



NOAA
FISHERIES

US and Mexican King Mackerel landings

John Walter
SEFSC
June 2026 Gulf Council meeting



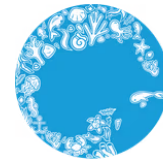
SEDAR 99 ToRs

1. Utilize the approved 2020 SEDAR 38 Update base model for Gulf of Mexico migratory group of king mackerel with data through 2024, where possible. Update the model to the current stock synthesis version and model configurations using current best practices.
2. Document any changes or corrections to the SEDAR 38 Update base model in detail and provide rationale for decisions on how to address these issues made to model and input datasets and provide updated input data tables.
 - Describe any annual differences in the magnitude of landings from the previous assessment greater than 10%, with assistance from the NOAA Office of Science and Technology.
 - Update life history data (e.g., growth, reproduction, natural mortality) if warranted. Evaluate any new data on discard mortality.
 - Explore any possible changes in age-structure, including time-varying growth. If stock structure has changed substantially, describe how this will be addressed.
 - Explore temporal variations in stock productivity using the full complement of available data, including sensitivity analyses to explore model start dates.
 - Revise the shrimp bycatch estimates based on the CIE-reviewed methodology, considering the updated shrimp effort estimation reviewed during previous SEDAR assessments (e.g. 87 and 98).
 - Revisit sex-specific data provision and whether said data improves model estimates when included.
 - Explore available landings of king mackerel from Mexico.
 - Consider work by the CMP technical team and the results of the Gulf CMP regional engagement sessions.



GoM-LME project

Note: Use of the term “Gulf of Mexico” in reference to this project does not represent an official position of the United States. Per Executive Order 14172 issued on January 20, 2025, the United States recognizes the “Gulf of America.”



**SAP
LME
PROJECT**

**GULF OF
MEXICO**



UN
environment
programme

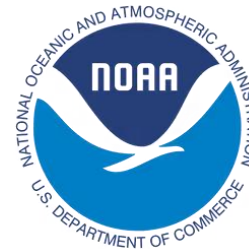
A \$12.9M U.S.-Mexico collaboration funded by the Global Environment Facility (GEF) and implemented by UN Environment Programme

Component 1: Improve Water Quality

Component 2: Preventing Depletion and Restoring Living Marine Resources

↳ **Output 2.1: Implement joint stock assessment for King mackerel and Spanish mackerel**

Component 3: Conserving and Restoring Coastal and Marine Ecosystems



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NATIONAL MARINE
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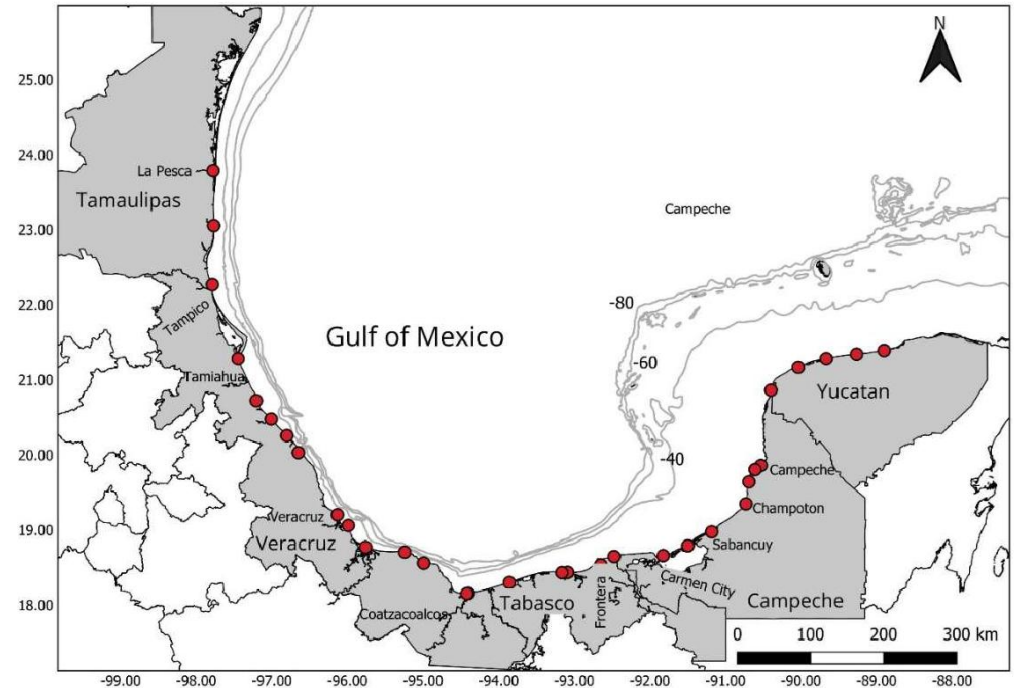
CONANP
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DE ÁREAS NATURALES
PROTEGIDAS



