



Summary of the 93rd IPHC Interim Meeting (IM093)

NPFMC Meeting
Agenda Item B10
06 December 2017

93rd IPHC Interim Meeting (IM093)

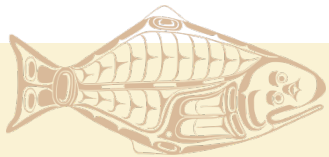
- **Dates:** 28-29 Nov. 2017 in Seattle, WA, U.S.A.
- **Improved transparency:** All sessions are now open to the public and webcast.
- **Participation:** 69 in person (14 from the Contracting Parties, 55 members of the public) as well as 74 via the webcast.
- **IM093 Report** (and supporting documents):
<http://iphc.int/meetings-and-events/interim-meeting/im093-documents.html>



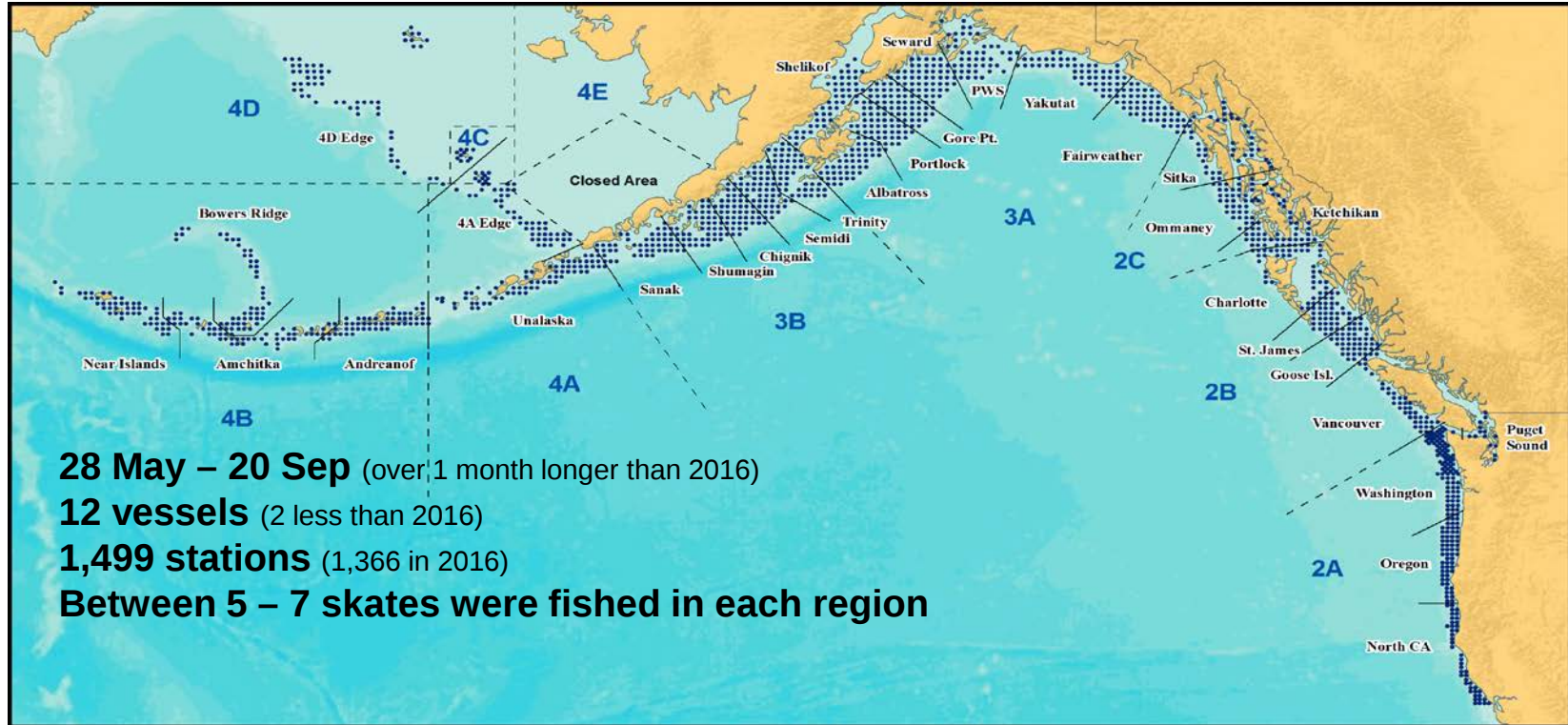
93rd IPHC Interim Meeting (IM093)

Items relevant to the NPFMC:

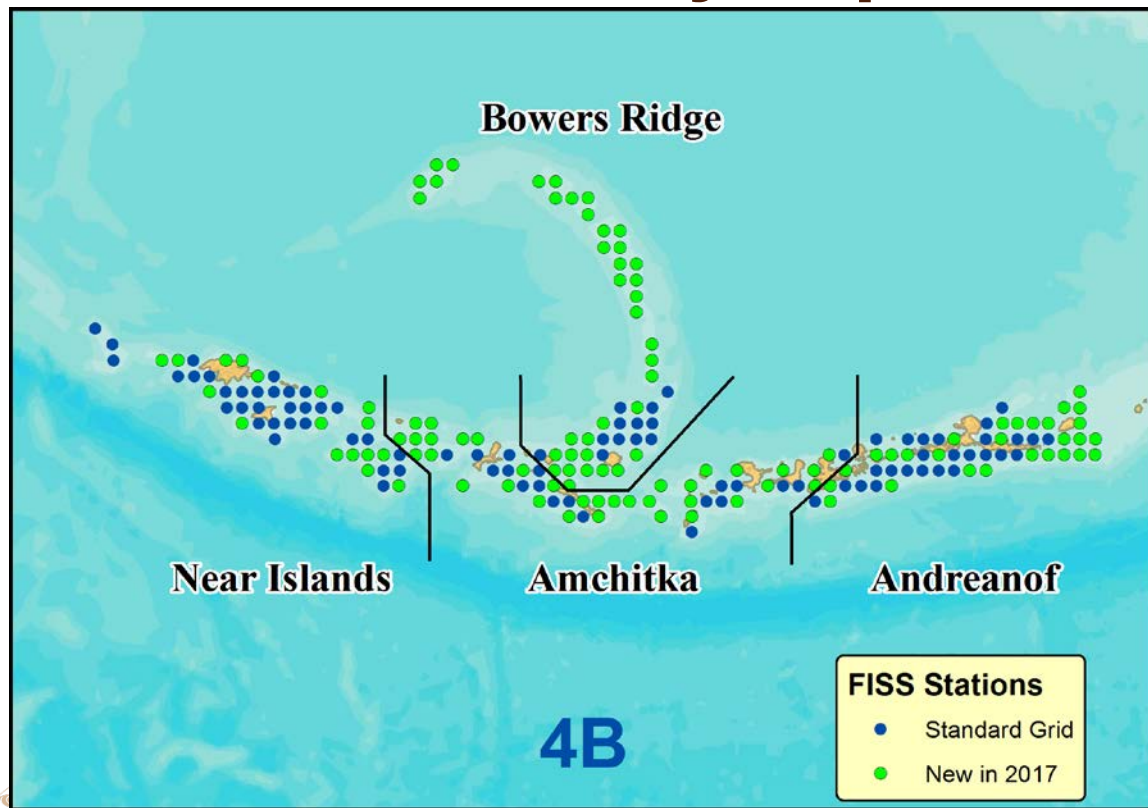
- Stock assessment inputs (incl. setline survey), results, and harvest decision table
- Management Strategy Evaluation: Update
- Evaluation of the IPHC's 32" minimum size limit
- 2nd Performance Review of the IPHC
- Regulatory proposals (22)
- 94th Session of the IPHC Annual Meeting



2017 Fishery-Independent Setline Survey

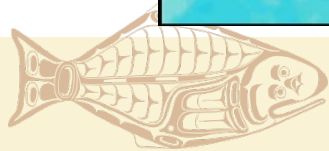


2017 Setline survey expansion in 4B



113 NEW stations, 202 total

Near Islands - 49 (17 new)
Amchitka - 49 (31 new)
Bowers Ridge - 50 (37 new)
Andreanof - 54 (28 new)

