

NOAA
FISHERIES
SEFSC

SEFSC Commercial Electronic Logbook Reporting

David Gloeckner
Fisheries Statistics Division
Southeast Fisheries Science Center

Sept, 2021

What do we collect on a logbook?

- When you fished-Trip start, trip end
- How long you fished-Hook hours, soak time, trawl duration
- How you fished-Gear, configuration, number, length
- Where you fished-Lat/Lon, ten minute square, fishing grid,depth
- What you caught-Species
- How much you caught-Total catch by weight or number
- How much you threw back-Discards
- How much the fishing cost-Trip expenses (ice, bait, etc.)
- How much catch you sold-Landings
- How much money you made-Revenue

How do we use logbook data?

- Indices of abundance-expressed as catch per unit effort-CPUE
- Discards-as part of the catch in CPUE (discard rate x total effort)
- Dead discards (discards x mortality rate), which are included as part of the total removals
- Home consumption of part of the catch-also part of total removals
- Economic information used to determine management impacts on fisheries participants or weather related economic impacts on communities.

Why move to e-reporting from paper?

- Do we manage ACLs with real-time logbook data?
- Do ACLs include dead discards from logbooks?
- Do federal permit holders along the Atlantic coast have redundant logbook reporting requirements?
- Are there data quality problems with paper reports that could be improved with e-reporting?
- Could e-reporting improve the timeliness of communication to fishers regarding compliance?
- Can 20th century data collection methods meet the needs of 21st century science?

SEFSC development of e-logbook

- May 2015-Jan 2016 Pilot project to establish possible hardware/software to support e-logbooks
- 8 laptops and 3 iPads were deployed on a total of 12 vessels, with one utilizing existing on-board PC. 58 trips submitted
- Gears used included bandit, hand line, longline (reef and pelagic), buoy, and trap (fish). 3 of the vessels were mixed gear.
 - 6 South Atlantic
 - 5 from North Carolina
 - 1 From Florida
 - 2 HMS
 - 1 South Florida (buoy, trolling)
 - 1 North Carolina/Mass. (longline)
 - 4 Gulf
 - 2 Florida (reef longline/hand line)
 - 2 TX (bandit)
- Fishermen provided regular feedback on eLog use
 - Including feedback on hardware use, software use, and the overall experience in collecting and submitting data

