







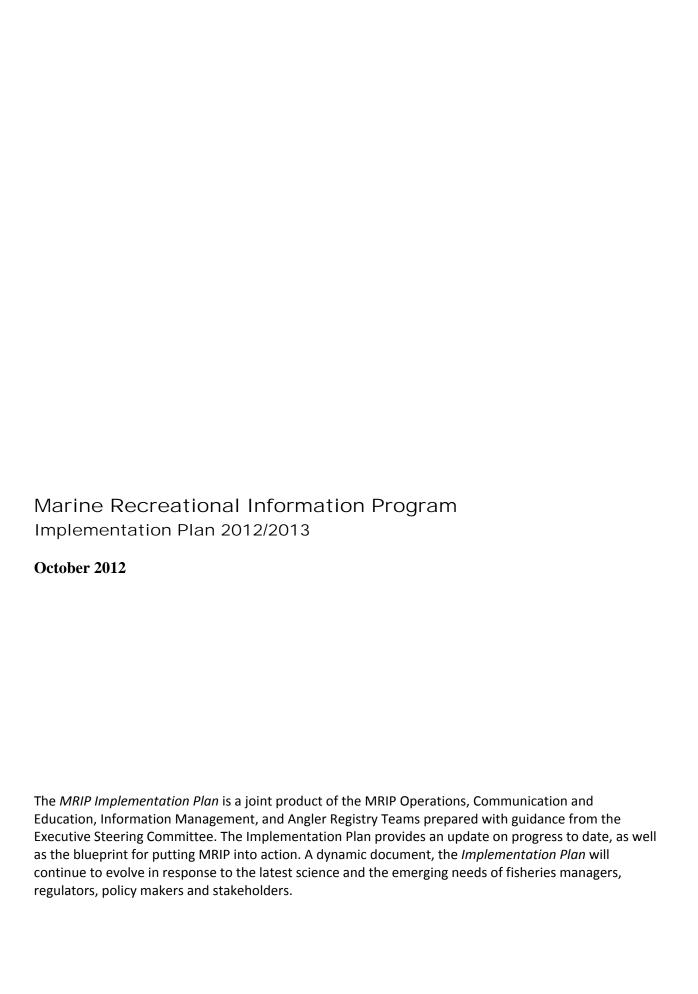


MARINE RECREATIONAL INFORMATION PROGRAM

Implementation Plan 2012-2013 Update October 2012



To help ensure the long-term sustainability of U.S. fisheries through enhanced estimates of marine recreational catch and effort, a partnership of public and private organizations is developing the Marine Recreational Information Program, an improved national system of regional surveys. This Implementation Plan outlines the history of the program, its current status, and future course.



MRIP Implementation Plan

Table of Contents

Executive Summary	
Introduction	5
2012 Review	
2013 Priorities	
Accomplishments and Priorities	7
Operations Team	
National Saltwater Angler Registry and State Exemption Program	
Information Management Team	10
Communications and Education Team	
Regional Implementation	
Implementation Strategy	15
Roles and Responsibilities	
Region-by-Region Status	16

Executive Summary

The Marine Recreational Information Program, or MRIP, is NOAA Fisheries' new way of counting and reporting marine recreational catch and effort. Initiated in 2008, MRIP is a customer-driven effort that will produce better estimates through a process grounded in the principles of transparency, accountability and engagement. MRIP replaces an array of data programs including the Marine Recreational Fisheries Statistics Survey, or MRFSS.

MRIP is designed to provide the detailed, timely, scientifically sound estimates that fisheries managers, stock assessors and marine scientists need to ensure the sustainability of ocean resources, while at the same time addressing stakeholder concerns about the reliability and credibility of recreational fishing catch and effort estimates. The program is being implemented in three concurrent phases: **Evaluation** of current methods, **Innovation** to identify and test new methods, and **Activation** of proven methodologies.

This *MRIP Implementation Plan 2012/2013* provides information on MRIP activities and the status of pilot projects since the last update of the Implementation Plan, which was issued in December, 2011. Readers may refer to that plan – available online at www.countmyfish.noaa.gov – as well as other resources available on the site for more information on the program's background, priorities, strategy, organization and decision-making process.

Introduction

Over the course of the last year, the Marine Recreational Information Program teams achieved a series of significant milestones that have both corrected shortcomings of previous recreational data collection programs and laid the foundation for future enhancements. The 2013 priorities listed below, and further detailed throughout this Implementation Plan, outline the process for achieving those enhancements.

2012 Review

Among the key milestones of the year was the release in January 2012 of re-estimated catch data dating back to 2004. The new data were based on a years-long effort by a team of internal NOAA scientists and external experts to address one of the chief concerns raised by the National Research Council in its 2006 review of NOAA's recreational statistics program. Namely, that the methods being used to calculate catch data were not properly matched to the surveys that were conducted to gather that data. This introduced the potential for bias into our estimates, which we needed to correct. As predicted by our early analyses, there was no specific trend in the direction or magnitude of the changes in the estimates. Some were higher, some were lower, and some remained about the same.

However, in removing a source of from our calculations, we have made all of our estimates more accurate. Equally important, we have established a sound, peer-reviewed scientific and statistical basis for all future enhancements we will make to meet the emerging needs of fisheries managers, our data partners, marine scientists, the recreational fishing community, and other stakeholders. These enhancements could include more frequent reporting, estimates made on a smaller geographic scale, or increased sampling to enhance precision.

