D6: Social Sciences Planning Team (SSPT) Report

March 2021 virtual meeting on EDR recommendations

Presented by:
Steve Kasperski
April, 2021
SSPT Agenda Items

• Economic data collections in other U.S. regions (presented by Dr. Doug Lipton)
• EDR Workshop report (to be summarized by Katie Latanich)
• EDR discussion and recommendations
• Received a presentation by Dr. Kate Haapala on the scope and function of the SSPT-CEC-LKTKS groups
Economic data collections in other U.S. regions

- Doug Lipton (NMFS Senior Scientist for Economics) provided a summary of economic data collections in other U.S. Regions

Commercial Fisheries Economic Assessment Index 2001-2020
Summary of NMFS Economic Data Collections in other Regions

• Most economic data collections are initiated, designed, collected and analyzed by the Fishery Science Center
  • Some co-designed or co-initiated with the Council, the majority in the North Pacific

• Economic data collections are used extensively in the fishery management process to analyze impacts and conduct regulatory impact reviews

• Economic data collections enable research and program reviews such as:
  • Catch shares
  • Bycatch reduction
  • Rebuilding
  • Conflicting ocean uses
  • Climate impacts

• Well-designed standardized periodic economic data collections
  • Inform current management
  • Provide baseline and ability to project for:
    • Disaster assistance need
    • Ecosystem trade-off analysis
    • Climate change
    • Differential impacts among sectors, sub-sectors
    • Environmental justice and equity
NMFS national consolidated statement of need for 15 voluntary commercial economic data collection programs
(From PRA supporting statement, OMB Control No. 0648-0773, Nov. 2020)

1.1 Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

This response applies to all 15 fisheries. **NMFS needs the economic data included in this information collection to be capable of more than cursory efforts to comply with or support the following** laws, Executive Orders (EOs) and NOAA Fisheries strategies and policies, which require economic analyses.*

- The Magnuson-Stevens Fishery Conservation and Management Act (MSA); The Marine Mammal Protection Act (MMPA); The Endangered Species Act (ESA); The National Environmental Policy Act (NEPA); The Regulatory Flexibility Act (RFA); EO 12866 (Regulatory Planning and Review); EO 13771 (Reducing Regulation and Controlling Regulatory Costs); EO 13840 (Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States); The NOAA Fisheries Guidelines for Economic Reviews of Regulatory Actions; The NOAA Fisheries Strategic Plan 2019-2022 (Strategic Plan); The NOAA Fisheries Ecosystem-Based Fishery Management (EBFM) Road Map; The NOAA Fisheries National Bycatch Reduction Strategy; NOAA’s Catch Share Policy.

There is implicit authority for the proposed information collections in each of those laws and EOs.

*Appendix A discusses their requirements for economic data and analyses, and was briefly summarized in Section 3.1 of the April 2019 EDR discussion paper. Appendix A of OMB Control No. 0648-0773: https://www.reginfo.gov/public/do/DownloadDocument?objectId=105310401
EDR Discussion and Recommendations

- General discussion of the NPFMC’s EDR Program
- For each EDR fishery, we will describe the:
  - Background and context
  - SSPT process on considering EDRs
  - SSPT recommendations for EDRs
- For more information about the SSPT’s discussion, our March 2021 meeting report is available here:
- All of the EDR purpose and need statements can be found here: https://meetings.npfmc.org/CommentReview/DownloadFile?p=7b8ec905-1bb2-4806-bbab-375762bb9bbb.pdf&fileName=D6%20Reference%20EDR%20Purpose%20and%20Need%20Statements.pdf
## Existing estimates of EDR burden and cost
(summarized from Tables 6 and 9 from April 2019 DP)

<table>
<thead>
<tr>
<th>Program</th>
<th>Total annual respondents</th>
<th>Annual burden hours</th>
<th>Annual burden cost</th>
<th>Average annual implementation cost (2016/17)‡</th>
<th>Total burden and cost per respondent per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crab</td>
<td>95</td>
<td>1,893</td>
<td>$312,345</td>
<td>$262,838</td>
<td>$6,054</td>
</tr>
<tr>
<td>GOA Trawl</td>
<td>114</td>
<td>1,299</td>
<td>$48,063</td>
<td>$89,868*</td>
<td>$1,210/$422†</td>
</tr>
<tr>
<td>Amendment 80</td>
<td>27</td>
<td>508</td>
<td>$18,796</td>
<td>$66,114</td>
<td>$3,415</td>
</tr>
<tr>
<td>Amendment 91</td>
<td>177</td>
<td>708</td>
<td>$60,300</td>
<td>$82,550</td>
<td>$807</td>
</tr>
</tbody>
</table>

