



ALASKA CRAB ECONOMIC DATA REPORT DATA VALIDATION EXTENSION

**Report Prepared for Pacific States
Marine Fisheries Commission**

1998, 2001, 2004, & 2005 Calendar Year Data

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INTRODUCTION

BACKGROUND

The Bering Sea and Aleutian Islands (BSAI) Crab Rationalization Program was developed to create a quota system that grants exclusive harvesting and processing rights to crab harvesters, processors and coastal communities. Economic data reports (EDRs) were developed to aid the North Pacific Management Council (Council) and National Marine Fisheries Service (NMFS) in assessing the success of the program and developing amendments necessary to mitigate any unintended consequences. To ensure that the data submitted by respondents in the EDRs is accurate, Pacific States Marine Fisheries Commission (PSMFC) contracted AKT, LLP (AKT) to develop a process to review the data contained within submitted EDRs, including verification audits for those EDRs containing odd or suspicious data values, and conducting random audits for a certain percentage of submitted EDRs.

This project is a continuation of the work performed in 2006 on the 1998, 2001, 2004, and 2005 data analysis described above. NMFS requested additional and more extensive analysis of the 1998-2005 EDR support documentation subsequent to the 2006 EDR data validation. NMFS asked for analysis similar to the 2006 EDR project for the 1998-2005 EDR selections to provide a consistent comparison across all years. For a full description of the validation project and initial analysis performed on the 1998-2005 EDR selections, please refer to the original report written on that project.

SCOPE OF WORK

In order to perform the additional documentation analysis, the following procedures were requested by NMFS:

- 1) ***Critical Review of Documentation Type*** – Review and analysis of supporting documentation for each variable audited, noting how frequently each document type was used as support for the years 1998, 2001, 2004, and 2005.

The methodologies to address the above procedure are outlined later in this report.

Based on conversations with NMFS the following key objective of the analysis was agreed: characterize and quantify the type of supporting documentation by year for each audited variable.

KEY INFORMATION

A statistical sample was determined based on a total submitted population of 268 catcher vessels, processors, and stationary floating & shoreside processors. This sample was comprised of all unique submitters of information (see original report for basis of the statistical sample). The following table summarizes the number of EDRs submitted by vessel type and the resulting sample size.

	# EDRs submitted				Sample
	1998	2001	2004	2005	
Catcher Vessel	225	220	237	164	33
Catcher Processor	8	7	9	8	3
Stationary Floating & Shoreside Processors	24	23	20	17	5

AKT reviewed the originally provided supporting documentation from the selected sample population. No additional sampling was performed and no additional documentation was obtained from the original sample population.

METHODOLOGY

The following is a summary of the steps taken to perform the supplemental analysis of the 1998, 2001, 2004 and 2005 documentation.

- 1) **Review initial audit notes.** To gain an understanding of the work that was performed by AKT in the initial audit of the submitted documentation for 1998-2005, AKT reviewed audit work papers for each randomly selected vessel and processor.
- 2) **Perform analytical review of supporting documentation.** This process involved review of the audit work paper notes from the audits performed by AKT for the years 1998-2005 to characterize the different types of support given for each variable and the frequency with which each type of support was used.
- 3) **Summarize results of documentation analysis.** The available supporting evidence was classified in categories and grouped by year and variable. This grouping process made it possible to analyze the type of support used across years. These results are summarized in "Findings" below.

FINDINGS

AKT developed the following classifications to describe the documentation provided by vessels and processors:

Documentation Provided

- Provided documentation was separated by type, counted, and then organized by year and variable for vessels and processors. This is shown in Exhibits 2 and 3.

Documentation Not Provided

- For a given year, vessels may not have provided documentation for each requested variable. If no documentation was provided for a specific variable, it was classified as “No Support”. This is shown in Exhibits 2 and 3.
- For a given year, vessels may not have provided any documentation for all requested variables. If no documentation was provided for a specific year, it was classified as “Did Not Provide”. An analysis of how many vessels provided documentation for each year is given in Exhibit 1.

