Public comment and Council direction

Give input on scope and content of planned review.

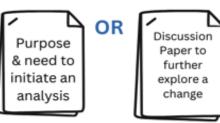
Public comment and Council direction on the review (not the program)

The review should adequately assess impacts of the program.

The review should also evaluate if the program is meeting its goals and objectives.



If the Council decides to make changes to the program:





D2 Crab Rationalization Program 17-Year Review



June 2024

This study is intended to meet the requirements of the Crab Rationalization (CR) Program Review and the Allocation Review.



Program Objectives:

- (I) [Promote] resource conservation, utilization, and [address] management problems;
- (2) [Reduce] bycatch and its' associated mortalities, and potential landing deadloss;
- (3) [Reduce] excess harvesting and processing capacity, as well as [discouraging a system that promotes] low economic returns;
- (4) [Promote] economic stability for harvesters, processors and coastal communities;
- (5) [Eradicate] the high levels of occupational loss of life and injury;
- (6) Address the social and economic concerns of communities;
- (7) Promote efficiency in the harvesting sector;
- (8) [Promote] equity between the harvesting and processing sectors, including healthy, stable, and competitive markets.

Program Elements

- I. Total allowable catch
- 2. Harvesting shares
- 3. Processing shares
- 4. Regional landing designations
- 5. Right of first refusal (ROFR)
- 6. C share allocation to protect captain and crew interests
- 7. Catcher processor shares
- 8. Binding arbitration system
- 9. Cooperatives
- 10. Community Development Quota (CDQ) and Adak community allocations
- II.Low interest loan program
- 12. Annual economic data collection (Crab EDRs)





Presentation Overview:

- Dashboards are presented in the Executive Summary and Section 5 to provide a high level overview of the BBR, BSS, AIG, and all CR Program fisheries combined to show how catch, participation, value, diversification, vessel owner communities, and catcher vessel and catcher processor shareholder communities have changed under the CR Program.
- Crab fishing years cover two calendar years and some catch data and EDR data in this report are annual data. Caution should be used when comparing data that reports annual information against fishery year data (e.g., catch vs. TAC data in the dashboards).



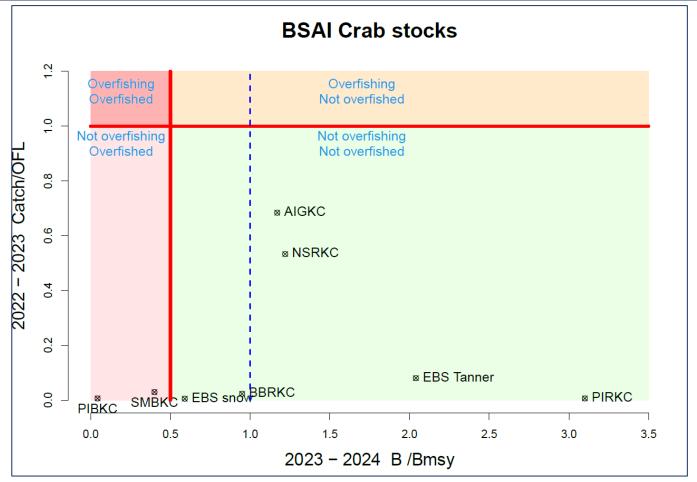
Program Objective: Promote resource conservation, utilization, and [address] management problems.

- The next several slides address resource conservation and utilization and were prepared by ADF&G staff.
- Management issues discussion is provided by NOAA
 Fisheries staff and will be presented later in this report.





Section 4 Stock Status and Biological Indicators





4.2 Harvest Above the Catch Limits and TAC Utilization

- Harvest has remained at or below catch limits in all CR Program fisheries since implementation.
- Under utilization, or harvest below the catch limit, has occurred in the Tanner crab, Aleutian Islands golden king crab, and St. Matthew Island blue king crab fisheries.
- The management structure of the CR Program has allowed fisheries to open with smaller TACs than could be effectively managed under a race for fish.





4.3 Improvements in Data Quality

- New recordkeeping and reporting regulations implemented with the CR Program have improved in-season fishery data collection.
- The slower fishery pace has contributed to efficiencies in observer data collection and freed up capacity for observers to participate in additional data collections.
- The structure of the CR Program helped facilitate the formation of industry-funded research foundations including the Bering Sea Fisheries Research Foundation (BSFRF) and the Aleutian King Crab Research Foundation (AKCRF).





Program Objective: Data collection (Section 4.3.2)

- Collaborative research programs by crab industry and management agencies was rare before the CR Program. Agencies and industry foundations have worked on several projects. For example:
 - Crab surveys, crab movement, bycatch, habitat, recruitment limitation, and predation.
 - Growth rates of Tanner and snow crab
 - Transcribing logbook data from 2005 through 2016 for analysis and mapping purposes.
- Industry contributions to these collaborative programs have been severely impacted by the recent collapse of the snow crab fishery and closure of the Bristol Bay red king crab fishery.

