

To ensure that statistics derived from existing and new Marine Recreational Information Program (MRIP) recreational surveys meet statutory requirements and promote nationwide consistency of recreational catch and effort data, MRIP has established a rigorous certification process to ensure survey and estimation methods are scientifically sound and defensible. Once certified, the survey method or component is eligible for potential MRIP funding and use by MRIP partners. In general, MRIP only supports surveys (via funding, staff, etc.) that apply methods that have been MRIP certified. MRIP may support continued use of legacy survey methods that are not certified, provided: (1) the data produced by such surveys have been used in peer reviewed applications, such as fisheries stock assessments; (2) an MRIP Regional Implementation Plan identifies the need to continue such survey, and (3) a plan to certify those survey methods is in place and is being followed. The detailed procedures for the MRIP certification process follow.

II. Objective

This document specifies guidance and procedures to implement Policy Directive 04-114, which addresses the requirements and process for certifying recreational catch and effort survey designs. It describes the role and responsibilities of the Office of Science and Technology (OST) in reviewing and certifying candidate survey designs, the processes for certification review and decision-making, and the processes for documenting and archiving survey design details. It also provides general Terms of Reference for certification reviews.

III. Guidance

i. Certification Requirements

To be considered for MRIP certification, recreational catch and effort survey design and estimation method components must fall into one of three categories:

1. New or replacement designs and methods;
2. Modifications or recommended improvements to existing designs and methods; or
3. Existing survey designs and estimation methods.

To be considered MRIP certified, surveys or survey components must:

1. Provide sufficient documentation to support a technical review of survey methods, including documentation requirements specified in [Recreational Fishing Survey and Data Standards Documentation Guidance](#), and in the MRIP Survey and Data Standards, Standard 2, sections 2.1, 2.2, 2.3, and 2.4;
2. Be peer reviewed and supported by conclusions from the reviewers that the Terms of Reference have been met;
3. Be recommended for approval by the MRIP Program Management Team (PMT) and other MRIP teams assigned by the PMT to review the survey;
4. Be approved by the MRIP Executive Steering Committee (ESC); and
5. Be approved by NMFS Leadership.

After survey designs have been certified, they are eligible for MRIP funding and technical support, as available, and consistent with priorities in the applicable MRIP Regional Implementation Plan. Before the statistics from a certified survey can be used by NMFS, a Transition Plan is required as per Policy Directive 04-114, and Procedural Directive 04-114-01.

ii. Certification Timeline

Normally, certification reviews for fully documented survey designs that are cleared by initial peer review can be completed in approximately six months. However, the actual timeline is highly dependent upon the completeness of the documentation for the survey design and estimation methodology, and the results of the initial peer review. Receipt of complete documentation may not be known until detailed evaluation of submitted materials, including the peer review workshop, has

begun, which may extend the time period considerably or compromise the evaluation. The result of the latter scenario may force a determination of “not certified,” which would trigger a resubmission.

Also, if documentation is complete, but reviewers have significant concerns about the soundness of the survey design and make the decision to not certify, the survey may be resubmitted again once reviewer concerns have been addressed. This scenario similarly would trigger another review period after all new revised survey materials are received. In this scenario, the time from the first initial submission to the revised submission and second peer review is dependent on the time it takes the sponsor to develop a response and address the reviewers’ concerns.

iii. Peer Review Terms of Reference for Certification

A set of six Terms of Reference (that includes 10 basic questions) guides the peer review process for the survey or survey design and estimation methodology component seeking certification. The six Terms of Reference were designed to be broadly applicable with the understanding that modification of those terms may be required to adequately address specific survey component characteristics under review. Securing peer reviewers' responses to the terms is the responsibility of the peer review team. These peer review Terms of Reference are as follows:

1. Does the survey design follow a formal probability sampling protocol with known inclusion probabilities at all stages and/or phases of sampling?
2. Do the estimation methods appropriately weight the sample data to account for the sampling design and produce design-unbiased point estimates and variance estimates?
3. Is the accuracy of survey estimates dependent upon key assumptions? What are these assumptions? Are they clearly identified in survey documentation? Are they reasonable?
4. Have non-sampling errors, including nonresponse (which includes noncompliance), non-coverage and measurement errors been evaluated? Are appropriate methods in place to correct for potential biases resulting from non-sampling errors?
5. Are appropriate methods in place to identify and evaluate the effects of implementation errors or deviations from design specifications on survey estimates (e.g., monitoring response rates, reviewing survey dispositions and/or response dispositions among interviewers, strata or reference periods)?
6. Are survey goals and objectives clearly stated as per the [MRIP Survey and Data Standards](#), and does the survey design address these goals and objectives?

iv. Certification Process

Certification involves a number of steps, as described below.

