

BSAI Crab Rationalization EDR Testing

Report Prepared for Pacific States Marine Fisheries Commission
2017 Calendar Year Data



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**INDEPENDENT ACCOUNTANTS' REPORT
ON APPLICATION OF AGREED-UPON PROCEDURES**

To Pacific States Marine Fisheries Commission
Portland, Oregon

We have performed the procedures described in the following report, which were agreed to by Pacific States Marine Fisheries Commission and National Marine Fisheries Service solely to assist you in evaluating the accuracy of the information submitted through Economic Data Reports for the 2017 calendar year. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described in the following pages either for the purpose for which this report has been requested or for any other purpose.

As part of our testing we used sampling. Whenever sampling is involved there is the possibility that the findings might not be representative of the population from which it was drawn.

This engagement to apply agreed-upon procedures was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the Economic Data Reports or the submitters of those reports. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

In the contract between Pacific States Marine Fisheries and Aldrich CPAs + Advisors LLP, the terminology "audit" was used and is used in the following pages to align with the contract terms. The procedures performed do not constitute an audit in accordance with generally accepted auditing standards.

This report is intended solely for the information and use of the specified parties listed above and is not intended to be and should not be used by anyone other than those specified parties.

Aldrich CPAs + Advisors LLP

Lake Oswego, Oregon
March 27, 2019

BACKGROUND

Under regulations promulgated by the United States Secretary of Commerce, fishing and seafood processing businesses and associated participants in the Bering Sea and Aleutian Islands Crab Rationalization (CR), American Fisheries Act (AFA), and Amendment 80 (A80) fishery management programs, and groundfish trawl fisheries in the Gulf of Alaska (GOA Trawl), are subject to mandatory annual economic data collection censuses, referred to as Economic Data Reports (EDR). As developed by the North Pacific Fishery Management Council (Council) and implemented by National Marine Fisheries Service (NMFS), EDR requirements for regulated participants in these fisheries are specified under 50 CFR 680.6, 679.65, 679.94, and 679.110, respectively. EDRs are intended to provide employment, cost, sales and other business data to inform the Council's oversight of fishery management through improved analyses of economic performance of affected harvesters and processors participating in these Alaska fisheries, and social and economic effects on associated communities. The Council placed a high priority on data quality assurance (QA) in design of EDR programs.

Compliance with EDR submission requirements is mandatory for all subject entities as a condition of federal fishery permit issuance and renewal, and failure to submit required EDR forms in a timely manner is grounds for enforcement action by NMFS Office of Law Enforcement. In addition to these and other data QA elements, the Council specified EDR regulations to include data verification audits of EDR records, to be performed by a qualified financial auditor contracted and authorized to solicit and review financial and other supporting company records from EDR submitters, assess reported data values against supporting records, and verify accurate values.

Data collection and management of EDR programs for Alaska fisheries is administered by the Pacific State Marine Fisheries Commission (PSMFC), under a grant from NMFS and in collaboration with NMFS Alaska Fisheries Science Center (AFSC). For each distinct category of participant in the respective fisheries, EDR questionnaire forms have been designed to collect quantitative financial and administrative information about business operations with respect to the previous calendar year. Submission due dates are July 31 for the Crab EDR and June 1 for all other EDR forms. Primary data validation is conducted by PSMFC during the course of data collection and employs automated database processes to identify gross and/or logical reporting errors and obtain submitter corrections where possible. Following completion of primary validation and error correction, the EDR database is further analyzed to identify a subset of records from the most recent years of EDR submissions for verification audit.

KEY PARTICIPANTS AND ROLES

The key participants in the project include:

- ▶ **National Marine Fisheries Service (NMFS)** – initiator of the audit process and end-user of the information contained in the EDRs.
- ▶ **Pacific States Marine Fisheries Commission (PSMFC)** – collector and manager of the data collected through the EDRs.
- ▶ **Aldrich CPAs + Advisors LLP (Aldrich/Auditor)** – independent accountants and consultants selected to audit and validate the information collected in the EDRs.
- ▶ Participants in the crab rationalization program.

