

Fisheries Sampling Branch Program Review

Northeast Fisheries Science Center Summary and Response

August 2015

Introduction

In December, 2014 – January, 2015 an independent review was conducted to assess the effectiveness and efficiency of the Fisheries Sampling Branch, the relevancy of its programs to current and future needs, the value and contribution of program outputs to meeting program objectives, the applicability of current approaches to strategic and operation processes. Reviewers were also asked to recommend ways to improve the program in the upcoming year, and to provide guidance on the scope of future work. The review was carried out by Steven Kennelly of IC Independent Consulting (ICIC) and ICIC associate Matthew Ives, through a grant funded by Northeast Fisheries Science Center and administered by Pacific States Marine Fisheries Commission.

The reviewers conducted a desktop review of extensive available documentation. These materials covered Branch procedures, outputs, and processes; prior program reviews; and science plans. They developed an interim report to finalize product design; and conducted field interviews with Branch personnel, as well as agency, Council and industry stakeholders. The final report was drafted and presented to Center leadership staff.

Remarks

The reviewers cited the remarkable performance of Fisheries Sampling Branch staff, including exceptional responsiveness and flexibility in a changing environment. The core activities of the Branch are strong: recommendations generally focused on increasing efficiencies rather than changing the focus, quality, or timeliness of Branch products. Based on feedback over the entire spectrum of stakeholders, the reviewers indicated at the outset that the Branch does very well at providing a broad range of data to a diverse clientele in support of regional fisheries science and management.

The report recommendations fall into four major areas:

1. Develop organizational structure
2. Augment internal and external communications
3. Streamline data collection, processing, and reporting
4. Refine or modify operational processes

The major themes and recommendations in the review overlap significantly with those identified in two evolving Science Center initiatives:

1. Northeast Fisheries Science Center Strategic Science Plan. This plan outlines scientific priorities and organizational goals and promotes integration of Center scientific activities and responsiveness to external partners. Prominent within the plan are objectives to expand communications and information technology capacities. Once the plan is finalized, organizational changes may be appropriate if we are to effectively address the plan's priorities.
2. Regional Fishery-Dependent Data System Visioning Project. The need for a fully integrated fishery-dependent data system has been identified by previous national reviews. Together with the Greater Atlantic Regional Fisheries Office (GARFO), the Center is developing a modern, integrated system to improve data timeliness and efficiency of use. The Branch's fishery-dependent data collection programs, including electronic monitoring, will be part of this system. Short-term improvements to fishery-dependent data systems are developed and reviewed by the joint GARFO-Center Fishery Dependent Data Collections Committee.

Thus, in the months ahead, three of the four major themes in the review will also be addressed in on-going Center- and region-wide work. Actions in response to this review will be integrated with actions planned under these two initiatives, to avoid duplication of effort and to develop solutions that are consistent with, and leverage broader Center and regional efforts. Consequently, in several cases, actions based on recommendations from this review may need to be nested within, or keyed off, these two more comprehensive plans. In those cases, we have identified the associated comprehensive plan in this response.

The reviewers' comments and recommendations ranged from fine- to broad-scale. We have not referred to the finest scale recommendations here (these are included in the ICIC final report), and the action lists here do not reflect the entire scope of changes we will be implementing as a result of the review.

Our challenge will be to move as rapidly as possible to implement improvements, without compromising current program function and integrity.

Reviewer's Comments by Theme and Proposed Solutions

1. Develop organizational structure

Summary of Reviewer Comments and Recommendations

The reviewers noted that the Branch would benefit from additional internal organizational structure to reinforce responsibilities for and strategic focus on the Branch's core activities, while relieving some current supervisory, oversight, and liaison responsibilities of the Branch Chief. They acknowledged the considerable work load of contract administration and data requests on professional staff, and the need for permanent administrative staff. They identified the potential value of satellite offices in the Mid-Atlantic as an opportunity to increase interactions with Mid-Atlantic fishery participants and streamline interactions with observers in the Mid-Atlantic area. They recognized the value and importance of the Fishery-Dependent Data Collections Committee, a regional working group tasked with improving current

operational efficiency of regional fishery-dependent databases, including review and modification of database elements.

The reviewers noted that the structure of the Branch is flat, with little internal organization and recommended an internal organizational structure that reflects core activities: Training, Operations, and Data Handling. They also recommended adding permanent federal positions including a contract procurement specialist, an administrative assistant, and a database specialist. They recommended that we consider relocating the Mid-Atlantic lead position to New Jersey. Finally, they recommended consideration of Division status for the Branch, given its size, funding and complexity.