Specific decisions regarding changes in our reporting will necessarily be made in the context of managing limited resources – ensuring the appropriate level of scientific or management return for the taxpayer investment. But we can say with confidence that whatever the data need, MRIP can provide the science to support it.

Other fundamental milestones that are detailed in this 2012 Implementation Plan include:

- Intercept survey re-design. In early 2013, we will introduce a new design for our Access Point Angler Intercept Survey, also known as "dockside sampling," which we use for estimating catch. The new design will further reduce potential sources of bias in our catch estimates.
- Utilizing license and registration information. The implementation of the National Saltwater Angler Registry opens up the possibility of moving away from the Coastal Household Telephone Survey as our primary means of estimating effort. Studies are underway to evaluate the best way to use license and registration data, along with other sources, to contact anglers about their fishing activity.
- Greater access, transparency and context. Access to important information is a critical component of ensuring trust in the process through which our methods are tested and improved. Enhancements to our information management infrastructure now enable visitors to the MRIP Website to quickly and easily review and track progress on MRIP-funded projects. In addition, new features added to our data queries allow for easy access to more information, along with new output reports that visually represent the precision of our point estimates.
- Nationwide Collaboration. We are working with our partners across the country to improve survey designs. Programs in different parts of the country are in different stages of evolution. For example, we've worked with the Pacific Coast states to evaluate and test improved survey methodologies, while in Hawaii and Puerto Rico, we're coordinating to develop an enhanced survey design to meet the unique needs of the island fisheries, and in the U.S. Virgin Islands, we're working to create a new data collection program.

Priorities for 2013

Building on these milestones, our key priorities for the coming year – as well as detailed steps for achieving them – are outlined in the body of this Plan. They include:

- Continuing to build a solid foundation. Following the advice of the NRC, we will continue to focus on evaluating, developing, and testing new, unbiased survey methodologies for large-scale catch and effort surveys administered or funded by NOAA Fisheries. While this work is ongoing, we will continue to collect and report data through our existing set of surveys to provide a continuous stream of data to managers and stock assessors.
- Regional implementation strategies. MRIP has been built from the beginning around the principle of national standards and regional implementation. National standards ensure consistently high data quality that can be uniformly trusted. Regional implementation ensures that the specific data needs of different parts of the country, each with their unique fisheries, management concerns and priorities, can be effectively and efficiently met. As the MRIP team certifies new methods, we will work with our regional partners and stakeholders to determine how best to incorporate these methods into practice at the local level.
- Identifying and evaluating data collection and reporting tradeoffs. As part of our regional implementation strategy, we will work with managers, marine scientists, the recreational fishing community, and other stakeholders to clearly articulate the tradeoffs inherent in data collection and reporting decisions. Among the products that we are creating to aid in this task is a "simulation tool." This tool will enable users to pick a desired outcome, such as more timely data or greater precision, and then see the actual costs in terms of both financial and human resources for achieving that end.
- Expanded understanding of the role recreational data play in the overall picture of ocean health. As the MRIP team conducts outreach regarding the improvements we have made in data collection and reporting, we increasingly find that our discussions tend to generate as many questions as they answer. Numerous myths and misconceptions exist regarding the interplay among various information sources that managers consider. The result is that many stakeholders simultaneously:
 - Significantly exaggerate the impact of a small set of data points on fisheries management decision-making, AND
 - o Substantially *underestimate* the impact of recreational fishing on the resource. Investments in outreach that explains the bigger picture have proven effective on a small scale, and we intend to expand that work in the coming year.
- Increased engagement aimed specifically at addressing issues of trust. In its review of our previous recreational fishing data collection and reporting programs, the National Research Council made two distinct sets of recommendations. The first was to improve our statistical processes and methods. The second was to specifically address the issue of angler trust in the data. The NRC recognized that sound science is a prerequisite for trust, but "good data products" in and of themselves are not enough. Trust is a complex human-dimension component of any activity with policy implications that impact lives and livelihoods. Distinct and targeted confidence-building initiatives have been an ongoing part of MRIP to date. As more and more of our work moves to the implementation phase, we will concurrently expand our specific strategies and tactics to build stakeholder trust.

These key priorities – and the strategies we have outlined to achieve them – are a reflection both of the diverse makeup of the MRIP team and of the pressing scientific needs of our time. Our approach is measured and deliberate, with each improvement we recommend built on exhaustive testing and peer review that reflects our strong culture of science. At the same time, MRIP remains committed to a

transparent, cooperative and collaborative approach reflecting the desire and expectation of stakeholders to be included in every part of the process.

As pressures on our ocean resources continue to mount – many of them having nothing to do with fishing – MRIP's dual approach of ensuring both sound data and stakeholder confidence will be an increasingly important part of sustainably managing our ocean resources. Having the best, most-trusted recreational fishing data in the world will not make the challenges affecting fish stocks – much less the challenges of crafting effective policies to manage them – go away. Rather, when sound, trusted data becomes an increasingly universal yardstick by which to make and judge management decisions, then the quality of those decisions – and their outcomes – can be vastly improved.

