

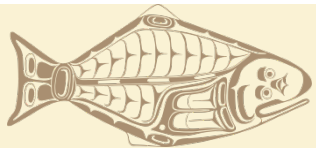
Summary of the 2016 IPHC Annual Meeting

NPFMC Meeting
3 February, 2016



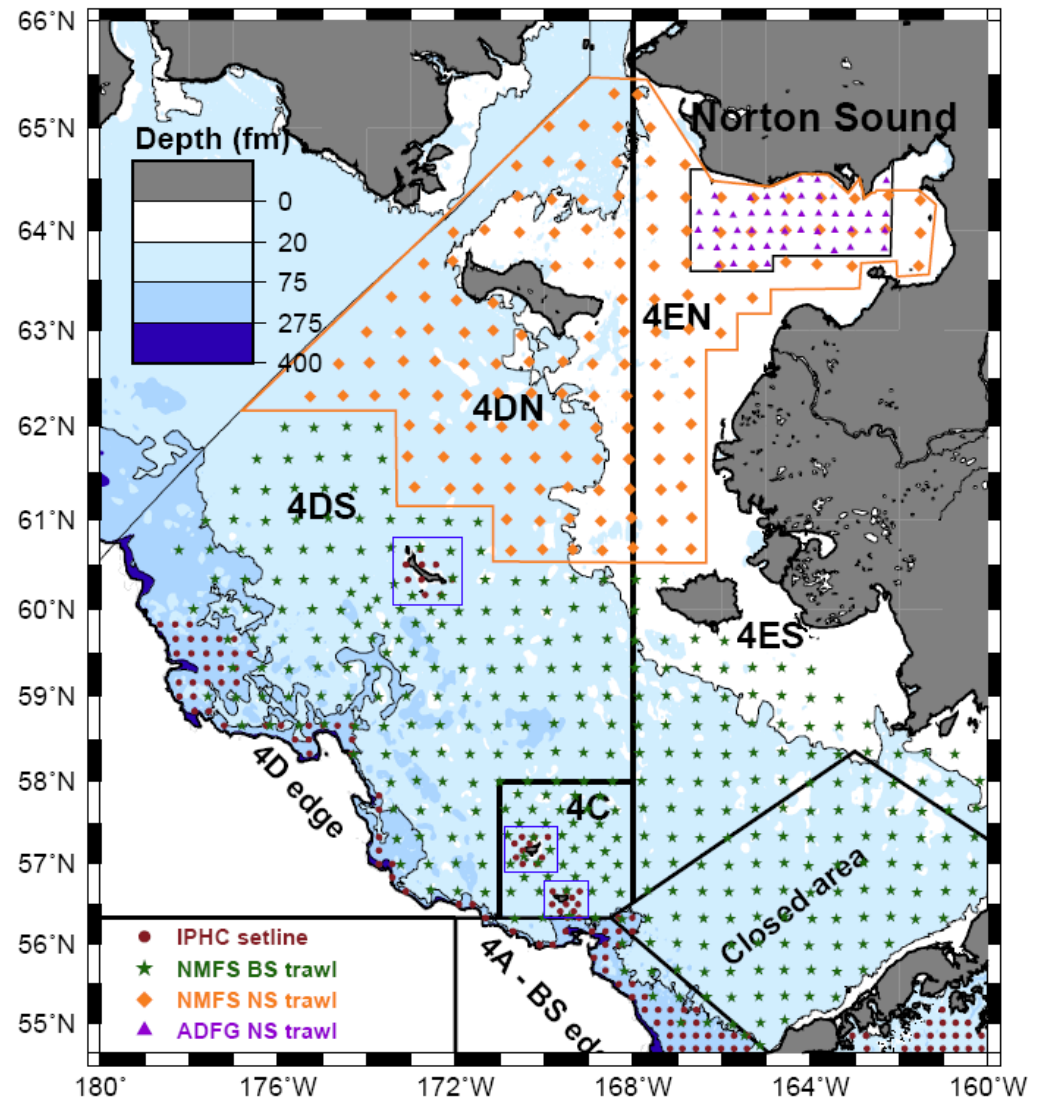
Outline

- Scientific results
 - Survey expansion
 - Stock assessment
- 2016 Catch limits
- Regulatory actions
- Other activity
 - MSAB
 - Staff directives

