# Key Findings of the MRIP For-Hire Electronic Reporting Pilot Study in the Gulf of Mexico

## Gulf of Mexico Fishery Management Council Meeting

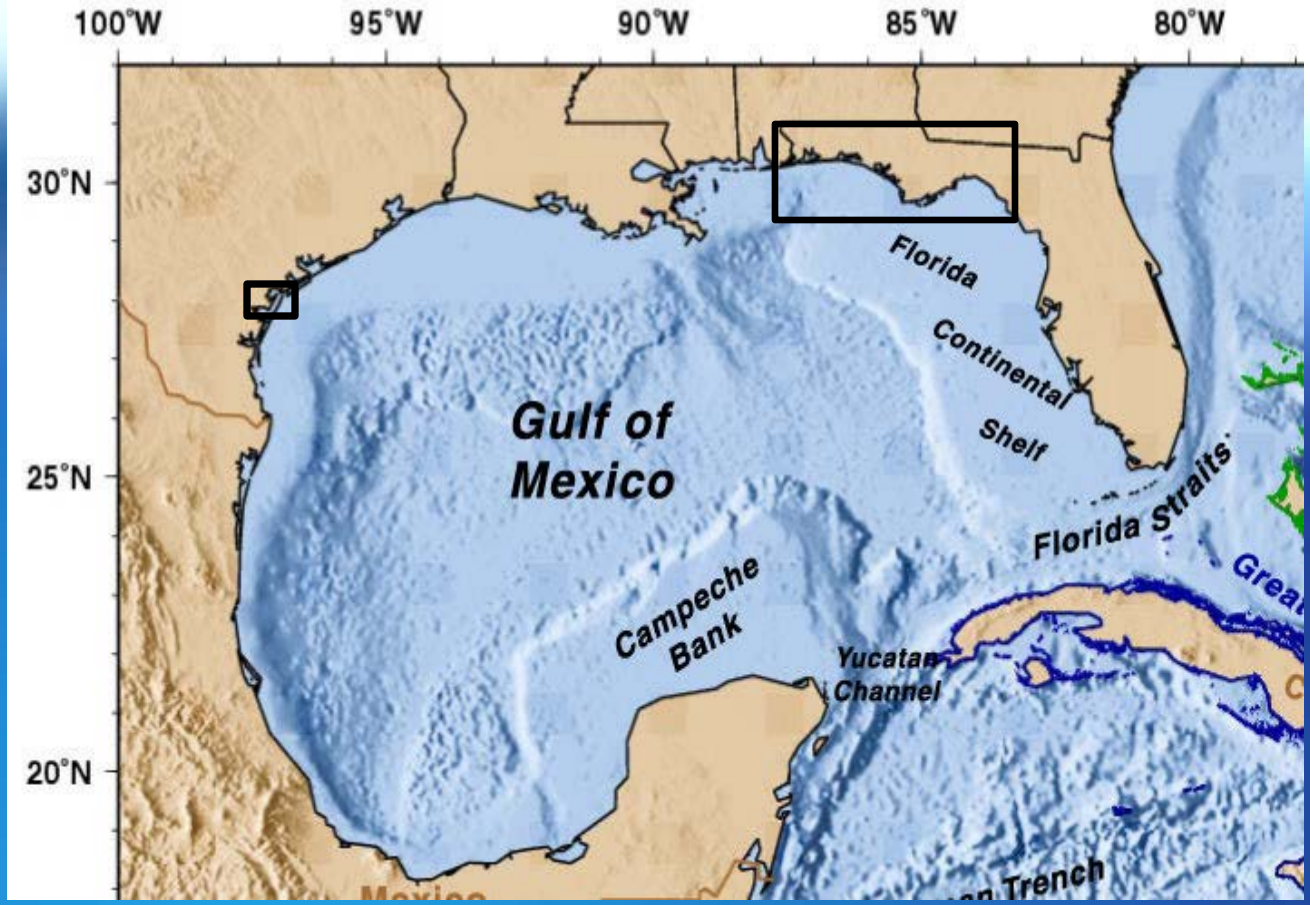
April 17, 2013

Gulfport, MS

MARINE RECREATIONAL INFORMATION PROGRAM

YOUR TRUSTED SOURCE FOR FISHING DATA

# Study Area:




**Charter vessels with Federal Permits:**
**Northwest FL: ~350 vessels**
**Corpus Christi, TX: 60 vessels**

# Study Design

- Required for permit renewal
  - Weekly reporting
    - Fishing week = Mon – Sun
    - Deadline = following Sunday
- Self-Reported Data
  - Validated and “validatable”
- Keep it simple!

bluefin data, LLC
Software Development

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Weekly & Monthly tracking of Missing Reports