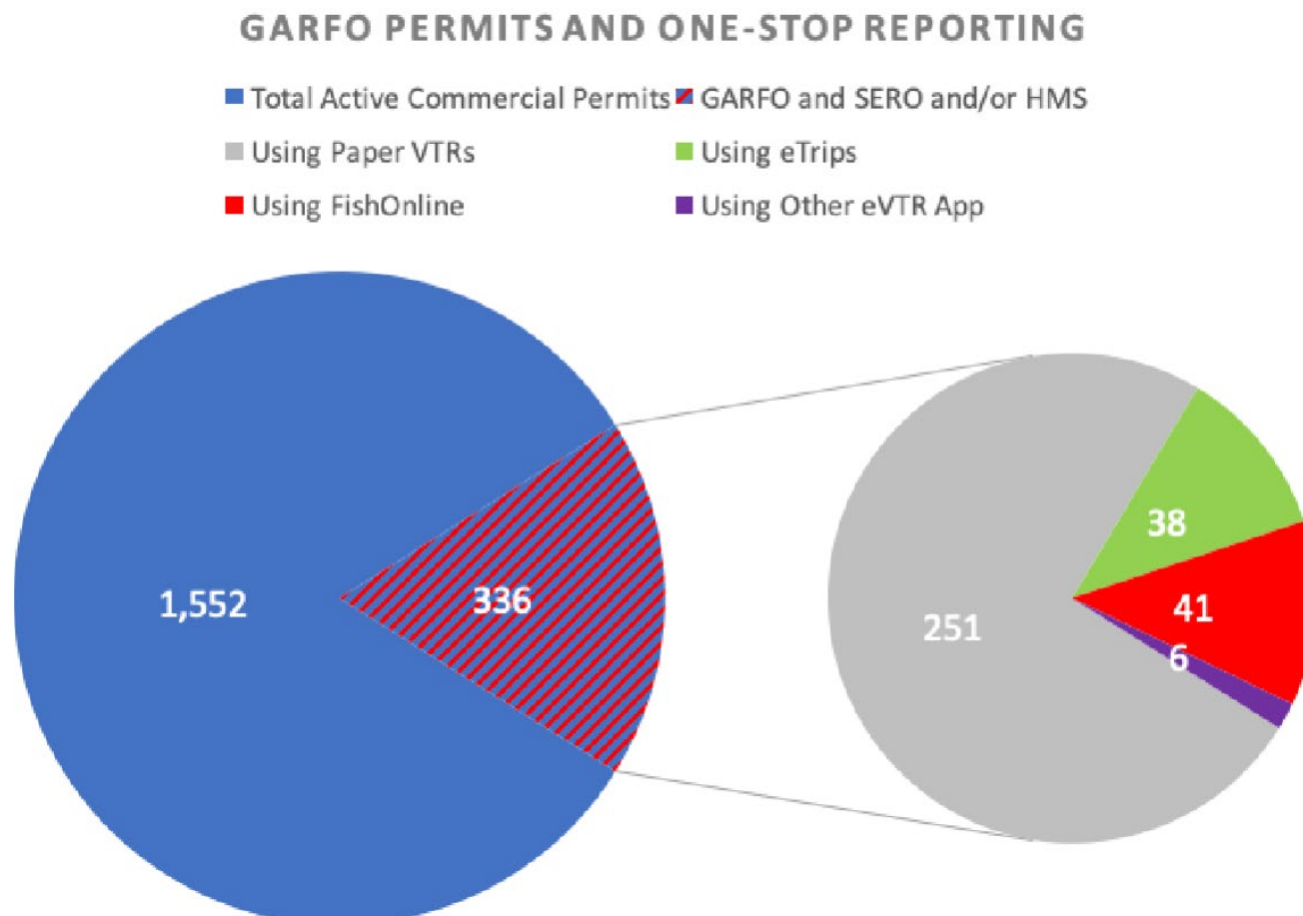
Pilot Findings

- Results showed some changes to data collection standards were needed
 - Most Gear types can facilitate set-based reporting. Hand line and cast net scaled back to sub-trip reporting (24 hours).
- Hardware issues were a major concern for fleet
 - Small and/or exposed cabins and relatively small crews create the need for smaller laptops and tablets that can be weatherized and integrated into current fishing methods.
- Large increase in quantity and quality of catch/effort data above current logbook methods
 - Catch/effort data logged over multiple days likely with multiple sets each day
 - Reports contained finer spatial and temporal data generated automatically by eLog.

HMS logbook was most comprehensive of logbooks managed by SEFSC, so worked with ACCSP to develop a version for volunteers with a SE/HMS permit...until now



Urgency to support dual GARFO/SERO/HMS permit holders



GARFO e-reporting implements November 10. eTrips software will have to accommodate SERO and HMS reports to avoid duplicate reporting.

November launch will have available the same variables collected on HMS or SERO paper logbook.



Commercial Electronic Logbook available for SERO and HMS permits

- We anticipate that on or around November 10, software will be available from ACCSP to report electronically in lieu of submitting paper reports.
- This is intended to reduce duplicate reporting and partially deals with data quality improvements as a result of e-reporting.

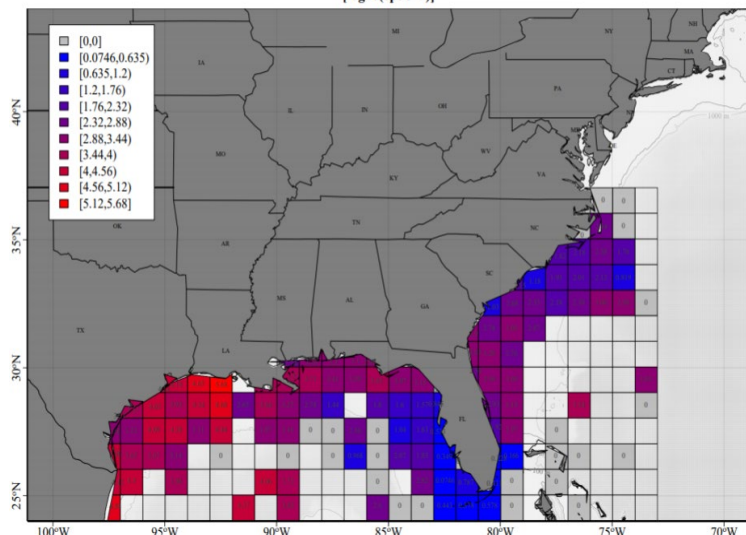
SEFSC e-logbook update to reporting requirements