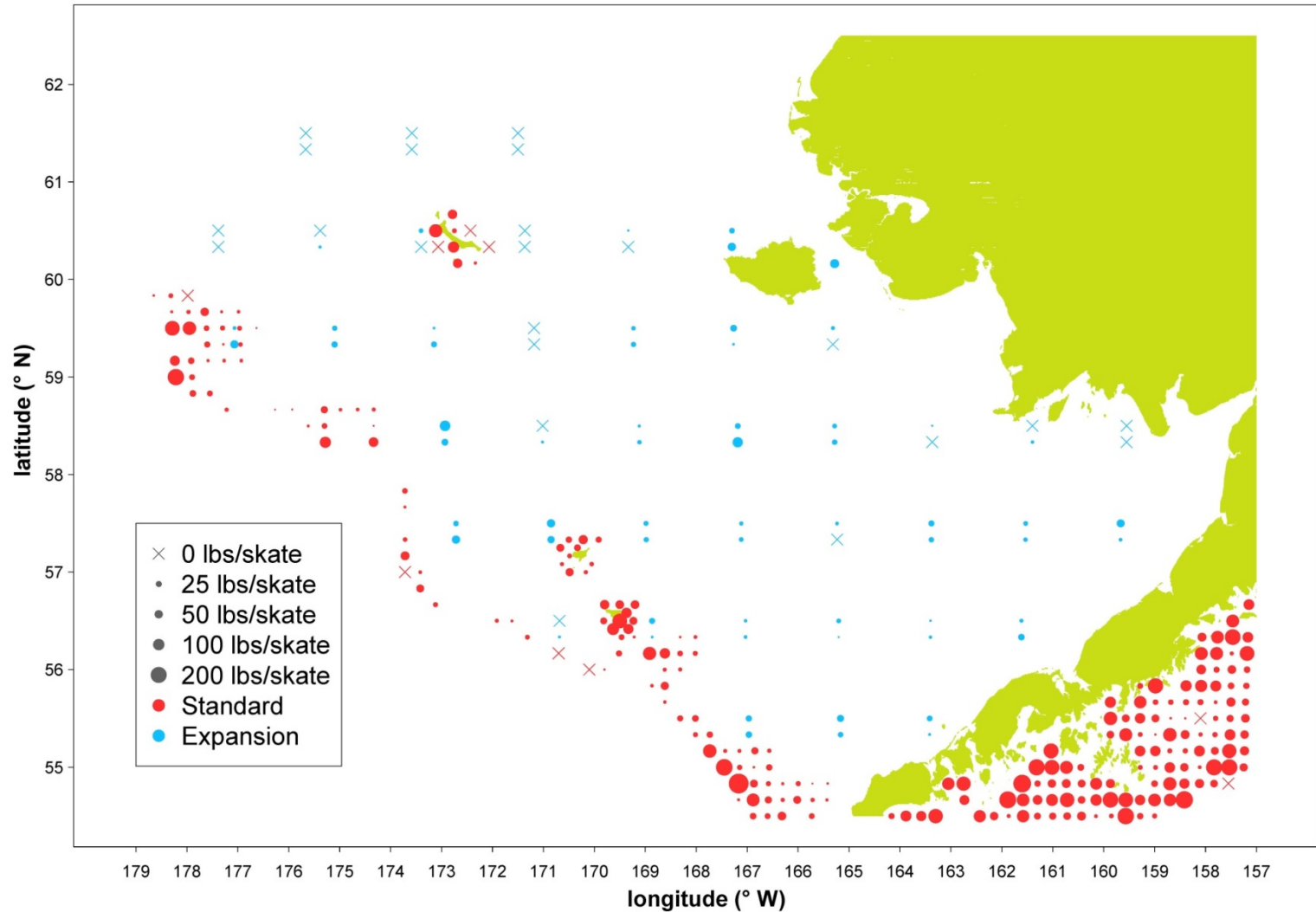


2015 Bering Sea NMFS trawl/setline calibration

