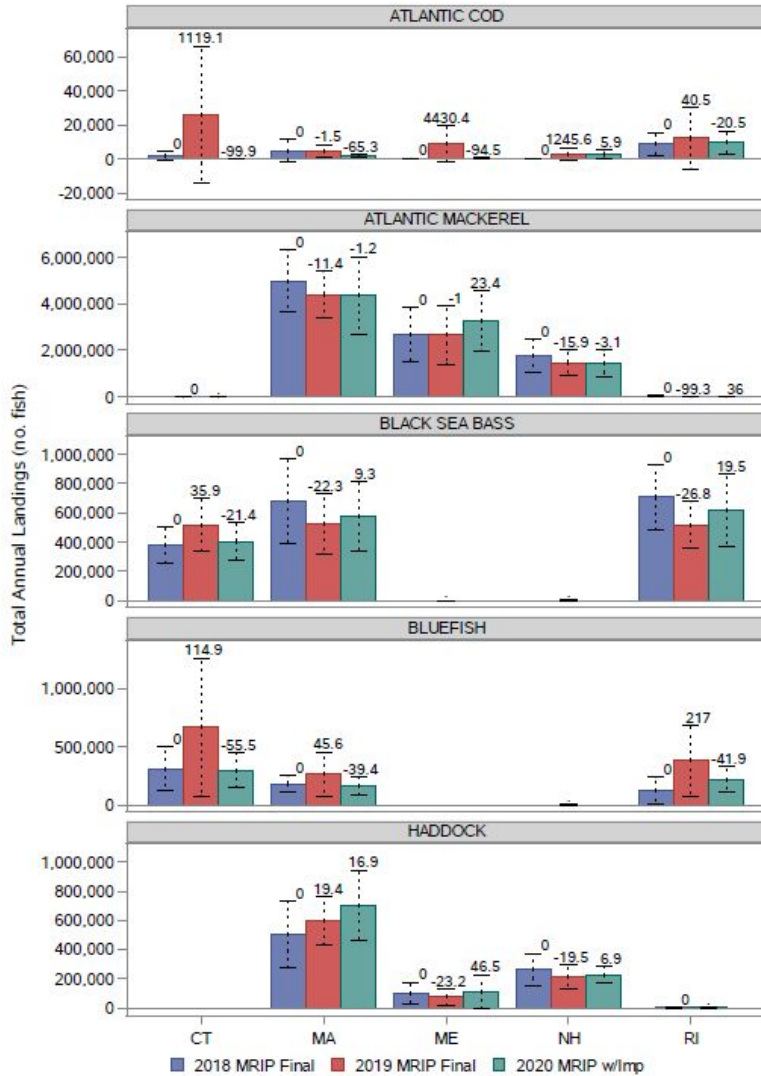


2020 Annual Landings - South Atl.

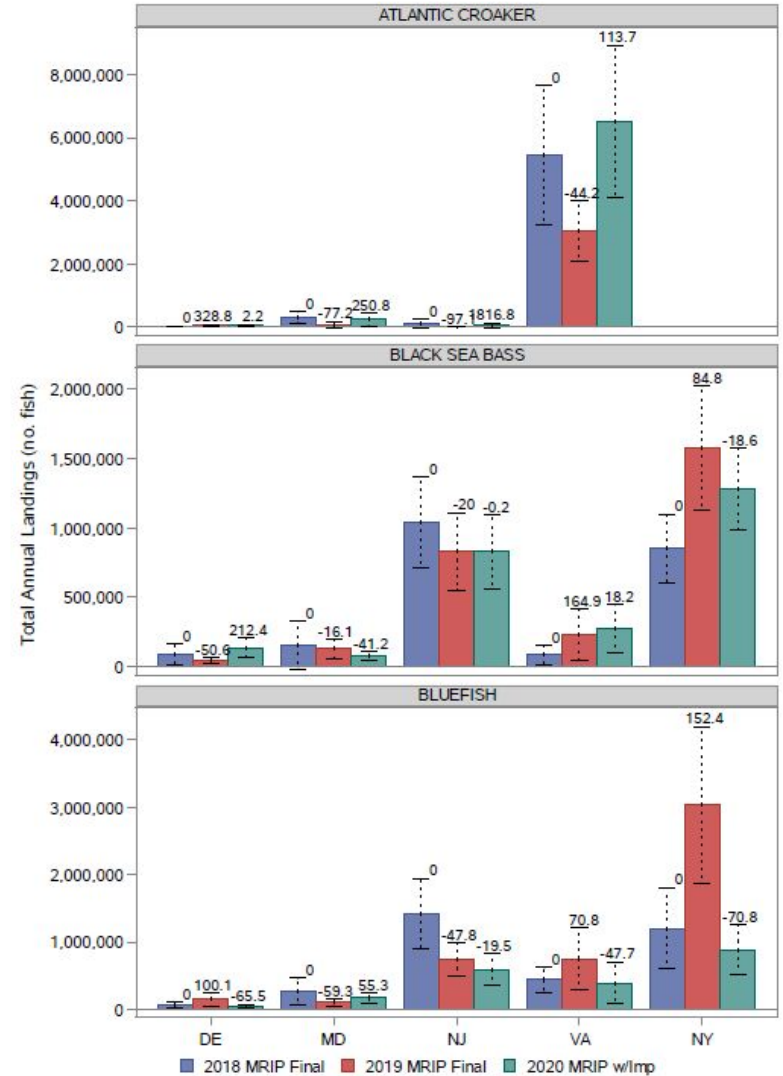


2018-2020 Annual Landings

4. New England

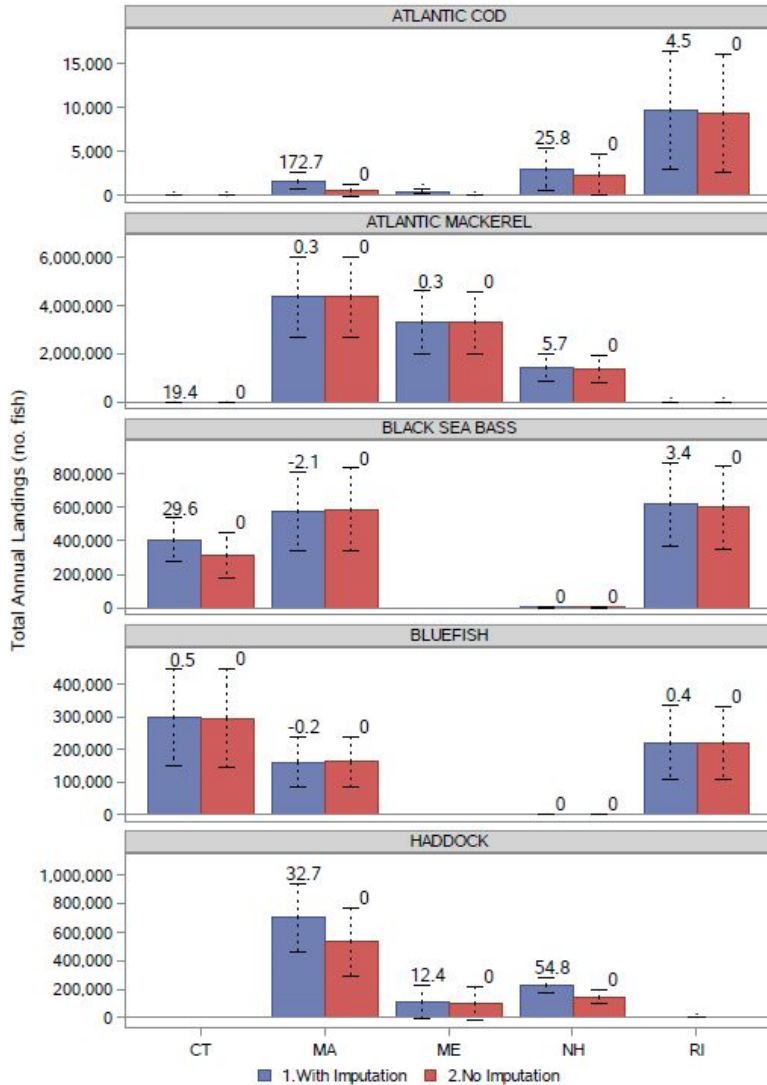