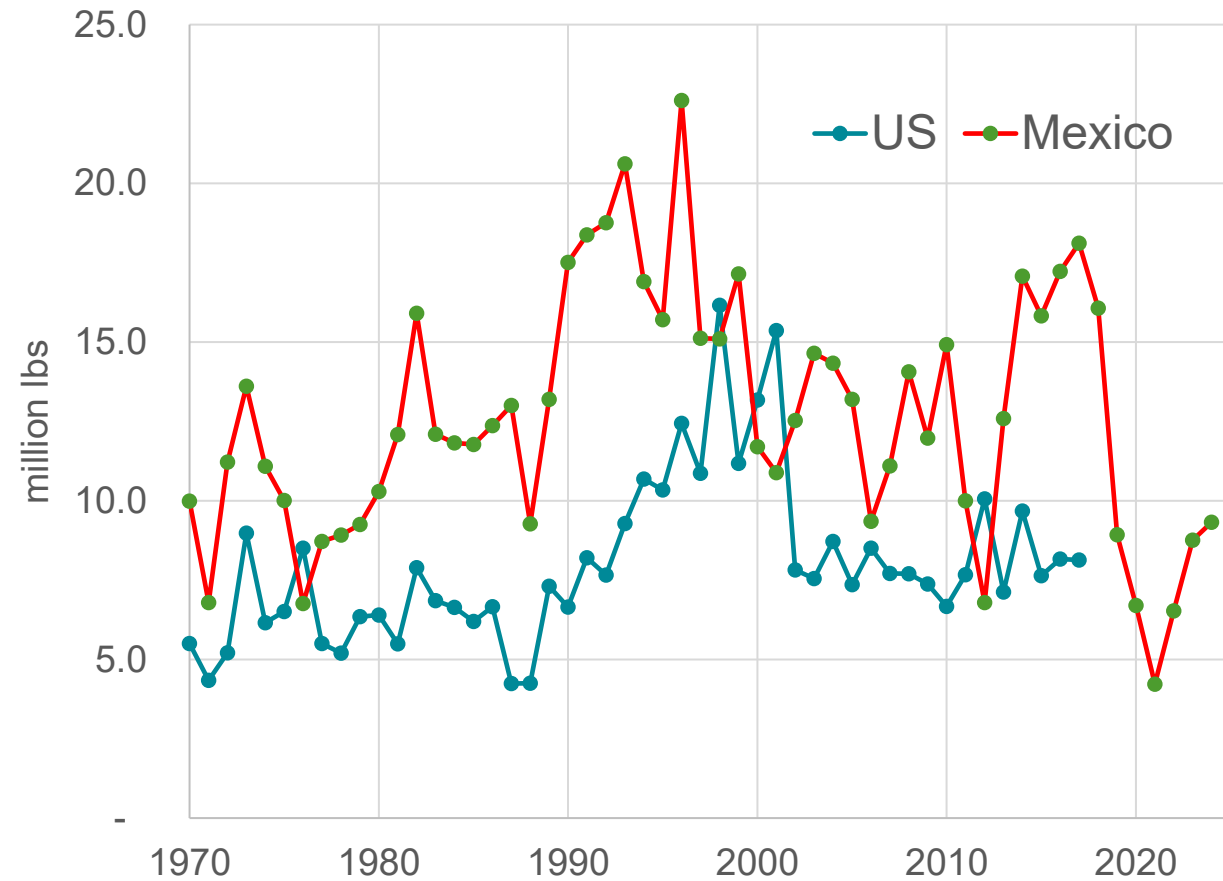
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Mexican Landings