Accomplishments and Priorities

Operations Team Report

MRIP's Operations Team (OT) designs, tests, and recommends improvements to NOAA Fisheries' recreational fishing data collection programs. Each year, the OT identifies, develops, and carries out research in collaboration with teams of experts in survey design and management, natural resource management and stock assessment science, and individuals representing the recreational saltwater fishing community. Since 2007, the OT has funded 59 projects to develop improved survey designs that increase the accuracy of recreational fishing catch, effort and participation estimates. Complete descriptions of all OT-funded projects are available on the MRIP website at www.countmyfish.noaa.gov.

The MRIP projects completed in 2012 (detailed below) will result in either direct implementation of improved survey methods or follow-up studies to continue testing alternative data collection designs.

Working toward an improved catch survey design

In 2012, the OT completed a study testing a new shoreside catch survey design in North Carolina. The results of this so-called "North Carolina Pilot" are summarized in a final project report available on the MRIP website. The project team recommended specific survey improvements to eliminate or minimize significant sources of survey error from catch estimates and, in so doing, addressed a major concern of the NRC. The final recommendations will be reviewed by MRIP's Executive Steering Committee and NOAA Fisheries. Should they both adopt the project recommendations, NOAA Fisheries will implement an improved Access-Point Angler Intercept Survey (APAIS) along the Atlantic and Gulf of Mexico coasts in 2013.

Ongoing studies continue to test improvements to onsite surveys in general, and the APAIS specifically. MRIP will examine new technologies, such as computer-assisted personal interviewing and video monitoring of catch, while other studies will evaluate differences in catch rates between fishing at public sites, where intercept surveys are conducted, and fishing activity at privately-owned sites that are inaccessible to field interviewers.

We developed the improved APAIS design through careful review and evaluation of the historical intercept survey design and alternative data collection designs. In 2012, MRIP completed similar reviews for surveys administered by state natural resource agencies on the Pacific coast. Specifically, we evaluated sampling and estimation designs for the California Recreational Fisheries Survey (CRFS), the Oregon Ocean Recreational Boat Survey (ORBS), the Washington Ocean Sampling Program (OSP), and the Washington Puget Sound Sampling Program (PSSP). In 2013, MRIP will test survey design improvements recommended by each review and develop recommendations for improved data collection and estimation designs. Similar reviews of ongoing and alternative survey designs for Hawaii, Puerto Rico, and the U.S. Virgin Islands will be completed in 2013. These reviews will likely result in future testing of the recommended designs.

Testing new methods for collecting effort data

In recent years, new technologies, like caller ID and cell phones, have had a dramatic, negative effect on the success of telephone surveys. Organizations and government agencies, including NOAA, that rely on phone surveys to collect information are now looking for new ways to survey members of the public.

MRIP has been testing new methods for collecting recreational fishing effort data for shore and private boat fishing. One such study concluded that mail surveys may be more effective than phone surveys. According to the study, mail surveys provide more complete coverage of the population, result in considerably higher response rates, and may be less susceptible to respondent error than traditional random digit dial telephone survey designs. The project report recommended follow-up studies to test additional designs and explore differences between mail and telephone survey estimates. In 2013, we will test mail survey designs in Massachusetts, New York, North Carolina, Florida, Oregon, and Hawaii.

Collecting data from the recreational for-hire sector

In 2012, we completed a project in the Gulf of Mexico that tested a logbook approach for collecting catch and effort data from the recreational for-hire sector. The study's findings indicated logbook reporting was not a feasible approach to achieve a census of for-hire catch and effort due to the considerable costs of compliance monitoring and independent validation. However, logbook reporting, particularly when completed via an electronic reporting mechanism and coupled with dockside validation of logbook data, could be useful for estimating fishing effort, catch per trip, and landings. In 2013, we will complete a companion study to examine methods for estimating catch and effort using logbook data. Also, MRIP will test the feasibility of electronic reporting and validation methods for for-hire vessels that participate in the Southeast Region Headboat Survey.

Using catch cards to monitor billfish landings in Puerto Rico

This year, the OT tested the feasibility of a catch card program to monitor recreational billfish landings in Puerto Rico. The project team recommended a catch card census approach over existing telephone and online reporting systems. The team also urged mandatory reporting requirements and simplified reporting options. We are testing these recommendations in a catch card pilot study of bluefin tuna landings currently underway in Massachusetts.

Assessing the utility of community monitoring programs

Many recreational anglers want to contribute information about their fishing activities via online logbooks or smartphone and tablet applications that are outside of MRIP's system of surveys. To determine if and how data from so-called "community monitoring programs" could be used, MRIP worked with the Mid-Atlantic Fisheries Management Council to conduct an evaluation workshop with statisticians, representatives from state natural resources agencies, recreational anglers, and other stakeholders.

Workshop participants recognized the potential of community monitoring programs, but also pointed out several limitations, most notably, that data collected in this manner are potentially biased. Community monitoring programs provide data that are not collected from probability samples – as are the MRIP surveys – and, therefore, cannot be generalized to a larger population of anglers. Estimates generated from community monitoring program data are particularly susceptible to errors for measurements that are likely to be correlated with a respondent's decision to participate in the program. For example, catch estimates will be inaccurate if anglers only report catch from successful fishing trips leaving the unsuccessful trips unreported.