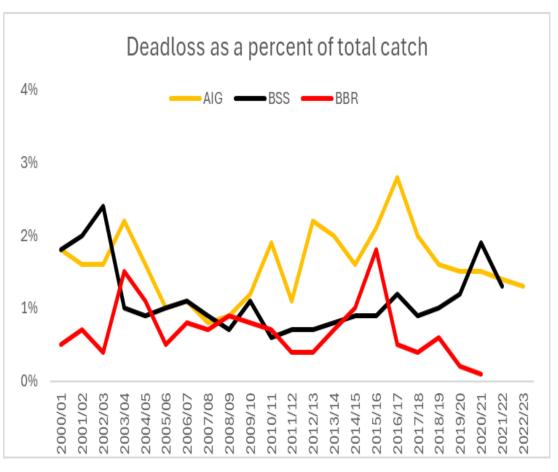
4.8 Handling mortality



- Under the CR Program, the season length has extended, thereby slowing the pace of fishing and allowing fishermen to improve handling mortality on deck.
- Many vessels have conveyors and chutes that discard bycatch without the need for additional handling.



4.4 Deadloss



- Deadloss is the amount of dead crab landed at the dock and tends to increase the longer crab are held prior to offload.
- The amount of annual deadloss is variable but tends to be less than 2% of the harvest of Aleutian Islands golden king crab and less than 1% in the BBR and BSS fisheries.
- Percent of deadloss in the BSS crab fishery is slightly lower post rationalization.

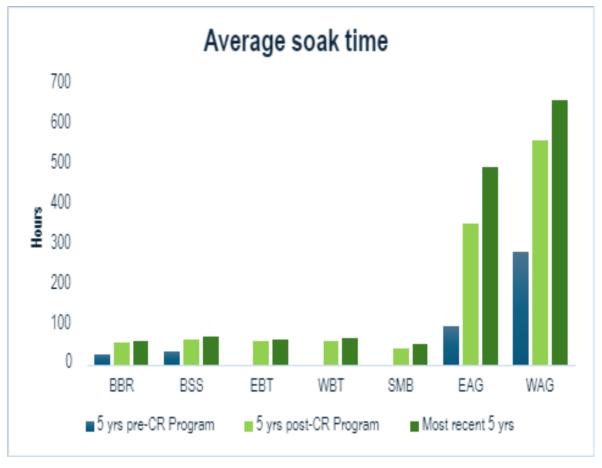


4.6 & 4.7 High-grading, Discards, and Rail Dumping

- High-grading is the sorting of legal-size male crab to retain only the most valuable, typically the largest and/or cleanest crab.
 Data on the size of male crab that are discarded are limited.
- Discard rates have decreased in the Aleutian Islands golden king crab fishery, remained similar pre- and post-CR Program in the Bristol Bay red king crab fishery, and increased slightly in the snow crab fishery.
- Rail dumping is the practice of emptying pots at the rail before they are brought on deck. Information on the number of raildumped pots was not collected prior to the CR Program, but we assume it has decreased as the CR Program allows for gear sharing among vessels in the same cooperative.



4.9 Soak Times, CPUE, and Gear Selectivity

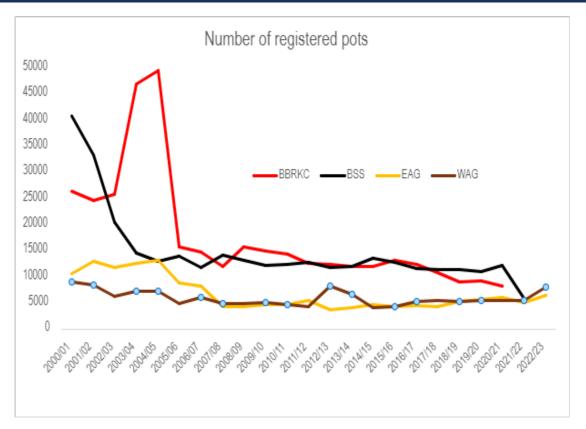


- Average soak times have increased for all CR Program fisheries since implementation of the program.
- Catch Per Unit Effort (CPUE or catch per pot) has increased under the CR
 Program in the BBR, BSS, and Aleutian Islands golden king crab fisheries.