CONCLUSION

It is important to include the conclusions from the initial audit analysis performed on this sample population in 2006 along with the conclusions from the additional documentation analysis. This enables one to obtain a bigger picture of how the documentation analysis ties to the EDR validation.

Below is a brief summary of the relevant conclusions from the initial audit performed on the randomly selected vessels and processors for the years 1998-2005:

- 1) ***The quality of the records differ by vessel.***
- 2) ***Historical data (1998) is not always supported.***
- 3) ***Current data (2005) was not always supported, either.***

The conclusions stated above have the most significance and still apply to this extended documentation analysis.. As shown in Exhibits 1-3, many vessels did not provide information for all the requested years, and for any given year a vessel may not have provided supporting documentation for all the requested variables. This factor is important to keep in mind when viewing the documentation analysis as one year may look more supported than another year. As the years progressed from 1998 to 2005, the type of support given for each variable became more robust. Computerized accounting systems were used more frequently to produce documentation in 2005 than in 1998, which may be due to increased computer use by vessel owners and operators. In addition, more documentation was provided for 2005 than earlier years. The EDR validation request was made in 2006, thus documentation may have been more readily available to vessel owners and operators for the year 2005.

EXHIBIT 1

Note: It is important to take note that some vessels did not provide supporting documentation for all years requested. Therefore, we have also performed an analysis of how many vessels submitted documentation for each year. We believe this information will help explain why some years may appear to have more in-depth support than others.

Requested Years	Vessel Count - Did Provide	Vessel Count - Did Not Provide
1998	18	8
2001	20	7
2004	25	1
2005	15	11

Seven vessels did not provide any information for any of the requested years and were not included in the analysis. See prior year report for explanation.

Requested Years	Processor Count - Did Provide	Processor Count - Did Not Provide
1998	5	2
2001	6	1
2004	7	0
2005	6	1

One processor did not provide any information for any of the requested years and was not included in the analysis. See prior year report for explanation.

EXHIBIT 2 - Floating, Stationary, Catcher Processors

Note: The 2005 data count is in a separate column because there were additional variables audited in 2005 that were not included in the EDR of the previous years. It is also important to note that a vessel may have left a variable blank, or a vessel may have provided more than one type of documentation. This is why there are different documentation counts for each variable type within a given year.