5. Mid-Atlantic

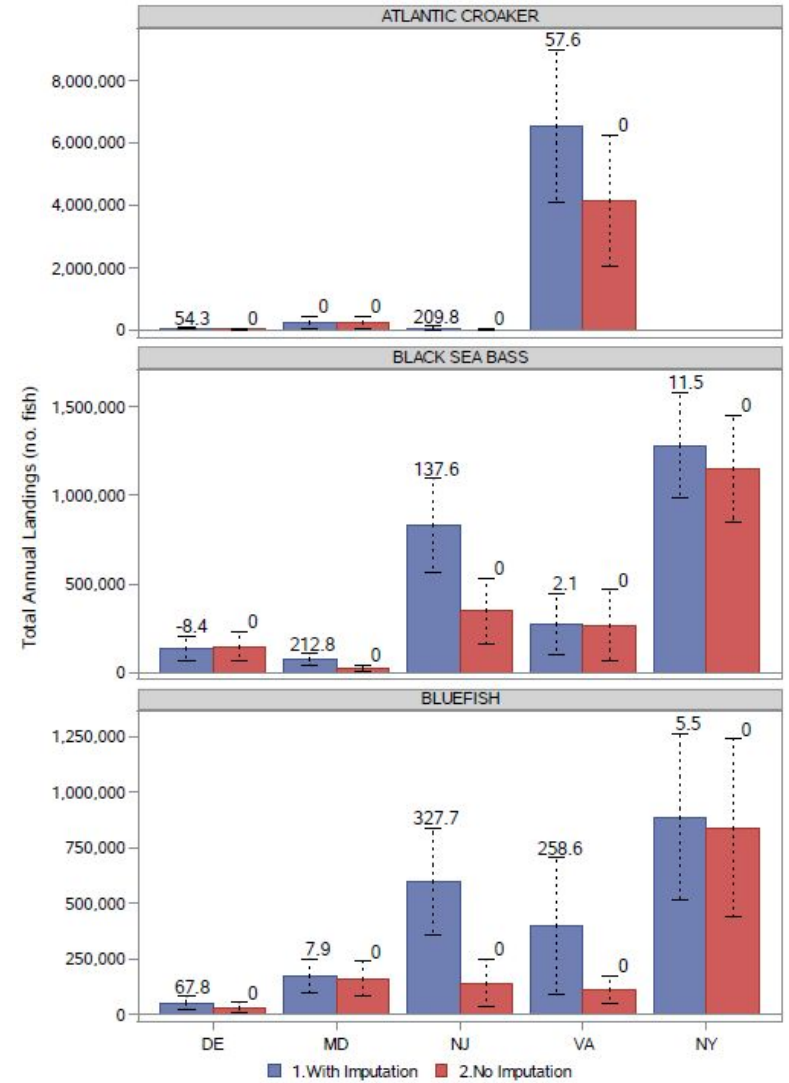


2020 Annual Landings

4. New England



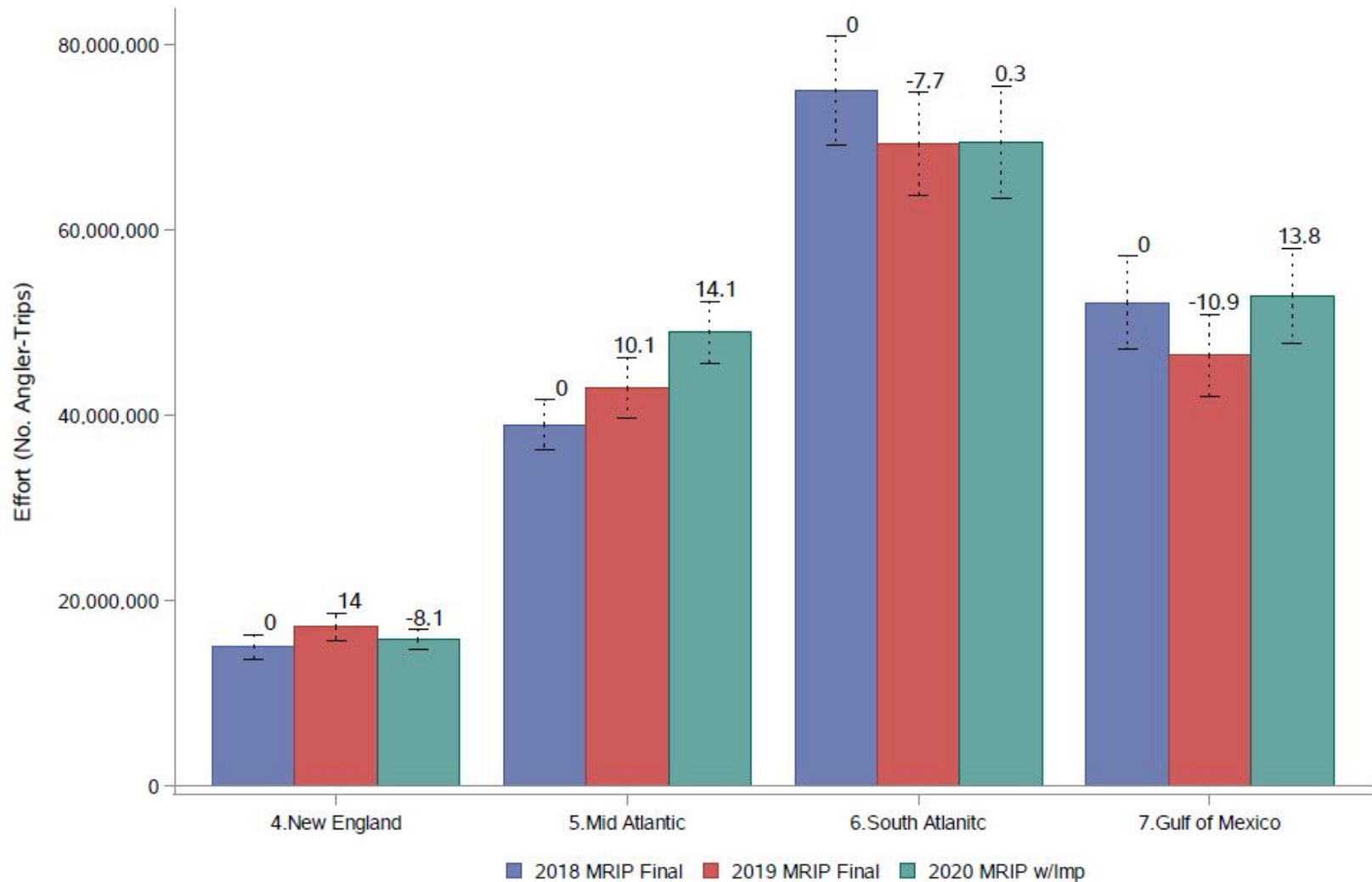
5. Mid-Atlantic



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