The workshop report – available on the MRIP website – concluded that additional research is needed before data from community monitoring programs can be considered as a supplement to MRIP catch and effort surveys. Potential research could evaluate statistical methods to correct for errors in opt-in angler data, identify measures that are unlikely to be correlated with angler participation in community monitoring programs, and evaluate alternative data collection designs that more effectively engage anglers in probability-based designs, such as panel study designs that track angler activities over a period of time.

Priorities for 2012/2013 include:

In 2013, the OT will continue to evaluate alternative data collection designs. As described above, we will prioritize ongoing studies, and will design and implement necessary follow-up studies to finalize data collection approaches. To date, research efforts have generally focused on addressing concerns identified by the NRC, such as evaluating sampling and estimation designs for large-scale catch and effort surveys administered or funded by NOAA Fisheries. As new sampling and estimation approaches are implemented, research priorities will shift toward more subtle refinement of data collection methods to better address stakeholder needs. Examples of possible project areas include:

- Evaluation of catch and effort surveys administered by state natural resource agencies;
- Development of methods to estimate catch and effort at greater levels of temporal and spatial resolution, including both design- and model-based approaches;
- Assessment of non-sampling errors, such as non-response error, coverage error and measurement error, in recreational fishing surveys;
- Development and testing of new technologies, such as electronic data capture and online reporting, to support recreational fisheries data collection; and
- Optimization of sampling allocations within and among recreational fishing surveys to satisfy stakeholder needs for precision.

National Saltwater Angler Registry and State Exemption Program Report

The Magnuson-Steven Act (Section 401(g)(1)) requires NOAA to register and collect identification and contact information for anglers and for-hire vessels if they fish in the exclusive economic zone (EEZ), for Continental Shelf fishery resources beyond the EEZ, or for anadromous species throughout their range, including state waters. However, anglers and vessels that are licensed or registered by a state are exempt from the federal registration requirement if the state provides sufficient identification and contact information for use in recreational surveys. The resultant federal registry must address both the qualifications and procedures for registering anglers and vessels, and for exempting qualified states' anglers and vessels from the federal registration requirement.

Federal regulations were adopted in 2008 to implement the National Saltwater Angler Registry. The regulations include:

- Standards and process by which states may apply for exempted state designation based on their provision of license/registry-based sample frames;
- Standards and process by which states may apply for exempted state designation based on use
 of state license/registry data to perform surveys of recreational catch and effort;
- Detailed requirements and process by which anglers and for-hire vessels from non-exempt states enroll in the federal registry; and
- Requirements for registration fees beginning January 1, 2011.

The registry regulations are available online at:

 $\frac{\text{http://ecfr.gpoaccess.gov/cgi/t/text/textidx?c=ecfr\&sid=26e11a80d32d8ff9d7dc27ee2538b8bf\&rgn=div}{8\&\text{view=text\&node=50:}10.0.1.1.1.16.1.1\&\text{idno=50}}$

During 2010 and 2011, NOAA Fisheries began entering into Memoranda of Agreement (MOAs) with each of the states that qualify for Exempted State designation. Pursuant to the MOAs, those states have been formally designated as Exempted States, and the states have begun to submit data as called for in the MOAs. The Exempted States are:

- For submission of state license holder or registry data: Texas; Louisiana; Mississippi; Alabama; Florida; Georgia; South Carolina; North Carolina; Virginia; District of Columbia; Maryland; Pennsylvania; Delaware; New Jersey; New York; Connecticut; Rhode Island; Massachusetts; New Hampshire; Maine.
- For participation in and submission of catch data from an approved regional survey: Alaska;
 Washington; Oregon; California; Guam; American Samoa; Commonwealth of the Northern Mariana Islands.

2011/2012 Registry Program Activities

In 2011/2012, NOAA Fisheries:

- Completed rulemaking to update and adjust the final rule for the Registry Program to reflect experience with the existing registration and state exemption process.
- Completed evaluations of the initial state registry data feeds from the Atlantic and Gulf coast states, and provided the states with advanced data quality reports and recommendations for improvements to the state databases.
- Provided approximately 20 grants to states through the interstate marine fisheries commissions to support initial data quality improvement projects.
- Supplied registry data from the states of North Carolina, South Carolina, Georgia, and Florida for
 the registry sample component of the MRIP Pilot Project Continued Development and Testing of
 Dual Frame Surveys of Fishing Effort (the project plan and update are available on our website
 under "projects").

2012/2013 Planned Activities

In 2012/2013, we will:

- Work with states to complete registry data quality improvement plans that address the recommendations of the advanced data quality reports provided to states in 2011/12, and any other requirements of the states' MOAs.
- Continue to provide grants to states through the Interstate Marine Fisheries Commissions to assist the states in implementing the provisions of their data quality improvement plans.
- Supply registry data from the states of Massachusetts, New York, North Carolina, and Florida to support the MRIP pilot project *Finalize Design of MRIP Effort Surveys* (the project plan and update are available on our website under "projects").
- Maintain registry databases for the Atlantic and Gulf coast states and make them available for additional pilots or new survey method deployment, as needed.
- Supply registry data from the Atlantic and Gulf coast states for a national survey of recreational angler attitudes and preferences.