For MRIP-Supported Survey Components:

1. An MRIP project team submits a request for approval of a final MRIP Project Report and peer review request by the project team or entity (NMFS, interstate commission, state, or other partner who sponsored the study) wishing to conduct the survey (or survey component).
2. The final report for a completed MRIP funded research study and/or pilot test of survey methodology is submitted to the MRIP PMT. This report describes the survey methods used in the project, the results of pilot testing, and conclusions regarding the utility and scalability

of the method.

3. The PMT then reviews the report with input from other relevant MRIP teams to determine if the survey design is adequately documented, and if the results of the testing warrant consideration of certification. If additional documentation is required, the PMT advises the sponsor of what additional documentation and pilot testing results are required to proceed.
4. If the PMT determines that the survey is adequately documented and has potentially certifiable results, the PMT works with the Office of Science and Technology (OST) staff to conduct an independent peer review of the methods. OST will arrange for reviewers, establish Terms of Reference, and organize the review in consultation with the project team and/or sponsoring partner. After the peer review is completed, the peer review results are shared with the project team/survey sponsor, who in turn will prepare and submit responses to the peer reviewers' conclusions and recommendations as appropriate. The PMT will review the peer reviewers' conclusions and recommendations, and the sponsor's responses, consult with other MRIP Teams and expert consultants as necessary, and determine whether the Terms of Reference have been satisfactorily met. If the Terms of Reference were not completely met during the initial review, the peer reviewers will be asked to review the project team/sponsor responses for sufficiency. This process may be repeated until a final resolution is achieved.
5. The PMT will conduct reviews and post notices when necessary to comply with the requirements of the Information Quality Act.
6. The PMT will assign MRIP Program Management Branch staff to coordinate the completion of the procedural steps, track progress, and provide status reports to the PMT.
7. The PMT submits the following items to the MRIP Executive Steering Committee (ESC): 1) the project report, 2) the peer review report, 3) the project team's response to the peer review, 4) any subsequent peer review comments and responses, and 5) the PMT's final recommendation.
8. Based on the PMT review and recommendations, the ESC either recommends the survey for certification or reports its findings to the PMT and the project team. If the ESC recommends certification, ST1 prepares a decision memorandum for clearance by the NMFS Director of Science Programs and the Chief Science Officer. Once cleared, the design is officially certified.

For Independent Survey Components Already In Use Or Being Proposed as MRIP Alternatives:

1. For survey components already in use or being developed independently (without MRIP funding), the request for certification leads to an initial consultation between the survey sponsor and the MRIP PMT where requirements are described and survey components to be submitted are presented. Materials required for certification are similar to those required for survey components developed through MRIP pilot studies and include all survey documentation (in-depth description of methods, survey manuals, survey instruments, data formats and structures, notated descriptions of sample draws and estimation processes, sample draw and estimation program code) and, if applicable, results of pilot testing of the survey necessary to address the peer review Terms of Reference. The survey sponsor is also encouraged to share the survey documentation with the NMFS FMC's that will

potentially be using the data (e.g. Regional Offices, Fisheries Science Centers), to seek feedback on the utility of the survey data to meet required agency functions, and to consider adjustments to address such feedback. It would be far more efficient to address data use limitations prior to certification rather than to have to revise certified surveys and re-visit certification afterwards.

2. Although the certification process contains a number of defined steps, there is flexibility in terms of the PMT involvement (i.e., MRIP staff and consultant support). To expedite the process, and subject to availability, access to statistical and survey expertise may be offered by NMFS prior to a formal request for certification. Depending on availability, partners may work directly with the PMT during the development and testing phases or they may defer consultation until after the peer review has been completed and reviewer recommendations provided. The advantage of the former approach is that most of the statistical considerations should have been addressed by the time certification has been requested.
3. The remaining steps are the same as outlined above for MRIP-supported survey components.

Certification Tracking:

Certification is a stepwise and interactive process that requires continued coordination from the requesting entities (MRIP partner or sponsor), PMT, MRIP consultants, and peer reviewers for the successful completion of the process. OST created a tracking tool in the Program Information Management System (PIMS) that allows an instant determination of the status in the certification process from the initial request for certification and submission of survey materials for review, through peer review and responses, to final approvals by the ESC for certification (Figure 1). PIMS is used for MRIP pilot study proposals and report submission and to track the progress of those pilot studies. The system provides a convenient way to track the certification progress and document process bottlenecks, so that targeted improvements to the process can be identified and made. PIMS accounts will be provided to partners who have requested certification of their survey designs so they can track the status of their submissions. To assist with tracking the certification status of a given survey component, a separate certification tracking tool has been developed in the PIMS that is similar to the tool used to track the progress of MRIP funded pilot studies (Figure 2 and Figure 3). Relatively brief descriptions are needed for projects that have complete documentation available for upload to the system. The PIMS MRIP Certification project page has six tabs for teams to input information: “Main,” “Leadership,” “Schedule,” “Cost,” “Supporting Documents,” and “Risk” (Figure 3). Project details are entered on the main tab, and the following are minimum fields that must be populated to complete a submission:

