

MARINE RECREATIONAL INFORMATION PROGRAM

Work Plan for Improving Marine Recreational Fishing Data
Collection Programs

Prepared by the MRIP Operations Team

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1.0 Background

Fisheries managers in the United States have the difficult task of managing fish stocks over fine geographic and temporal scales with data from recreational fishing surveys that were originally designed to track broad trends. Over time, angler confidence in the surveys has eroded and pressure has increased to improve data collection and estimation procedures - the National Research Council (NRC) Review highlighted many potential problems with recreational fishery surveys. There are now two key challenges: First, to facilitate effective management and science by providing more accurate estimates of fishing catch and effort, and second, to make the process transparent in order to build angler confidence in those estimates.

Generally, the NRC Review did not prioritize which problems were most critical or provide plug-in solutions. Over the last year, NOAA Fisheries has been gathering input to identify the most critical needs for a new Marine Recreational Information Program (MRIP) in a variety of ways:

1. Meetings at the Pacific, Atlantic, and Gulf of Mexico interstate fisheries commissions to identify specific regional recreational fisheries information needs.
2. A national workshop of recreational fishery data users and data collection managers
3. Constituent teleconference listening sessions to allow input from anglers
4. Public review on the initial development plan to improve recreational fisheries statistics
(<http://www.st.nmfs.noaa.gov/RecSurveyUpgrade/DevelopmentPlan.html>).
5. Construction and regular maintenance of a web site
(<http://www.st.nmfs.noaa.gov/RecSurveyUpgrade/RecSurveyUpgrade.html>) to keep interested parties updated on ongoing activities and upcoming opportunities to become involved.
6. Preliminary evaluation by NOAA Fisheries (NMFS) Office of Science and Technology staff of the impact of potential sources of bias.

The MRIP Executive Steering Committee (ESC) charged the Operations Team with prioritizing recommendations for improving recreational fishing data collection programs, as well as developing a work plan to address the resulting recommendations. Based on the above inputs, as well as input from informal discussions with data managers, stock assessment scientists, and the fishing public, the Operations Team developed a list of general cross-cutting priorities to guide decision making and project planning within each of six regions; Western Pacific, Alaska, Pacific Coast, Gulf of Mexico, Caribbean, and Atlantic Coast. This plan describes an approach to address the recommendations to improve marine recreational fishing data collection programs.

2.0 Approach

The Operations Team immediately recognized that a depth and diversity of skills beyond its membership was needed to implement the tasks encompassed within the general priorities. For this reason, the Operations Team recommends that the tasks associated with the different priorities be distributed among several work groups. The following sections provide descriptions, charges, milestones, and key deliverables for each of five work groups: Analysis, Design, Data Management and Standards, For Hire, and HMS (Highly Migratory Species). Details are not provided in this document for the Communications and Education Group (CEG) or the Registry Group (RG) because they are being formed and tasked directly by the ESC. However, the Operations Team expects to work closely with these groups once they are operational.

While the goal of this plan is to provide a National framework for developing, testing and implementing an improved marine recreational fishing data collection program, the Operations Team recognizes that each region has unique informational needs and challenges. The Operations Team considered establishing regional work groups to address regionally specific issues and recommendations. However, the Team recognized that in general, recommendations are fairly consistent among regions, and that forming regional work groups to address each recommendation would not be practical. As an alternative, the Operations Team proposes that work groups be provided with the flexibility to form subgroups on an as-needed basis to address regionally specific issues.

Ultimately, the size of each work group will be dictated by the magnitude of assigned work. However, the Operations Team proposes that work groups initially be populated by 12-15 members with appropriate levels of expertise and experience to complete assigned tasks. The Operations Team has identified several individuals as potential candidates for the various work groups (Appendix A). This list is not complete, and the Operations Team requests the option to add new members over the course of the coming weeks. Some individuals have been identified as potential candidates for more than one work group. The decision to participate in one or more of the work groups will be left to the discretion of the individual and his or her supervisor.

At the outset, each work group will receive the regional, prioritized lists of recommendations, as well as specific tasks associated with each of the recommendations (Appendix B). Work groups will be asked to develop detailed project plans to address each of the recommendations. Specific tasks are provided as examples and should not be considered to represent all of the tasks associated with each recommendation. Work groups will be responsible for reviewing the tasks, adding or removing tasks as necessary, and prioritizing the tasks within each recommendation based upon potential impact, ease of implementation (time and cost) and dependencies upon other tasks or recommendations. The Operations Team has provided preliminary priorities to facilitate this process. These tasks (or reports and recommendations resulting from the tasks) represent work group deliverables and are the foundation upon

which project plans should be developed. Priorities of both the recommendations and tasks should guide the project planning process. A project plan template is attached (Appendix C).