Data Type	1998 Count	2001 Count	2004 Count	2005 Data Type	2005 Count
Days at Sea				Days at Sea	
Client Prepared Summary of settlement sheets	1	1	1	Client Prepared Summary of settlement sheets	1
Trip Summary Sheet	1	1	1	Trip summary sheet	1
Log Book	1	1	1	Log Book	1
Crab Processing Days				Days Traveling and Offloading	
Client Prepared Summary of settlement sheets	1	1	2	Client Prepared Summary of settlement sheets	1
Fish Ticket Detail	1	1	1	Trip summary sheet	1
Estimation	1	0	1	Log Book	1
Log Book	1	1	1		
Production Reports	1	1	1	Crab Processing Days	
PBC Reports	1	2	2	Client Prepared Summary of settlement sheets	1
No support	1	1	0	Trip summary sheet	1
				Log Book	1
Raw Pounds				Fish Ticket Detail	1
Client Prepared List of fish tickets	1	1	1	Client Prepared Reports	1
Purchase Recap	1	1	0	No Support	2
Trip Summary sheet	0	0	1		
Fish Tickets	1	1	1	Raw Pounds	
Tax Worksheet	0	0	1	Client Prepared List of fish tickets	2
Production Reports	1	1	2	Trip summary sheet	1
Client Prepared Reports	0	1	0	Fish tickets	1
Fish Ticket Detail	1	1	1	Fish Ticket Detail	1
				No Support	2
By Product Variables*				By Product Variables*	
Financial Statements	1	1	1	Financial Statements	1
Management discussion	2	2	2	Management discussion	2
Estimations	1	0	0	Production Reports	3
Trip summary sheet	0	1	0	No Support	2
Production Reports	3	4	5		
Client Prepared Reports	0	0	1	Crew Earning Shares	
No Support	0	0	1	Crew log	1
				Settlement sheets	1
Crew Earning Shares				Trip Summary sheet	1
Crew log/Crew List	2	2	1	Quarterly Wage Detail	1
Crew Settlement sheets	1	1	1		
Quarterly Wage Detail	0	0	1	Total Crew Payments	
Trip summary sheet	0	1	1	Client Prepared Individual trip sheets	1
No support	1	0	0	Trip Summary sheet	1
				Quarterly Wage Detail	1
Total Crew Payments				Total Captain Payments	
Client Prepared Individual trip sheets	1	1	1	Client Prepared Individual trip sheets	1
Quarterly Wage Detail	0	0	1	Trip Summary sheet	1
Trip summary sheet	0	1	1	General Ledger	1
Crew log/Crew List	1	1	0		
No support	1	0	0	Crew with pay from Processing	
				Estimation	1
Total Captain Payments				Crewmember Info. Report	1
Client Prepared Individual trip sheets	1	1	1	Quarterly Wage Detail	1
Quarterly Wage Detail	0	0	1		
Trip summary sheet	0	1	1	Total Man Hours	
Crew log/Crew List	1	1	0	Estimation	1
No support	1	0	0	Labor Distribution Report	1
				No Support	2
Crew with pay from Processing				Total Processing Labor Pay	
Estimation	1	1	2	Crew logs	1
Quarterly Wage Detail	0	0	1	Estimation	1
Crew log/Crew List	1	1	0	Direct Labor/Distribution report	2
No support	1	1	0	Quarterly Wage Detail	1
				No Support	2
Total Man Hours				By Product Variables - Total*	
Estimation	0	0	1	Sales Analysis	1
Plant Labor Report	1	1	1	Sales Price Table	1
Wage Report	1	1	2	Production Reports	1
				Commercial Operator's Report	1
Total Processing Labor Pay				No Support	2
Crew logs/Crew List	2	2	1		
Estimation	1	1	2	Insurance Premium	
Income Statement Analysis	1	1	0	Income Statement	1
Quarterly Wage Detail	0	0	1	General Ledger	1
Processor Wages Report	2	2	4	No Support	1
No Support	0	0	1		
By Product Variables - Total*				Insurance Deductible fees	
Client Prepared Data Reports	0	0	1	Income Statement	1
Crab Inventory Costing	2	0	1	General Ledger	1
Intra Company Transfers	0	1	0	No Support	2
Sales Price/Sales Report	2	3	3		
Production Reports	1	2	2	Processing and Packing Materials	
Commercial Operator's Report	1	1	1	Client Prepared Spreadsheets	1
No Support	2	1	2	No Support	2
				Bait Cost	
Insurance Premium				Income Statement	1
Income Statement	1	1	1	Trip Summary sheets	1
General Ledger	1	1	1	Invoices	1
No Support	1	1	1		
Insurance Deductible fees				Fuel cost	
Income Statement	1	1	1	Income Statement	1
Income Statement Analysis	0	1	0	Trip Summary sheets	1
General Ledger	1	1	2	Invoices	1
No support	2	2	3	General Ledger	1
Processing and Packing Materials					
General Ledger	0	0	2		

Client Prepared Spreadsheets	2	2	2
Purchase Summary	0	1	0
Bait Cost			
Income Statement	1	1	1
Trip summary sheets	1	1	1
Invoices	1	1	1
Fuel cost			
Income Statement/Analysis	1	2	1
Trip summary sheets	1	1	1
Invoices	1	1	1
Crab Settlement	0	1	0
General Ledger	1	1	3
Monthly Utilities Schedule	1	1	1
Fish Taxes			
Income Statement	1	1	1
Purchase Recap	1	1	2
Income Statement Analysis	0	1	0
Tax Return	2	1	1
General Ledger	0	1	0
Client Prepared Data Reports	1	1	2
Capitalized expenditures			
Income Statement	1	1	1
Capitalized Expenditures worksheet	2	3	2
General Ledger	1	0	3
Repairs and Maintenance			
Income Statement	1	1	1
Income Statement Analysis	1	2	0
General Ledger	3	2	6
Number of Salaried Employees			
Nothing	1	1	1
Labor Distribution Reports	1	1	1
Client Prepared Reports	0	1	0
Cost Reports	0	0	1
No support	3	3	4
Total Pay for Salaried Employees			
Nothing	1	1	1
Income Statement Analysis	1	2	0
General Ledger	1	1	2
Copied Checks	0	0	1
Client Prepared Reports	1	1	1
No Support	1	1	2
Days @ Sea Total			
Client Prepared Summary of settlement sheets	1	1	1
Log Books	1	1	1
No Support	1	1	1
Processing Days Total			
Client Prepared Summary of settlement sheets	1	1	1
Log Books	2	2	2
Client Prepared Data Reports	1	2	3
No Support	1	1	1

