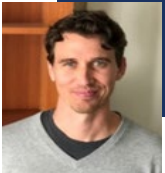


# C5 – CREW DATA COLLECTION INITIAL REVIEW DRAFT

OCTOBER 2024 COUNCIL MEETING

PREPARED AND PRESENTED BY: MICHAEL FEY



# PURPOSE AND NEED STATEMENT

June 2023 Council adopted the following purpose and need

*Currently only two federal fisheries in the North Pacific consistently collect information relative to crew on fishing vessels through a NMFS economic data collection (EDR) program, thus there is not a regular mechanism in place to provide quantitative data in most Council analyses to understand impacts on this important component of fisheries participation. The Council is considering **annual data collection to include crew license data, crew compensation, and number of crew positions** on vessels operating in federal fisheries to support economic and community impact analyses required for FMP and regulatory amendments. Any proposed collection mechanism should provide useable data by fishery while **minimizing reporting burden and costs** to fisheries participants and NMFS.*



# ALTERNATIVES

## **Alternative 1: No Action**

All participants of the North Pacific Fishery other than Amendment 80 Program and Crab Rationalization Program would not submit information on crew participation. The crew members participating in those other sectors would not be known, the communities of those crew members would likewise not be known, and the amount of compensation from those sectors to crew members and the communities that benefit from crew compensation would also not be known.

## **Alternative 2: Implement Annual Crew Data Collection**

Implement an annual data collection to collect crew license data, crew compensation, and number of crew positions on vessels operating in commercial federal fisheries in the North Pacific. Data need to be able to be delineated by fishery and area. Charter halibut vessels and vessels only active in State waters are not included.

- Option 1: Fisheries currently subject to EDR (Economic Data Report) that include crew data (BSAI crab rationalization and BSAI Am 80) will not be subject to a new data collection effort but have their existing EDR forms modified to be consistent with the data points under Alternative 2.



# INTRODUCTION – HISTORY OF DATA COLLECTION CHANGES

Discussion Paper Requested -  
April 2018

*The Council requests that NMFS prepare a discussion paper that describes the Economic Data Report requirements for all programs, explains how the data are used, and provides estimates of the costs of complying with the EDR requirements.*

November 2019 – SSPT received a presentation on the EDR Discussion

Paper, highlighted issues with data coverage and consistency, suggested a day-long workshop and recommended conceptual changes.

April 2019 – EDR Amendments Discussion Paper Reviewed by SSC, AP and Council

Motion to change EDRs with Purpose and Need to **improve the usability, efficiency, and consistency of the data collection programs and to minimize cost to industry and the Federal government**

February 2020 EDR – Initial Review of Economic Data Report regulatory changes by SSC, AP and Council

Added alternative to remove EDR requirements



# INTRODUCTION - HISTORY OF DATA COLLECTION CHANGES

August and November 2020 - EDR Stakeholder Workshops

Question 2 - Are there attributes of your fishery that you would like the Council and analysts to better understand? Participants commented on the importance of crew information

April 2021 – SSPT and EDR Workshops report to SSC, AP and Council

March 2021- SSPT Discussion of EDR Revisions

Included mapping exercise of all EDRs, reviewed national EDR efforts and stakeholder workshop summary  
**\*Recommended comprehensive data collection for all fleets based on Council needs with emphasis on crew** and/or template for rationalized fisheries data collection

February 2022 – Final Action taken on EDR Amendments

Removed GOA Trawl EDR requirement and **\*initiated Data Collection Discussion Paper**



# INTRODUCTION – CURRENT ACTION HISTORY

October 2022 – Universal Data  
Collection Components Paper  
Reviewed by SSC, AP and Council

Highlighted four data components;  
Crew Licenses, Crew Compensation,  
Lease Costs and Fuel/Lube Costs

June 2023 – Crew  
Data Collection Paper  
Review by SSC, Initial  
Review motion by  
Council

February 2023 – Universal Data  
Collection Paper Reviewed by  
Council and AP – Focused on crew  
data collection and ability of NMFS  
to collect leasing data