Non-Compliance Lists

Weekly e-mail reminders and late notices

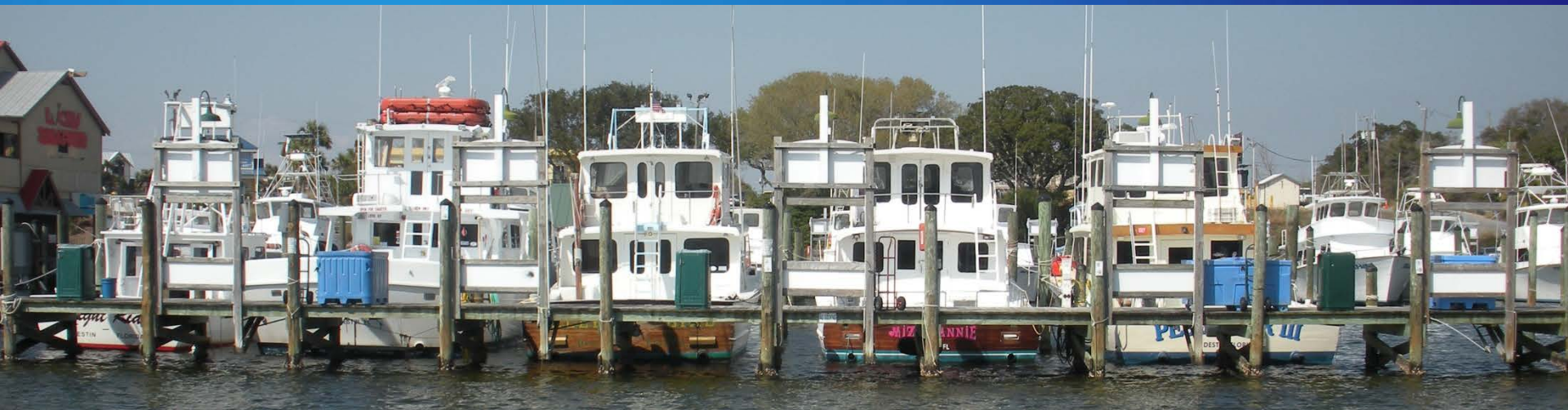
Monthly phone contact

Permit Holds

# Validation Methods

Fishing Effort

- Sites clustered into regions
- Randomly select regions each week
- Validate every vessel at every site in selected region



# Validation Methods

Dockside Validation of Catch

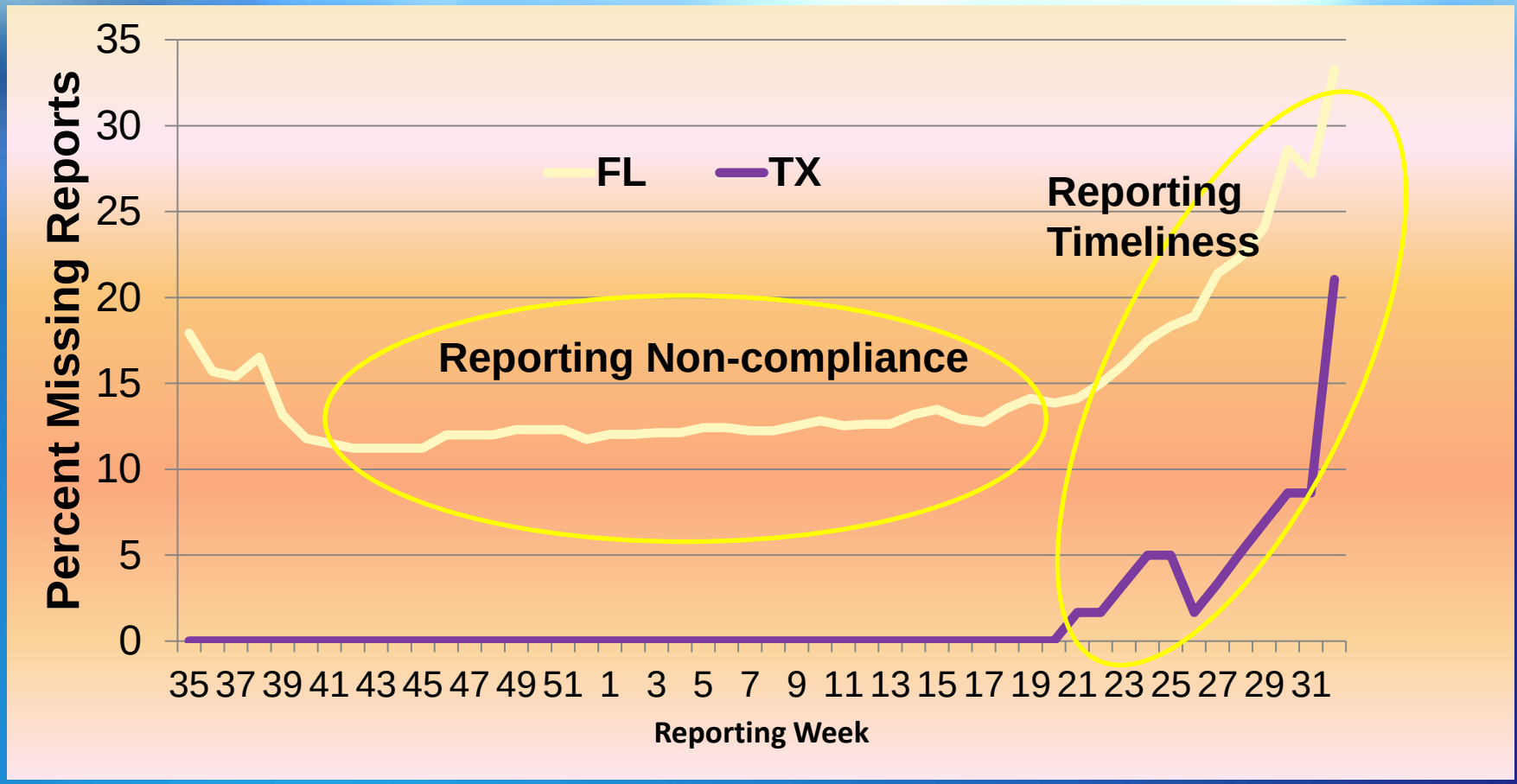
- Random site selection – PPS sample
- Interview all returning vessels
- Directly observe harvest
  - Count, weigh, measure
- Interview vessel operators
  - Discards
  - Number of anglers
  - Hours fished