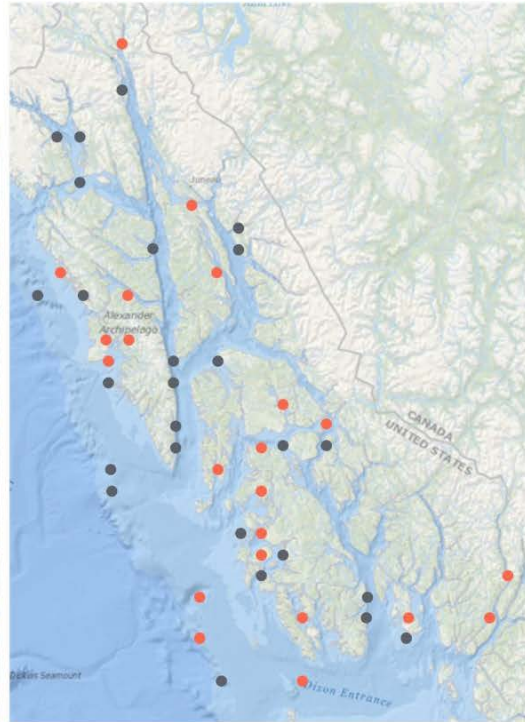


2018 Setline survey expansion in 2C

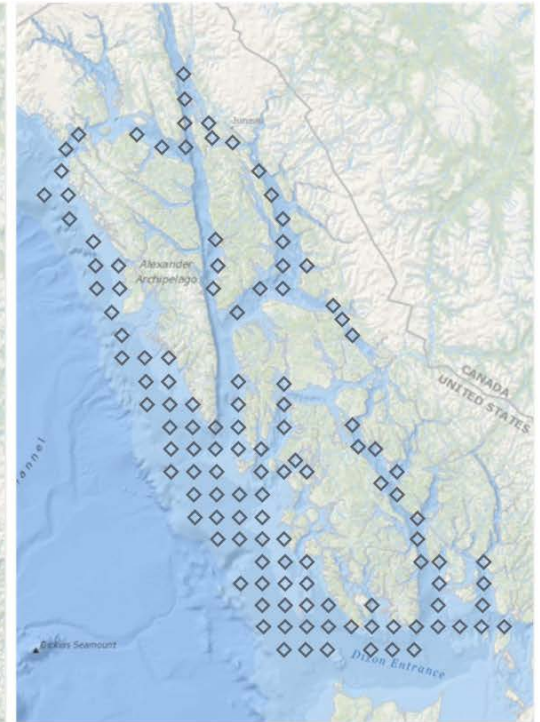
2C All



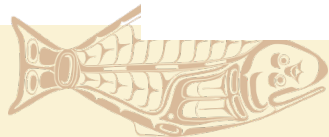
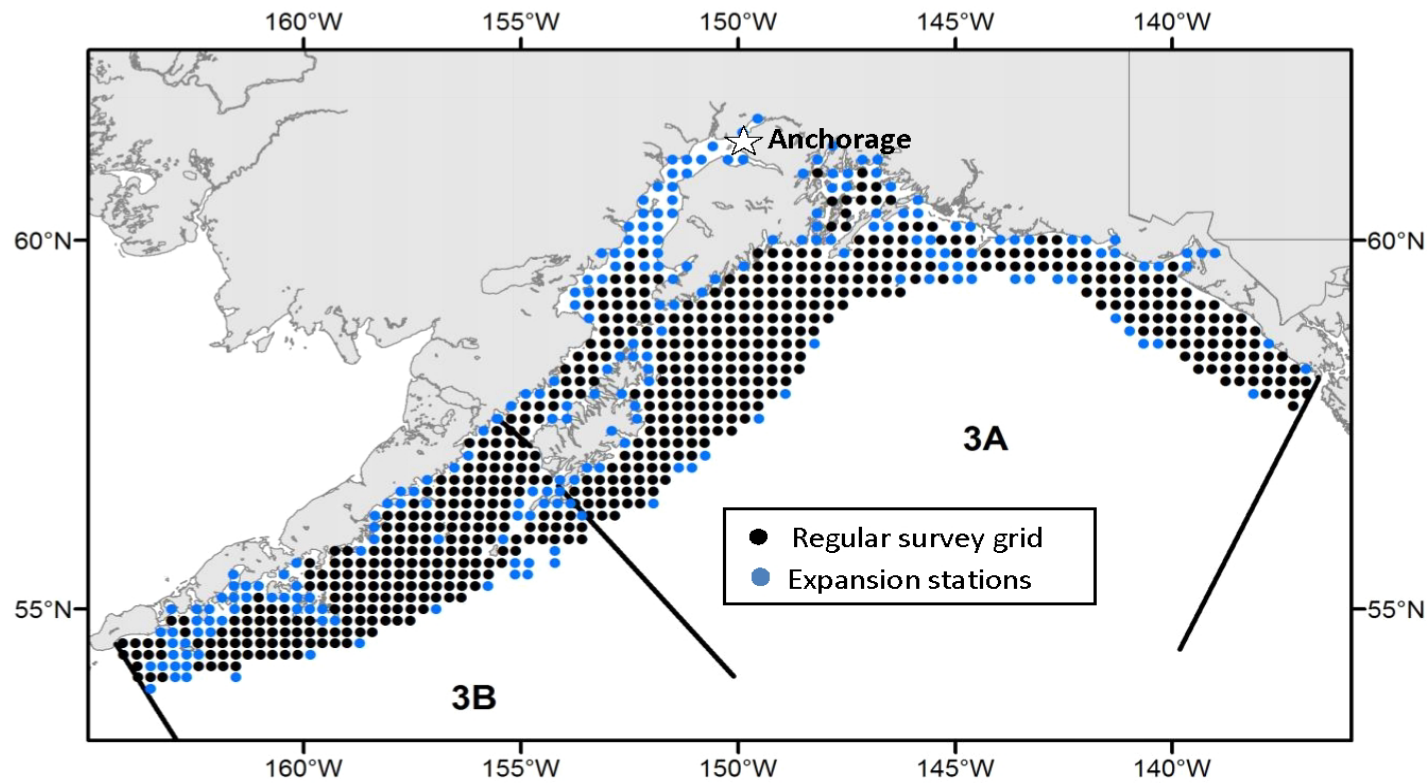
2C Expansion stations