SCOPE OF WORK

Selection of audits and data preparation:

- ▶ NMFS selected the EDR data items from each respective EDR form to be audited.
- ▶ NMFS analyzed the EDR data submitted for anomalies and select records as appropriate for non-random audits.
- ▶ PSMFC compiled the data from selected EDRs into a tabular data report from which the Auditor validated as agreed to with PSMFC.
- ▶ PSMFC supplied the contact information and assisted with making arrangements between the Auditor and the EDR submitter.
- ▶ PSMFC provided letter templates for Auditor to use in preparing formal notices for mailing to EDR submitters.
- ▶ PSMFC and NMFS consulted with the Auditor to determine the appropriate types of documentation and degree of supporting records detail that were sufficient and appropriate basis to verify selected EDR variables.

Data verification and analysis:

- ▶ The Auditor coordinated preparation and mailing of written audit notices to solicit supporting information from the selected EDR submitters for selected data entries.
- ▶ The Auditor monitored submitter response to audit notices, organized and managed all materials and information received from submitters and conducted and additional correspondence with the submitters as needed to obtain additional records and information sufficient to complete the verification process.
- ▶ The Auditor analyzed the records and other supporting information provided by submitters, and evaluated the quality of supporting information and verified the accuracy of reported values. For each data value selected for audit, data verification procedures are the following:
 - Evaluated the quality of supporting records and other documentation supplied as the basis for data verification;
 - Evaluated accounting/recordkeeping methods, calculations, logical considerations, and/or other factors used by the submitter to derive or approximate the reported value from supporting documentation;
 - Evaluated the accuracy of the original reported value;
 - Where the original value could not be verified and/or is determined to be inaccurate, consulted with the submitter to obtain corrections, additional records and other information as needed to identify the accurate (verified) value, as confirmed by the submitter.
- ▶ The Auditor recorded the evaluation and verification results for each value audited in the Audit results database, using the support analysis codes framework.
- ▶ The Auditor prepared a final project report for public distribution, summarizing audit procedures and administrative procedures, summary of results, a general discussion of notable issues identified during the course of the audit including problems encountered by submitters with EDR forms and supporting records, audit procedures under the statement of work, and recommendations for modifications of EDR data collection and audit procedures for the future.
- ▶ The Auditor coordinated preparation and mailing of Submitter Feedback Letters to notify audited EDR submitters of audit results for their selected data, including summary audit finding by-item verification results for their selected data, suggestions for improved EDR reporting and record keeping, and notice of any failure of the submitter to comply with verification audit requirements.

METHODOLOGY

For each EDR variable and data entry selected for verification, Aldrich critically evaluated the support provided by the selected vessel or processor EDR submitter. Information was evaluated against third party support, such as invoices or fish tickets; internally-generated information, such as crew settlement sheets, general ledger details, invoices, detailed internal reports, or financial statements; and estimates made, including an assessment of the reasonableness of assumptions. Where a selected EDR data value as originally reported was based solely on the submitter's internally-generated records, auditors requested additional supporting documentation as needed to substantiate the internal records and/or verify the reported value. Aldrich also noted when no support was available to evaluate the selected data entry.

Many of the records provided to Aldrich by vessel owners reflect the broad variation in accounting and record-keeping systems among this segment of EDR submitters. The processor reporting tends to be more formal and standardized, reflecting the large company nature of those operations. Because the material provided is so unique, the audit process began with a detailed review of each information packet received while comparing totals for each variable to the original EDR entry. Each supporting document was assessed for accuracy and depth of support. Estimates were accepted as long as a reasonable explanation and/or calculations were also provided. If there were no source documents available to support the value reported, it was noted in the database that is submitted to PSMFC. If nothing was provided initially or upon further inquiry it was recorded as a non-response and noted in the database report. If the initially provided documentation was determined to be incomplete or insufficient, then Aldrich contacted the vessel or processor to request further documentation. Once this additional documentation was received, it was assessed and validated via the process described above.

For discrepancies that were found between the original EDR submission and the supporting documentation provided, Aldrich contacted the vessel owner and/or preparer to validate the corrected value. Many times this discussion led to the receipt of additional documentation and/or further explanation as to the methodology used to report the associated EDR value. Once all supporting documentation had been provided by EDR submitters and evaluated by auditors, the Validated Value was determined (as equal to, or a correction to, the original value) and entered into the database report.