*AFSC and the NMFS Office of Science and Technology cover these costs
† industry burden and cost per respondent per year
‡ Total 2020 EDR implementation costs across all programs was $260,000, and is estimated to be $250,000 in 2021
Context: Why do we need economic data

Benefits (Cost-Benefit)  Equity / Distributive Effects  Efficiency

Social / Community Impacts

E.O. 12866

NEPA  NEPA  NEPA

NS 1 - OY  NS 4  NS 5  NS 8  NS 10

MSA Fishery Impact Statement

Endangered Species Act  Regulatory Flexibility Act

E.O. 12898 Environmental Justice
<table>
<thead>
<tr>
<th>Benefits</th>
<th>Equity /</th>
<th>Social /</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Cost)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- To make better, and more informed, decisions.
- They are the basis by which the Council is informed (like fish tickets), they do not support or refute any potential future management alternative.
- EDR information is likely not the deciding factor in any particular decision (nor should they be).
Result: Everyone is frustrated by EDRs. They are inefficiently implemented, lack a clear framework or understanding for what decisions they are attempting to inform or what metrics of performance should be created, are perceived as being overly burdensome and with little utility, and some EDRs may be inconsistent with NAO 202-735D-2 on Scientific Integrity, issued 1/19/21.
SSPT Process on EDR revisions

• Council: What information in the EDRs is useful?
• SSPT: What question(s) are you trying to answer?
Steve’s preferred process

1. Council requests information (develop P&N)
   - AFSC develops survey instrument to provide information requested
   - Survey pre-testing with industry; revise as necessary
   - Survey is implemented, the data analyzed, and lessons are learned for future survey deployments
   - Council approves of data collection and NMFS implements necessary regulations
SSPT Process on EDR revisions

- Council: what information in the EDRs is useful?
- SSPT: what question are you trying to answer?

If the Council wants AFSC staff to tell them what information we think should be collected to make informed decisions, we can (see A80 EDR & SSPT recommended revisions). But the scope of several of the existing P&N statements is exceptionally narrow. NMFS has the authority to adjust the questions we ask in these forms, but they would then be “what AFSC thinks the Council needs” rather than what the Council said it needed.
SSPT EDR recommendations – three types

- **SR**: Small changes within existing purpose and needs
- **LR**: Adjustments to the purpose and need statements to clarify data collection objectives
- **HC**: Holistic changes to the EDR program as a whole
Crab EDR Discussion

- In 2012, a new P&N established a revised EDR. The P&N statement for the initial EDR in 2005 was more specific about the information that was intended to be collected by listing a broad range of social and economic objectives, whereas the revised 2012 EDR purpose and need focused on reducing the reporting burden for stakeholders and improving data quality.

- SSPT members stressed how information about economic contributions to specific communities and regions is essential to the capacity to monitor economic stability as mandated.

- The Council may wish to consider equity of burden as there are some participants in the Crab Rationalization program without EDR reporting requirements (such as QS holders) as well as participants in other rationalized sectors that don’t have EDR reporting requirements at all.

- The SSPT also discussed some of the more specific changes to existing forms. Rather than suggesting specific language at this time for the crab forms, the SSPT recommended these issues be considered with AFSC working in collaboration with industry. Thus, the SSPT made the following recommendations for smaller changes to the crab EDR:
Crab EDR Recommendations

- **LR**: The SSPT asks for the NPFMC to clarify its intended scope of analytical objectives for the Crab EDR, specifically the extent to which the original EDR P&N still applies.

- **SR** a) Assess modifications to Table 1 (Ex-vessel sales) and Table 2 (Quota lease costs) to account for inconsistencies associated with ex-vessel sales and IFQ lease costs as reported in crab EDR forms compared to 1) the gross revenue basis for crew settlements and 2) NMFS Alaska Region records of vessel landings and IFQ permit deductions.