# Validation Methods

At-Sea Validation of Catch

- Random vessel selection
- Directly observe discards

# Reporting Compliance and Timeliness




Sept. 2010 ---------- August, 2011

# Reporting Tools

Key Findings:

- Paper and electronic reporting options without quality controls require more error checking and follow-up
- At-sea data recording options would give more flexibility, reduce recall bias

Recommendations:

- Require electronic reporting
- Must have built-in quality controls
- Should allow for data entry at-sea

# Enforcement

Key Findings:

- Current legal authority to enforce reporting requirement is inadequate for receiving timely reports
- Delinquent vessels may continue to fish until their permit is up for renewal
- Permit holders allowed to submit all of their delinquent reports at time of expiration and then renew for another year

Recommendations:

- Timely reporting should be required and requirement should be enforceable

# Enforcement


Recommendations:

- Authority for enforcing reporting requirements be modified to enhance timeliness of reporting - include permit suspension, permit termination and civil penalties

# Reporting Compliance and Timeliness

Key Findings:

- Not a complete census
- Compliance would have continued to improve
- Would still have to account for misreporting
- Daily reporting would help to identify missing reports
- Continuous effort required to maintain compliance and timeliness

# Reporting Compliance and Timeliness

Recommendations:

- Early stakeholder input
- Early outreach
- Plan for quick response if early compliance is low
- Must have methods to quickly ID missing/late reports with timely follow-up procedures
  - Multi-tiered approach
- Report inactivity/activity each day in a reporting week

# Reporting Frequency

Key Findings:

- Daily reporting not necessary to produce good catch and effort statistics
  - Effort/cost required to maintain compliance with timely follow-up procedures would be much greater
  - Cost would be greater if certifying accuracy at individual vessel level
- Decreased reporting frequency (bi-weekly, monthly) would increase recall bias, not recommended

# Reporting Frequency

Recommendations:

- Selected reporting frequency and required reporting accuracy should be considered both in terms of cost and necessity for management/ assessment before implementing a region-wide logbook reporting program
- Weekly reporting frequency combined with a daily reporting requirement is recommended as the most feasible both in terms of cost and minimizing recall bias for a census

# Validation and Estimation

Key Findings:

- Logbook reporting resulted in high coverage (~70% of validated trips were reported)
- Self-reporting is subject to recall bias and inaccuracies
- Aggregated logbook data potentially useful for estimating total effort, CPUE, and total harvest on a regional scale
- Monthly and bi-monthly estimates are feasible

Recommendations:

- Work with a statistician to develop estimators
- Further research to account of sampling bias needed

# Field Validation

Key Findings:

- Logbooks and field validations were not closely matched
- Small validation monitoring program will not be sufficient
- Effort validation is least costly method
- Dockside validation of catch is intermediate cost, but not effective for validation of discarded catch
- Demonstrated feasibility for at-sea validation
  - More costly, but provides high quality data
  - May be used to develop independent estimators for discards

# Field Validation

Recommendations:

- Validation methods need to measure and account for incomplete reporting
- For harvested catch, use combination of dockside and at-sea validation methods
- For released catch, incorporate some type of at-sea validation methodology

# Feasibility for Regional Implementation

Key Findings:

- Given adequate resources and long-term funding commitments, logbook reporting would be feasible for a large geographic area
- May not be feasible for small states with small number of vessels
- Regional implementation would also have to consider whether to include vessels without federal permits
  - Consider authority to require reporting
  - Guide vessels may be difficult to validate

# Feasibility for Regional Implementation

Recommendations:

- Large scale implementation should be phased in so adequate resources can be focused on up-front efforts for outreach and follow-up with non-respondents
- Regional program exclude non-federally permitted vessels
- Need complete universe of known vessels before implementation

# Next Steps

- Final report complete
  - Provided to MRIP
  - Approved by Operations Team and Executive Steering Committee
- Work with MRIP Consultant to develop example of estimators for effort and catch
  - Report provided to MRIP
  - Awaiting final approval to determine next steps

# QUESTIONS?