Motion to have SSC review  
mechanism and value of crew data



# INTRODUCTION – CURRENT ACTION

- Simple data collection – minimize cost and burden
- Data components that benefit the Council process
- Support Community Impact Assessment
  - Three data components identified to be brought forward at this time
    - Crew Licenses – ADFG issued 15,434 licenses in 2023 – unknown federal use
      - Used to identify crew participation by community
    - Crew Positions - 5,670 crew positions on federally active vessels in 2023
      - Not including processing positions
    - Crew Compensation - \$308M 2023 estimate of total crew compensation in the North Pacific for federally managed vessels (based on A80 EDR)
      - Used to identify the fishery revenue that enters communities



# IMPLEMENTATION - RESPONDENTS

- 672 vessels active in EEZ in 2023
  - Excludes charter halibut vessels
    - 1,204 vessels
    - Not required to have crew licenses
  - Excludes 359 vessels operating in state waters only
  - Upper Cook Inlet Salmon became active in 2024 with an estimated 278 vessels participating – not including in 2023
- 59 vessels submit duplicative EDRs that contain crew information – Option I removes them from the new data collection
  - 18 Amendment 80 vessels
  - 41 Crab Rationalization vessels
  - 613 vessels excluding EDR sectors

Fleet	Total Vessels	EEZ Active Vessels	EDR Required	Limited Access Privilege Program
Amendment 80	18	18	Y	Y
AFA Catcher Processor	13	13	N	Y
AFA CV Mothership	11	11	N	Y
AFA CV Shoreside	71	71	N	Y
Non-AFA BSAI Trawl	17	17	N	N
Halibut IFQ	682	381	N	Y
Halibut CDQ	20	14	N	Y
Sablefish IFQ	288	279	N	Y
Freezer Longliner	20	20	N	N
Pot	95	89	N	N
Central Gulf Trawl	44	44	N	N
Central Gulf Rockfish	26	26	N	Y
Western Gulf Trawl	32	31	N	N
Longline CV	30	29	N	N
Jig	100	40	N	N
Crab Rationalization	41	41	Y	Y
Non-Rationalized BSAI Crab	34	34	N	N
Scallop	2	2	N	N
<b>Total</b>	<b>1,031</b>	<b>672</b>	<b>59</b>	<b>904 (592 EEZ)</b>

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive\_FT

\*Vessels and fleets may operate in CDQ and non-CDQ except for the Halibut CDQ fleet





# CREW DATA USES - COMMUNITY IMPACT ASSESSMENTS

- Need: To better understand the communities impacted by changes in North Pacific fisheries
  - Crew connect fishing activity to communities
- Currently Community Impact Assessment for harvesters relies solely on vessel owner's city of residence (non EDR sectors)
  - Vessel Owner Residence has shortcomings
    - Vessel operations may be in a community different from ownership
    - Weak correlation between vessel owner residence and crew residence
- Two tables could be added to Community Impacts Assessments with collection of crew data components
  - Number of crew by community
  - Crew compensation by community



Community	1998-2005 Avg	2006-2010 Avg	2011-2015 Avg	2016	2017	2018	2019	2020	2021	2022	Annual Average 2016-2022 (number)	Annual Average 2016-2022 (percent)	Unique Vessels 2016-2022 (number)
Anchorage/Wasilla	6.9	5.6	7.8	7	6	6	6	5	9	7	6.6	10.00%	11
Homer/Seldovia*	9.1	4.8	6	8	4	4	4	4	4	2	4.3	6.52%	8
Kodiak	33.9	11.6	8.2	8	8	7	7	7	7	4	6.9	10.43%	10
Southeast**	6.1	1.2	0	0	0	0	0	0	0	0	0.0	0.00%	0
Southwest***	8.6	0.6	0	0	0	0	0	0	0	0	0.0	0.00%	0
<b>Alaska</b>	64.6	23.8	22	23	18	17	17	16	20	13	17.7	26.96%	28
<b>Oregon</b>	21.3	10.2	9.8	10	10	9	9	7	7	5	8.1	12.39%	10
Seattle MSA	136.1	46.4	40	42	37	35	36	36	32	27	35.0	53.26%	45
Other WA	18.5	4.6	4.4	5	5	4	3	2	3	3	3.6	5.43%	8
<b>Washington</b>	154.6	51	44.4	47	42	39	39	38	35	30	38.6	58.70%	52
<b>Other States</b>	6.1	1.2	1.2	1	1	1	0	2	2	2	1.3	1.96%	2
<b>Total</b>	246.6	86.2	77.4	81	71	66	65	63	64	50	65.7	100.00%	86