Information Management Team Report

The Information Management Team (IMT) supports the national-level processing and management of recreational saltwater fishing data by ensuring the comparability and compatibility of recreational fishing statistics among regional data collection programs. In 2012, the IMT developed a three-year operations plan focused on data access, analytical tools, and data quality management. These priorities

address NOAA Fisheries directives for data management, as well as recommendations from the NRC.

In 2012, the IMT continued to improve the accessibility and use of MRIP data through projects and initiatives, including:

Launch of new website query tool features

We enhanced the existing online data queries tool with additional selection options, output options, and graphics. We updated the tables to improve the users' experience, and provide a clearer representation of our data. A National Summary Query, covering all U.S. coastal states, was added, expanding our standard coverage to include data provided by the Texas Parks and Wildlife Department, the Pacific States Marine Fisheries Commission, and the Alaska Department of Fish and Game. All MRIP data are publically available via our online query tool.

Continued development of the MRIP Site Registry

The IMT, in cooperation with our state partners, continued the development of the new online registry of coastal fishing sites. Historically, contractors and partners have maintained separate registers of fishing sites in their state or region. The new online site register will provide a host of new tools and features that allow us to map and update sites more easily, and share this information with the public through a new web interface. NOAA Fisheries will maintain the website and database to ensure a high level of data quality, maintain consistency between regions, and increase sampling efficiency.

Enhancements to the MRIP Data Management Standard

The IMT maintains MRIP's Data Management Standard (MDMS), an online collaboration tool to manage all MRIP project tasks. Proposals are submitted, edited, and approved without needing to send multiple emails and attachments. Monthly updates are provided online, without additional program management support needed to compile or monitor submission. All documentation is available to users and, where appropriate, also available for public access.

Priorities for 2012/2013:

- Include fully documented metadata (the contents and context of data) for all ongoing and legacy programs, and make it available online to the public.
- Add user guides to help new users correctly interpret the characteristics, uses, and limitations of the data.
- Develop analytical tools to enhance the understanding of the data.
- Create a customizable SAS program that will allow users to analyze data themselves.
- Continue to add additional selection options, output options, and graphics to the website query tools.
- Continue to expand MDMS to tie pilot projects to the resulting data, as well as project management needs.
- Develop an integrated for-hire vessel direction.

Communications and Education Team Report

In coordination with the other MRIP teams, the Communications and Education Team (CET) works on a variety of projects to keep those with a stake in recreational fishing data engaged in our work and updated on our progress and developments. In its 2006 report, the National Research Council explained:

"Ultimately, the value of marine recreational fishing data, whether collected by the Marine Recreational Fisheries Statistics Survey (MRFSS) or any other survey, will be judged by the extent to which it meets the needs of the individuals who use the data and will be trusted by those whose lives are affected by the

ways the data are used...Communication and outreach efforts are essential to foster confidence in the quality of the data among managers, other decision makers, and those who rely on the fishery resources for recreation or for a living."

In 2012, our efforts to build confidence and trust among stakeholders, including:

Communications support for the release of the new MRIP catch estimation method

In January 2012, NOAA Fisheries released an improved MRIP catch estimation method and re-estimated catch data for historic estimates back to 2004. In support of this major milestone, the CET helped facilitate the communications rollout strategy that built on its work in 2011 with an Observer Team, which was made up of stakeholders who helped guide the project. The strategy involved reaching out to many leaders and influencers in the recreational fishing community, states, councils, commissions, and internal NOAA offices. The CET developed and helped disseminate a suite of materials to these stakeholders, including a fact sheet, a video, a PowerPoint presentation, and a general MRIP brochure.

MRIP "Road Show"

The CET conducted a listening tour this year to meet with constituents along the Atlantic and Gulf coasts. The meetings provided anglers and other stakeholders with the opportunity to ask questions, share their ideas and concerns, and learn the latest MRIP news.

The goals of the Road Show were to ensure that we're effectively communicating what has been accomplished under MRIP, build a dialogue among partners and stakeholders around the direction the program is headed, and ensure that expectations of all parties are aligned with the on-the-ground realities of resources, needs, and priorities.

The Road Show began with a series of listening sessions, both formal and informal, with recreational fishermen in New Jersey at the beginning of April. The CET traveled up and down the state's coastline to meet with tackle shop owners, fishing groups, recreational fishing advocates, members of the New Jersey Department of Environmental Protection Marine Fisheries Division, and everyday anglers from all walks of life.

The next stop was Florida in mid-May, where the team met with charter boat captains and private recreational anglers from the Atlantic and Gulf coasts. The team also talked with anglers about the potential uses and statistical limitations of the data some anglers choose to collect and submit outside of our catch and effort surveys. Many states offer programs that encourage anglers to self-report information about their catch.

Finally, the CET traveled to New England in September. The team met with Sea Grant Extension Agents from Connecticut, Massachusetts, New Hampshire and New York, and representatives from Rhode Island's Department of Environmental Management and Connecticut's Department of Environmental and Energy Protection Recreational Angler Panel to share outreach materials and discuss the best methods for reaching out to recreational anglers in the region. The CET also sat down with members from the Rhode Island Saltwater Anglers Association, recreational anglers in Sandwich, MA, and held two formal focus groups with anglers to talk about improvements MRIP is making to the way it collects and reports recreational data, and how that affects anglers.