Proposed Program Response

We generally concur with the recommendations. We will develop a comprehensive staffing plan and modified organization structure after reviewing the scope and feasibility of activities proposed by the reviewers, and available personnel resources. We endorse the proposed organizational structure identified in the review:

- Training
- Operations
- Data Handling

We have initiated the highest priority recruitment actions to maintain Branch operations in the face of recent retirements (program analyst and administrative support staff). We are investigating staffing options for a New Jersey satellite office. While we consider broader, Center-wide organizational changes, we are seeking agency approval for a new high level (ZP-V) position that would work under the current divisional structure, to provide additional planning, policy, leadership, and communications capacity for the program.

2. Augment internal and external communications

Summary of Reviewer Comments and Recommendations

Based on positive feedback, the reviewers observed that the Branch communicates very well with NOAA regional and headquarters staff, Council staff and committees, industry, and state agencies. They identified examples of positive collaborations. Some communications issues raised by the reviewers are of concern throughout the Center, including problematic distinctions between contracted and permanent staff, and issues regarding communication within the Center, and with the Regional Office.

Reviewers made several simple procedural recommendations relative to internal and industry communications. They proposed increased observer training on how observer work was used by Center, GARFO, and Council staffs (“inreach”). They advocated continued or expanded relationships with other observer programs regionally, nationally, and internationally. They recommended frequent Branch visits by the Division Chief to overcome the geographical separation of the Branch from Center data users.

Proposed Program Response

We will evaluate recommendations for internal communication processes in light of historical practices and successes, and adopt practicable changes to internal procedures, in consultation with local staff. We will develop standard operating procedures for:

- Internal communications, e.g., within the Branch, between other Center units, with Division and Center leadership; and
- External communications, e.g. with Regional and Headquarters offices; with stakeholders and partners, ranging from management, industry, service providers, agencies, and others.

We will also integrate internal and external communications recommendations in Center strategic planning and implementation (e.g., staff and observer outreach communications). Based on those results, we will further develop staff and observer outreach/inreach programs (e.g., suggested region-wide field staff meetings and industry workshops, interactions with other programs).

3. Streamline and modernize data collection, processing and reporting

Summary of Reviewer Comments and Recommendations

The reviewers recognized significant strengths of the current data collection, database, and data flow systems, but also noted potential inefficiencies in the collection of the current set of observational variables (e.g., oceanographic or meteorological data). They observed that Branch members have taken on many additional Information Technology (IT) roles and tasks to meet user needs, even though they were initially hired as biologists. They noted that the current data system has a cumbersome series of manual stages, and that the database structure is relatively static, requiring interim local work-arounds when changes or updates are required out of schedule. They noted several examples where more streamlined systems would be helpful. Finally, they noted the significant workload of meeting external data requests.

The reviewers were impressed by the newly-developed Android-based tablet technology used for electronic reporting by observers. They summarized many of the interests, strengths, and weaknesses in using electronic (video) monitoring, currently under discussion in the region.

The reviewers recommended full participation by Branch members in the Fishery-Dependent Data Visioning project and Fishery-Dependent Data Collections Committee actions expanded IT capacity to streamline current systems and increase flexibility, and development of a data warehouse to meet standard common data and report requests. They also recommended a review of data variable types currently collected, as well as the data processing system, to improve efficiency. Finally, they identified the need to expand and continue electronic reporting within the Branch, including assigning lead personnel to be responsible for electronic data collection activities.

Proposed Program Response

We have designated staff to support the Center/Region Fishery-Dependent Data Visioning project, which should support the design and implementation of an integrated, streamlined system for data collection,

processing, and reporting (including electronic reporting and electronic monitoring). The Center-wide need for expanded IT capacity has been raised during NEFSC planning, and some of the Branch's requirements will be integrated into implementation of the 2016 science plan. This should address the reviewer's suite broad issues, as well as some additional more technical recommendations.

In the interim, we are hiring a contracted programmer to develop more streamlined automated processes within the Branch, and to begin to address some elements of a data warehouse system. We will develop a process for regular review of information collected, with broad opportunities for staff, stakeholder, and partner input. We have drafted proposed Center responsibilities for components of electronic data collection systems in consultation with GARFO, consistent with the reviewers' recommendations but also contingent on resource prioritization/availability. We will continue to take on active roles in the regional EM Implementation Working Group, as we work on pre-implementation of electronic video monitoring in two Northeast Multispecies sectors for potential implementation May, 2016.