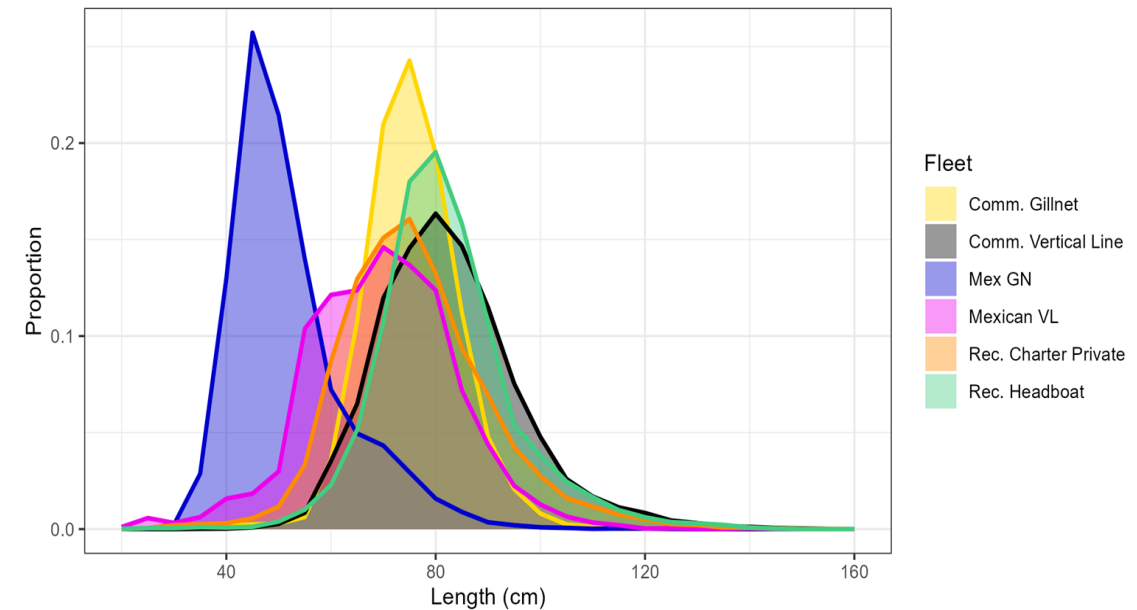
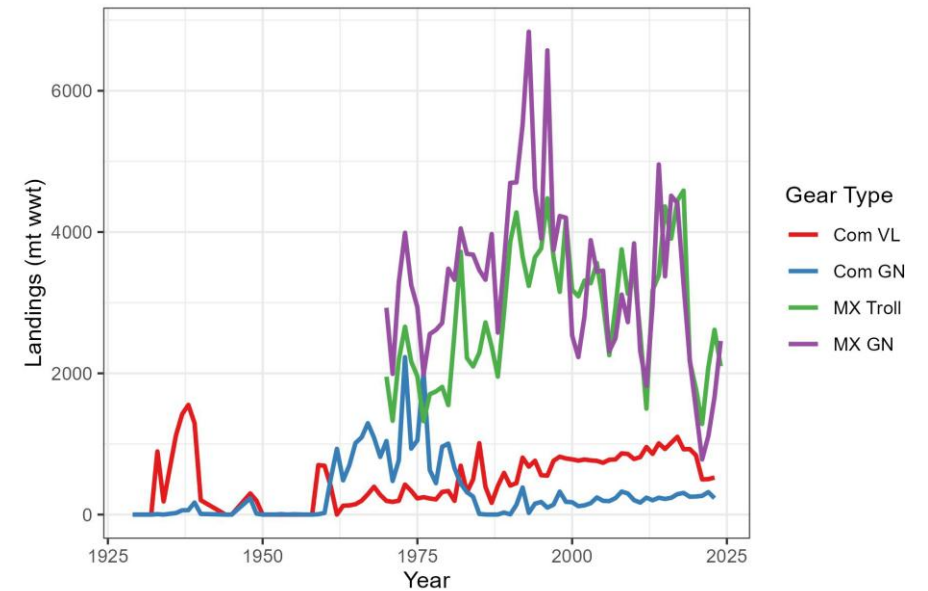
- Supplied by Mexican Institute for Sustainable Fisheries and Aquaculture Research (IMIPAS)
- 2 fleets: trolling and gillnet
- Artisanal commercial fleets
- Two working papers submitted: landings and length comps



