



SOUTHEAST RED/BLUE KING CRAB HARVEST STRATEGY

ANDREW OLSON

ANDREW.OLSON@ALASKA.GOV

& JOE STRATMAN

KING AND TANNER TASK FORCE MEETING

DECEMBER 13TH, 2021

2 OUTLINE

- Harvest Strategy Goals
- Biological reference points (legal male biomass)
- Harvest Rates
- Equal Quota Share
- Questions and Discussion

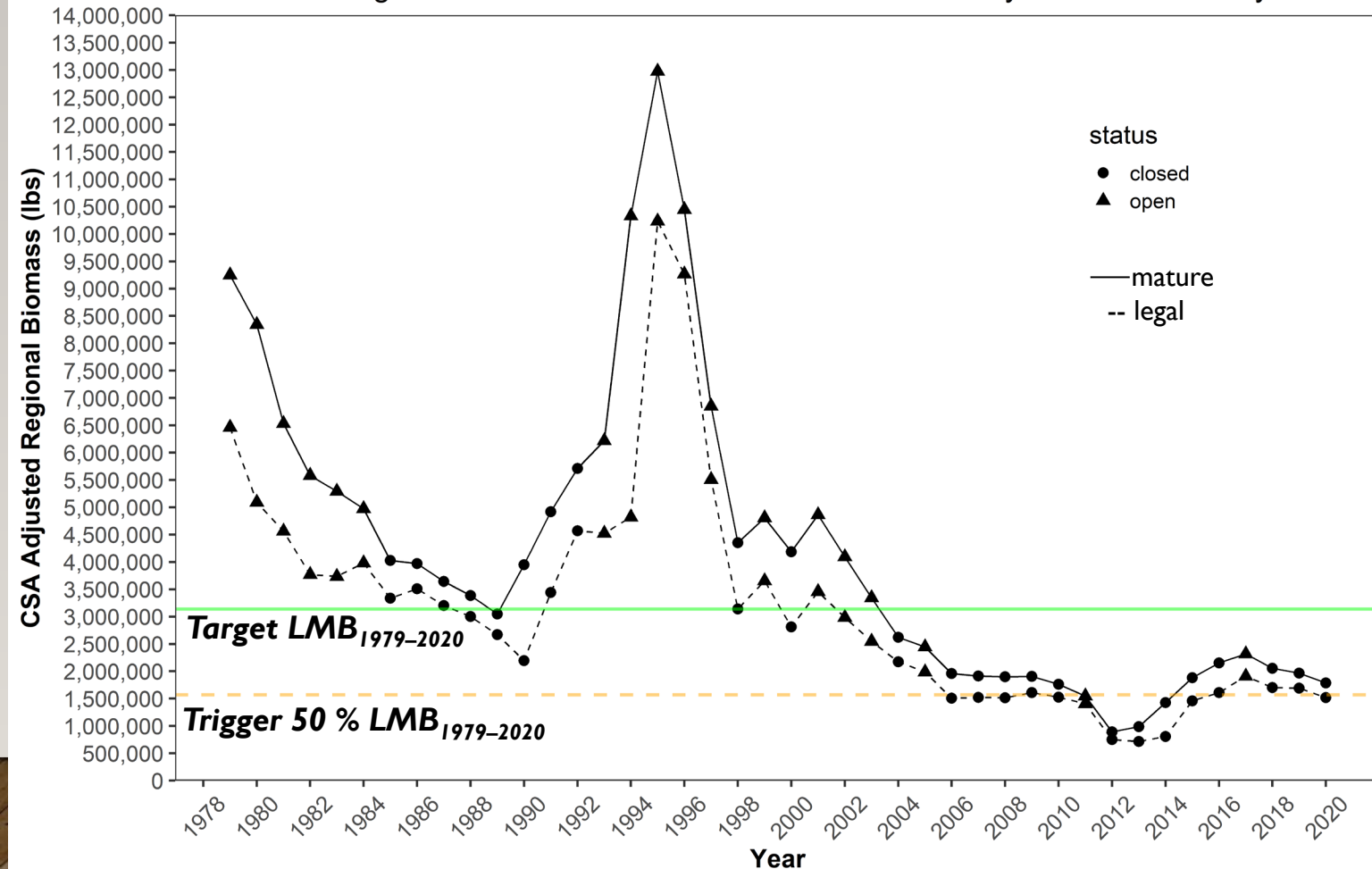
3 HARVEST STRATEGY GOALS

1. Transition from an economic threshold [5 AAC 34.113 (c)] to biological using historical legal male biomass estimates from survey data to establish reference points.
2. Improve harvest control rules that aid management of the fishery.
3. Improve and stabilize fishery performance using transparent and repeatable metrics.
4. Minimize handling and unnecessary mortality on unretained catch.
5. Maintain multiple size and age classes for stock health.

