For-Hire Electronic Census Reporting of Red Snapper Catch in Alabama (Year 2)

FY 2015 Proposal

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1. Overview

1.1. Sponsor
Gregg Bray, Gulf States Marine Fisheries Commission

1.2. Focus Group
Survey Design and Evaluation

1.3. Background
In 2014, the Alabama Department of Conservation and Natural Resources/Marine Resources Division initiated a mandatory reporting program for owner/operators of for-hire vessels who landed red snapper Lutjanus campechanus in Alabama. This reporting program will be continued for the 2015 red snapper season. Owner/operators will report landing data via telephone and internet reporting platforms developed for this program and this data coupled with validation data collected by DCNR/MRD staff of for-hire red snapper vessel trips is expected to produce more timely information compared to traditional survey methodologies which should help management of this important species.

1.4. Project Description
This proposal requests MRIP funds to maintain a mandatory reporting system for reporting for-hire red snapper landings by Alabama charter vessels and validate for-hire vessel trips with red snapper to calculate a non-reporting rate to be used to adjust reported landings.

1.5. Public Description

1.6. Objectives
1. Refine the reporting app, the online reporting system, and the IVR telephone hotline used for reporting landings.
2. Refine 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 and marinas used by charter vessels to record pertinent trip information from vessels landing red snapper. Adjustment factors will be used to compare collected data with reported data and applied to raw reported data.
3. Improve upon computing and data processing methods which minimize time needed to generate adjusted landings totals. The goal is to have adjusted totals calculated within 48 hours of the end of the last reporting unit (day).
4. Evaluate the potential of the entire reporting system to be used as an in-season quota monitoring tool and compare results from the first year of the program.

1.7. References

2. Methodology

2.1. Methodology
DCNR/ MRD will continue the mandatory red snapper reporting program for charter boat vessels implemented in 2014. A robust validation component will be maintained consisting of at-sea and shored-based assignments. Trip validations will help to determine the rate of non-reporting which will be used to adjust reported trip information. Based on preliminary results and analysis of data from the 2014 reporting program along with feedback from field staff and the public, additional data collected will be collected from charter vessel owner/operators. As was required during the 2014 reporting program captains of vessels landing red snapper will be required to report vessels’s registration, number of anglers, and number of red snapper harvested, dead red snapper discards, and county of landing. However, an additional question regarding whether or not the vessel was on a multi-day trip will be added to the reporting methodologies.

2.2. Region
Gulf of Mexico

2.3. Geographic Coverage
Alabama

2.4. Temporal Coverage
Designated red snapper seasons (state and federal) - ~ May - July 2015.

2.5. Frequency
Trip-level reporting can be expected.
2.6. Unit of Analysis
Angler trip.

2.7. Collection Mode
Electronic data collection; smartphone apps, internet, telephone and paper tickets.

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 (Gregg Bray) as needed. In advance of the 2015 red snapper fishing season, outreach will be conducted with for-hire boat owner/operators through letters, attendance to local for-hire organizations, and emails. Project status reports will be provided monthly through MRIP Data Management System (MDMS) and a detailed final report will be submitted upon project completion.

4. Assumptions/Constraints

4.1. New Data Collection
N

4.2. Is funding needed for this project?
Y

4.3. Funding Vehicle
Gulf States Marine Fisheries Commission subaward

4.4. Data Resources
N/A

4.5. Other Resources
N/A

4.6. Regulations
Federal - none. State - under DCNR regulation 220-3-.83 – “Recreational Reporting of Red Snapper”, the captain of each vessel is required to report red snapper landings prior to landing for each trip made. One report per vessel is required.

4.7. Other
Assumptions include successful hiring of required additional field samplers and season length is anticipated to be similar to recent seasons (significant increases to season length could reduce overall sampling which could impact validation coverage).