US/Mexico Gulf king mackerel Landings

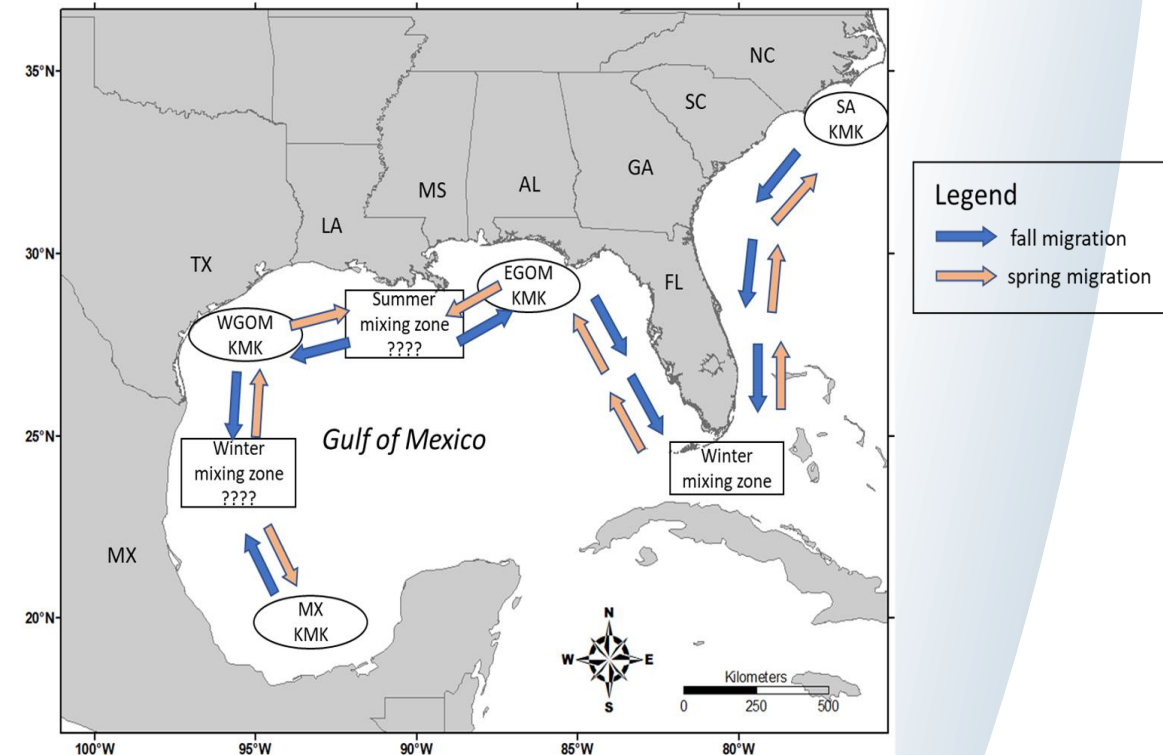


US landings are SEDAR38update values (through 2017, using MRIP-FES)