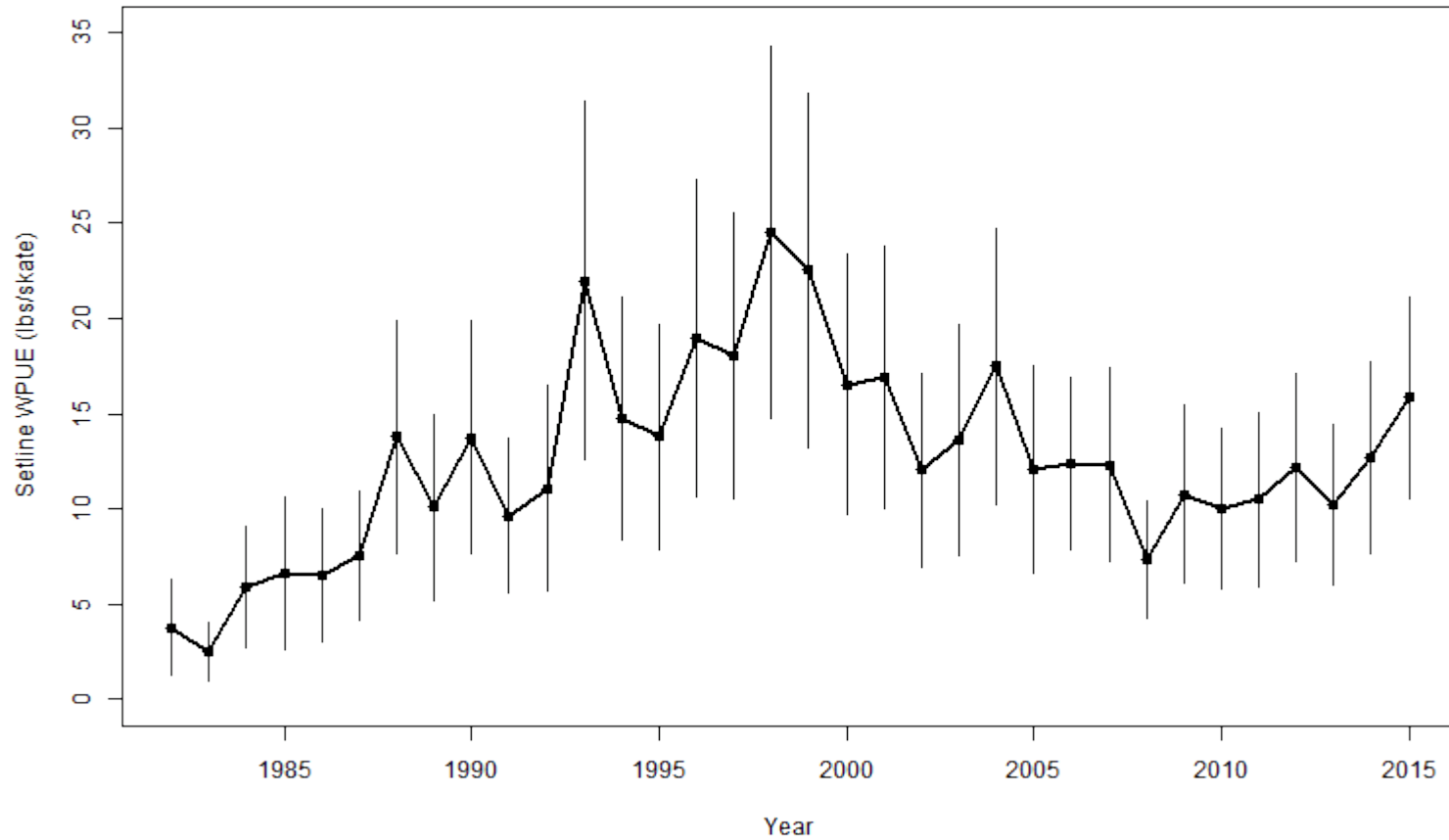
- IPHC uses four primary surveys to estimate abundance in the Bering Sea