7 communities groups

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive\_FT

\* Homer/Seldovia includes: Anchor Point, Homer, Kenai, Seldovia and Seward

\*\*Southeast includes: Cordova, Ketchikan, Petersburg, Sitka, Yakutat

\*\*\*Southwest includes: Akutan, Unalaska/Dutch Harbor, King Cove, and Sand Point

**EXAMPLE TABLE. VESSELS HARVESTING RATIONALIZED CRAB BY COMMUNITY OF VESSEL HISTORIC OWNERSHIP ADDRESS, 1998-2022 (NUMBER OF VESSELS)**



EXAMPLE TABLE.  
CREW MEMBERS  
HARVESTING  
RATIONALIZED  
CRAB BY  
COMMUNITY OF  
RESIDENCE, 2012-  
2022 (NUMBER OF  
CREW MEMBERS)

Community	2012-2015 Avg	2016	2017	2018	2019	2020	2021	2022	Annual Average 2016-2022 (number)	Annual Average 2016-2022 (percent)
Anchorage MSA	48.8	42	35	37	45	33	43	25	37.1	6.56%
Dutch Harbor/Unalaska	23.8	20	12	18	19	3	14	14	14.3	2.52%
Homer/Seldovia	34.0	27	22	24	26	18	29	12	22.6	3.98%
Kenai/Soldotna/Sterling	7.0	7	6	5	8	10	5	4	6.4	1.13%
King Cove	4.5	9	6	9	6	3	10	3	6.6	1.16%
Kodiak	75.0	60	62	54	50	24	36	23	44.1	7.79%
Sitka	5.3	3	2	1	3	18	1	0	4.0	0.71%
Petersburg	1.0	3	3	4	4	14	2	3	4.7	0.83%
<b>Other AK</b>										
Akutan	1.8	3	0	1	0	0	0	0	0.6	0.10%
Chevak	1.5	1	0	0	1	1	0	0	0.4	0.08%
Cordova	2.5	1	6	5	1	5	3	3	3.4	0.61%
Dillingham	1.5	0	0	0	0	10	0	0	1.4	0.25%
Fairbanks	1.3	1	0	0	0	4	0	1	0.9	0.15%
Haines	0.8	0	1	1	1	3	0	0	0.9	0.15%
Juneau/Douglas/Auke Bay	0.3	0	1	0	0	12	0	0	1.9	0.33%
Ketchikan	1.0	1	2	2	2	5	1	0	1.9	0.33%
Ninilchik	0.5	1	2	1	1	1	1	0	1.0	0.18%
Saint Paul Island	1.3	1	1	2	1	0	1	1	1.2	0.21%
Sand Point	2.3	2	2	2	5	2	3	3	2.7	0.48%
Seward	0.8	2	2	1	3	2	1	1	1.7	0.30%
Toksook Bay	2.8	1	2	0	0	2	0	0	0.7	0.13%
Valdez	1.5	2	1	1	1	2	1	1	1.3	0.23%
Wrangell	0.3	2	2	2	1	6	0	0	1.9	0.33%
Other AK	16.8	10	7	7	4	54	7	4	13.3	2.34%
<b>Other AK Total</b>	<b>37.0</b>	<b>30</b>	<b>31</b>	<b>25</b>	<b>21</b>	<b>110</b>	<b>20</b>	<b>16</b>	<b>36.1</b>	<b>6.38%</b>
<b>Alaska</b>	<b>236</b>	<b>201</b>	<b>179</b>	<b>177</b>	<b>182</b>	<b>233</b>	<b>160</b>	<b>100</b>	<b>176.0</b>	<b>31.06%</b>
Newport	9.8	17	10	8	6	2	9	7	8.4	1.49%
Other WA	58.3	55	43	46	50	19	59	28	42.9	7.56%
<b>Oregon</b>	<b>68.0</b>	<b>72</b>	<b>53</b>	<b>54</b>	<b>56</b>	<b>21</b>	<b>68</b>	<b>35</b>	<b>51.3</b>	<b>9.05%</b>
Seattle MSA	178	172	157	140	129	77	105	70	121.4	21.43%
Other WA	98.3	88	70	70	65	66	42	37	62.6	11.04%
<b>Washington</b>	<b>276.5</b>	<b>260</b>	<b>227</b>	<b>210</b>	<b>194</b>	<b>143</b>	<b>147</b>	<b>107</b>	<b>184.0</b>	<b>32.48%</b>
<b>Other States</b>	<b>153</b>	<b>201</b>	<b>148</b>	<b>141</b>	<b>167</b>	<b>175</b>	<b>141</b>	<b>114</b>	<b>155.3</b>	<b>27.41%</b>
<b>Total</b>	<b>734</b>	<b>734</b>	<b>607</b>	<b>582</b>	<b>599</b>	<b>572</b>	<b>516</b>	<b>356</b>	<b>566.6</b>	<b>100.00%</b>