4.10 Lost pots and ghost fishing

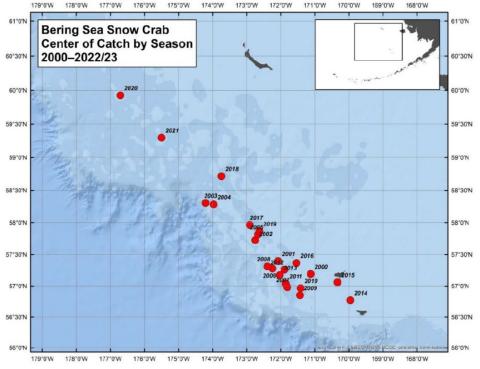
- All crab pots are required to have biodegradable escape mechanisms that allow a section of the webbing to open after an extended period in the water to help reduce ghost fishing.
- Pre-CR Program, it was estimated that 10% to 20% of crab pots were lost each year.
 Post-CR Program, 1% to 6% of crab pots are lost each year.





4.11 Season Length, Temporal and Spatial Dispersion

- Season lengths increased under the CR Program.
 However, most harvests occur during traditional time periods.
- Spatial distribution of the fisheries have remained relatively similar except for a slight expansion in the BBR fishery and large expansion in the BSS fishery.
- Beginning in 2017, the center of catch for BSS moved north and west along the shelf edge due to lower CPUEs in historical fishing areas. This was likely due to abnormally warm temperatures in the Bering Sea.





Program Objective: Reduce excess harvesting and processing capacity, as well as discouraging low economic returns.

- The allocation of QS to harvesters and the use of cooperatives has allowed the harvesting sector to better match harvesting capacity with the TAC available
- Table 6-9 shows a 80% decrease in active vessels from the year before the program was implemented (2004) to the most current year of data (2022)
- It also shows a 38% decrease in active vessels since the last review in 2016 to 2022
 - The recent declines occurred primarily in the BBR, BSS, and WBT fisheries, that experienced substantial TAC declines after 2015

Program Objective: Reduce excess harvesting and processing capacity, as well as discouraging low economic returns.

- The allocation of crew shares (C shares) was intended to provide crew with additional market power and aid their transition to vessel ownership.
- The ROFO program was industry organized to give crew the opportunity to purchase up to 10% of QS transferred.
- Overall, the market for C shares has been weak in recent years as demand is very low, due to the cost of entry, limited pool of buyers, and the uncertainty in the fisheries.
 - The Council has been addressing the active participation requirement challenges as the number of active vessels has declined.

Program Objective: Reduce excess harvesting and processing capacity, as well as discouraging low economic returns.

- Processors have also been able to better match capacity to the TAC because of the allocation of PQS.
- Table 8-15 shows the distribution of processors by community.
- It a decrease in active shorebased processors from 18 to 6 from 2004 through to 2022.
- Harvesters have expressed concern over the lack of markets in some areas and the overall reduction in processors.
- World markets and other factors, primarily outside the control of the CR Program, have created challenging economic conditions for both harvesters and processors.



Program Objective: Promote healthy, efficient, and equitable harvesting and processing sectors.

- Participation in cooperatives has increased since implementation and are utilized to facilitate transfer of IFQ during the fishing year.
- Allows harvesters to utilize efficient vessels without being subject to use caps.
- Foster cooperation within the fleet
 - Address concerns about division of program benefits (e.g., limiting BBR and BSS lease rates to protect crew shares).
 - ROFO to crew for QS transfers





Program Objective: Promote healthy, efficient, and equitable harvesting and processing sectors.

- Share matching and binding arbitration system provides a structure to increase communication between harvesters and processors.
- Harvesters generally support the provisions but have concerns regarding the possibility of share matching with a processor that may be unable to pay for deliveries.
- Processors are less supportive of the system and expressed concerns over the general structure of the share matching/ "baseball" style arbitration system and the division of revenue formula that has been utilized.
- Concern was also expressed over the cost (averaged about \$110k over the past 7 years) of submitting the annual information (divided equally between harvesters and processors), even when fisheries are not open.

Program Objective: Promote healthy, efficient, and equitable harvesting and processing sectors.

- Low interest loan program (Section 6.9.4)
 - May be used for the purchase of harvest quota. FFP loans may also be used for refurbishing, modernization or purchasing existing fishing vessels, but may not be used for the purpose of substantially increasing the harvesting capacity of vessels.
 - During the fiscal years 2011 through 2023 the FFP program approved 18 loans for a total of \$5.7 million for an average of about \$317k per approved loan application.



Program Objective: Data collection

- Annual economic data collection (Crab EDRs). The EDR program is a mandatory census of detailed cost, revenue, ownership, and employment data collected from owners and leaseholders of vessels and processing plants, and Registered Crab Receivers, participating in CR Program fisheries.
- EDR data are used extensively in the annual Crab Economic SAFE, program reviews, and analytical documents for BSAI King and Tanner Crab FMP amendments. The EDR program is a primary reason that the need for extensive additional data collections have not been recommended as part of this or past CR Program reviews.