No Support	2
Fish Taxes	
Income Statement	1
Purchase Recap	1
Tax Return	1
No Support	2
Capitalized expenditures	
Income Statement	1
Fixed Asset Master List	1
General Ledger	1
No Support	2
Repairs and Maintenance	
Income Statement	1
Estimation	1
General Ledger	2
No Support	2
Number of Salaried Employees	
Nothing	1
Estimation	1
Labor Distribution Report	1
No Support	3
Total Pay for Salaried Employees	
Nothing	1
General Ledger	2
Client Prepared Reports	1
No Support	2
Days @ Sea Total	
Client Prepared Summary of settlement sheets	1
Log Book	1
No Support	1
Processing Days Total	
Client Prepared Summary of settlement sheets	1
Client Prepared Data Reports	1
Log Book	1
No Support	2

* By product variables include: Process code, product code, finished pounds, if the product was customed processed, and FOB revenues. The support shown for these variables is consistent across all years and variables, therefore they have been lumped into one category for the purposes of this report.

EXHIBIT 3 - Catcher Vessel

Note: The 2005 data count is in a separate column because there were additional variables audited in 2005 that were not included in the EDR of the previous years. It is also important to note that a vessel may have left a variable blank, or a vessel may have provided more than one type of documentation. This is why there are different documentation counts for each variable type within a given year.