Other AK

30  
communities  
groups



EXAMPLE TABLE.  
CREW MEMBERS  
COMPENSATION  
FOR RATIONALIZED  
CRAB BY  
COMMUNITY OF  
RESIDENCE, 2012-  
2022 (MILLIONS OF  
2022 DOLLARS)

Community	2012- 2015 Avg	2016	2017	2018	2019	2020	2021	2022	Annual Average 2016-2022 (millions)	Annual Average 2016-2022 (percent)
Anchorage Msa	3.97	3.36	2.13	2.15	3.91	3.03	5.06	1.74	3.05	6.59%
Dutch Harbor/Unalaska	1.96	1.35	1.34	1.26	1.65	0.30	2.52	0.98	1.34	2.90%
Homer/Seldovia	2.41	2.50	1.91	1.58	2.19	2.01	2.73	0.83	1.96	4.24%
Kenai/Soldotna/Sterling	0.49	0.65	0.28	0.30	0.49	0.85	0.86	0.71	0.59	1.28%
King Cove	0.31	0.56	0.24	0.54	0.41	0.21	0.90	0.10	0.42	0.91%
Kodiak	5.33	3.75	3.19	2.42	2.72	1.42	2.42	0.85	2.39	5.17%
Petersburg	*	0.32	*	*	0.32	1.53	*	0.22	0.43	0.94%
Sitka	*	0.21	*	*	0.10	1.44	*	0.00	0.28	0.60%
Other Ak	3.02	2.79	2.28	1.49	1.43	8.51	2.28	0.75	2.79	6.03%
<b>Alaska</b>	17.99	13.61	10.62	7.95	10.88	15.95	15.62	5.00	11.38	24.58%
Newport	1.11	2.11	1.60	1.09	1.12	*	2.14	0.90	1.31	2.82%
Other OR	5.16	4.92	3.70	3.67	5.60	*	7.20	1.96	4.02	8.67%
<b>Oregon</b>	6.27	7.03	5.29	4.75	6.72	1.25	9.34	2.87	5.32	11.49%
Seattle MSA	15.95	15.07	11.12	9.71	10.17	6.78	13.56	3.33	9.96	21.52%
Other WA	9.66	8.68	6.11	6.38	5.95	5.75	6.63	2.35	5.98	12.91%
<b>Washington</b>	25.61	23.75	17.23	16.09	16.12	12.53	20.19	5.67	15.94	34.43%
<b>Other States</b>	12.59	17.85	11.40	10.44	13.01	19.67	17.07	6.15	13.66	29.50%
<b>Total</b>	62.45	62.24	44.54	39.24	46.74	49.39	62.21	19.70	46.29	100.00%

Source: Economic Data Reports, data compiled by  
AKFIN



# CREW DATA USES - OTHER USES - IDENTIFY CREW

- Disaster Relief Fund Distribution
  - Crew license information could be used to support allocation of disaster relief funds
    - Notify crew members
  - Currently disaster relief relies on vessel owners or word of mouth to notify crew members
    - Disaster relief has a time lag of 4-5 years
- Improve other analytical tools
  - ACEPO
  - Economic SAFEs
- Research
  - Labor market dynamics
  - Industry stability
- Initiatives
  - Community support programs
    - Housing, education, healthcare
  - Crew quota programs