Program Objective: Eradicate the high levels of occupational loss of life and injury. (This section will be updated in the document)

- During the 1990's, the BSAI crab fleet was identified as the most hazardous commercial fishery in the United States. During that decade, 73 BSAI crab fishery crewmembers died because of vessel disasters, falls overboard, or onboard injuries (Lincoln et al., 2013).
- NIOSH reported six fatalities on the F/V Destination sinking during February 2017
- The 5 crew members that were lost due to the Scandies Rose sinking December 31, 2019 were attributed to the pot cod fishery, but that vessel also participated in the BSAI crab fishery.
- NIOSH has not updated the nonfatal injuries report generated as part of the 10-year CR Program review. Those data are not routinely collected. The 10year review found safety had improved.

- Regional landing designations
- Right of first refusal (ROFR)
- Community Development Quota (CDQ) and Adak community allocations





- Section 8 Social and Community (pg 142)
 - Incorporates key elements of a Social Impact Assessment (SIA)
 - Focus on what has changed since the 10-year program review
 - Focus on outcomes relative to CR Program elements designed as or have functioned as community protection measures



- Section 8.1 Regulatory Context (pg 142)
 - MSA National Standards
 - Environmental Justice
 - Tribal Consultation and Collaboration
 - Recent Executive Orders
 - NOAA Fisheries Equity and EJ Strategy



- Section 8.2 Fishery Community Engagement and Dependency (pg 148)
 - Distribution of Catcher Vessels within Alaska
 - Fewer CVs over time, with consolidation into:
 - Fewer communities
 - Larger communities
 - A relatively narrow geography
 - Southcentral region and Kodiak only by 10-year Review
 - Anchorage/Wasilla (Anchorage MSA), Homer/Seldovia (KPB), Kodiak (KIB)
 - No community where all CVs have left has regained CVs
 - Distribution of CVs across all Geographies (2016-2022 averages)
 - AK 27%, WA 59%, OR 12%, Other 2%



- Distribution of CVO, CVC, CPO, and CPC Quota Shares
 - Notable shifts since initial allocations (Table 8-14)
 - Away from WA and toward AK in all categories
 - Within AK, by 2022 CDQ and Tribal ownership accounted for more than half of AK held CVO QS (57%) and CPO QS (62%)
 - Among other AK communities:
 - Kodiak and Anchorage gained in all QS holdings categories
 - Homer gained in CVC and CPC QS holdings
 - Wasilla, Kenai, and Unalaska gained in CVO QS holdings
 - Sand Point CVO QS holdings were unchanged
 - All other AK communities w/initial allocation lost some or all QS holdings





- Distribution of Processors (Table 8-16)
 - Trend of decline in number of processors over time
 - Number of engaged shore-based processors stable 2016-2022 in Unalaska/Dutch Harbor, Akutan, King Cove, and St. Paul except for one fewer processor in Unalaska/DH in 2022.
 - Number of shore-based processors engaged in CR Program fisheries varied from zero to two in Kodiak and Adak 2016-2022.
 - Inshore Stationary Floating Processors all but disappeared from the relevant fisheries 2016-2022 except for one operating off St. Paul in 2020 (during Covid) and in 2022.



- ROFR and Movement of PQS Between Communities
 - 9 Eligible Crab Communities (ECCs)
 - 5 ECC Entities
 - 2 CDQ groups
 - 3 other non-profits

Elligible Crab Community	CR Program ROFR Governing Body	CR ROFR Eligible Crab Community Entity*
Adak	None**	None**
Akutan	APICDA	APICDA
False Pass	APICDA	APICDA
King Cove	City of King Cove and Aleutians East Borough	Aleutia, Inc.
Kodiak	City of Kodiak and Kodiak Island Borough	Kodiak Fishery Development Association
Port Moller	Aleutians East Borough	Aleutia, Inc.
Saint George	APICDA	APICDA
Saint Paul	CBSFA	CBSFA
Unalalaska/Dutch Harbor	City of Unalaska	Unalaska Crab, Inc.





- ROFR and Movement of PQS Between Communities (cont.)
 - PQS has moved between communities through intra-company transfers
 - Some ECCEs have acquired ownership or control over PQS due to:
 - Some processors hitting ownership or use caps due to changes in corporate structures, which has forced divestitures of PQS
 - Some processors making business decisions to sell PQS



- ROFR and Movement of PQS Between Communities (cont.)
 - The formal ROFR process has never been triggered
 - The existence of the ROFR process has facilitated ECCEs reaching PQS acquisition agreements
 - Both ECCEs that are CDQ groups have acquired and still retain all PQS they have acquired
 - Of the ECCEs that are not CDQ groups:
 - One has acquired PQS and subsequently sold all PQS acquired
 - One has acquired PQS and has retained it
 - One has waived a ROFR opportunity and has never acquired PQS



- ROFR and Movement of PQS Between Communities (cont.)
 - All PQS has left all EECs where qualifying processing history was earned exclusively through Inshore Stationary Floating Processor operations:
 - Saint George
 - False Pass
 - Port Moller
 - Some PQS has left Unalaska/Dutch Harbor through required divestitures, a waiver of ROFR rights, and sale of PQS based on business decision-making.