For each audited value, Aldrich also recorded a qualitative assessment of the audit results as a pair of Audit Codes in the database report, based on criteria described below (see TABLE: SUPPORT ANALYSIS CODES). A distinct Audit Code was assigned to each of the Original Value and Validated Value, based on auditors assessment of the quality and/or deficiencies in supporting documentation provided, the nature of any reporting error identified for the Original Value, and the resolution of any deficiencies and/or errors as represented in the Validated Value. Audit codes 0, 1, 1T, 5, 6, 7, 9, or 10 (denoted by " * " in the table) are used to characterize the accuracy and quality of support for either Original Value or Validated Value entries. Audit codes that represent a category of reporting error and/or support deficiency identified with respect to the Original Value (2, 2T, 3, 4, 7, or 8) are coupled with a code value of 0, 1, 1T, 5, 6, 7, 9, or 10 assigned to the Validated Value.

The table below provides a listing of all the codes and descriptions.

TABLE: SUPPORT ANALYSIS CODES

Audit codes	Documented support for Original Value	Documented support for Verified Value	Validation result
0	No	No	Respondent did not respond to audit request for supporting records; represents noncompliance
1*	Yes	Yes (same as original)	No error; reported value is clearly substantiated by complete records. [Zero handling; Original value is "0": Correct value= 0 (no correction). Original and corrected code= 1.]
1T*	Yes	Yes (same as original)	Original value is blank or 'N/A': Correct value= 0 (not counted as error for fail letters)
2	Yes	Yes (same as original)	Calculation error
2T	Yes	Yes (same as original)	Observable typographic error on the respondent's part
3	Yes	Yes (same as original)	Misinterpretation of question
4	Yes	Yes (same as original)	Estimate is based on original documentation but flawed assumptions/logic
5*	Yes	Yes (same as original)	Data cannot be reported precisely as specified in EDR form and must be estimated; estimate is based on appropriate documentation and sound assumptions/logic and is considered validated
6	Yes	Yes (updated)	Original value was reported correctly based on original documentation, but corrected based on updated documentation
7*	No	No	Reported value is "best guess", not derived from records; no valid value is available
8	No	Yes (new)	Original value is unsubstantiated; correction based on new documentation
9*	No	No	Original value is blank; available information contra-indicates 0 or N/A and no validated value can be confirmed
10*	No	No	Item "Not Applicable" to vessel

*Code can be used as the validation support code

OUTLIER SELECTIONS – CATCHER VESSEL EDR RECORDS

A total of 57 individual Crab Catcher Vessel EDR data entries were selected for verification, representing 12 distinct vessel-related EDR variables; within this pool, there were 16 distinct EDR forms from which one or more data entry was selected. During verification, 3 additional data entries were identified by the submitters as errors and correcting information was provided. Upon completion of the verification review, each selected data entry was assigned a code for the quality of the original support, and the validated support. The tables below provide a summary of audit results for each EDR variable selected, listing the number and percentage (%) of selected entries assigned each audit code for the original and verified value, respectively, with the associated codes defined below.

Variable 1: Certification Page - Vessel Equipment Market Value

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	0	0%	1	100%
8	1	100%	0	0%
Total	1	100%	1	100%

Support analysis code and description of support provided:

8 One vessel reported an initial value that was unsubstantiated but corrected based on information provided.

Variable 2: Certification Page - Vessel Equipment Replacement Value

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	0	0%	1	100%
8	1	100%	0	0%
Total	1	100%	1	100%

Support analysis code and description of support provided:

8 One vessel reported an initial value that was unsubstantiated but corrected based on information provided.

Variable 3: Table 1- Crab Ex-Vessel Sales Revenue

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	5	50%	10	100%
1T	2	20%	0	0%
2	2	20%	0	0%
8	1	10%	0	0%
Total	10	100%	10	100%

Support analysis code and description of support provided:

- 1 Five vessels provided support for the initial values, which were substantiated by sales reports, detailed sales listings, or invoices.
- 1T Two vessels had reported the EDR data entry blank, one of which was substantiated based on information provided and the other corrected.
- 2 Two vessels had calculation errors that were corrected based on supporting documentation.
- 8 One vessel reported an initial value that was unsubstantiated but corrected based on information provided.

