

Private Recreational Angler Electronic Census Reporting of Red Snapper Catch Data in Alabama

FY 2014 Proposal

Kevin Anson
Created: 05/13/2015

1. Overview

1.1. Sponsor

Dave Donaldson, Gulf States Marine Fisheries Commission

1.2. Focus Group

Survey Design and Evaluation

1.3. Background

Anglers fishing from privately-owned vessels are estimated to make up a majority of the red snapper fishery in Alabama, but at this time it is impossible to create an accurate snapshot of fishing effort. Preliminary NOAA estimates from the June 2013 season show that private vessel anglers in Alabama harvested over 250,000 fish (Sminkey, personal communication), however this would imply that a very large number of private vessels are able to leave port every day of the red snapper season. With determinations of season and bag limits relying on these data, it is critical to provide managers with the most accurate and timely information possible about actual red snapper catch and fishery effort. Currently, the Marine Recreational Information Program (MRIP) Access Point Angler Intercept Survey (APAIS) dockside survey captures catch information and during the June 2013 red snapper season, Alabama Department of Conservation and Natural Resources/Marine Resources Division (ADCNR/MRD) samplers weighed just 169 fish in the private/rental (PR) recreational vessel mode. The MRIP dockside surveys do not capture data from anglers who depart from private docks or ramps, and it is impossible to place samplers at all public ramps during all hours of the red snapper season in order to take accurate counts of fish. However, a more complete portrait of the red snapper fishery may be obtained by involving anglers in counting harvested fish; to date there have been precedents set in the form of voluntary reporting surveys for sport species in several states, and support for a red snapper reporting system voiced to the Gulf of Mexico Fisheries Management Council. Given the derby conditions which exist in the recreational fishery today due to reductions in season length, and the importance of red snapper fishing in Alabama, there is strong justification for a plan which provides more accurate accounting of red snapper harvested by anglers on privately-owned vessels.

1.4. Project Description

Goal is to develop a system to account for the numbers of PR anglers fishing for red snapper in Alabama whereby anglers can easily count and report harvest, the reported data can be readily validated by DCNR/MRD staff, and reporting coverage can be enforced.

1.5. Public Description

1.6. Objectives

1. Develop outreach materials to inform anglers of how to report harvest and materials for license sales outlets to register for vessel endorsement. 2. Develop software for a smartphone/tablet application ("app"), an online reporting system, and/or a telephone hotline with Interactive Voice Response (IVR) for angler reporting. 3. Develop field validation protocols and procedures to determine appropriate under- and over-reporting adjustment factors. Field validation assignments will be completed by biological staff who will visit boat ramps to record pertinent trip information from vessels landing red snapper. In addition, enforcement officers will conduct dockside inspections to ensure compliance with mandatory reporting requirements. Adjustment factors will be developed after comparing collected data with reported data and applied to raw reported data. 4. Develop computing and data processing methods which minimize time needed to generate adjusted landings totals.

1.7. References

Sminkey, T. 2013. NOAA Fisheries. Personal communication.

2. Methodology

2.1. Methodology

This proposal requests MRIP funds to; 1) develop and implement a mandatory reporting system for reporting recreational red snapper landings by Alabama private vessels and 2) develop methods for validating self-reported data and tracking reporting compliance and using data to determine if adjustments to raw data are required. After each fishing trip but before fish are landed dockside, a representative from the vessel will submit data including the number of anglers on the vessel, number of red snapper harvested and released dead, and vessel registration number. These data will be reported electronically by the use of an app or by telephone hotline. ADCNR/MRD staff will oversee the development of reporting software. Currently, a template is in place via the ADCNR Game Check system which is used to collect data from hunters about deer and turkey harvest; a similar platform could be used to capture red snapper harvest data. Samplers will validate harvest during field sampling assignments, and enforcement officers will ensure angler participation. ADCNR/MRD staff will develop and disseminate outreach materials to anglers to make sure that they understand the reporting process.

2.2. Region

Gulf of Mexico

2.3. Geographic Coverage

Alabama

2.4. Temporal Coverage

Data reporting will take place during the designated red snapper season (~June 2014)

2.5. Frequency

Trip-level reporting by vessel or angler.

2.6. Unit of Analysis

Vessel or Angler trip

2.7. Collection Mode

Electronic data collection, through smartphone apps and automated telephone recording software.

3. Communication

3.1. Internal Communication

Key DCNR/MRD staff will have bi-monthly meetings to evaluate project status, identify issues remaining for project implementation, and delegate work as appropriate. Coordination activities outside scheduled meetings will be made primarily via phone and email.