4 BIOLOGICAL REFERENCE POINTS

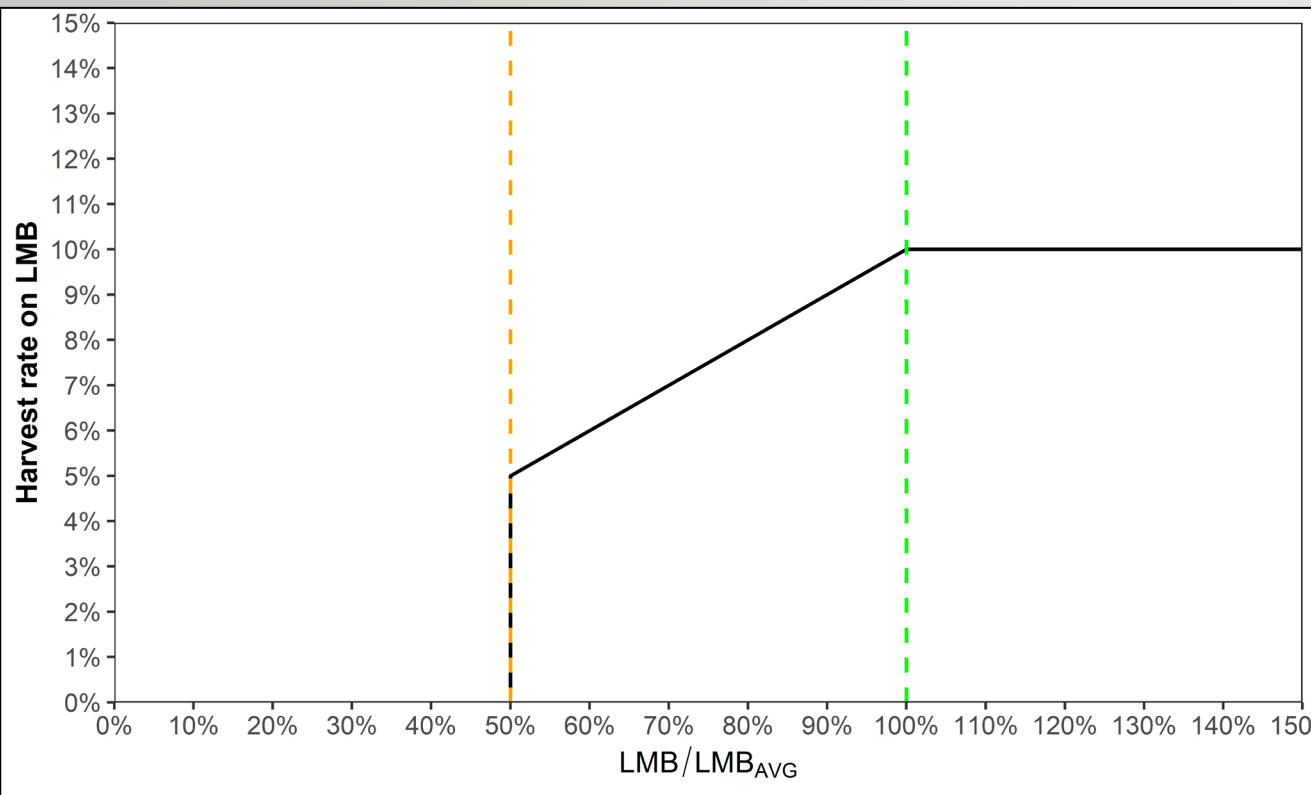
LEGAL MALE BIOMASS (LMB)

Mature and Legal Male Biomass of Southeast RKC for Surveyed and Nonsurveyed Areas