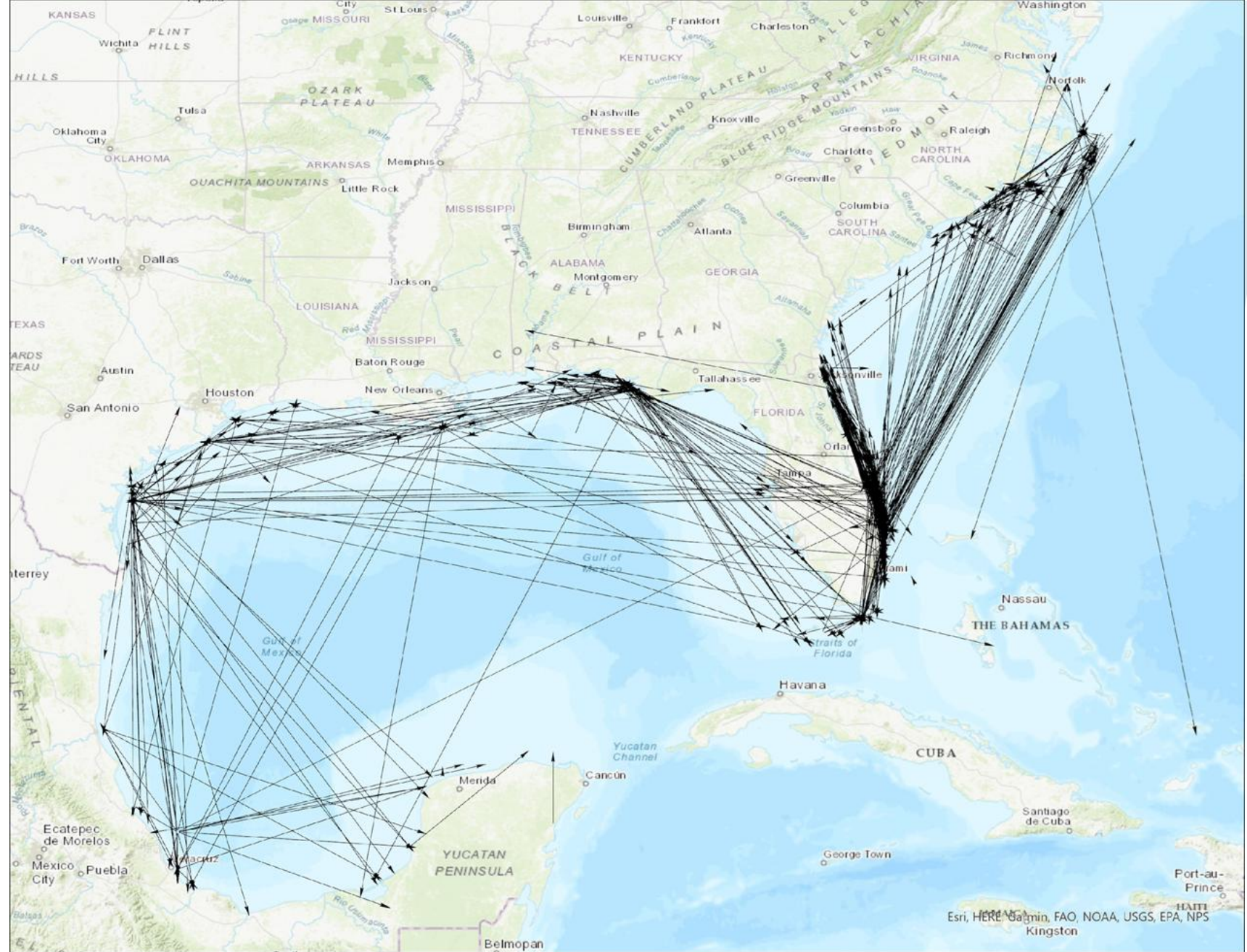


Stock Structure

- Mark-recapture (Fable et al. 1987), back-calculated spawning dates based on daily aging (Grimes et al. 1990), electrophoresis data (Johnson et al. 1994), and regional growth differences (DeVries and Grimes 1997) found evidence to support the hypothesis of an EGOM stock and a WGOM stock within the GOM.
- However, the two-stock GOM hypothesis was refuted based on mitochondrial DNA results (Gold et al. 1997).



SEFSC Cooperative Tagging Center – King Mackerel Recapture Tracks (straight-line)



SEDAR 99 proposal

Proposal MEX-US timeline to work on joint assessment:

- 6 month extension of SEDAR99
- June / July- 2 Virtual meetings - Finalize data compilation and start stock assessments
- August - Virtual meeting to review assessment progress
- 1st Technical Workshop (in person, in Mexico) in early Fall
- October-November - Virtual meeting to review stock assessment progress
- 2nd Technical Workshop (in US) late 2026 (November/December) to finalize the model and documentation
- January/February 2027, complete joint assessment and restart SEDAR process

*may need to delay on other SEDAR assessment to account for extended time on KMK