Work groups will have the flexibility to convene at their own schedule. However, work groups will be required to submit informal monthly reports that document activities, progress and problems, and the status of ongoing and planned projects. In addition, work groups will be required to submit annual and final reports that provide results of analyses and/or pilot studies, documentation of all efforts, and recommendations for moving the program forward.

The Operations Team envisions that a variety of processes will be used by work groups to complete tasks, including the following:

- Collaborative analysis, research, and design by work group members,
- Project proposals for independent contractors,
- Project proposals for academic consultants and/or academic grants,

Several recommendations that were classified as high priority by the Operations Team involve the expansion of data collection programs, or the collection of data at finer levels of temporal and/or geographic stratification to meet management or stock assessment needs. The Operations Team recognizes that these are high priority issues and should receive considerable attention as the survey redesign process evolves. However, the Operations Team feels that efforts to produce a sound sampling design should take precedence over efforts to improve precision or stretch the utility of the current program through increases in sample size. As a result, the Operations Team will not accept projects aimed at expanding the scope of current data collection programs until biases and assumptions of current programs have been addressed.

To initiate work, the Operations Team proposes a kickoff workshop that will include all work groups and address the following:

- Introduce work groups to ESC, OT, CEG and RG,
- Review standard operating procedures for the work groups,
- Discuss interactions and communications among work groups and teams,
- Communicate priorities and objectives,
- Have each work group select a chair,
- Review reporting requirements,
- Review project planning process (Project Plan Template),
- Have each work group review and prioritize tasks,
- Initiate planning process by having work groups draft project plans to address 2 high priority recommendations,
- Review/Develop milestones and timelines for additional projects.

So that work can be initiated as quickly as possible, the Operations Team recommends that the kickoff workshop be held no later than the last week of July.

While the work groups will be responsible for developing and testing new methodologies and developing and documenting protocols, the Operations Team

will ultimately be responsible for implementing improved data collection programs. As workgroups complete projects and provide recommendations, the Operations Team will utilize existing mechanisms, such as NOAA Contracts and cooperative agreements with the interstate fisheries commissions, to implement survey improvements. Where necessary, the Operations Teams will work with relevant partners and organizations to develop new mechanisms for implementing improvements.

2.1 Analysis Work Group

The function of the Analysis Work Group (AWG) will be to address sources of potential bias as well as fine tune estimation procedures to account for sources of significant bias in the current system of recreational fishing surveys. Where assumptions/bias cannot be evaluated through examination of existing data, the AWG may consider additional research and/or the development of pilot surveys. It is expected that the Analysis Work Group will work closely with the design and data management work groups to provide a “workable” transition to the new system of recreational surveys. The AWG will refer to the prioritizations established by the OT and the work group itself when determining project order. Deviation from the initial prioritizations will likely be necessary but the OT must concur that deviation is required. A complete list of recommendations and tasks to be addressed by the AWG is attached.

2.2 Design Work Group

The Design Work Group (DWG) will be responsible for developing and testing new data collection methodologies that address NRC recommendations. The focus of the work group will be to incorporate as appropriate those recommendations (as summarized by the OT) that are consistent with improvements necessary and practical on both national and regional levels. The DWG will work closely with other work groups to develop a system of surveys that is robust in terms of data collection standards, adaptive to changing fisheries management needs, and responsive to constituent concerns. The DWG will refer to the prioritizations established by the OT when determining project order. Deviation from the initial prioritizations will likely be necessary but the OT must concur that deviation is required. A complete list of recommendations and tasks to be addressed by the DWG is attached.

2.3 Data Management and Standards Work Group

Development and maintenance of data collection standards, protocols and logistics will be major responsibilities of the Data Management and Standards Work Group (DMSG). One of the key goals of the DMSG is to ensure comparability of results between different surveys. The DMSG will refer to the prioritizations established by the OT when determining project order. Deviation from the initial prioritizations will likely be necessary but the OT must concur that

deviation is required. A complete list of recommendations and tasks to be addressed by the DMSG is attached.

2.4 For Hire Work Group

The For-Hire Work Group (FHWG) will focus specifically on charter, guide and headboat issues but will be expected to interact closely with other work groups to ensure compatibility of data elements within the new system of surveys. The FHWG will have elements of design, analysis and data management work groups. The FHWG will refer to the prioritizations established by the OT when determining project order. Deviation from the initial prioritizations will likely be necessary but the OT must concur that deviation is required. A complete list of recommendations and tasks to be addressed by the FHWG is attached.