- Derived from St. Matthew BKC [5 AAC 34.917] and Aleutian Islands GKC [5 AAC 34.612] harvest strategies
- Biological reference points
 - 2021 CSA Model
 - Uses all available data LMB₁₉₇₉₋₂₀₂₀
- Establish target and trigger reference point based on LMB to harvest rate strategy

5 HARVEST RATES & TOTAL ALLOWABLE CATCH LEGAL MALE BIOMASS (LMB)



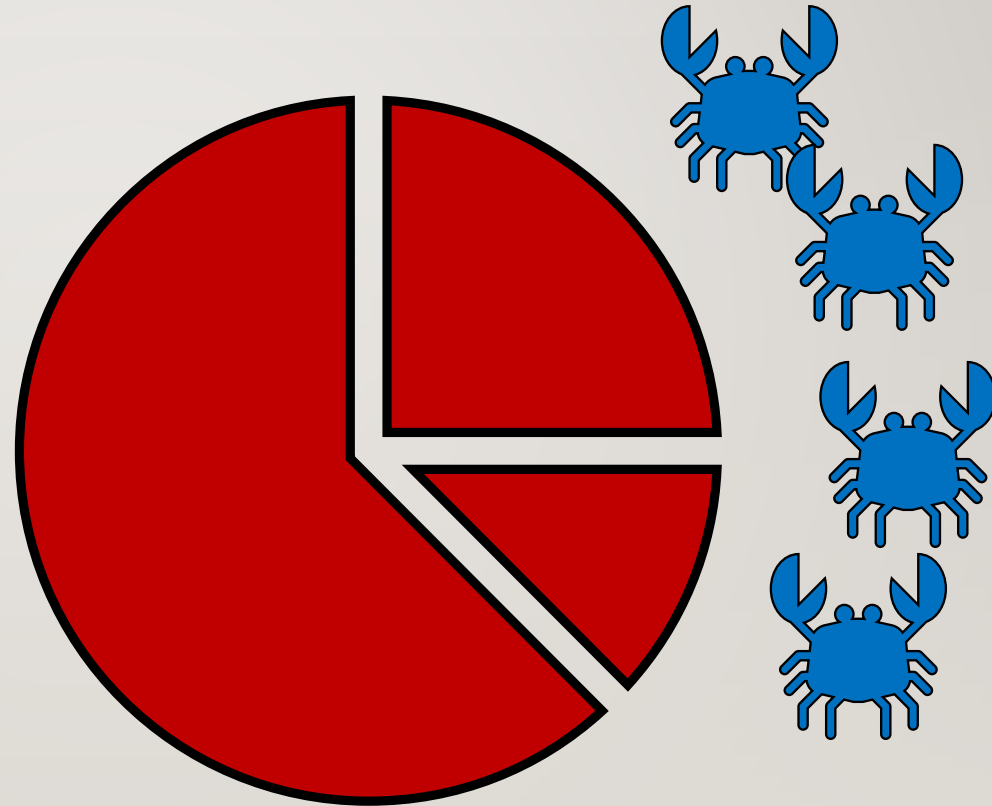
- Harvest rate applied to LMB per:
 1. LMB > 50% but < than 100% of LMB_{AVG} the maximum TAC will be no more than:
$$TAC_{max} = 0.1 \times \left(\frac{LMB}{LMB_{AVG}} \right) \times LMB$$
 2. LMB ≥ LMB_{AVG} the maximum harvest rate applied will be no more than 10%.
- Applying harvest rate to LMB is same as current policy [5 AAC 34.113 (d)]

6 HARVEST RATES & TOTAL ALLOWABLE CATCH LEGAL MALE BIOMASS (LMB)

Year	Adjusted Survey LMB	Regional LMB	Harvest Rate on LMB	Maximum TAC (lbs)	Actual Harvest Rate LMB	Harvest
2004	1,141,488	2,174,009	6.9%	150,490	0.0%	0
2005	1,042,854	1,986,157	6.3%	125,607	10.6%	209,799
2006	792,476	1,509,301	0.0%	0	0.0%	0
2007	798,913	1,521,561	0.0%	0	0.0%	0
2008	795,824	1,515,678	0.0%	0	0.0%	0
2009	845,913	1,611,074	5.1%	82,645	0.0%	0
2010	801,129	1,525,782	0.0%	0	0.0%	0
2011	737,917	1,405,391	0.0%	0	12.6%	176,545
2012	394,019	750,426	0.0%	0	0.0%	0
2013	375,157	714,501	0.0%	0	0.0%	0
2014	424,570	808,610	0.0%	0	0.0%	0
2015	766,463	1,459,760	0.0%	0	0.0%	0
2016	844,772	1,608,901	5.1%	82,422	0.0%	0
2017	1,003,111	1,910,465	6.1%	116,216	6.3%	120,002
2018	894,131	1,702,907	5.4%	92,335	0.0%	0
2019	887,787	1,690,825	5.4%	91,030	0.0%	0
2020	797,845	1,519,528	0.0%	0	0.0%	0
2021	755,338	1,438,571	0.0%	0	0.0%	0