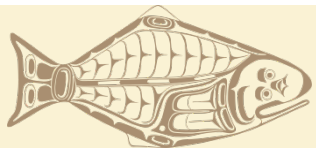
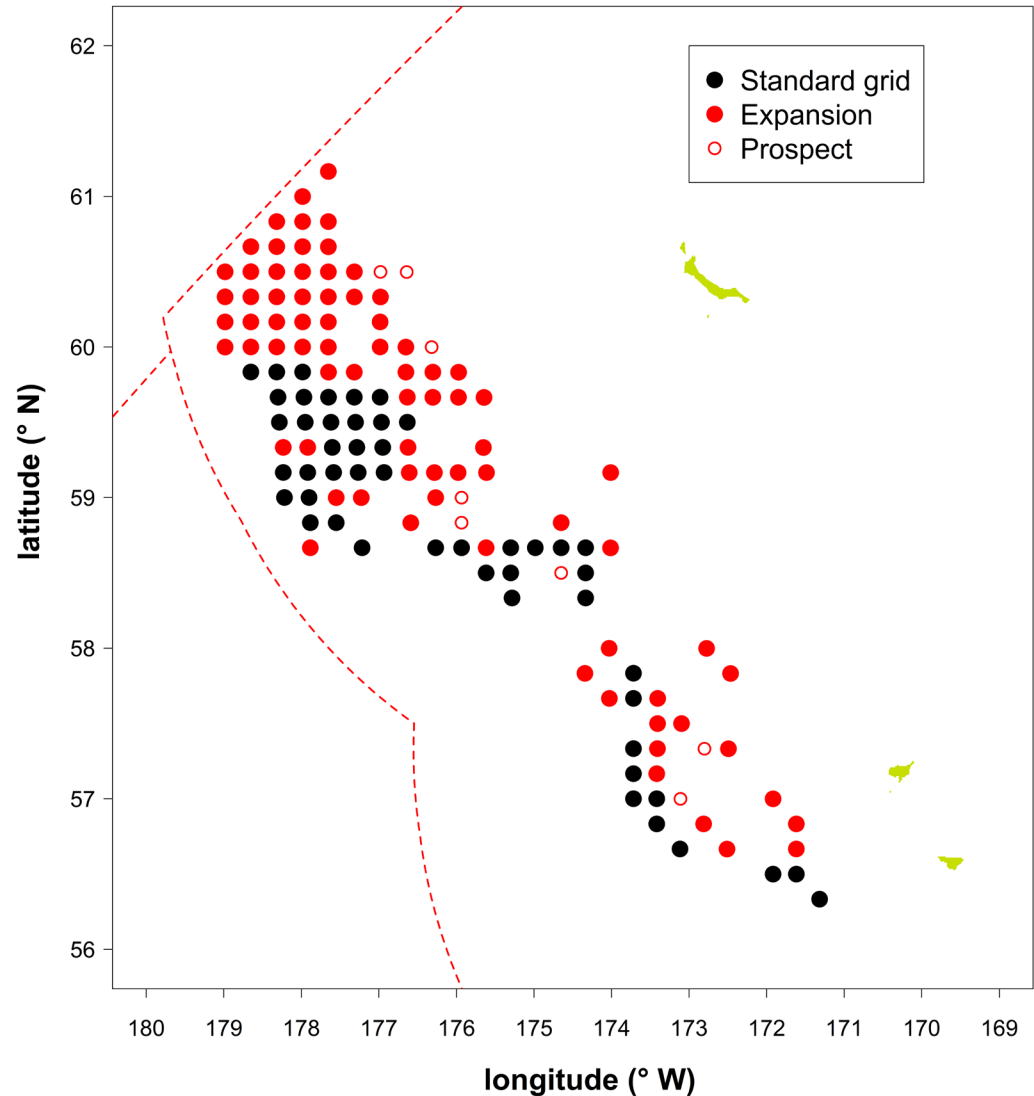
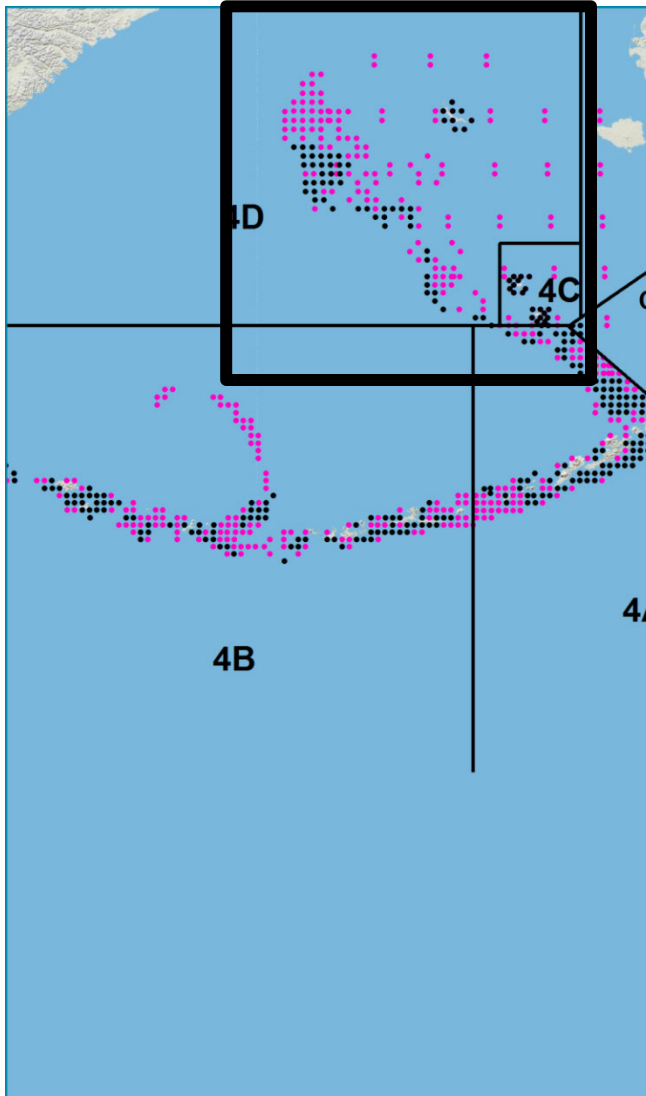
2015 Bering Sea NMFS trawl/setline re-calibration