# IMPLEMENTATION - AGENCY COSTS

- NMFS can administer the data collection internally, use a third-party, use contractors or use a combination of efforts
- PSMFC acts as the independent third-party data collection agent (DCA) for current EDR
  - PSMFC estimates initial cost at \$133,000
  - Estimates based on leveraging EDR efforts
  - Re-occurring cost of \$110,000 for PSMFC staff, mailings and data maintenance
  - One time cost of \$23,000 to build forms and database
  - \$197 cost per form
- Potential funding through NMFS Data Collection Grant
  - Not eligible for cost recovery
  - Competitive annual allocation of funds



# HISTORIC EDR COSTS

Year	Crab <sup>1</sup>	A80	AFA <sup>2</sup>	GOA Trawl	Total EDR cost	EDR cost in 2023 dollars
2005	\$150,000				\$150,000	\$224,958
2006	\$150,000				\$150,000	\$218,169
2007	\$259,938				\$259,938	\$368,101
2008	\$338,276				\$338,276	\$470,184
2009	\$314,303				\$314,303	\$434,005
2010	\$352,508				\$352,508	\$480,992
2011	\$323,588				\$323,588	\$432,613
2012	\$373,316				\$373,316	\$489,936
2013	\$318,278				\$318,278	\$410,610
2014	\$342,703				\$342,703	\$434,555
2015	\$269,583			\$53,771	\$323,354	\$406,477
2016	\$345,509	\$88,254	\$62,114	\$73,221	\$569,098	\$708,610
2017	\$180,168	\$91,482	\$66,929	\$91,879	\$430,458	\$526,379
2018	\$202,012	\$92,462	\$40,631	\$61,765	\$396,870	\$474,442
2019	\$180,224	\$87,644	\$56,989	\$57,486	\$382,343	\$449,525
2020	\$91,620	\$72,976	\$48,194	\$107,459	\$320,250	\$371,526
2021	\$72,927	\$85,123	\$52,735	\$73,240	\$284,026	\$315,113
2022	\$97,913	\$80,256	\$64,205	\$78,651	\$321,025	\$332,691
2023	\$145,209	\$130,943	\$63,378	\$0	\$339,530	\$339,530

Source: Pacific States Marine Fisheries Commission (2024)

1 Reflects the first year of the crab fishing season.

2 Only includes costs associated with the inshore sector



# IMPLEMENTATION – RESPONDENT COST

- Cost to vessel owners estimated at \$145,500
  - \$75 per hour to complete form
    - 6 hours per catcher processor
    - 3 hours per catcher vessel
  - \$237 average respondent cost per form
- Difficult to estimate due to nature of the form
  - Small vessels may have very limited burden with few crew while catcher processors may have multiple licenses with processing workers carrying crew licenses
- EDR cost to respondents estimated at \$425,317 in 2022
  - Total cost \$570,817





# IMPLEMENTATION – ENFORCEMENT

- For the current EDR programs, enforcement is tied to the issuance of quota share
  - Would not change if Option I was selected
- Quota share issuance could not be leveraged for all sectors
  - AFA, RP and PCTC could potentially leverage quota share issuance
    - 157 vessels
- Federal Fisheries Permit could be leveraged for all vessels
  - Issued every three years
  - Preferred method



# IMPLEMENTATION – DATA COLLECTION FORM

- Tying crew participation to fishery can be done multiple ways
  - Relying on vessel activity – Only including crew licenses
  - Using fishery check box method
  - Using begin dates and end dates for employment





# QUESTIONS?

## CONTRIBUTORS AND PERSONS CONSULTED:

SARAH MARRINAN, NPFMC

STEPHANIE WARPINSKI, NMFS AKRO

JENNIFER MONDRAGON, NMFS AKRO

BRIAN GARBER-YONTS, NMFS AFSC

CAREN BRABY, PSMFC

BRIAN BISSEL, PSMFC

BRIAN BROWN, NMFS AKRO

JEAN LEE, PSMFC/AKFIN