4. Refine or modify operational processes

Summary of Reviewer Comments and Recommendations

The reviewers identified significant interest in estimates of costs of observer programs, as well as the complexities associated with generating those estimates. They identified the high turnover rate of observers as a contribution to costs. Reviewers felt that there were relatively small differences in the training and data collection duties of Northeast Fisheries Observer Program (NEFOP) observers compared to at-sea monitors (ASM) for Northeast groundfish sectors. They also identified a series of operational issues associated with the vessel selection process, and with the observer deployments. The reviewers noted the importance of enforcement in supporting observer programs.

The reviewers recommended timely completion of a report detailing program costs and associated assumptions and dynamics contributing to fluctuations and uncertainty in estimating those costs. They recommended review of contract structure to provide incentives to reduce observer turnover. They also recommended combining NEFOP and ASM programs to improve efficiency and working conditions for those currently in the ASM program. They acknowledged that there were no easy solutions to industry concerns about the functioning of the Pre-Trip Notification System (PTNS), the system used to select trips to be covered by monitors and observers. They recommended a variety of changes that could improve working conditions for observers. Reviewers provided several cases and examples where improved communications with the Office of Law Enforcement (OLE) would be beneficial. This included continuing to assign a dedicated Office of Law Enforcement staff member to the program, and development of an automated process to track violations on a vessel-specific basis.

Proposed Program Response

We will complete a report on FY14 cost categorizations, including assumptions and uncertainty, for use in future cost projections. We will evaluate costs and benefits of alternative observer sea-day payment options to improve observer retention and data accuracy. We will identify factors in observer provider performance that lead to low retention rates, and incorporate preventative actions in future contract solicitations. We will also evaluate training and sea-day cost differences between NEFOP and ASM

programs for potential combination of the two programs. We will develop outreach material on the basis for the PTNS selection. We will also review the tradeoffs between statistical sampling requirements and logistical constraints of the current ASM vessel selection program. Individual recommendations for improving work and working conditions for observers will be evaluated for feasibility and changes implemented where appropriate. We will continue to encourage OLE to detail an enforcement officer to the observer program, and develop software for automated reporting of observed violations to OLE.

Closing Comments

We appreciate the contributions of our regional partners and stakeholders to a productive and informative review process, their recognition of the strengths of our program and their support of planned work. We also appreciate the suggestions to improve efficiencies. The demand for observer capacity continues to increase, and we are grateful for insights that will help us better understand and meet the current and future needs for monitoring. In some cases, we are already implementing some of the review recommendations. Successful long-term solutions will be built in coordination with other Center and regional partners, but the benefits should be substantial. We will move forward as rapidly as resources permit, while continuing our current range of program activities and functions. We look forward to reporting future progress through the Branch website.

Table 1: Summary of Major Action Items and Schedule

Action Item	Schedule ¹
Develop staffing plan	Staffing plan: 1 October 2015 ²
Hire administrative and supervisory program leads to provide internal organizational structure	Administrative staff backfill/hire: underway. Supervisory staff hires: 1 October 2015 Mid-Atlantic satellite position: 1 September 2015 (backfill or non-competitive assignment) Band V Supervisory Fishery Biologist: 1 November 2015
Integrate internal and external communications recommendations in Center strategic and communications plans, including staff and observer outreach program.	Ongoing, with Center strategic and communications plan actions
Update standard operating procedures for internal communications.	1 December 2015
Develop streamlined internal and external data reporting and access as part of regional Data Visioning project.	Data Visioning timeline (currently 2017) Programmer hire for external data reporting: contract underway
Include review and prioritization of data collected by program, with industry input, to the extent there is no conflict with the Data Visioning project plans.	Observer data field manual update, 2019
Resolve roles and responsibilities for electronic monitoring administration and database oversight	Industry-Funded Omnibus Amendment: discussion and clarification of EM responsibilities on-going Fishery Dependent Data Visioning: on-going EM Implementation Working Group: regional operations starting 1 May 2016
Support electronic monitoring pre-implementation and pilot projects: technical specifications, operational requirements and performance standards	Underway (contingent on FY16 funding) as part of regional EM Implementation Working Group pre-implementation work with GMRI and three sectors, for potential full implementation as a potential alternative to at-sea monitors the start of the next fishing year ,1 May 2016 (contingent on results this fishing year) .
Review costs and benefits of merging ASM and NEFOP programs	White paper: 1 February 2016
Implement PTNS outreach. Develop explanatory descriptions for industry users, review statistical/logistical tradeoffs of alternate approaches to vessel selection	Website, written material: 1 November 2015 Statistical/logistical tradeoffs: Discard Estimation Workshop
Investigate mechanisms to improve observer retention	White paper: 1 February 2016

¹ Schedule is contingent on future available personnel, fiscal resources, and emerging management demands on program personnel.

² Hiring is contingent on external hiring schedules and timelines