Variable 4: Table 1- Crab Ex-Vessel Sales Pounds

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	12	71%	16	94%
1T	2	12%	0	0%
2	2	12%	0	0%
0	1	6%	1	6%
Total	17	100%	17	100%

Support analysis code and description of support provided:

- 1 Twelve vessels provided support for the initial values, which were substantiated by sales reports, detailed sales listings, or invoices.
- 1T Two vessels had reported the EDR data entry blank, which were substantiated based on information provided.
- 2 Two vessels reported calculation errors in the initial submission but corrected based on information provided.
- 0 No information was provided for this data entry from one vessel.

Variable 5: Table 2- Crab Fishing Quota Cost

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	9	90%	10	100%
8	1	10%	0	0%
Total	10	100%	10	0%

Support analysis code and description of support provided:

1 Nine vessels provided support for the initial values, which were substantiated to lease calculations and fish tickets.

8 One vessel reported an initial value that was unsubstantiated but corrected based on information provided.

Variable 6: Table 2- Crab Fishing Quota Pounds

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	10	91%	10	91%
0	1	9%	1	9%
Total	11	100%	11	100%

Support analysis code and description of support provided:

1 Ten vessels provided support for the initial values, which were substantiated to lease calculations and fish tickets.

0 No information was provided for this data entry from one vessel.

Variable 7: Table 3- Crab Crew Labor Payments Captain Pay

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	0	0%	2	100%
2T	1	50%	0	0%
8	1	50%	0	0%
Total	2	100%	2	100%

Support analysis code and description of support provided:

2T One vessel had a typographical error that was corrected through the validation process.

8 One vessel reported an initial value that was unsubstantiated but corrected based on information provided.

Variable 8: Table 3- Crab Crew Labor Payments Crew Pay

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	1	33%	2	67%
5	0	0%	1	33%
7	1	33%	0	0%
8	1	33%	0	0%
Total	3	100%	3	100%

Support analysis code and description of support provided:

- 1 One vessel reported information on the EDR that was correct and substantiated by agreeing the amounts to crew settlement statements, check payments, or reconciliations of the pay calculations.
- 7 One vessel reported an initial value that was an estimate. This estimate was agreed to supporting records and therefore coded a 5.
- 8 One vessel reported an initial value that was unsubstantiated but corrected based on information provided.

Variable 9: Table 4- Vessel Operating Costs: Bait Costs

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	1	100%	1	100%
Total	1	100%	1	100%

Support analysis code and description of support provided:

- 1 For one vessel the information reported on the EDR for this data entry was correct and substantiated by agreeing the amounts to invoices or expense account detail.

Variable 10: Table 4- Vessel Operating Costs: Provisions Cost

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
7	1	100%	1	100%
Total	1	100%	1	100%

Support analysis code and description of support provided:

- 7 One vessel reported an initial value that was unsubstantiated and is a best guess.

Variable 11: Table 5- Annual Fuel Cost

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
1	0	0%	2	100%
2T	2	100%	0	0%
Total	2	100%	2	100%

Support analysis code and description of support provided:

2T Two vessels had a typographical error that was corrected through the validation process.

Variable 12: Table 6- License or Permit Number

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Vessels	% of Total	Vessels	Total
0	1	100%	1	100%

Support analysis code and description of support provided:

0 No information was provided for this variable from one vessel.

OUTLIER SELECTIONS – CATCHER PROCESSOR EDR RECORDS

A total of 12 individual Crab Processor data entries were selected for verification, representing 7 distinct processing-related EDR variables; within this pool, there were 4 distinct EDR forms submitted, from which one or more data entry was selected. Upon completion of the verification review, each selected data entry was assigned a code for the quality of the original support, and the validated support. The tables below provide a summary of audit results for each EDR variable selected, listing the number and percentage (%) of selected entries assigned each audit code for the original and verified value, respectively, with the associated codes defined below.