3.2. External Communication

DCNR/MRD project managers will communicate with the Gulf States Marine Fisheries Commission (anticipated liaison) as needed. Once the regulation is signed, outreach will be conducted with recreational anglers through local print media, radio, meetings and the DCNR website. Project status reports will be provided monthly through MRIP Data Management System (MDMS).

4. Assumptions/Constraints

4.1. New Data Collection

Y

4.2. Is funding needed for this project?

Y

4.3. Funding Vehicle

Cooperative agreement with the Gulf States Marine Fisheries Commission

4.4. Data Resources

4.5. Other Resources

4.6. Regulations

Currently, no state regulations exist to require mandatory reporting of recreational red snapper catches. However, general support from Alabama anglers exists to improve data collection for red snapper. The Commissioner of the ADCNR understands the issues related to red snapper management and is eager to develop better systems to monitor landings. A new regulation will be promulgated to address mandatory reporting within the fishery.

4.7. Other

5. Final Deliverables

5.1. Additional Reports

Final evaluation report.

5.2. New Data Set(s)

Census reporting of private angler trips

5.3. New System(s)

Smartphone app and IVR module.

6. Project Leadership

6.1. Project Leader and Members

First Name	Last Name	Title	Role	Organization	Email	Phone 1	Phone 2
Kevin	Anson	Chief Biologist	Team Leader	Alabama DCNR/Marine Resources Division	kevin.anson@dcnr.alabama.gov	251.968.9694	
Karon	Aplin	Biologist II	Team Member	Alabama DCNR/Marine Resources Division	karon.aplin@dcnr.alabama.gov	251.969.9696	
Scott	Bannon	Chief Enforcement Officer	Team Member	Alabama DCNR/Marine Resources Division	scott.bannon@dcnr.alabama.gov	251.861.2882	
Julie	Perry	IT Manager	Team Member	Alabama DCNR-IT Section	julie.perry@dcnr.alabama.gov	334.353.5510	

7. Project Estimates

7.1. Project Schedule

Task #	Schedule Description	Prerequisite	Schedule Start Date	Schedule Finish Date	Milestone
5	Beta testing of reporting systems and fix identified problems.	3	05/01/2014	05/21/2014	
7	Develop in-season and final catch/harvest rates using adjustment factors.	6	06/01/2014	07/31/2014	Y
4	Develop field validation procedures and determine formulas for adjustment factors.		03/01/2014	05/01/2014	

Task #	Schedule Description	Prerequisite	Schedule Start Date	Schedule Finish Date	Milestone
6	Collect data, perform QA/QC procedures and conduct field validations.	3, 5	06/01/2014	07/10/2014	
1	Planning		12/01/2013	01/31/2014	
2	Reporting regulation development: outreach with regulatory members and angler groups.		01/01/2014	04/15/2014	Y
3	Smartphone App platform, internet database, IVR telephone capture development.		01/01/2014	05/01/2014	Y
8	Final evaluation report.		08/01/2014	10/31/2014	

7.2. Cost Estimates

Cost Name	Cost Description	Cost Amount	Date Needed
Oversee field data collection, QA/QC and correction factor development	DCNR/MRD staff time	\$12500.00	04/01/2014
Final report	DCNR/MRD staff time	\$5000.00	07/15/2014
Planning and outreach activities	DCNR-IT and DCNR/MRD staff time	\$5000.00	12/31/2013
Smartphone App and internet database development	DCNR-IT and DCNR/MRD staff time	\$10000.00	01/31/2014
Field validation procedure development	DCNR/MRD staff time	\$5000.00	03/31/2014
Cooperative Agreement Oversight	GSMFC Cooperative Agreement management/oversight	\$2500.00	12/01/2013
TOTAL COST		\$40000.00	

8. Risk

8.1. Project Risk

Risk Description	Risk Impact	Risk Probability	Risk Mitigation Approach
Regulation to require mandatory reporting of red snapper catches will not be promulgated.	All trips will not be reported.	Medium	Outreach with Conservation Advisory Board members and recreational angler group(s) is planned to

Risk Description	Risk Impact	Risk Probability	Risk Mitigation Approach
			build support for the regulation.
Development of smartphone app, database and IVR telephone module will not occur in time to test.	Reporting rates may be reduced and timeliness of reports will be reduced.	Low	DCNR/MRD staff will engage DCNR-IT staff and IVR contractor to develop modified version of technology which is already in use for other game species.
Low reporting rates.	Quality of data.	Medium	Anglers who do not report as required will receive a citation. Significant outreach will be conducted before and during the fishing season.
Lack of field samplers.	Validation of reported data.	Low	DCNR/MRD will hire additional staff to ensure a robust validation program is maintained throughout fishing season.

9. Supporting Documents