All of the meetings and focus groups the CET held provided important insight into how recreational anglers understand and perceive NOAA Fisheries and MRIP. The feedback the CET received will continue to help guide messaging and materials so that MRIP can most effectively reach recreational anglers with the information they want and need to know.

Creating more user-friendly methods of communicating information and updates with stakeholders In 2012, MRIP released the new MRIP Data Management Standard (MDMS), which catalogues past, ongoing and future MRIP projects. Working with the IMT, the CET assisted in developing a public-facing version of MDMS to make this information available and easily accessible to MRIP stakeholders through our website. This meant developing plain-language descriptions of each project and its objective and categorizing the projects by MRIP priority to make them easily searchable.

The CET also worked with the IMT to enhance MRIP's new data query tools user-friendliness by conducting one-on-one sessions with key stakeholders to gather their feedback as they navigated the tool. The feedback was used to ensure the query tools could be used easily and productively by a variety of data customers.

MRIP Project Support

MRIP has a variety of ongoing projects through the year. In an effort to effectively communicate the progress, findings, and recommendations of these projects, the CET is creating customized communications plans for each one based on the issue they're working on and the region in which they take place.

MRIP Stakeholder Updates

The CET emails a regular newsletter, called a "Newscast," to keep stakeholders engaged and up-to-date. The Newscast chronicles MRIP progress and developments and provides contact information for stakeholders who have questions or comments. Anyone interested in receiving the MRIP Newscast can e-mail Forbes Darby at forbes.darby@noaa.gov.

Revamped MRIP Website

In September 2012, NOAA Fisheries' Office of Science & Technology unveiled a series of revamped websites, including one for recreational fishing data collection and reporting. This new face and structure for the MRIP website meant an opportunity to increase its effectiveness as a tool with which to communicate information to various stakeholders. The CET helped to lay out a new web strategy that included a more user-friendly layout and dynamic content.

Communications support for the enhanced Access Point Angler Intercept Survey

Working alongside the Operations Team, the CET is developing a communications strategy to aid in the rollout of the new APAIS and the survey's general communications strategy moving forward. Similar to the improved re-estimation method, the CET is developing a suite of materials that will help explain the changes being made to the intercept survey. The CET is also developing messaging and materials to help samplers answer question from recreational anglers and provide basic information about MRIP, as they are face of NOAA Fisheries for many anglers.

Priorities for 2012/2013 include:

- Continue the MRIP Road Show. The CET plans to meet with stakeholders and partners on the
 West Coast in 2013 to continue its efforts to tell the story of MRIP's progress, gather feedback
 from recreational anglers and test outreach materials.
- Help facilitate the rollout of the enhanced Access Point Angler Intercept Survey. Many stakeholders have been interested in changes NOAA Fisheries is making to its intercept survey. The rollout of the new survey is an opportunity for MRIP to talk about one of the most visible

aspects of the program. The CET will implement a robust communications strategy in coordination with the Operations Team in order to capitalize on this unique opportunity.

- **Site Registry Outreach.** MRIP will unveil a new database of every recreational fishing site on the Atlantic and Gulf coasts. In addition to meeting a critical program need, this tool has the potential to be extremely useful for recreational fishermen and a great way to attract them to the MRIP site. The CET will develop a communications strategy to support the rollout of the site registry database.
- Create a Communications Network. MRIP has a wide-reaching network of partners that include
 the states, Councils, Commissions, non-governmental organizations, and others. The CET intends
 to leverage the capacity of this network to disseminate information to stakeholders by creating
 a network of communicators that represent each partner. The MRIP Communications Network
 will help disseminate information about MRIP's progress, and act as a feedback mechanism by
 letting MRIP know what their stakeholders are saying and feeling.
- Continue to support the release of historic data using the improved catch estimation method. The CET will add communications and outreach support to NOAA Fisheries' plans to use the improved catch estimation method released this year to re-estimate historic data before 2004.

Regional Implementation

Strategy Outline

From its inception, we designed MRIP to be a series of regionally-based data collection programs, all adhering to a set of rigorous national standards. This dual approach of the program is critical to its ultimate success.

Regional programs are important because the data needs for effective management can differ substantially among regions, and oftentimes among various fisheries within each region. National standards ensure that, regardless of the specific decisions made by each region with respect to data collection priorities and implementation, all recreational fisheries survey and estimation methods will withstand a rigorous independent peer review, and the resultant fisheries statistics will meet a baseline of quality sufficient to ensure the sustainable use of the resource for recreational fishing.

Creating the "Toolbox"

To achieve the balance of national quality and regional control, MRIP uses a "toolbox" approach to implementing estimation methods that involves three steps:

Creating the Tools •MRIP Pilot Study •Peer Review •MRIP Review and Approval •NOAA Fisheries Certification Honing the Tools •Evaluate regional data needs •Model tradeoffs •Determine resource baselines Putting the tools to use •Establish funding needs •Identify externalities •Convene decisionmakers •Ensure QA/QC throughout implementation

1. **Creating the tools:** Development of improved, more accurate data collection and estimation methods.