Variable 1: Table 1- Crab Product Sales Finished Pounds

Initial Reporting			Corrected Reporting	
Support Analysis Code	# of Processors	% of Total	As Corrected # of Processors	As Corrected % of Total
1	2	100%	2	100%

Support analysis code and description of support provided:

- 1 Two of the processors provided support for the initial values, which were substantiated by sales reports, detailed sales listings, or invoices.

Variable 2: Table 1- Crab Product Sales Revenue

Initial Reporting			Corrected Reporting	
Support Analysis Code	# of Processors	% of Total	As Corrected # of Processors	As Corrected % of Total
1	0	0%	2	100%
2T	1	50%	0	0%
6	1	50%	0	0%
Total	2	100%	2	100%

Support analysis code and description of support provided:

- 2T This error appears to be a typographical error in the data entry. Supporting documentation was reviewed and the value was validated.
- 6 One processor reported an initial amount that was unsubstantiated but corrected based on information provided. The new amount was an estimate that was substantiated.

Variable 3: Table 3- Crab Purchases from Vessels - Cost

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Processors	% of Total	Processors	Total
1	0	0%	1	100%
6	1	100%	0	0%
Total	1	100%	1	100%

Support analysis code and description of support provided:

- 6 For one processor the information reported on the EDR was correct and substantiated by agreeing the amounts to purchase records, check payments, or invoices.

Variable 4: Table 3- Crab Purchases from Vessels - Pounds

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Processors	% of Total	Processors	Total
1	1	100%	1	100%

Support analysis code and description of support provided:

- 1 One processor provided support for the initial values, which were substantiated by invoices.

Variable 5: Table 4- Custom Processing Services - Cost

Initial Reporting			Corrected Reporting	
Support Analysis			As Corrected # of	As Corrected % of
Code	# of Processors	% of Total	Processors	Total
1	0	0%	2	100%
2T	1	50%	0	0%
8	1	50%	0	0%
Total	2	100%	2	100%

Support analysis code and description of support provided:

- 2T This error appears to be a typographical error in the data entry. Supporting documentation was reviewed and the value was validated.
- 8 The initial value provided was incorrect and corrected during validation process.

Variable 6: Table 4- Custom Processing Services - Raw Pounds

Initial Reporting			Corrected Reporting	
Support Analysis Code	# of Processors	% of Total	As Corrected # of Processors	As Corrected % of Total
1	2	100%	2	100%

Support analysis code and description of support provided:

- 1 For two processors the information reported on the EDR was correct and substantiated by agreeing the amounts to purchase records, check payments, or invoices.

Variable 7: Table 4- Custom Processing Services - Finished Pounds

Initial Reporting			Corrected Reporting	
Support Analysis Code	# of Processors	% of Total	As Corrected # of Processors	As Corrected % of Total
1	2	100%	2	100%

Support analysis code and description of support provided:

- 1 For two processors the information reported on the EDR was correct and substantiated by agreeing the amounts to purchase records, check payments, or invoices.

The quality of the information submitted in EDRs is important, as the information will be used to analyze the effects of current and future fishery management decisions associated with the Crab Rationalization program and on the owners of vessels and processing plants submitting EDR data as well, as other stakeholders. Overall, the data verification procedures found that out of 20 submissions for 2017, 19 were well-supported and 1 failed. It was also noted that some of the variables selected were not applicable to all of the vessels or processors.

The results of the data verification procedures performed, detailed in the findings section, discuss the basis for the initial values and the support provided if the initial values were corrected based on updated documentation. Based on key objectives listed earlier in the report, several other observations noted through the data verification procedures performed are as follows:

1. The majority of support provided was consistent with the types of support provided during EDR data verification audits in previous years.
2. Most EDR respondents were in compliance with procedures, as support was provided in a timely fashion and follow-up questions were addressed as requested.
3. Errors in submitted information did not appear to indicate a directional bias in the data. The corrected information was made as a result of new information received subsequent to the preparation of the original EDR or based on updated estimates or guidance on how to derive the variable.
4. During our conversations with the submitters it became clear that there is confusion regarding the calculation of some of the variables and it might be helpful to consider recording a webinar or some instructional video that preparers could watch should they need guidance.