7 EQUAL QUOTA SHARE

- Proposed by industry and stakeholders since 2012
- Southeast Sablefish (NSEI & SSEI)
 - 5 AAC 28.170 (f)–(k)
 - Quota divided by valid CFEC permit holders
 - 1 mgt area instead of many



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- Management decrement process
- Permit stacking

	Year					
	2016	2017	2018	2019	2020	2021
Acceptable biological catch	807,559	850,113	965,354	1,058,037	1,216,743	1,255,056
Decrement Type (round lb)	Estimated Mortality					
Bycatch mortality in halibut fishery ^a	27,915	26,136	19,583	18,434	16,207	38,124
ADF&G longline survey removal decrement (excluding catch retained by permit holders for their equal quota share) ^a	53,914	29,290	15,875	26,260	24,698	42,499
Guided sport fish harvest ^b	44,509	43,656	41,179	33,135	35,004	753
Unguided sport fish harvest ^b	7,015	3,911	5,872	11,340	5,280	5,631
Mortality from fishery deadloss ^a	6,719	4,250	5,699	8,046	9,729	10,888
Mortality from fishery releases ^a	–	–	–	19,142	–	–
Subsistence and personal use harvest^b	16,734	22,621	21,730	21,587	17,821	19,295
Total decrements	156,805	129,863	109,938	137,944	108,740	117,189
Annual harvest objective	650,754	720,250	855,416	920,093	1,108,003	1,137,867
Permit holders	78	78	78	78	75	73
Equal quota share	8,343	9,234	10,967	11,796	14,773	15,587

^a Projected estimate of mortality for the current season.

^b Estimate of mortality that occurred during the previous season and is applied as decrement for the current season.

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- Permit stacking
- Increased registration requirements
- EQS tracking forms
 - Overages/underages from previous open season
- Decreases pace of fishery for more accurate inseason mgt
- Increases permit holder flexibility in harvesting their EQS



ALASKA DEPARTMENT OF FISH AND GAME
Division of Commercial Fisheries
304 Lake St., Room 103, Sitka, AK 99835-7563
Phone: (907) 747-6688 fax: (907) 747-6693



Northern Southeast Inside Sablefish Longline Fishery Registration (C61A)

Fishing Year: 2021

Registration Expires: November 15, 2021

Vessel Name: _____ ADF&G No: _____
(Please print clearly)

Vessel Owner/Authorized Agent: _____
(Print Name)

Address of Owner/ Agent

Phone number

Permit Holder(s):

Name: _____
(Print Name)

Phone Number _____

Permit No: C61A _____

PQS Tracking Form Received: _____

Name: _____
(Print Name)

Phone Number _____

Permit No: C61A _____

PQS Tracking Form Received: _____

Name: _____
(Print Name)