2C Existing stations

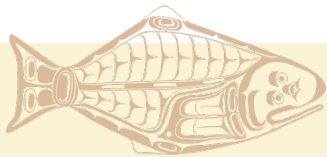


2019 Setline survey expansion in 3A & 3B



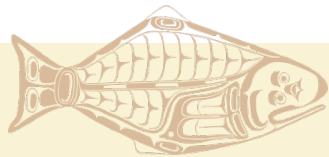
The 2017 stock assessment and preliminary catch tables

Wednesday Dec. 6
5:30-6:30 pm
Aleutian Rm



Assessment summary table

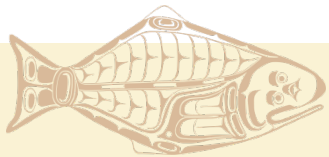
Indicators	Values	Trends	Status
Total removals 2017: Retained catch 2017: Average removals 2013–17:	42.44 Mlbs, 19,250 t 35.29 Mlbs, 11,864 t 43.34 Mlbs, 19,659 t	Mortality stable 2014-17	2017 MORTALITY BELOW 100-YEAR AVERAGE
SPR_{2017} : $P(SPR < 46\%)$: $P(SPR < \text{limit})$:	40% (29-58%) 75% Limit not specified	Fishing intensity increased from 2016 to 2017	FISHING INTENSITY HIGHER THAN REFERENCE LEVEL
SB_{2018} (Mlb): SB_{2018}/SB_0 : $P(SB_{2018} < SB_{30})$: $P(SB_{2018} < SB_{20})$:	202 Mlbs (148–256) 40% (26-60%) 6% <1%	SB decreased from 2017 to 2018	NOT OVERFISHED
O32 stock distribution: All stock distribution:	See Table and Figure	Distribution stable 2013-17	REGION 2 ABOVE, REGION 3 BELOW HISTORICAL VALUES



Summary table

Indicators	Values	Trends	Status
Total removals 2017: Retained catch 2017: Average removals 2013–17:	42.44 Mlbs, 19,250 t 35.29 Mlbs, 11,864 t 43.34 Mlbs, 19,659 t	Mortality stable 2014-17	2017 MORTALITY BELOW 100-YEAR AVERAGE

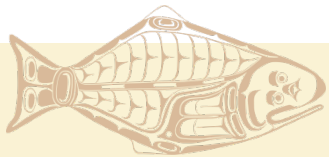
Sources of mortality: In 2017, total removals were below the 100-year average, and have been stable near 42 million pounds (19,050 t) from 2014-17. In 2017, 83% of the total removals from the stock were retained compared to 80% in 2016.



Summary table

Indicators	Values	Trends	Status
SPR ₂₀₁₇ : P(SPR<46%): P(SPR<limit):	40% (29-58%) 75% Limit not specified	Fishing intensity increased from 2016 to 2017	FISHING INTENSITY HIGHER THAN REFERENCE LEVEL

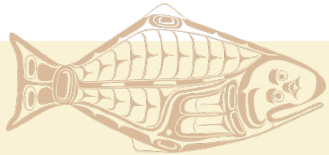
Fishing intensity: The 2017 mortality from all sources corresponds to a point estimate of SPR = 40% (there is a 75% chance that fishing intensity exceeded the IPHC's reference level of 46%). In order to reach the interim reference level, catch limits would need to be reduced for 2018. The Commission does not currently have a coastwide limit fishing intensity reference point.



Summary table

Indicators	Values	Trends	Status
SB_{2018} (Mlb): SB_{2018}/SB_0 : $P(SB_{2018} < SB_{30})$: $P(SB_{2018} < SB_{20})$:	202 Mlbs (148–256) 40% (26-60%) 6% <1%	SB decreased from 2017 to 2018	NOT OVERFISHED

Stock status (spawning biomass): Current female spawning biomass is estimated to be just above 200 million pounds (90,700 t), which corresponds to only a 6% chance of being below the IPHC threshold (trigger) reference point of $SB_{30\%}$, and less than a 1% chance of being below the IPHC limit reference point of $SB_{20\%}$. Therefore, no adjustment to the target fishing intensity is required, and the stock is not considered to be '**overfished**'. Projections indicate that the target fishing intensity is likely to result in similar, but declining biomass levels in the near future.