2.5 HMS Work Group

The focus of the HMS Work Group will be the geographic expansion of HMS data collection programs, assessment of the current methodologies for potential bias, and development of new methodologies as needed. The HMS Work Group will refer to the prioritizations established by the OT when determining project order. Deviation from the initial prioritizations will likely be necessary but the OT must concur that deviation is required. A complete list of recommendations and tasks to be addressed by the HMSWG is attached.

3.0 Funding

Estimated costs for planning, initiating and completing all tasks and addressing all recommendations are included in Appendix B. It is not practical to estimate the total annual cost to run a redesigned survey program, as the ultimate survey design will depend upon the results of the work described in this plan. Rather, the included costs reflect the amount of funding required to develop a redesigned survey program. Labor costs of workgroup members are not included in estimated costs.

4.0 Major Tasks and Milestones

The Operations Team has listed estimated project durations for example tasks (Appendix B). One-time project durations are estimated from workgroup planning to completion at the given funding level. In addition, specific milestones for the first project year (June 1, 2007 – June 1, 2008) are provided below. The project durations and timelines proposed by the Operations Team involve several key assumptions. First, it is assumed that the ESC is able to secure significant time commitments from work group members. Second, the timelines assume that projects are fully funded (including premium required for rapid turnaround). The stated project durations and timelines may not be met if either of these

assumptions are incorrect. Milestones may be adjusted based upon Work Group feedback.

4.1 Milestones Common to All Work Groups

Milestone	Date
Initial Work Group meeting	TBD (kickoff workshop)
Selection of Work Group chair	TBD (kickoff workshop)
Make recommendations for additional Work Group members	TBD (kickoff workshop)
Review and prioritize Work Group tasks	TBD (kickoff workshop)
Identify and document projects that are likely to require the formation of subgroups	TBD (kickoff workshop)
Outline 2 high priority project plans	TBD (kickoff workshop)
Finalize 2 project plans (from above outlines)	8/1/2007
Monthly reporting	Ongoing

4.2 Analysis Work Group Milestones

Milestone	Date
Report documenting results of analyses to evaluate whether estimation procedures appropriately match sample design	6/1/2008
Project plan to investigate the impact of private access fishing, night fishing and tournament fishing on catch estimates	6/1/2008
Project plan to investigate the impact of excluding non-coastal county households and households without landline telephones in telephone surveys of fishing effort.	6/1/2008

4.3 Design Work Group Milestones

Milestone	Date
Expansion of Angler License Directory Survey (ALDS) / Coastal Household Telephone Survey (CHTS) dual-frame methodology to additional states (NC)	9/1/2007
Extention of Gulf ALDS through 2008	1/1/2008
Initiation of a pilot study to assess the feasibility of using panel survey designs to collect fishing effort data	1/1/2008
Documented methodology for license (registry) directory surveys and dual-frame surveys of fishing effort	6/1/2008
Project plan to develop methodologies to provide better estimates of discarded catch	6/1/2008
Project plan to develop methodology to collect more detailed fishing effort information	6/1/2008

4.4 Data Management and Standards Work Group Milestones

Milestone	Date
Provide mechanism for regional control of telephone surveys of fishing effort	1/1/2008
Documented data collection and data management goals, minimum data elements, timelines of data availability, data quality standards, and data accessibility standards	6/1/2008
Documented standard protocols for sampler training, interviewing procedures, and QA/QC procedures	6/1/2008
Project plan to evaluate procedures for updating access-point sampling frames and establishing protocols for updating site information and fishing pressure	6/1/2008
Report (metadata) documenting procedures for current survey programs	6/1/2008

4.5 For-Hire Work Group Milestones

Milestone	Date
Project plan to address gaps in coverage of for-hire catch and effort sampling frames, as well as assess potential bias	1/1/2008
Report documenting existing for-hire data collection programs, including an evaluation of the pros and cons of various reporting methods, and the benefits and limitations of individual programs	6/1/2008
Project plan to develop for-hire specific data collection methodology in the Caribbean	6/1/2008
Project plan to integrate existing logbook programs with for-hire sampling programs in dual-frame methodologies	6/1/2008

4.6 HMS Work Group Milestones

Milestone	Date
Report evaluating current HMS data collection programs	6/1/2008
Project plan to expand HMS data collection as required by management	6/1/2008