2018-2020 Effort Estimates

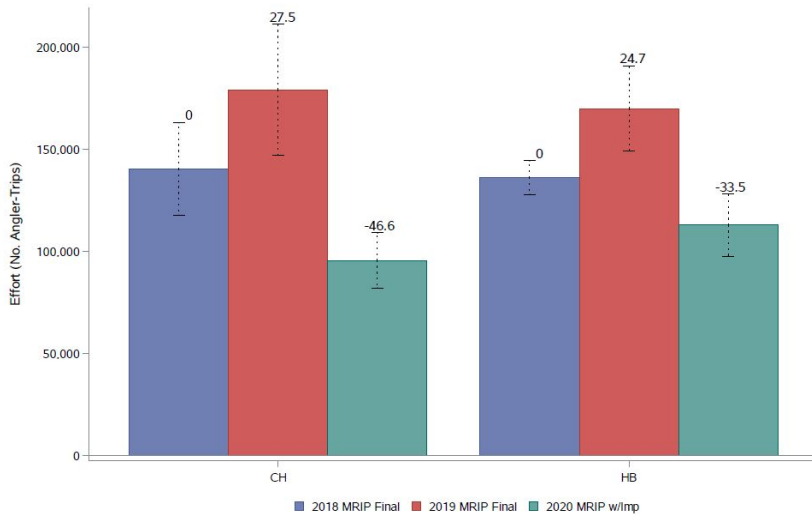


Data labels give % changes relative to prior year

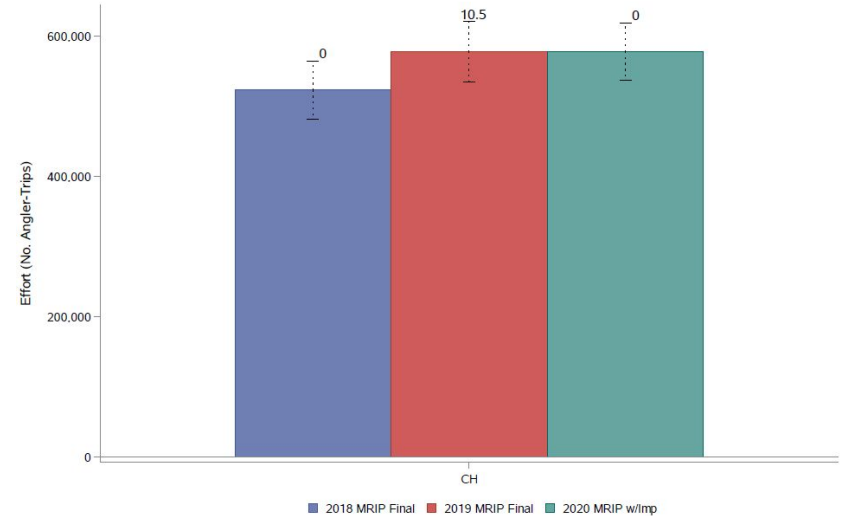


2018-2020 Charter/Headboat Effort