5. Final Deliverables

5.1. Additional Reports

5.2. New Data Set(s)
Landings and validation data from for-hire owner/operators.

5.3. New System(s)

6. Project Leadership

6.1. Project Leader and Members
7. Project Estimates

7.1. Project Schedule

<table>
<thead>
<tr>
<th>Task #</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Schedule Start Date</th>
<th>Schedule Finish Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning</td>
<td></td>
<td>02/01/2015</td>
<td>03/16/2015</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Modify smartphone app platform, internet database, IVR telephone systems.</td>
<td></td>
<td>03/01/2015</td>
<td>04/15/2015</td>
<td>Y</td>
</tr>
<tr>
<td>3</td>
<td>Outreach with for-hire vessel operators.</td>
<td></td>
<td>03/16/2015</td>
<td>05/31/2015</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Develop field validation procedures and determine formulas for adjustment factors.</td>
<td>3, 4</td>
<td>04/01/2015</td>
<td>05/15/2015</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Collect data, perform QA/QC procedures and conduct field validations and final report.</td>
<td>3, 4</td>
<td>05/23/2015</td>
<td>11/30/2015</td>
<td></td>
</tr>
</tbody>
</table>

7.2. Cost Estimates

<table>
<thead>
<tr>
<th>Cost Name</th>
<th>Cost Description</th>
<th>Cost Amount</th>
<th>Date Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach</td>
<td>DCNR/MRD staff time and</td>
<td>$2000.00</td>
<td>05/31/2015</td>
</tr>
</tbody>
</table>
### 8. Risk

#### 8.1. Project Risk

<table>
<thead>
<tr>
<th>Risk Description</th>
<th>Risk Impact</th>
<th>Risk Probability</th>
<th>Risk Mitigation Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement to report red snapper before landing will not reach the for-hire operator/owners.</td>
<td>Lack of awareness could contribute to under-reporting affecting precision of estimates.</td>
<td>Low</td>
<td>For-hire captains will be contacted directly with emails and letters. DCNR/MRD staff will also attend local for-hire operator organization meetings.</td>
</tr>
<tr>
<td>Development of improvements to smartphone app, database and IVR telephone module will not occur in time for season.</td>
<td>Lack of improvements could lead to inefficient data capture.</td>
<td>Low</td>
<td>DCNR/MRD staff will engage DCNR-IT staff and IVR contractor to develop modified version of data collection system.</td>
</tr>
<tr>
<td>Lack of field samplers to collect validation data.</td>
<td>Lack of validation data could lead to lower precision of estimates.</td>
<td>Low</td>
<td>DCNR/MRD will hire additional staff to ensure a robust validation program is maintained throughout fishing season.</td>
</tr>
</tbody>
</table>

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<th>Cost Amount</th>
<th>Date Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative Agreement Oversight</td>
<td>GSMFC Cooperative Agreement management/oversight</td>
<td>$2500.00</td>
<td>05/31/2015</td>
</tr>
<tr>
<td>Field data collection, QA/QC, data analysis and final report development.</td>
<td>DCNR/MRD staff time</td>
<td>$18000.00</td>
<td>05/31/2015</td>
</tr>
<tr>
<td>DCNR/MRD Indirect Cost Rate</td>
<td>Dept. of Interior approved cost rate of 17% (not applied to contractual services)</td>
<td>$4165.00</td>
<td>10/01/2015</td>
</tr>
<tr>
<td>Planning</td>
<td>DCNR-IT and DCNR/MRD staff time</td>
<td>$2000.00</td>
<td>05/31/2015</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td></td>
<td><strong>$28665.00</strong></td>
<td></td>
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<td>Validation of for-hire trips with red snapper by DCNR/MRD staff will bias reporting rates. Reporting rates may be higher for validated vessels compared to those vessels which were not validated.</td>
<td>Inaccurate correction factors determined by comparing biased validated trip data to reported data could cause final estimates to be significantly less than actual number of trips.</td>
<td>High</td>
<td>DCNR/MRD staff will contact MRIP survey consultants in advance of the red snapper season to determine: 1) feasible validation techniques to incorporate into the validation survey protocols, and 2) estimation procedures which could eliminate or reduce bias. Estimates of final harvest using correction factors derived from defined time intervals between time of validation and time of report will be included in the final report. Calculation of multiple correction factors using this approach might help to describe level of reporting bias due to validation encounter.</td>
</tr>
</tbody>
</table>
9. Supporting Documents