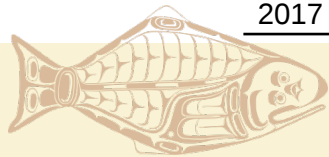


Summary table

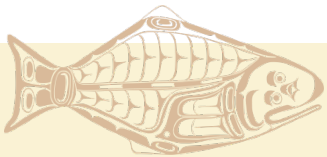
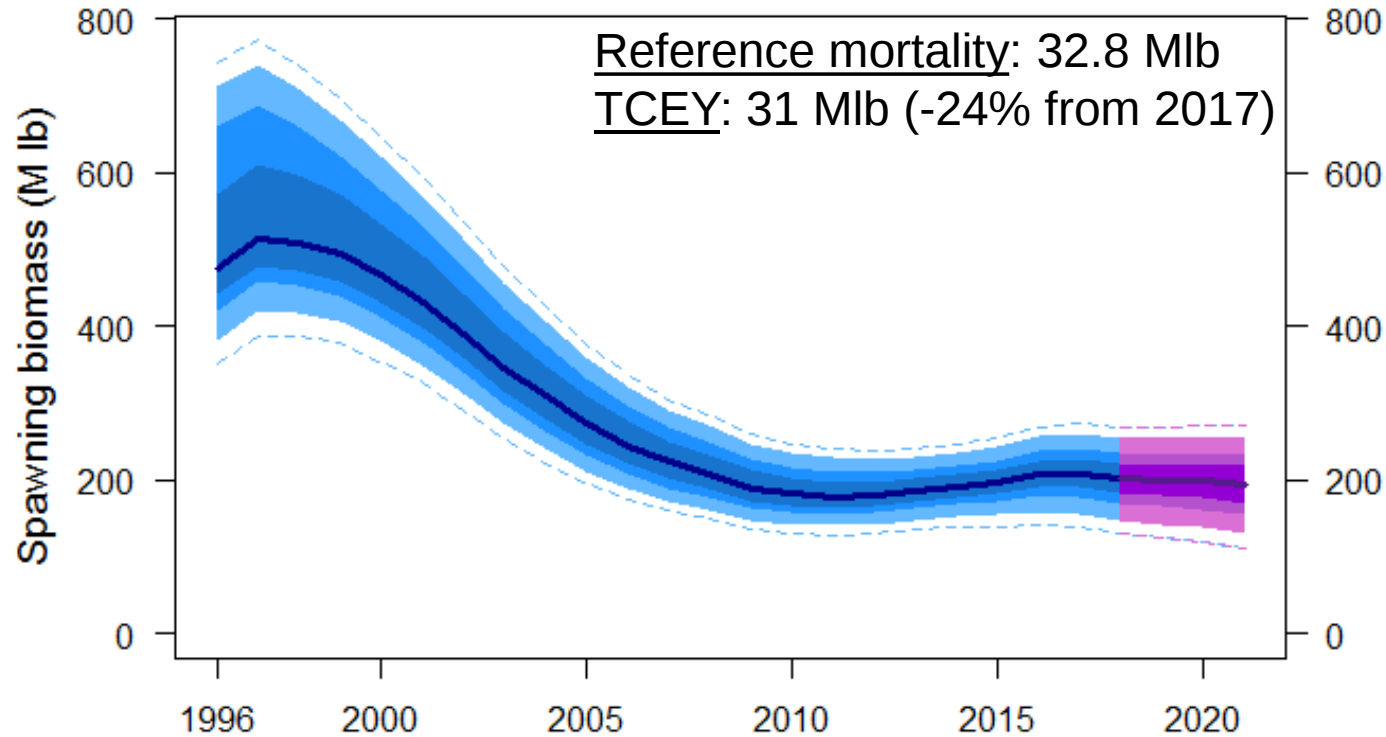
Indicators	Values	Trends	Status
O32 stock distribution: All stock distribution:	See Table and Figure	Distribution stable 2013-17	REGION 2 ABOVE, REGION 3 BELOW HISTORICAL VALUES

Stock distribution: Regional stock distribution has been stable within estimated credibility intervals over the last five years. Region 2 currently represents a greater proportion, and Region 3 a lesser proportion of the coastwide stock than observed in previous decades.

O32 stock distribution					All sizes distribution			
Year	Region 2 (2A, 2B, 2C)	Region 3 (3A, 3B)	Region 4 (4A, 4CDE)	Region 4B	Region 2 (2A, 2B, 2C)	Region 3 (3A, 3B)	Region 4 (4A, 4CDE)	Region 4B
2013	29.6%	45.9%	18.7%	5.8%	25.4%	50.1%	19.6%	4.9%
2014	28.8%	46.5%	19.8%	4.9%	24.2%	52.8%	19.1%	4.0%
2015	30.4%	44.2%	20.5%	4.9%	25.7%	51.4%	18.9%	4.0%
2016	30.0%	46.8%	18.6%	4.5%	25.9%	52.8%	17.4%	3.9%
2017	29.7%	45.6%	20.0%	4.8%	25.9%	50.7%	19.2%	4.2%



Reference projection ($F_{46\%}$)



Preliminary Harvest Decision table

Columns correspond to yield alternatives and rows to risk metrics.