- An overview of the project, including the project name and sponsor(s), background information, a project description, and a list of objectives;
- Information about methodology, including, at a minimum, the region where the project would be implemented;
- A description of the team's plan for both internal and external communications. This should include, at a minimum, the frequency of and mechanism for internal communication (e.g., monthly conference calls), mechanism(s) for sharing/distributing information among project team members (e.g., email), and the frequency of periodic reporting;
- Funding needs, including the current funding vehicle and if additional funding will be required; and

Whether the project is new or has been ongoing prior to requesting certification.

In addition to all of the above required information, at least one record must be entered for each of the following:

- Project leader, including contact information (under the Leadership tab);
- A project task description and its anticipated start and completion date (under the Schedule tab); and
- An anticipated risk relating to the project, including level and probability of that risk as well as a planned mitigation approach (under the Risk tab).

Figure 1. Certification process in relation to transition and implementation: Note: the certification process is necessary for transition to and implementation of the new survey. Transition and subsequent implementation, however, are not part of the certification process.

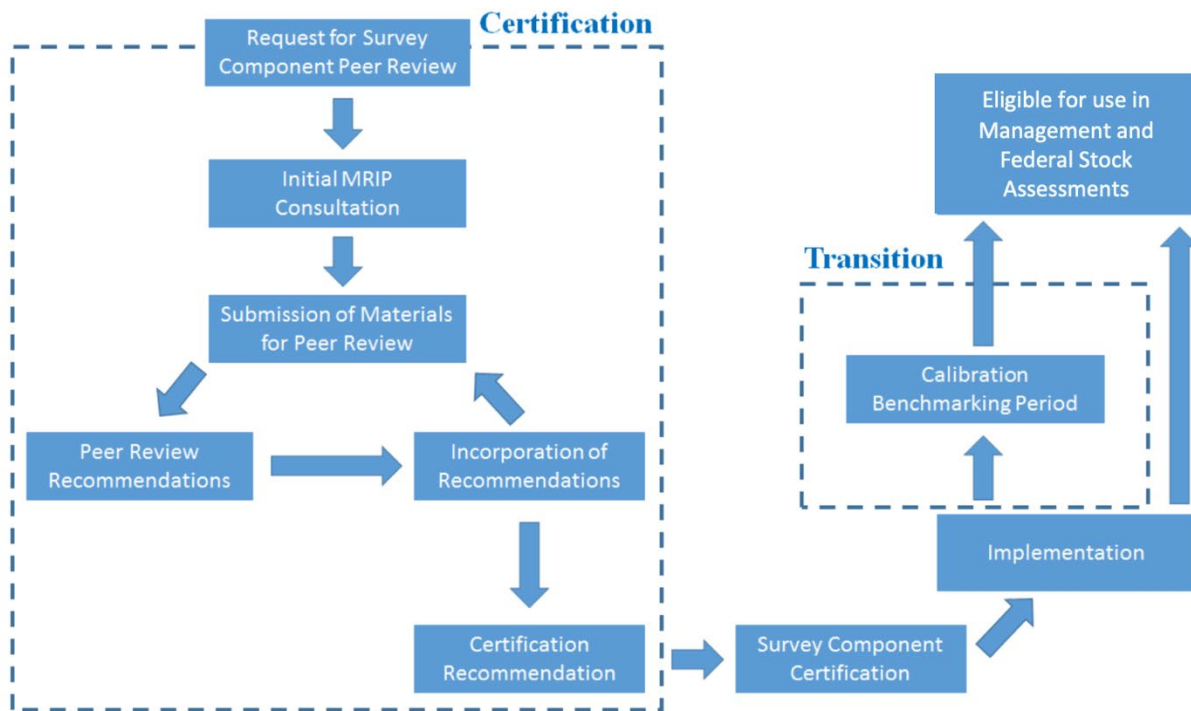


Figure 2: PIMS MRIP Certification Page

The screenshot shows the 'Marine Recreational Information Program Certification (MRIP CERT)' page. The page has a navigation bar with 'Search', 'Program Management', 'Manage Scorers', and 'Scoring Report'. Below this is a tabbed interface with 'Inbox', 'My Projects', 'Programs' (selected), and 'My RFP Proposals'. The main content area is titled 'MRIP Cert' and includes an 'Open' button. The 'Description' section explains that MRIP is a NOAA Fisheries program for reporting marine recreational catch and effort, driven by data from anglers and captains. It mentions that MRIP produces better information through better science and transparency. A section titled 'The key differences between this program and main MRIP are:' lists five bullet points:

- Always open to create new projects, not part of an request for proposal (which has short "open" window).
- No pre-proposal (including costs).
- No ranking.
- Does require schedule/email notification/monthly reports.
- Does require proposal/proj description.