- **SR** b) Assess modifications to crab CV and CP forms to associate joint ownership of active crab vessel and QS holdings.
Gulf Trawl EDR Discussion

- The clear message from the workshop from both stakeholders and analysts that there is a need to revisit the purpose and need statement.
- Participants felt the EDR is no longer relevant and has already served its purpose. In addition, one commented they don’t support changing the P&N to make it more relevant.
- The SSPT discussion focused on while this EDR was developed for a particular program which was never implemented, these EDR data have been among the most used. It has been widely used for crew and community analysis across a wide geography (recently been used in at least six analyses) and that these data are, and will become even more, necessary in order to respond to legal requirements for analyzing the impacts of fisheries management in the future.
Gulf Trawl EDR Recommendations

**LR:** Evaluate current relevance of original P&N for GOA Trawl EDR:

a) If a limited access privilege program is no longer a potential/pending initiative, discontinue GOA Trawl EDR regulations at 679.110, with the possibility of reinstatement at some future date if a LAPP is under consideration, acknowledging that removing the existing regulations and PRA approval will take time to implement.

b) If the Council may consider a limited access privilege program within the next 3-5 years,
   
   i. update P&N to reference key performance metrics needed to monitor changes in social and economic performance related to rationalization/bycatch management program implementation, and
   
   ii. revise CV and processor EDR forms to collect a standard panel of data elements consistent with (to be) established EDR data standards, such that baseline data collection will be maximally continuous with post-amendment data collection.

c) Recognizing the utility of the GOA trawl EDR data to recent analyses, consider revising the P&N to match actual uses of the data collection.

d) Assess data quality impacts and burden hour reductions from establishing minimum participation requirements to be subject to Gulf Trawl CV and shoreside processing EDR reporting requirements.

Recommendations for small changes holistic changes seemed irrelevant until the P&N issue is resolved.
Amendment 91 EDR Discussion

- Both industry stakeholders and analysts agreed the purpose and need for this EDR should be revisited by the Council.
- Stakeholders felt the purpose and need are no longer relevant and that the EDR should be discontinued. The group talked about the reporting requirement of the Incentive Plan Agreement (IPA) reports and the relationship of this to the EDR. Participants at the workshop felt the EDRs are duplicative of the IPA requirement and the industry’s efforts to evaluate the effectiveness of IPAs.
- Additional issues that were raised in the discussion but still need to be explored are the compensated transfer report form, which was meant to assess the value of salmon bycatch to the fleet, has never been used. The vessel master survey and vessel fuel survey forms have been routinely completed, but bycatch avoidance behavior is complex, and it’s necessary to have realistic expectations of the extent to which it’s possible to assess behavioral changes across the fleets from qualitative information at the annual level when catch and bycatch conditions can vary greatly between seasons, vessels, and years.
Amendment 91 EDR Recommendations

**LR:** Evaluate current relevance of original P&N for A91 EDR:

- **a)** If P&N is still relevant, initiate a process to identify and develop appropriate data collection requirements (which may/may not include EDR data collection).
- **b)** If current P&N is no longer sufficiently relevant to justify continuation of A91 EDR, consider broadening P&N to be consistent with general-purpose catch share program monitoring P&N.
- **c)** If P&N is no longer relevant, discontinue A91 EDR regulations at 679.65.

Recommendations for small changes holistic changes seemed irrelevant until the P&N issue is resolved.
Amendment 80 EDR SSPT Discussion

- There was some question about the focus of the A80 EDR P&N on general economic performance of the fleet compared with measuring the economic impact of bycatch reduction measures, but general support for the overall P&N by both stakeholders and analysts.
- The discussion was focused on the specific small change recommendations, which were concepts discussed at the workshop, including the pre-populating of EDR forms, whether days fishing and processing can be eliminated as duplicative, and to revise the way capital expenditures are collected.
Amendment 80 EDR Recommendations

**SR**: Additional component for A80 EDR changes under Alternative 2:

a) Revise EDR webform to pre-populate data entry fields for EDR, Tables 1, 2.1, 2.2, 2.3, and 2.4
b) Assess data quality impacts of eliminating days fishing and days processing data elements from Table 2.5
c) Assess modifications to Table 4 (Capital expenditures) to distinguish (and potentially exclude) major investment expenditures (e.g. vessel replacement, structural hull modification) from capitalized expenditures associated with routine/cyclical capital maintenance and improvement. Consider potential data quality improvements and burden reductions from a capitalized expenditures EDR module required only every 3 years which covers the prior 3-year period.
One SSPT member described their concerns with the concept of trying to address consistency within the current EDR framework. Since these data collections were all developed independently with different intents (e.g., program level evaluation for LAPPs or bycatch mitigation/reduction), the goal of consistency is not easily solvable. If the Council is interested in more consistent EDR data collection, this might be achieved through a more holistic approach (e.g., pre-approved forms with a data collection that could be applied to any fleet when a question arises about their economic and social performance). The current EDR forms are not consistent, and it would be very difficult to make them that way. If the Council wanted to have a consistent EDR program, SSPT discussion highlighted this would be a big task for the SSPT or another group to develop.
Concluding EDR discussion (2)