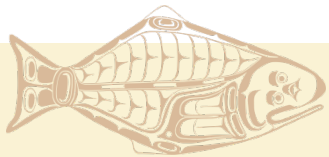
Values in the table represent the probability, in “times out of 100” (or percent chance) of a particular risk.

2018 Alternative				No removals											Reference: SPR=46%			
Total removals (M lb)				0.0	11.8	21.8	29.8	30.8	31.8	32.8	33.8	34.8	35.8	41.8	51.8	61.9		
TCEY (M lb)				0.0	10.0	20.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	40.0	50.0	60.0		
Fishing intensity				F100%	F73%	F58%	F49%	F48%	F47%	F46%	F45%	F44%	F43%	F39%	F32%	F27%		
Fishing intensity interval				--	61-84%	45-73%	36-66%	36-65%	35-65%	34-64%	33-63%	32-63%	32-62%	28-58%	23-53%	19-48%		
Stock Trend (spawning biomass)	in 2019	is less than 2018	1	3	24	64	69	74	78	81	85	87	98	>99	>99	a		
		is 5% less than 2018	<1	<1	<1	2	3	4	5	7	9	11	29	69	96	b		
	in 2020	is less than 2018	<1	1	14	52	57	62	67	71	76	80	95	>99	>99	c		
		is 5% less than 2018	<1	<1	1	11	14	18	21	25	29	34	61	94	>99	d		
	in 2021	is less than 2018	<1	2	23	63	68	72	76	79	83	86	97	>99	>99	e		
		is 5% less than 2018	<1	<1	5	32	36	41	46	50	55	59	83	99	>99	f		
Stock Status (Spawning biomass)	in 2019	is less than 30%	3	4	5	6	7	7	7	7	7	7	9	11	15	g		
		is less than 20%	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	h		
	in 2020	is less than 30%	2	2	4	6	6	7	7	8	8	9	12	21	32	i		
		is less than 20%	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	1	j		
	in 2021	is less than 30%	1	1	4	8	8	9	10	11	12	13	21	37	54	k		
		is less than 20%	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	2	7	l		
Fishery Trend (TCEY)	in 2019	is less than 2018	<1	<1	7	38	43	49	55	60	64	68	78	89	97	m		
		is 10% less than 2018	<1	<1	3	26	30	34	38	43	48	53	72	82	92	n		
	in 2020	is less than 2018	<1	<1	10	43	49	54	59	63	67	70	79	91	98	o		
		is 10% less than 2018	<1	<1	6	31	36	40	45	50	54	59	74	84	95	p		
	in 2021	is less than 2018	<1	<1	14	50	55	59	63	67	69	72	81	93	>99	q		
		is 10% less than 2018	<1	<1	9	38	43	48	52	56	60	63	75	86	99	r		
Fishery Status (Fishing Intensity)		in 2018	is above F _{46%}	0	<1	4	33	38	43	50	54	60	64	77	87	95	s	



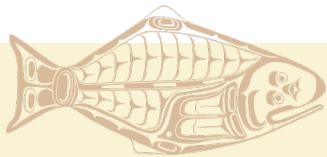
The 2017 stock assessment and preliminary catch tables

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Management strategy evaluation (MSE)

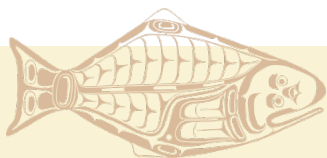
- Developing an IPHC harvest strategy policy
 - **SPR-based** (coastwide fishing intensity)
 - ***Status quo* SPR** = interim ref. level ($F_{46\%}$ = av. for 2014-16)
 - **Total Constant Exploitation Yields (TCEY):**
Management decisions to be based on TCEY rather than Fishery Constant Exploitation Yields (FCEY).
- MSAB will soon begin to address catch distribution



MSAB 3 year schedule

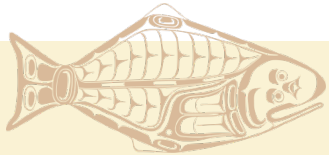
May 2018 Meeting
Review Goals
Look at results of SPR
Review Performance Metrics
Identify Scale MP's
Review Framework
Identify Preliminary Distribution MP's
October 2018 Meeting
Review Goals
Complete results of SPR
Review Performance Metrics
Identify Scale MP'S
Verify Framework
Identify Distribution MP's
Annual Meeting 2019
Recommendation on Scale
Present possible distribution MP's