Phone Number _____

Permit No: C61A _____

PQS Tracking Form Received: _____

Signature of Vessel Owner or Agent

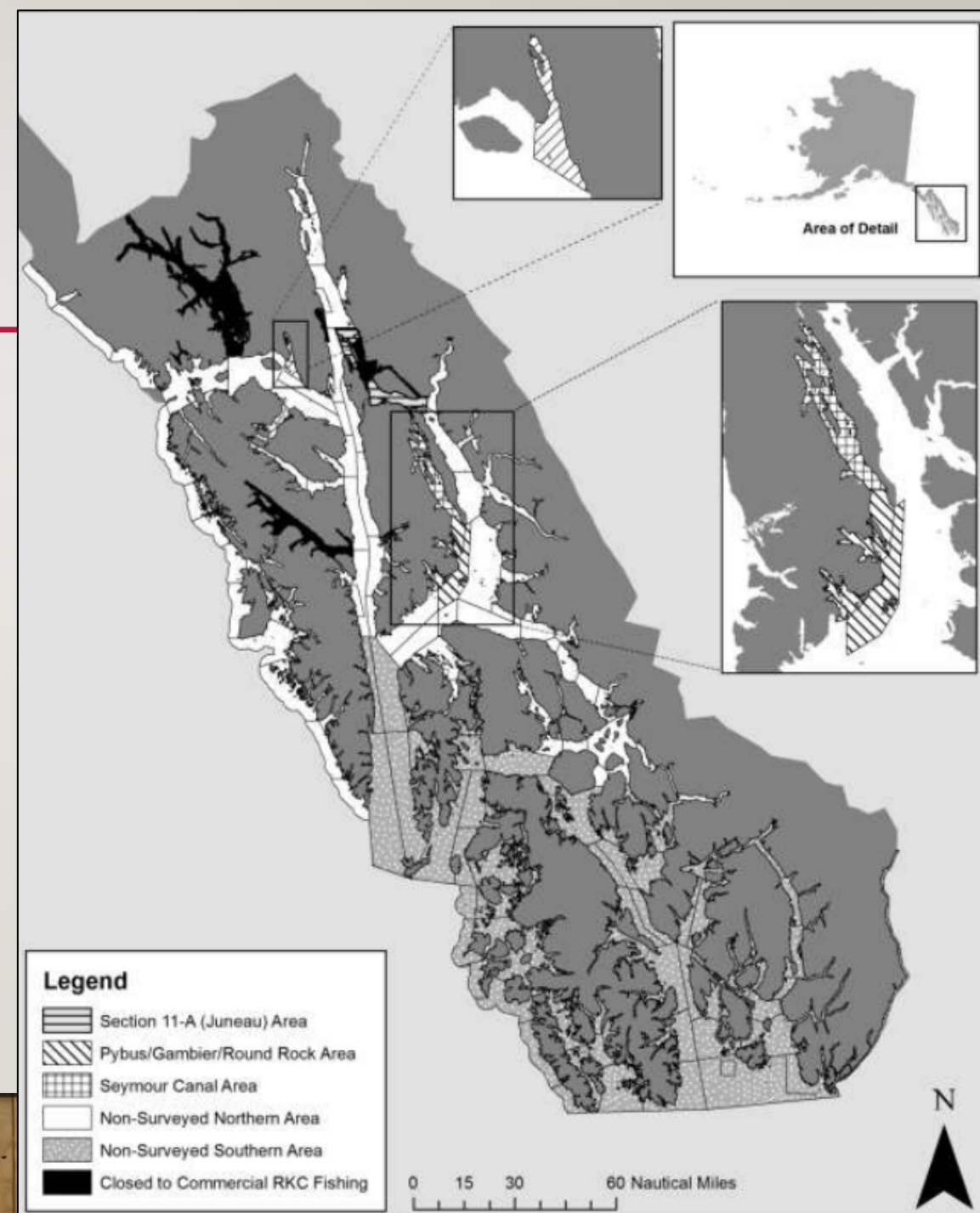
Department Representative

Date and Location of Registration

NOTE: This registration is required under authority of 5AAC 28.106(b). A copy of this form must be carried aboard the vessel at all times while directed fishing for or transporting sablefish taken in the Northern Southeast Inside(NSEI) Subdistrict. Registrations are not valid until signed by an ADF&G representative. ADF&G will keep the original.

10 EQUAL QUOTA SHARE RKC/BKC

- How to apply to RKC/BKC?
- EQS regionwide
 - Multiple management areas
 - Manage in-season for area specific TACs
- Permit Stacking
- Tracking and applying EQS overages/underages
- Decrements of known mortality
 - II-A management plan allocation
 - Outside II-A regional permit
 - BKC bycatch in Tanner/GKC fisheries



HOW DOES THIS WORK?



Annual estimate of LMB (survey & non-survey areas)



Is LMB $>$ than trigger & target reference points & no stock health concerns



Apply harvest rates to determine maxTAC for region



TAC allocated based on stock health and manageability



Decrements applied to account for other sources of mortality



Permit holders EQS determined



Fishery managed inseason (logbooks, call-ins, etc.)

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QUESTIONS AND DISCUSSION