- One member mentioned that the SSPT can help the Council identify the type of information only available through current EDR programs, which parallels the SSPT’s work on the data gap analysis. For instance, SSPT members noted that there is a void in data able to link communities, crew, and vessels which is regularly necessary for both routine and complex Council analyses.

- EDRs are unique in achieving this and several members emphasized the value in these data. For other fisheries, this has been a persistent data gap routinely identified by fishery analysts and researchers. Crewmember participation in North Pacific fisheries is only available from the GOA Trawl, Amendment 80, and the crab EDRs which allow analysts to better understand the social and economic footprint of these fisheries across communities.

- SSPT members highlighted that the collection of data able to link crew, vessels and communities would be valuable data, although their collection may not be in line with all the current EDR P&N statements. These types of data allow for an understanding of community dependence and participation as required under National Standards and are needed in order to provide analysis to address the analytical questions of program reviews as well as amendment packages.
SSPT recommendation for holistic changes to the existing EDR Program

Develop a consolidated P&N for Catch Share EDR data collections, addressing generalized analytical/performance metrics; individual EDR forms would employ standardized panels of data elements, specified as appropriate for the respective catch share program and associated management goals, structure of limited access privilege/QS/IFQ, and associated industry sector(s), gear group(s), and other relevant strata/subpopulation(s).

Suboption: EDR form templates would identify performance metrics and associated subpanel(s) of data elements relevant to monitoring pre-amendment baseline economic performance. Council could choose to invoke baseline data collection using pre-defined EDR template(s) when initiating development of CS programs or other large-scale FMP amendments in non-catch share/non-EDR fisheries/sectors in the future.
Concluding thoughts (1)

• The actual burden of these data collections has little to do with the information that is collected/reported. Once data systems for submitters are in place, additional variables are negligibly burdensome. See Crab and A80 stakeholder meeting audio recordings.

• AFSC and the public have been promised by the Council a more comprehensive evaluation of economic and social impact data collections on several occasions, back to crab EDR revisions in 2012.

• If labor and fuel cost data from the GOA Trawl EDR have proven to be useful in Council Analyses (used in 6 different analyses in the past several years), it stands to reason that this information would be useful across all fisheries and all vessels in the North Pacific.

• However, labor and fuel costs only represent a portion of costs, and thus very few economic performance metrics of the fishery can be developed (labor payments by community of crew residence).

• ---> The problem is that no recognizable economic performance metric (or “baseline information”) of the fishery can be created from these data. As an example, compare the A80 EDR chapter with the Gulf Trawl EDR chapter of the GF SAFE.
Concluding thoughts (2)

- New scientific (not administrative) data collections will take about 2 years to be approved through NOAA and OMB, and that is after Council, AFSC, and industry agree on an approved approach forward (so ~4 years for data to be returned and analyzed after requested by NPMFC).

- Scientific data collections are fundamentally different than the normal administrative records (fish tickets, permits, transfer applications) that most stakeholders are familiar with, and require additional information to justify their collection. The Council telling AFSC what economic information to collect and how to collect it is akin to telling AFSC what field stations in the EBS to survey at and which to avoid.

- NOAA is under increasing pressure to reduce our novel data collection efforts and consolidate them into fewer packages to approve through OMB.
Concluding thoughts (3)

• With additional information (fixed and variable costs, other revenues, capital expenditures), we could provide benefits and costs of management decisions by community of landing or vessel residence – and how those impacts have vary over time as a result of management actions or environmental changes. But predicting future impacts is still quite a while away, we need to monitor the system before we can explain or predict it.

• If it is worth over $1,000/day to observe the fish caught, how much is it worth to understand who benefits from that catch?

• EDRs average $47/active day fishing (burden and cost of everything EDR).
Thanks to all the SSPT members, workshop participants, EDR submitters, and especially Katie Latanich, Sarah Marrinan, Brian Garber-Yonts, and Scott Miller for their contributions to this effort.

Questions?