May 2019 Meeting
Review Goals
Spatial Model Complexity
Identify MP's (Distn Scale)
Review Framework
October 2019 Meeting
Review Goals
Spatial Model Complexity
Identify MP's (Distn Scale)
Review Framework
Review multi-area model development
Annual Meeting 2020
Update on progress
May 2020 Meeting
Review Goals
Review multi-area model
Review preliminary results
October 2020 Meeting
Review Goals
Review preliminary results
Annual Meeting 2021
Recommendations on Scale and Distribution



MSE initial results

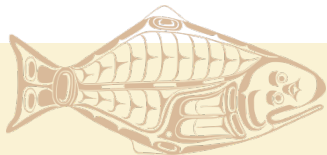
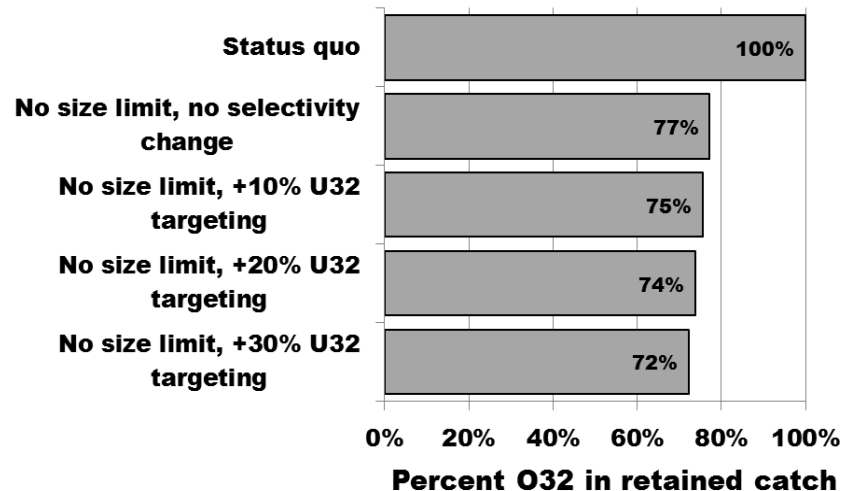
- Based on no error in estimation (perfect information)
- Randomly generated bycatch similar to recent values
- Trigger point (e.g. $SB_{30\%}$)
 - protects the spawning biomass at high fishing intensity
 - results in similar yields at high fishing intensity
 - Increases variability in yield at high fishing intensity
- SPR values greater than 30% and less than 55% are likely to meet goals and objectives



Evaluation of the 32" Minimum Size Limit

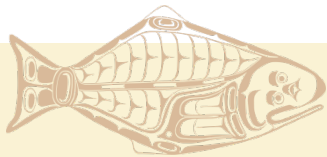
Removing the MSL: Trade-offs

- ~4% potential coastwide yield gain
- Yield variable by Regulatory Area
- ~ 1 Mlb reduction in discard mortality
- ~25% of landings would be <32"
- Net effect on fishery value unknown



Evaluation of the 32” Minimum Size Limit

Para. 60.: The Commission **AGREED** that the current MSL does not restrict the landed catch to only mature Pacific halibut: the majority of the catch is estimated to be female, and the age at 50% maturity is very close to the average age in the commercial landings. Therefore, the MSL may be providing a limited benefit in the form of a ‘recruitment refuge’. If that were the management goal, then it could be debated that a higher MSL would be warranted.



Noting that the [1st Performance Review](#) of the IPHC occurred in 2011-12 (see paper [IPHC-2017-AM093-17](#), and that the generally agreed best practice among RFMOs requires a Performance Review to be undertaken every 3-5 years, the IPHC has agreed to undertake a 2nd Performance Review of the IPHC in 2017-19.



CRITERIA

Criteria for the 2nd Performance Review of the International Pacific Halibut Commission (PRIPHC02)

Criteria 1: Legal analysis of the Convention

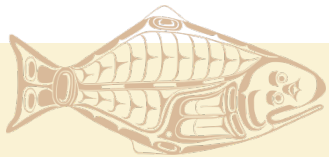
Criteria 2: Conservation and management

Criteria 3: Compliance and enforcement

Criteria 4: Decision-making and dispute settlement

Criteria 5: International cooperation

Criteria 6: Efficiency and transparency of financial and administrative management



IPHC Pacific halibut fishery regulation proposals for 2018

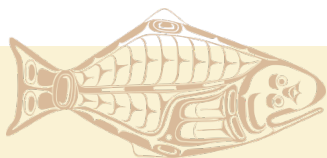
22 Proposals considered at the IM093

- 1) IPHC-2017-IM093-PropA1-A5: IPHC Secretariat proposals
- 2) IPHC-2017-IM093-PropB1-B3: Contracting Party proposals
- 3) IPHC-2017-IM093-PropC1-C14: Stakeholder proposals