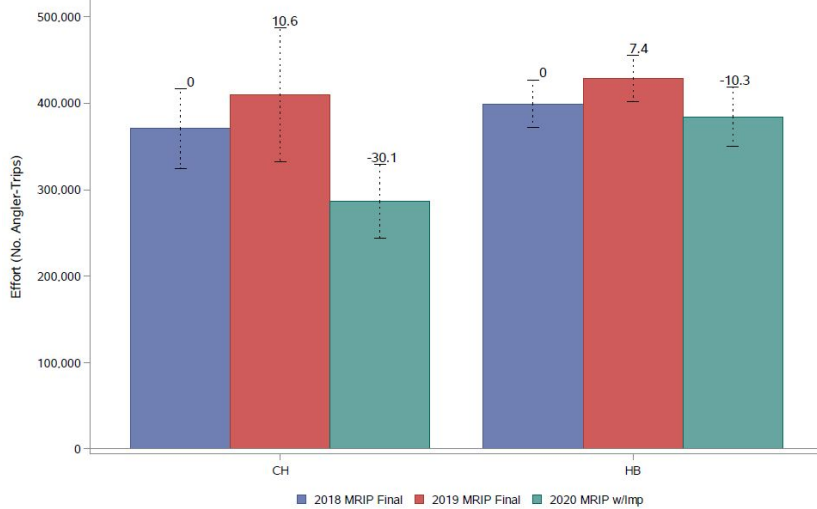
4. New England



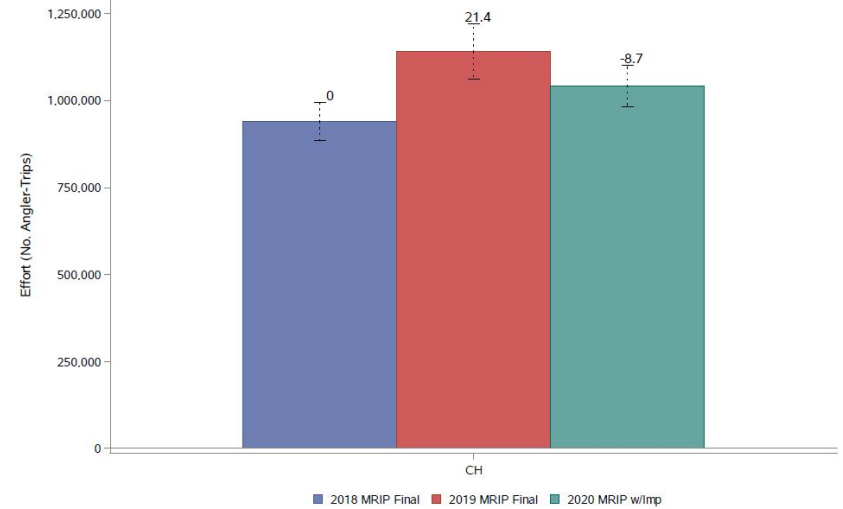
6. South Atlantic



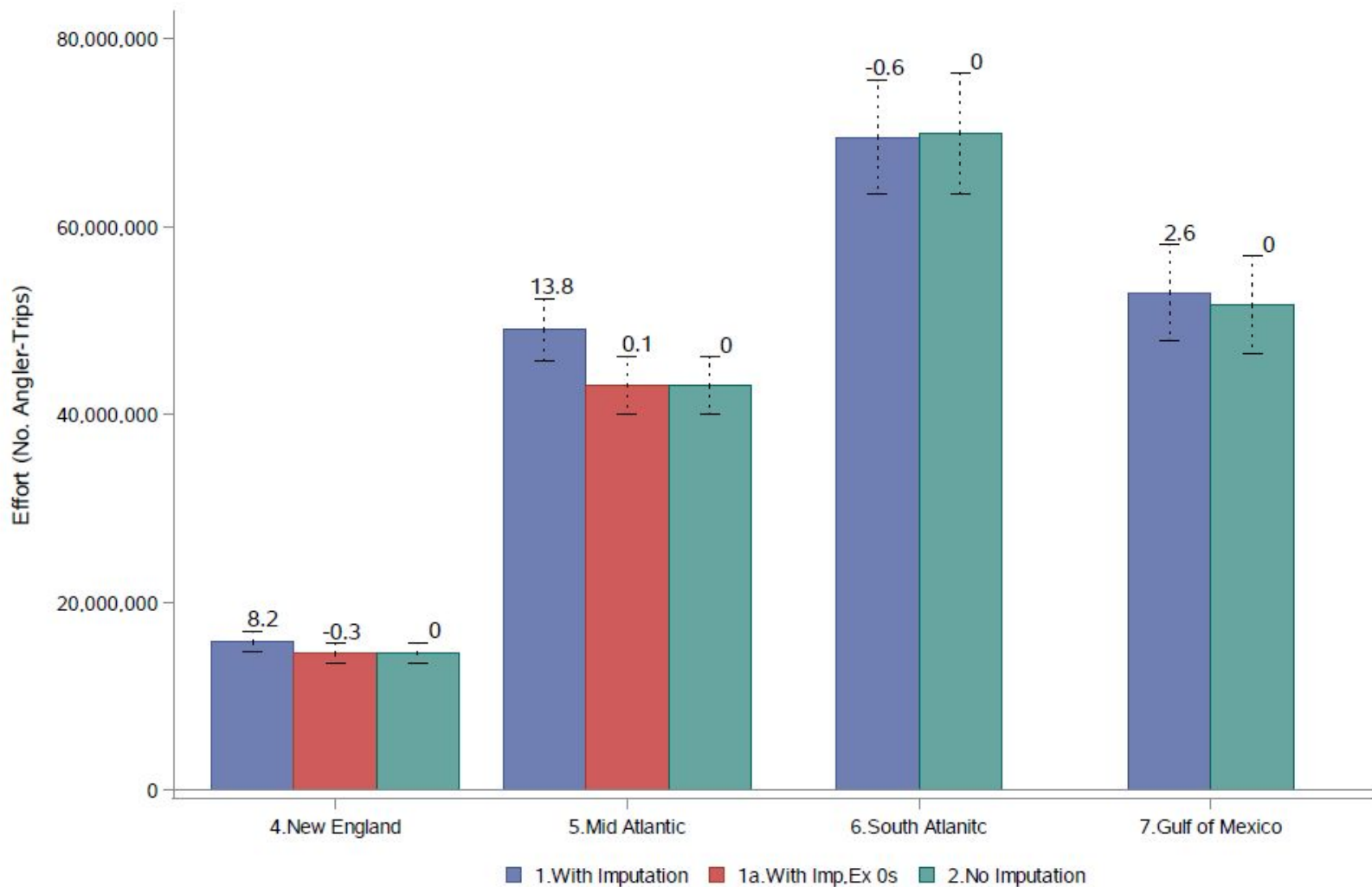
5. Mid-Atlantic



7. Gulf of Mexico



2020 Effort Estimates



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



Next Steps

- Estimate Release
 - Occurred in Mid-April target to follow standard schedule
 - included wave and annual estimates
 - Communications Roll-out
 - Continuing communications in the Regions
- Revisit 2020 estimation in early 2022
 - Comparison of 2018, 2019 vs 2019, 2021





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Questions