- ROFR and Movement of PQS Between Communities (cont.)
 - No PQS to date has left the following ECCs due to either no change in PQS ownership or acquisition by ECCEs that have retained PQS in the community:
 - St. Paul
 - Akutan
 - King Cove
 - Kodiak
 - Adak is the only ECC that was not provided ROFR but it has benefitted from other community and regional protection measures
 - A direct WAG allocation
 - A West regional designation for WAG landings/processing

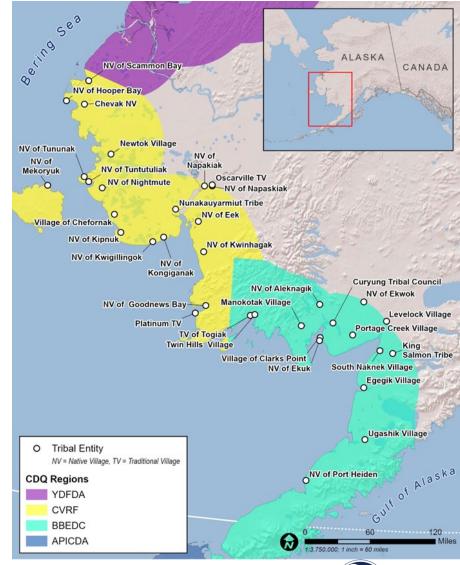


CDQ and Adak Allocations

- CDQ allocations increased from 7.5% to 10% in all CR Program fisheries except WAG (which does not have a CDQ allocation)
- Adak received a 10% allocation in the WAG fishery.
 - The Adak allocation alone and in combination with other West regionspecific community protection measures has not reached its full potential
 to help foster sustained participation of Adak in the CR Program
 fisheries due to multiple factors, including intermittent operations of the
 local shore-based processor and multiple processing operations
 ownership changes.



- Tribal Participation in the CR Program Fisheries
 - In 2021, 35 western Alaska Tribal entities gained ownership interest in multiple LLCs that, in turn, own CR Program CVO QS.
 - This marks the first entry of Tribal entity ownership interest in the CR Program fisheries.

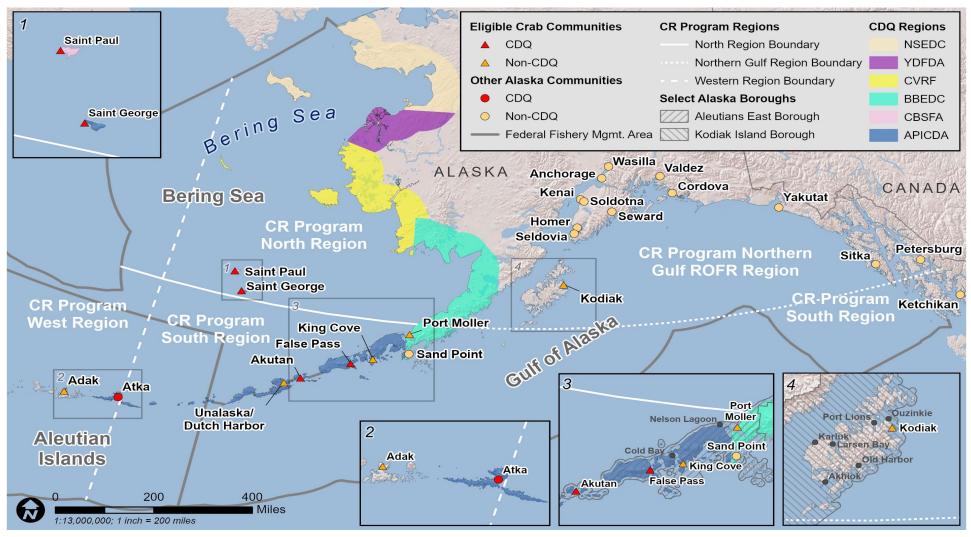




Regionalization

- The creation of a North landings/processing region has helped to provide for the sustained participation of St. Paul in the CR Program fishery. (Errata: emergency exemption never invoked)
 - It has also indirectly helped to foster the sustained participation of the St. Paul (and St. George) small boat fleet in the halibut fishery.
- The creation of a West landings/processing region has helped Adak work toward the sustained participation of the community in the WAG fishery, especially in combination with the Adak Allocation, but its efficacy has been limited to date.