Data Type	1998 Count	2001 Count	2004 Count	2005 Data Type	2005 Count
Days at Sea				Days at Sea	
Client Prepared Summary	3	4	5	Client Prepared Summary	3
Fish Tickets	0	2	3	Estimation	3
Log Book	0	0	2	Crew Settlement Sheets	3
Crew Settlement Sheets	6	6	5	No Support	6
Trip Summary	0	1	1		
Estimation	2	2	3	Days Traveling and Offloading	
Port days analysis	2	2	1	Crew Settlement Sheets	1
No Support	5	3	4		
Crew Earning Shares				Crew Earning Shares	
Client Prepared Crew Shares Sheet	2	1	1	Crew Settlement sheets	12
Crew Settlement sheets	13	18	21	Trip Summary sheet	1
Form 1099	1	1	1	Form 1099	1
No support	2	1	1		
Total Crew Payments				Total Crew Payments	
Client Prepared Hand Written Statement	1	0	0	Crew Settlement Sheets	13
Client Prepared Settlement Sheets	1	1	1	Form 1099	1
Crew Settlement Sheets	13	18	20		
Settlement Report	0	0	1	Total Captain Payments	
Form 1099	1	1	1	Crew Settlement Sheets	12
No support	2	1	1	Form 1099	1
				No Support	1
Total Captain Payments					
Client Prepared Hand Written Statement	1	0	0	IFQ A Transferred: Revenue	
Client Prepared Settlement Sheets	1	1	1	Crew Settlement Sheets	1
Crew Settlement Sheets	13	18	20	Vendor Calculation Spreadsheet	3
Settlement Report	0	0	1	Settlement Sheets	2
Form 1099	1	1	1	Leased Quota Work paper	1
No support	1	1	1		
				IFQ B Transferred: Revenue	
Insurance Premium				Settlement Sheets	1
Financial Statement	7	4	5	Vendor Calculation Spreadsheet	2
Check Register	0	1	1		
General Ledger	4	5	5	IFQ A Transferred: Cost	
Invoices	4	3	3	Crew Settlements	2
Estimation	1	1	2	Client Prepared Worksheet	1
Tax Return	0	1	1	Catcher's Allocation Sheet	1
Internal Cost Detail	1	1	1	Profit and Loss Statement	1
QuickBooks Report	0	0	2	No Support	2
Crew Settlement	0	0	1		
No Support	1	3	2	IFQ B Transferred: Cost	
				Client Prepared Worksheet	1
Insurance Deductible fees				Catcher's Allocation Sheet	1
Income Statement	1	2	1	Profit and Loss Statement	1
Invoices	1	1	0	No support	2
General Ledger	0	2	2		
Expense Fund Deduction Report	1	1	1	Insurance Premium	
Estimation	0	0	1	Financial Statements	1
Email	2	1	2	Check Register	1
No support	2	1	1	General Ledger	4
				Tax Return	1
Bait Cost				Invoices	3
Income Statement/Financial Statements	3	2	2	Estimation	1
Fish Ticket Detail	0	1	0	QuickBooks Report	1
Invoices	5	5	8	No Support	3
General Ledger	8	8	9		
Accounting System Export	0	0	1	Insurance Deductible fees	
Estimations	1	1	2	Income Statement	1
Crew Settlement Sheets	3	5	5	General Ledger	2
Tax Return	1	2	2	Catcher's spreadsheet	1
Trip Summary	0	1	1		
No Support	2	1	1	Bait Cost	
				Income Statement	1
Fuel cost				Invoices	5
Financial Statement/Analysis	1	0	2	Estimations	1
Fish Ticket Detail	0	2	1	Tax Return	1
Invoices	3	6	6	Crew Sheets	2
Estimations	5	5	7	General Ledger	8
General Ledger	7	6	4	Catcher's spreadsheet	1
Accounting System Export	0	0	1		
Settlement Report	0	3	5	Fuel cost	
Tax Return	0	1	0	Income Statement	1
Internal Cost Detail	2	1	1	Trip Summary sheets	1
Trip Summary	0	1	1	Invoices	4
No Support	1	0	2	General Ledger	4
				Estimations	3
Fish Taxes				Tax Return	1
Financial Statement	2	2	3	Internal Cost Detail	2
Settlement Sheets	4	3	4	Vendor Summary	1
Invoices	3	3	6		
Tax Return	1	1	0	Fish Taxes	
General Ledger	6	5	7	Income Statement	2
Fish Tickets	0	3	2	Client Prepared Crab Cost Worksheet	1
Crew Settlement Sheets	4	4	5	Fish Tickets	1
Fish Ticket Inquiry Report	0	0	1	Tax Return	1
Original Tax Tickets	0	1	1	General Ledger	5
Client Prepared Internal Summary	1	0	2	Invoices	3
				Original Tax Tickets	1
				Settlement Sheets	4

No Support	2	1	1
Capitalized expenditures			
Fixed Asset Master list	2	3	2
General Ledger	3	2	4
Client Prepared Worksheet	0	1	1
Tax Return	1	1	1
Estimation	0	0	1
No Support	4	6	3
Repairs and Maintenance			
Financial Statements	4	3	3
Income Statement Analysis	3	3	1
General Ledger	2	7	9
Check Register	0	1	1
Estimation	3	3	5
Invoices	1	1	3
Tax Return	1	2	2
Client Prepared Expense Listing	0	0	1
QuickBooks/System Report	0	0	2
No Support	6	4	2
Days @ Sea Total			
Client Prepared Summary	5	4	5
Port Days Analysis	2	2	3
Un-auditable Data	0	1	1
Estimation	3	2	3
Crew Settlement Sheets	1	3	3
General Ledger	0	0	1
No Support	6	7	7

No Support	1
Capitalized expenditures	
Fixed Asset Master List	1
General Ledger	1
Reconciliation from Check Register	1
Tax Return	1
Estimation	1
Invoices	1
No Support	3
Repairs and Maintenance	
Income Statement	2
Estimation	2
General Ledger	6
Tax Return	1
Invoices	2
QuickBooks Report	1
Check Register	1
Days @ Sea Total	
Client Prepared Summary	4
Crew Settlement Sheets	1
Log Book	1
Estimation	3
No Support	5