2015 O32 (legal-size) biomass on EBS shelf

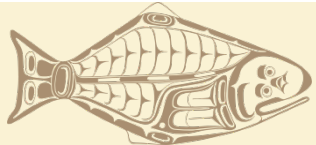


2016 Northern Bering Sea edge

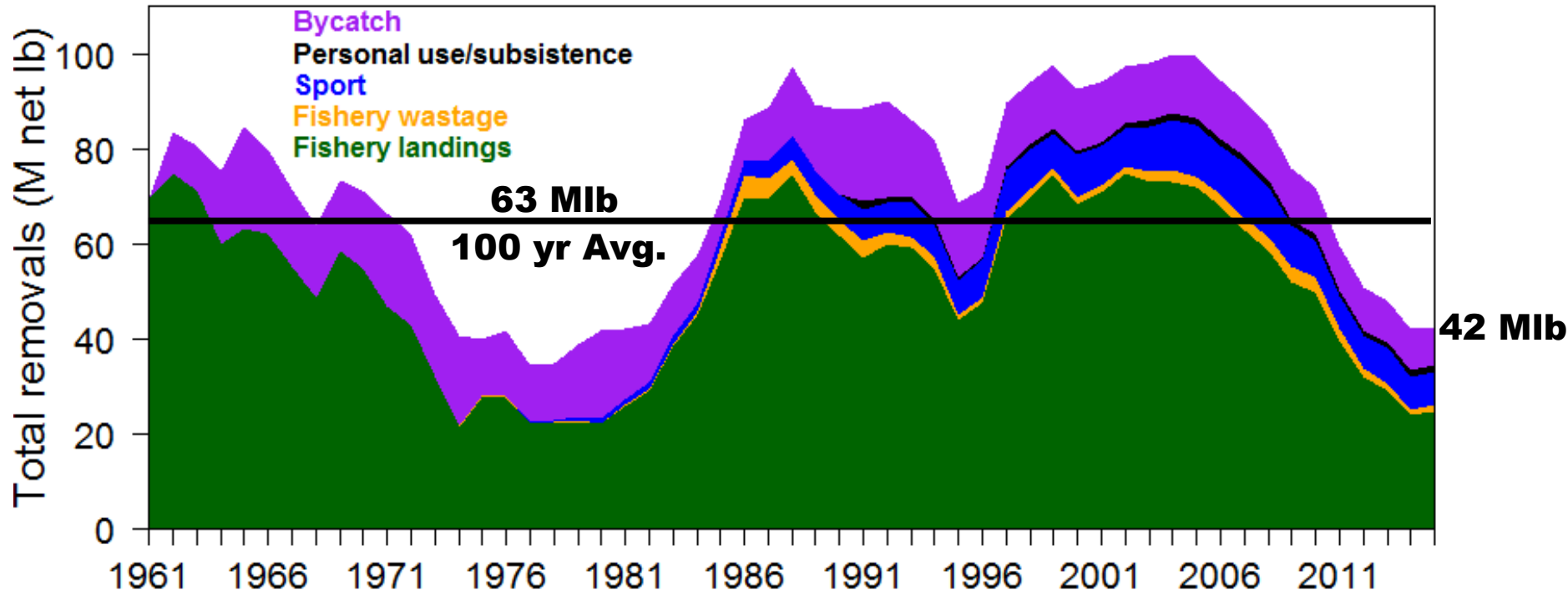


Outline

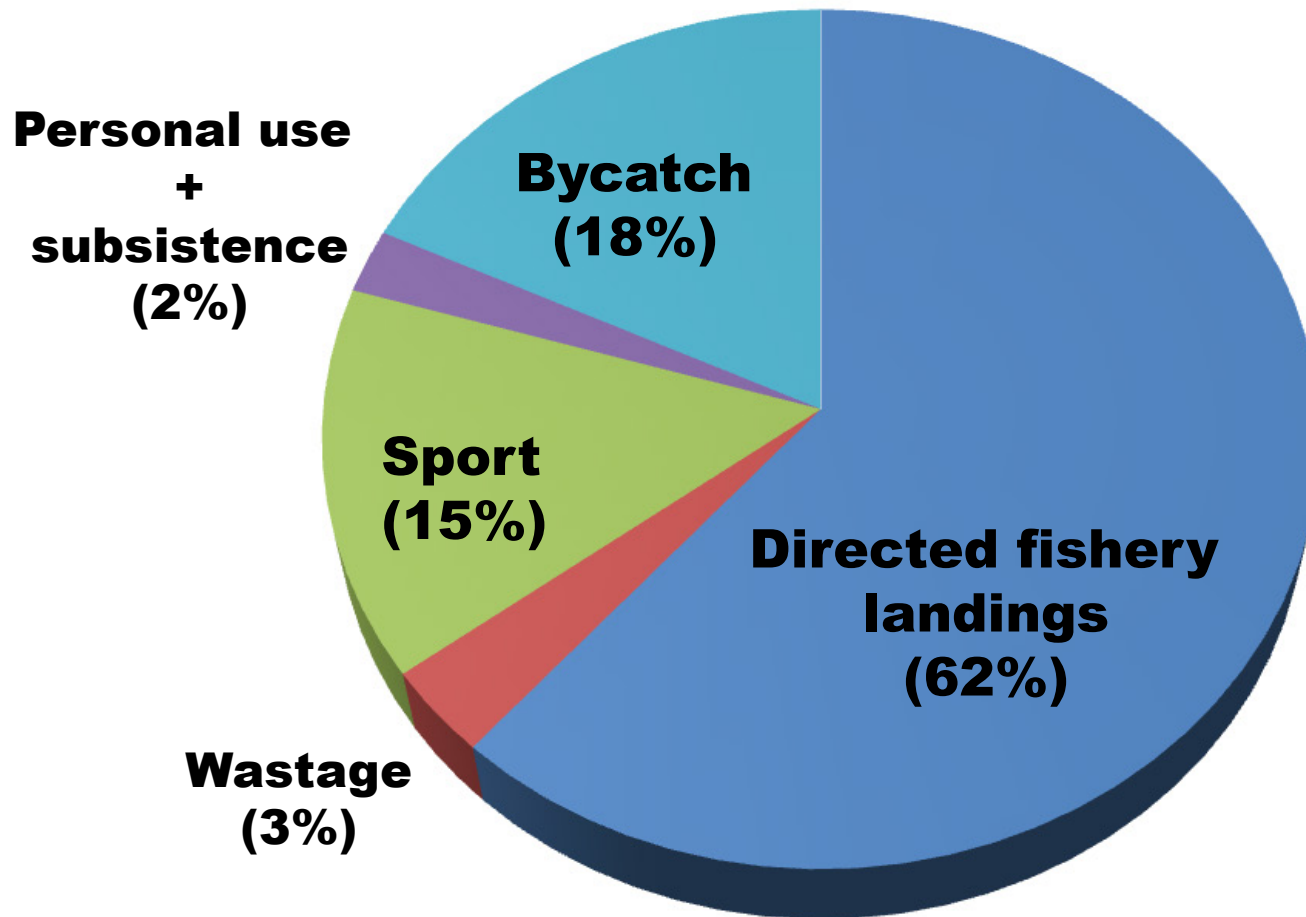
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