- BSAI Crab Fishing Communities Context
 - Incorporation by reference of extensive community characterizations that have been informed by ethnographic fieldwork.
 - Incorporation of community attribute characterizations that have been featured in recent Council SIAs
 - Community institutional summaries
 - Community demographic summaries



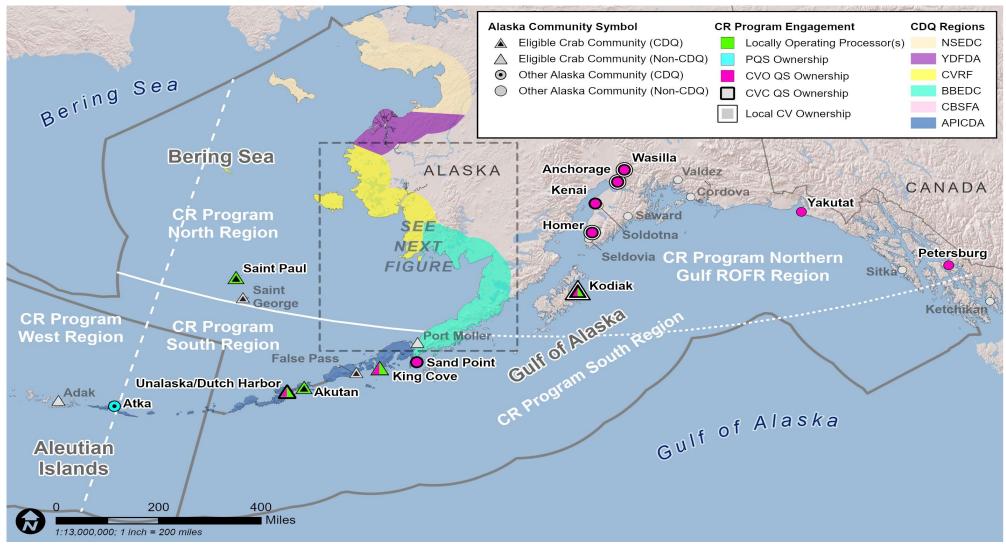
Program Objective: Address the social and economic concerns of

communities (continued)

- 2022 engagement snapshot
 - ECC/Other Communities
 - Tabular information
 - Mapping incl, Regionalization
- Highlight Changes from:
 - CR Program Implementation
 - CR Program Initial Allocations
- For:
 - Local CVs
 - Local Processing
 - QS Holdings
 - CVO and CVC
 - CPO and CPC











- Other social and community considerations
 - Employment, income, and resource fluctuations
 - Employment pluralism strategies
 - Income pluralism strategies
 - Diversification strategies
 - Profound levels of uncertainty not experienced in the CR Program era





CR Program Review: Management, Monitoring and Enforcement

Caleb Taylor June 9, 2024



Summary points:

- Monitoring tools and enforcement topics are largely similar to those discussed in the previous review and are not discussed in detail during this presentation.
- Management challenges were identified related to legacy computer infrastructure, conflicting state and federal regulations and federal regulatory ambiguities that could be addressed for more efficient CR program administration.
- If current conditions continue, there may be budgetary trade offs for the Agency and management partners.



What is NOAA's role in CR Program management?

NOAA is the primary administrator for the CR Program.

- issuance of initial QS and PQS
- processes annual IFQ, IPQ applications and QS and PQS transfers
- assesses C share active participation requirements
- facilitates share matching
- identifies QS use and vessel use caps
- processes applications for hired master permits, registered crab receiver permits, federal crab vessel permits
- processes annual crab cooperative applications
- issues evidentiary notices, initial administrative decisions and rights to appeal notices
- produces fisheries reports and program overviews









Management Challenges



- Legacy computer infrastructure
 - inability for online tracking of C share participation requirements and IFQ application status
 - Potential for stranded quota
 - must manually track participation requirements, beneficiary provisions, quota use
- Season timing, reporting due dates, and timely IFQ issuance
- Federal and State regulatory conflicts
- Difficulty in correcting IFQ landing reports can create reporting inaccuracies
- Direct marketing barrier and reporting: RCR volume and value reporting
- Beneficiary issues





Management Challenges: Legacy Computer Infrastructure

- ALDERS (the Alaska Data Entry and Retrieval System) has been in use since program implementation in 2005
- The legacy computer infrastructure has technical limitations
- IFA (Integrated Fisheries Application) is under development to resolve this issue

Downstream impacts:

- inability to carry out certain tasks (online tracking)
- manually tracking many processes including individual C share participation requirements and beneficiary provisions until automated process can be developed







Management Challenges: Federal and State administrative discrepancies

Fishing season timing and Federal administrative due dates

- Registered Crab Receivers (RCR)
 Volume and Value reports are due May 31 (50 CFR 680.5(m)(3))
- May 31 (50 CFR 680.5(m)(3))