Figure 3: PIMS MRIP Certification Project Page

The screenshot shows the 'MRIP CERT' project page. The top navigation bar includes 'Dashboard' and 'MRIP CERT'. The user is logged in as '@noaa.gov'. The page has several action buttons: 'Delete', 'Save & Submit', 'Cancel Project', and 'Go Back'. The project details section shows 'Project Name', 'Project ID', 'Status: Initiated', and 'Affiliation: MRIP-Certification'. A note states: 'Please save any changes before attempting to update the status.' Below this is a 'Project' section with tabs for 'Main', 'Leadership', 'Schedule', 'Cost', 'Supporting Docs', and 'Risk'. The 'Main' tab is selected, showing 'Save Changes' and 'Download Project' buttons. A note says: 'At least one record for Project Leader, Project Schedule and Risk must be entered before submitting the Proposal.' The 'Overview' section displays a form with the following fields:

- 'Project Name' (8/250)
- 'Affiliation' (MRIP-Certification)
- 'Sponsor' (0/100)
- 'Focus Group' (Name):
 - ☐ Information Management
 - ☐ Survey Design and Evaluation

Conditional Certification:

Under limited circumstances, a survey design may be conditionally certified. As a rule, survey design parameters should be considered final at the time of certification. However, there may be instances in

which the design itself satisfies the certification Terms of Reference, but questions remain regarding specific assumptions that will be used to produce estimates from the data the survey collects. In such cases, the design may be certified conditionally for a limited, specified period of time in which a specified plan will be executed by the survey sponsor to resolve the outstanding questions regarding the assumptions and to address any other requirements specified in the conditions of certification. The conditional certification document must specify the deadlines and performance requirements, and unequivocally state that, if they are not met, the certification will be rescinded.

v. Implementation and Transition

A decision by NMFS to certify a survey design is different from a decision by this agency or a partner to implement a certified survey design, and to use the data derived from a new design in stock assessments and management applications. The certification process results in a formal decision, supported by independent peer review, that a fully documented survey design is capable of providing accurate, relatively unbiased statistical estimates of the population parameters it is intended to measure. This fulfills NMFS' responsibility under the Information Quality Act (IQA), and makes the data eligible to be considered as best scientific information available (BSIA) per the MSA National Standard 2 Guidelines under 50 C.F.R. § 600.315. Once survey designs have been certified, they are eligible, subject to availability, for funding support via MRIP. The statistics resulting from such surveys are also eligible for use in fisheries assessment and management, taking into consideration other relevant factors, and following completion and execution of a transition plan per Policy Directive 04-114. The decision to implement a certified survey design is based on a consideration of the cost and practicality of changing methods, as well as a determination by the MRIP Regional Implementation Team as to which method produces statistics that best fit their needs. When a new survey design is to replace an existing design, a transition plan must be prepared and executed (see Policy Directive 04-114, Procedural Directive 04-114-01, and Supplement 04-114-01-01). Transition plans may require conducting the old and new survey methods concurrently to inter-calibrate estimates produced by the two methods. This will ensure there is a consistent long-term time series of catch statistics for stock assessment and regional management purposes.

vi. Accountability and Maintenance of Certification

Certification of a given survey design does not, by itself, guarantee that the survey and associated estimation will be implemented consistent with its documented design and performance requirements and applicable MRIP standards. To monitor the implementation of certified surveys to ensure they are conducted consistently with the certified design requirements, the following procedure is established. Pursuant to the MRIP Data Standard, once a certified survey is implemented, the survey administrator is required to submit an annual report within three months of the conclusion of each survey year, consistent with Section 5.2 of the MRIP Survey and Data Standards and including all of the content specified therein, including any changes that have been made to the survey design, estimation procedures, or survey operations and data collection methods. These annual reports will primarily be used to ensure that certified surveys are continuing to adhere to MRIP standards, but will also be reviewed to ensure the survey design is being implemented as it was certified. If an annual report contains evidence that a certified survey is being implemented with edits or modifications to the design that were not part of its certification, or that survey design assumptions are being violated, a review will be triggered to determine if the survey should maintain its certified status and continue to receive funding, as well as if the statistics derived from the survey data should continue to be eligible for use in stock assessments and management actions. Further, if it is apparent that the survey may no longer fully meet the Terms of Reference from its pre-certification review for

any reason, such a review will likewise be triggered. In addition, each MRIP certified survey will be subject to periodic independent peer review of the design and implementation as determined by MRIP's PMT and ESC. Periodic independent reviews, such as that completed by the National Academies of Sciences, Engineering, and Medicine in 2017, will include reviews of all survey designs in use by MRIP at the time of the reviews.