- Still need to discuss improvements in science that can be facilitated with this technology, while not increasing burden or actually decreasing burden.
- The logbook data is used in similar ways to provide information to stock assessments, so why the confusing differences between the SE, NE, and HMS logbooks?
- NMFS offices plan to meet in mid-October to discuss streamlining logbook variables to simplify reporting.

SEFSC e-logbook update to reporting requirements

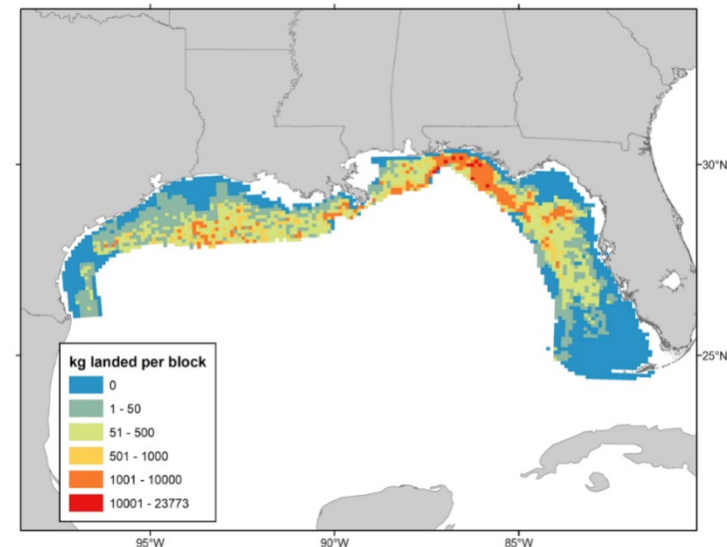
- SEFSC will consult with GMFMC and SAFMC as NMFS looks at alternatives for improvement of logbook data using e-reporting technologies
- Primarily identifying changes in the scientific need for high resolution location information and modifications to improve compliance.

Lutjanus campechanus
[log10(cpue+1)]



Southeast Regional Headboat Survey Catch
Records (SEDAR 74)

Example: Gulf Red
Snapper



Estimating commercial catch in space
(Great Red Snapper Count)

Consolidate SEFSC suite of commercial logbooks

SEFSC Commercial Logbooks

- Coastal (South Atl. and Gulf)
 - Wreckfish
 - HMS
- Golden Crab
- Menhaden (future)