 BSS season can end on May 31, but deliveries are allowed by state regulation to occur 24 to 72 hours afterwards, giving less time to resolve any disputes that arise
- Cost recovery payment is due by July 31 (50 CFR 680.5(g)(2)
- Delayed federal reporting impacts administrative processes and ultimately IFQ issuance

Mixed landing reporting

State regulation allows a small percentage of non target CR species (*C. opilio* or *C. bairdi*) to be retained as incidental catch, even without IFQ for that species

- Vessels are required to report retained incidental catch on ADF&G Fish tickets
- If that vessel does not own associated IFQ or participate in a CDQ for the retained incidental catch, there is no IFQ permit for that species to be debited on
- This creates ambiguity for CR Program enforcement and underassessment of cost recovery fees.





Management Challenges: eLandings

Correcting IFQ and landing reports

- Processors submit both landing reports and IFQ reports simultaneously through eLandings electronic reporting system
- Occasionally, errors can occur (typos)
- Landing reports can be fixed via the individual logging back into eLandings
- Erroneous IFQ reports require more effort to resolve; the individual must contact OLE for approval to make the correction
- This small discrepancy can cause submitters to only fix one report, causing a mismatch between both reports' data
- This could then lead to incorrect cost recovery fees





Management Challenges: Direct marketing

(RCR) Registered Crab Receiver

- Several requirements for RCR permit holders, including submission of a crab monitoring plan (CMP) for each location or processing vessel
- CMP requirements may be onerous for catcher vessels to direct market crab (specifically, a NMFS approved and inspected scale)
- RCR ex-vessel volume and value report regulations do not specify reporting requirements for RCRs that are also CVs (50 CFR 680.5(m))
- No reporting issues to date, but could be an issue in the future







Management Challenges: IFQ Beneficiaries

IFQ Beneficiary provision

- (50 CFR 680.41(g)(3)): "The Regional Administrator will approve, for 3 calendar years following the date of the death of an individual, an Application for transfer of crab QS/IFQ or PQS/IPQ from the surviving spouse or, in the absence of a surviving spouse, a beneficiary..."
- This provision is silent regarding C shares and participation requirements.
- There is currently no incentive or enforcement mechanism for beneficiaries to relinquish or divest shares after 3 calendar years.





Overview of Cost Recovery:

Cost recovery is authorized and required for LAPPs by section 304(d) of the MSA

- CR Program cost recovery authorizes the collection of actual management and enforcement costs for up to 3% of ex-vessel gross revenues
- paid by both the harvesting and processing sectors
- registered crab receivers (RCRs) are responsible for collecting the fee from the harvesters and submitting this and their own self-collected fee amount to NMFS
- funds are made available to the BSAI Crab Quota Share Loan Program and to Agencies to cover CR Program management and enforcement costs (NMFS, ADF&G, PSMFC)

NOAA Fisheries computes fees based on the total value of crab landings

The ex-vessel value of the CR Program fisheries is calculated based on information from RCR Ex-vessel volume and value reports





Cost Recovery:

 If conditions continue as they have over the last two years there could be budgetary tradeoffs for management and enforcement agencies in future years

 More information on cost recovery can be found in the annual <u>CR Program Cost</u> <u>Recovery Reports</u>

Fiscal Year	Total Program Costs	Amount Collected from Fishery	Difference
2022	\$2,594,226	\$1,542,996	-\$1,051,230
2023	\$2,888,997	\$1,099,994	-\$1,789,003
TOTALS (since 2006)	\$55,810,872	\$55,121,017	-\$689,855



Potential Future Actions

Volume and Value Reporting:

(50 CFR 680.5(m)(l)): "An RCR that also operates as a shoreside processor or stationary floating crab processor and receives and purchases landings of CR crab must submit annually to NMFS a complete CR RCR Ex-vessel Volume and Value Report..."

 Clarification for where RCRs that operate as a CV fits in may resolve any ambiguity for fishermen direct marketing CR crab

AIG Season:

 This potential future Council action could have substantive implications for NMFS's administrative responsibilities to administer cost recovery and issue annual CR Program permits that will need to be analyzed before the Council takes action.

IFQ Holder Beneficiary and Estate Provisions:

(50 CFR 680.41(g)(3)): "The Regional Administrator will approve, for 3 calendar years following the date of the death of an individual, an Application for transfer of crab QS/IFQ or PQS/IPQ from the surviving spouse or, in the absence of a surviving spouse, a beneficiary..."

 Clarification regarding C shares and/or specifying what happens to QS when the three year window has lapsed could improve administration of this provision.