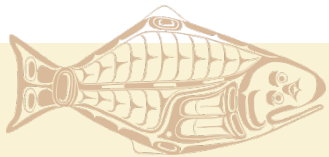
IPHC Secretariat regulatory proposals

Document Number	Title
IPHC-2017-IM093-PropA1	IPHC closed area – (Section 10 of the IPHC Regulations)
IPHC-2017-IM093-PropA2	Fishing periods (Section 8)
IPHC-2017-IM093-PropA3	VMS requirement for Regulatory Area 4 clearances (Section 15)
IPHC-2017-IM093-PropA4	Standardization of terminology, minor amendments, and clarifications.
IPHC-2017-IM093-PropA5	Discussion of frozen head-on exemption (Section 13)



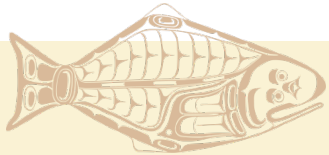
Contracting Party regulatory proposals

Document Number	Title
IPHC-2017-IM093-PropB1	Leasing in IPHC Regulatory Area 4 (Sections 7 and 11 of the IPHC Regulations) (USA)
IPHC-2017-IM093-PropB2	Clarify 2C-3A sport regulations (Section 28) (USA)
IPHC-2017-IM093-PropB3	Clarify head-on weight (Section 17) (USA)



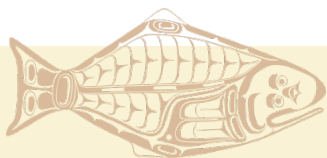
Stakeholder regulatory proposals

Document Number	Title
IPHC-2017-IM093-PropC1	Catch limit proposals (none to date)
IPHC-2017-IM093-PropC2	Preserving catch on private live-aboard vessels
IPHC-2017-IM093-PropC3	Unguided angler harvest record
IPHC-2017-IM093-PropC4	Sport cleaning regulations
IPHC-2017-IM093-PropC5	Elimination of skin-on regulation
IPHC-2017-IM093-PropC6	Live-aboard processing exemption
IPHC-2017-IM093-PropC7	Eliminate the requirement for a charter halibut permit (CHP)



Stakeholder regulatory proposals cont.

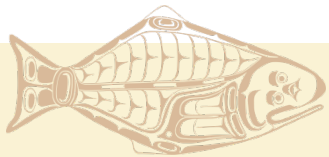
Document Number	Title
IPHC-2017-IM093-PropC8	Allow shellfish pots on board
IPHC-2017-IM093-PropC9	Processing greater than 4 fillets
IPHC-2017-IM093-PropC10	Halibut length measurement method
IPHC-2017-IM093-PropC11	Long-term storage on pleasure vessels
IPHC-2017-IM093-PropC12	Long-term storage on cruising vessels
IPHC-2017-IM093-PropC13	Halibut in Bering Sea pot gear
IPHC-2017-IM093-PropC14	Status quo harvest measures 3A



Further details

IM093 Report (and supporting documents):

<http://iphc.int/meetings-and-events/interim-meeting/im093-documents.html>



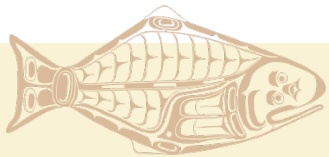
94th Session of the IPHC Annual Meeting (AM094)

22-26 January 2018

Hilton Portland Downtown hotel

Portland, Oregon, U.S.A.

<http://www.iphc.int/meetings-and-events/annual-meeting/documents.html>



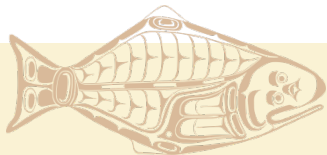
94th Session of the IPHC Annual Meeting (AM094)

Document submission deadline:
30 days before the opening of the Session:

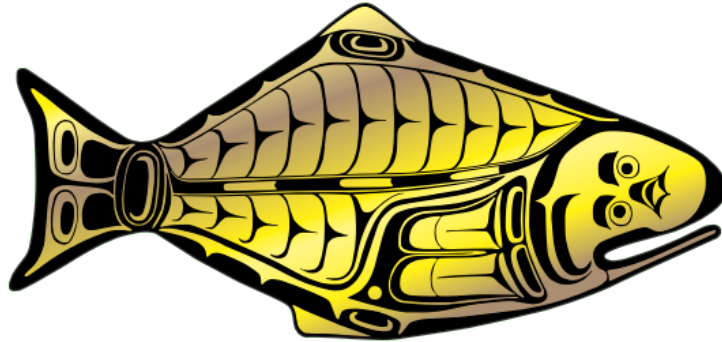
23 December 2017

- Contracting Party (agency reports)
 - Regulatory Proposals

New this year, the meeting will require attendees to pre-register. Please follow the Annual Meeting registration link at: <https://iphcam094.eventbrite.com>



INTERNATIONAL PACIFIC



HALIBUT COMMISSION