SEFSC Commercial Surveys

- Discards
- Economic

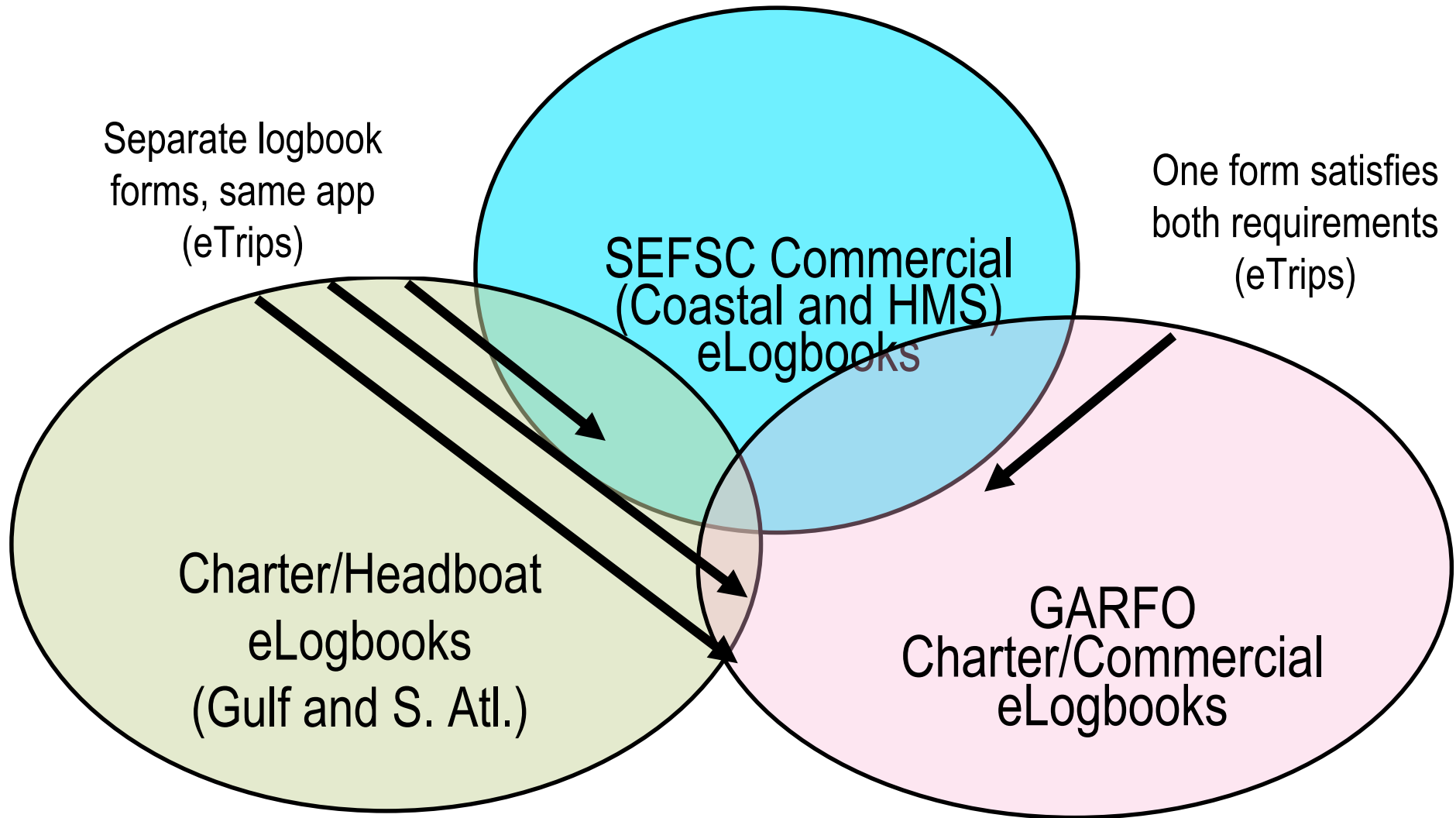
No Fishing Reports

SEFSC eLogbook

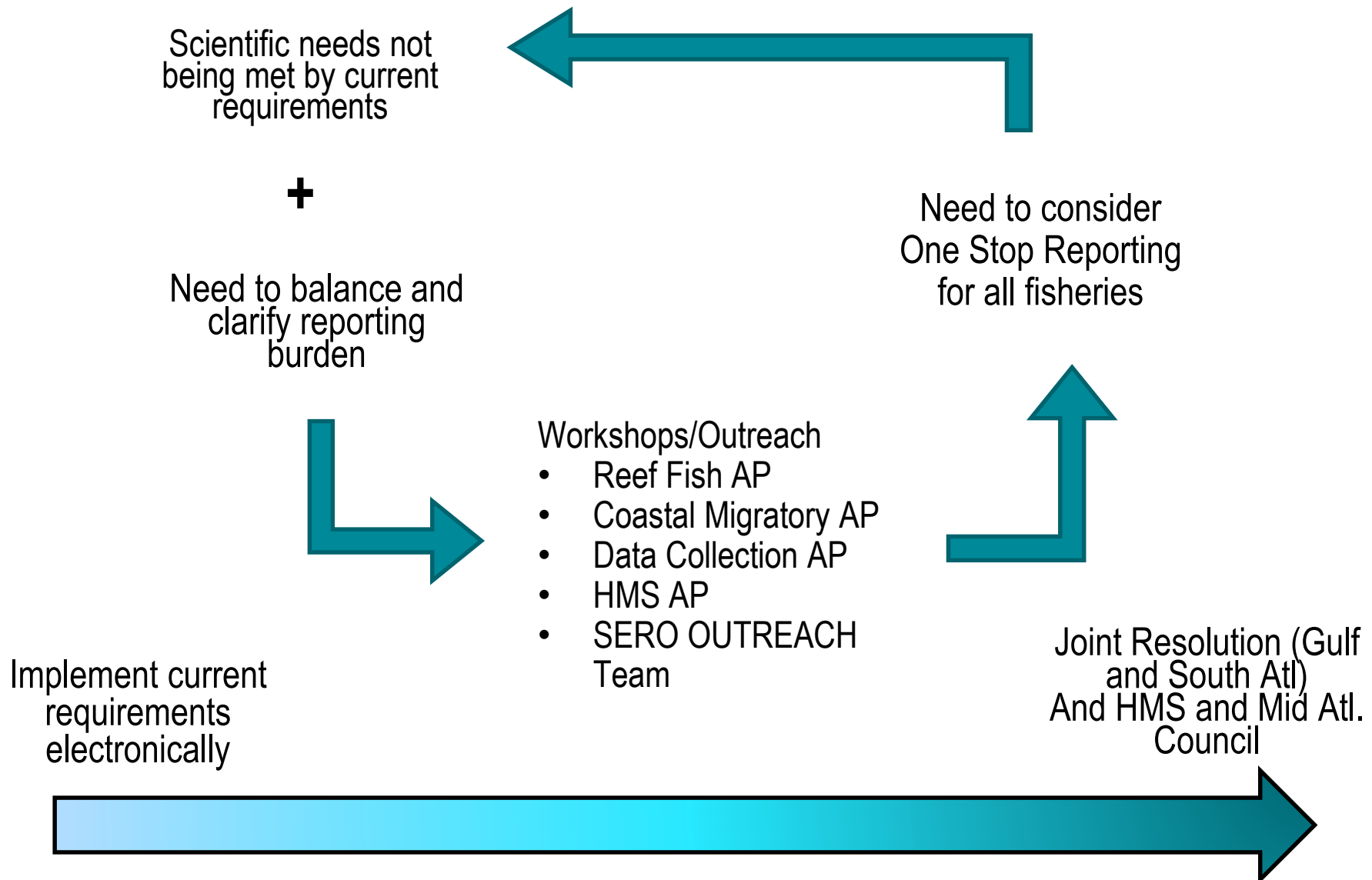
- Mobile (current)
- VMS Forms (Potentially in the future)



Incorporating SEFHIER/Headboat is a much larger lift



Current plan for moving forward



Need testing to improve available software

Volunteers: Recruit commercial fishing permit holders to voluntarily submit their fishing reports electronically.

Potential application developers: All eLog mobile applications will need to reflect SEFSC Reporting and Technical requirements before approval.

Report for Pilot Project is in the NOAA Research Publication Tracking System review process (available soon!)

Current Fisheries Electronic Reporting at SEFSC

- Fishers can now register and submit No-Fish Reports electronically
- SEFSC no longer accepts faxed or emailed No-Fish Reports
- All No-Fish reports need to be mailed or submitted through FER website

Summary

- Re-evaluation of certain reporting elements
- Completion of ACCSP reporting app (pending) for short term allowance of dual-permitted users to submit current logbook elements electronically.
- Ongoing discussions with Gulf and South Atlantic Councils and other NMFS offices about scientific needs and need to streamline reporting to reduce burdensome duplication.
- Recruitment of volunteers (Southeast commercial permit holders)
- Account creation tools for new users can now accommodate business or LLC permit holders





Questions?