Take aways:

- The legacy computer infrastructure used to administer CR Program QS has technical limitations. A new program is under development (the Integrated Fisheries Application (IFA)) but will take considerable time and effort to bring online
- Each of these noted issues can add time and or backlog to issuing IFQ and IPQ and general administration of the CR program
- Several regulatory clarifications were identified that could be helpful
- If current fishing conditions continue there could be budgetary trade offs for management and enforcement





Acknowledgements

Thank you to the authors that drafted sections for this review.

- Karla Bush
- Mike Downs
- Kendall Henry
- Caleb Taylor

Also thanks to the contributors that reviewed and provided information for this report.



 NS 1 Optimum Yield: TACs have been fully harvested in most fisheries and years. Allocations to individuals/cooperatives and the associated accountability have allowed fisheries with low TACs to open to directed fishing when they would have remained closed under the pre–CR Program management structure.



NS 2 Scientific Information: Sections 4 and 9 describe the management of the program and how the best scientific information is collected and used to manage the CR Program fisheries. Scientific information is collected through EDRs, fishtickets, logbooks, the observer program, and collaborative efforts with industry. Some of the collaborative programs were funded by industry and would likely not have been undertaken if not for the CR Program. Current economic conditions in the fishery are limiting some of these industry funded studies.



NS 3 Management Units: Individual stocks of fish are managed as a unit throughout its range, and interrelated stocks are managed as a unit or in close coordination as described in Section 4 and through the allocation of QS based on TACs established for each fishery.



NS 4 Allocations: QS were allocated for nine fisheries based on historic participation of harvesters, processors, and crew without discriminating between residents of different states. As described in previous CR Program reviews, allocations were fair and equitable, reasonably calculated to promote conservation, and included ownership and use caps to ensure that no individual, corporation, or other entity acquires an excessive share. Use caps have been modified to account for changing fishery conditions. For example, vessel use caps in cooperatives and custom processing crab have been liberalized.



NS 5 Efficiency: While efficiency was not the sole purpose of the program, it has allowed harvesters and processors to scale annual production capacity to better align with the available TAC. That ability has been important in recent years when low TACs (and closed fisheries) have reduced the amount of harvesting and processing capacity needed to efficiently utilize the resource.





NS 6 Variations and Contingencies: This NS addresses changes and how they are addressed based on conditions that arise from biological, social, and economic occurrences, as well as from fishing practices. Section 2.3.14 describes all the amendments that have been made and many that have been considered by Federal and State of Alaska management agencies. That section highlights changes that have been made when circumstances in the fishery change substantially, or when a different management philosophy and objectives are defined.



NS 7 Costs and Benefits: Current fishery and market conditions have resulted in difficult economic times for harvesters, processors, crew, and communities that rely on the CR Program crab fisheries. While a formal cost benefit analysis was not undertaken, the CR Program provided benefits to harvesters and processors by allowing fisheries to be opened under small TACs, providing stakeholders the ability to better scale production inputs to current conditions. However, many of the current economic conditions are impacted more by factors outside the control of the program than by elements of the CR Program itself (see Section 3).



NS 8 Communities: Requires that management measures provide for the sustained participation of fishing communities and to the extent practicable minimize adverse economic impacts to such communities. Initial QS allocations were based on qualifying history of substantial engagement in or dependence on the CR Program fisheries and multiple CR Program features were designed as, or have served to function as, fishing community protection measures, including regionalization, ROFR for Eligible Crab Communities, CDQ and Adak allocations, and ownership and use caps. As noted in Section 8, outcomes have varied for differently situated communities, due to the consolidation of the CV fleet, consolidation of processing, movement of PQS between communities via intra-company transfer within a region, and differential patterns of CVO/CPO and CVC/CPC QS among communities, among other factors. In general, percentage of QS holdings have shifted in varying degrees away from Washington and toward Alaska (and to a lesser degree toward Oregon) and within Alaska toward fewer and larger fishing communities, CDQ groups, and, most recently, Alaska Native Tribal entity.





NS 9 Bycatch: Requires that programs minimize bycatch and to the extent bycatch cannot be avoided, minimize the mortality of such bycatch. Sections 4.6 through 4.10 describe issues associated with highgrading and discards, rail dumping, handling mortality, soak times and gear selectivity, and ghost fishing. Highgrading has increased as harvesters attempt to keep only crabs that have the highest value. The program has provided benefits in terms of better handling practices, less need for rail dumping, longer soak time to fish more selectively, and fewer lost pots. Fewer lost pots are reported because of changing fishing practices. Improvements in biodegradable escape panels are attempts to reduce bycatch and mortality.



NS 10 Safety of Life at Sea: The fishery has shown a clear improvement in safety of life at seas. It has gone from one of the deadliest fisheries, pre–CR Program, to no fatalities attributed to the crab fishery since the last CR Program review. (see Section 11)