- Interdisciplinary teams of scientists, statisticians, state partners, fishermen, and
 other stakeholders evaluate existing programs and make recommendations for
 improvement. The findings of the resultant projects are then field-tested and peerreviewed to ensure the results meet the highest possible scientific standards. Once
 a method is approved through the MRIP process, it is sent to NOAA Fisheries for
 final certification. Certified methods are then "placed in the toolbox" and available
 for regional implementation.
- 2. **Honing the tools:** Modeling cost and performance tradeoffs among precision, timeliness, coverage, etc.
 - Different regions and fisheries often have different data needs, and those needs can shift by time of year. For instance, management decisions for a very popular species may require frequent reporting, while for another the need may be a high degree of precision. In a world of limited resources, the need for one level of specificity must be balanced against all others. MRIP is working with our regional partners and other stakeholders to create models that will clearly articulate what these tradeoffs are and what they mean to fisheries management.
 - The results of regional data needs evaluation also provide feedback to the first step.
 Regional needs directly influence development and pilot testing of new methods to address those needs.
- 3. **Putting the tools to use:** Establishing and implementing data collection and reporting requirements while ensuring data integrity.
 - In many cases, decisions regarding tradeoffs will require hard choices about how to commit limited NOAA Fisheries funds for MRIP implementation. In these cases, supplemental funding from partners may be required to achieve some of the desired data collection and reporting parameters. Further, certain types of data collection options (e.g., for-hire trip reporting of catch and effort or a census of private boat landings of a species by carcass tag, catch card, etc.) will require a regulatory and enforcement component of implementation. The role of MRIP in the ultimate implementation of the tools is to convene partners in a given data collection region (NOAA Fisheries Office of Science and Technology, NOAA Fisheries Regions and Science Centers, Fishery Management Councils, States/Interstate Commissions, stakeholder community) to collaborate on the decision-making and ensure that the final product will achieve the desired balance of data collection in the region while maintaining data quality.
 - Once put into use, evaluation of new methods may result in additional feedback regarding further refinement of regional needs and potential for additional methods development. Long term success of the program requires ongoing evaluation and feedback as new tools are developed and deployed.

Regional Implementation Strategy:

MRIP has opened and is maintaining dialogue with the key partners in each region (see below for description of regions) to fully document desired data characteristics, assure the partners are aware of the options for data collection, and to include the partners in evaluation of pros, cons, and tradeoffs among the choices.

Wherever possible, this dialogue takes place through existing regional fishery data collection partnerships, i.e., the Fishery Information Networks (FINs). When sufficient information is available to enable an implementation choice and decision, MRIP has and will continue to work with the partners to establish a decision-making venue, usually a workshop or series of meetings of the FIN governing structure.

Different implementation decisions may be facilitated at different times (e.g., for-hire survey design choices may be made separately from choices of survey design, timeliness, or precision goals for other fishing modes).

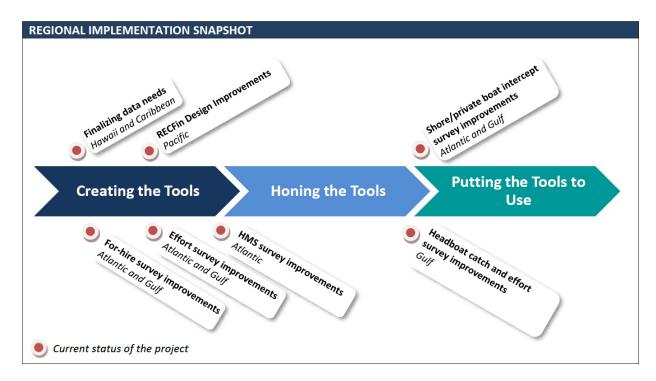
In 2012 and 2013, MRIP will finalize a number of methods and evaluation products to help some of the regions with implementation planning and decisions. To ensure effective, comprehensive, and timely decision-making, an active approach to regional analysis and decision-making is necessary. The strategy outlined below suggests processes for deliberation and decision-making for each of the regions, emphasizing the existing regional partnerships where they exist, and collaboration with all regional partners where no formal partnership is in place.

Roles and Responsibilities:

As discussed throughout this document, MRIP is a collaborative, iterative program designed to ensure the best recreational fishing data possible through a rigorous, inclusive, transparent process. With respect to regional implementation, the key roles and responsibilities of each party are:

MRIP Team	Develop and conduct pilot studies
(ESC, MRIP Teams,	Manage peer reviews
NMFS OST)	 Identify and recommend best practices
	Facilitate regional implementation
	 Manage implementation (certain regions)
NOAA Fisheries Leadership	Certify best practices for use by regional partners
Regional Partners	 Identify region-specific data needs and priorities
(States, Interstate	 Adapt certified methods to meet regional needs, and, as necessary,
Commissions,	secure additional resources
FINs, Councils,	Manage implementation
NMFS Regions and	
Science Centers)	
Stakeholders	Work with MRIP team to identify research needs and, as appropriate,
(anglers, charter	lead or participate in pilot studies
boat ,	 Work with regional partners to identify data needs and priorities, and, as
owners/operators,	appropriate, assist with resource acquisition
non-governmental	
organizations)	

Region-by-Region Status Report



Atlantic (Regional Partnership: Atlantic Coastal Cooperative Statistics Program--ACCSP):

- New weighted estimation methods have been completed and adopted for estimation of catch rates from intercept data.
- Key decisions for shore and private boat mode intercept survey design have been made and are reflected in recently updated ACCSP standards.
- Once additional pilot work on for-hire trip reporting methods has been completed, decisions on using sampling and estimation methodology equivalent to that being used for shore and private boat modes, or switching to census-based design for the for-hire mode, will be necessary, working with all the ACCSP partners.
- ACCSP standards have been updated to set goals for coverage and timeliness. MRIP is supporting a workshop in 2013 to develop goals for precision of catch estimates.
- In 2012 and 2013, MRIP is developing model tools to enable evaluation of the tradeoffs among cost, precision, and timeliness of delivery of preliminary estimates.
- Decisions on effort survey methodology for shore and boat modes are expected in 2013. Once
 effort survey design is selected, modeling of timeliness/precision/cost modeling is complete,
 and targets for precision have been adopted, workshops will be needed to evaluate those
 results and make choices and secure partner resource commitments based on the model
 outputs.

Gulf (Regional Partnership: Gulf Recreational Fisheries Information System—Gulf FIN):

- New weighted estimation methods have been completed and adopted for estimation of catch rates from intercept data.
- Key decisions for shore and private boat mode intercept survey, and headboat survey catch and effort design have been made.
- Once additional pilot work on for-hire trip reporting methods has been completed, decisions on using sampling and estimation methodology equivalent to that being used for shore and private

- boat modes, or switching to census-based design for the charter boat mode, will be necessary, working with all the ACCSP partners.
- In 2012 and 2013, MRIP is developing model tools to enable evaluation of the tradeoffs among cost, precision, and timeliness of delivery of preliminary estimates.
- Decisions on effort survey methodology for shore and boat modes are expected in 2013. Once effort survey design is selected, workshops will be needed to:
 - Set goals for survey coverage, precision, and timeliness.
 - Evaluate the results of the tradeoff models and make choices and partner resource commitments based on the model outputs.

Caribbean:

- Current data collection methods in use in Puerto Rico are similar to those in use for the Atlantic and Gulf regions. There is no recreational data collection at present in the U.S. Virgin Islands.
- Data needs and initial choices of survey design, coverage, etc., for improvement to the survey in Puerto Rico, and for new data collection programs in the U.S. Virgin Islands, will be defined via the MRIP project to be funded through Gulf FIN in 2012.
- Pilot projects to test identified choices are expected to begin in 2013. Following completion of
 the pilot projects, additional workshops will be needed with the regional partners (Caribbean
 Fishery Management Council, U.S. Virgin Islands and Puerto Rico governments, NOAA Fisheries
 Southeast Regional Office and Science Center), possibly facilitated by Gulf FIN, to come to
 decisions on future survey implementation.

Hawaii:

- MRIP has funded several projects to document and evaluate current survey methods.
- Based on the results of the completed MRIP projects and the results of expert consultant evaluation and a regional workshop funded by MRIP in 2012, data needs and initial choices of survey design, coverage, etc., will be defined.
- Additional pilot projects to test identified choices are expected beginning in 2013. Following
 completion of the pilot projects, additional workshops will be needed with the regional partners
 (Western Pacific Fishery Management Council, State of Hawaii, NOAA Fisheries Pacific Islands
 Regional Office and Science Center) to come to decisions on future survey implementation.

Pacific (Regional Partner: Pacific Recreational Fisheries Information Network—Pacific RecFIN):

- Via Pacific RecFIN, a series of workshops has been held to develop recommended improvements to survey designs for Washington, Oregon, and California. The improved methods are being piloted in all three states in 2012-2014.
- Future RecFIN workshops and regular meetings of its Technical Committee will evaluate pilot
 project results and regional data needs, resulting in decisions about what improvements to
 methods and expansions to coverage will be implemented.

Alaska:

- All Alaska surveys are funded and conducted by the State of Alaska, Department of Fish and Game (DFG). DFG and other regional partners will be provided with information on improved survey methods developed via MRIP.
- MRIP will remain open to entering into a state-federal partnership in Alaska if desired by the regional partners.

Atlantic HMS:

Atlantic Highly Migratory Species (HMS) are included in a separate "MRIP Region" due to the
unique distribution and management structure for these fisheries. The HMS stocks are widely

distributed in U.S., foreign, and international waters in the North Atlantic, including all five Council Regions covering the Gulf of Mexico, Caribbean, and Atlantic. For the most part, Atlantic HMS are managed separately from other MSA-managed fisheries, with a distinct suite of management partners, including a substantial international management component under the International Convention for the Conservation of Atlantic Tunas.

- MRIP has funded projects that :
 - Examined the benefits of expanding the coverage of the current Large Pelagics Survey
 (LPS) covering Maine through Virginia at present.
 - Explored census-based approaches to estimate recreational landings of key management species.
 - Developed improved intercept survey and estimation methods for the LPS (starting late 2012).
- As the HMS projects are completed in 2013, MRIP will establish a dialogue with the key partners (NOAA Fisheries HMS Division, HMS Advisory Panel, NOAA Fisheries Office of International Affairs, ACCSP, GulfFIN) that will lead to decision-making on improving HMS data collection, possibly via one or more regional workshops.