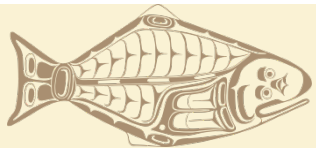
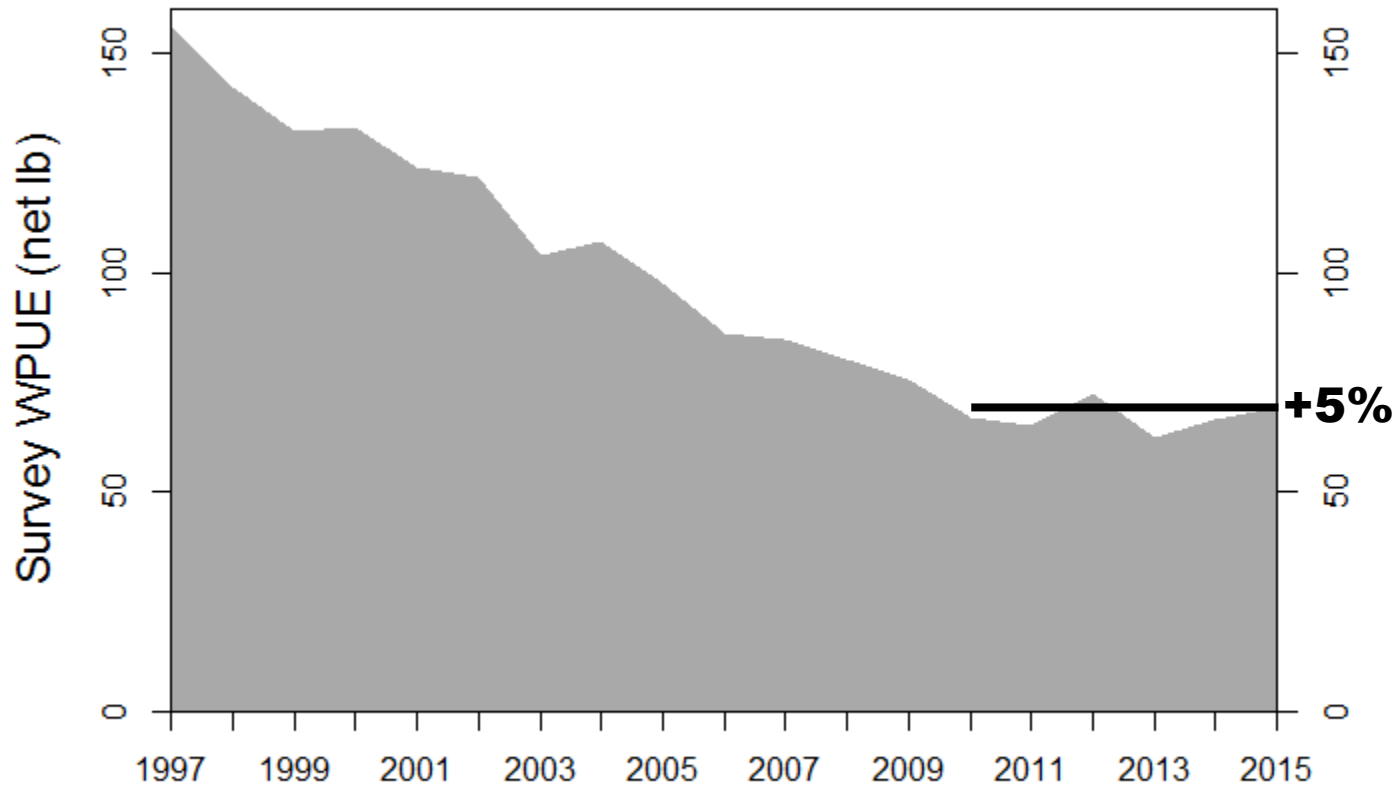
Estimated halibut mortality



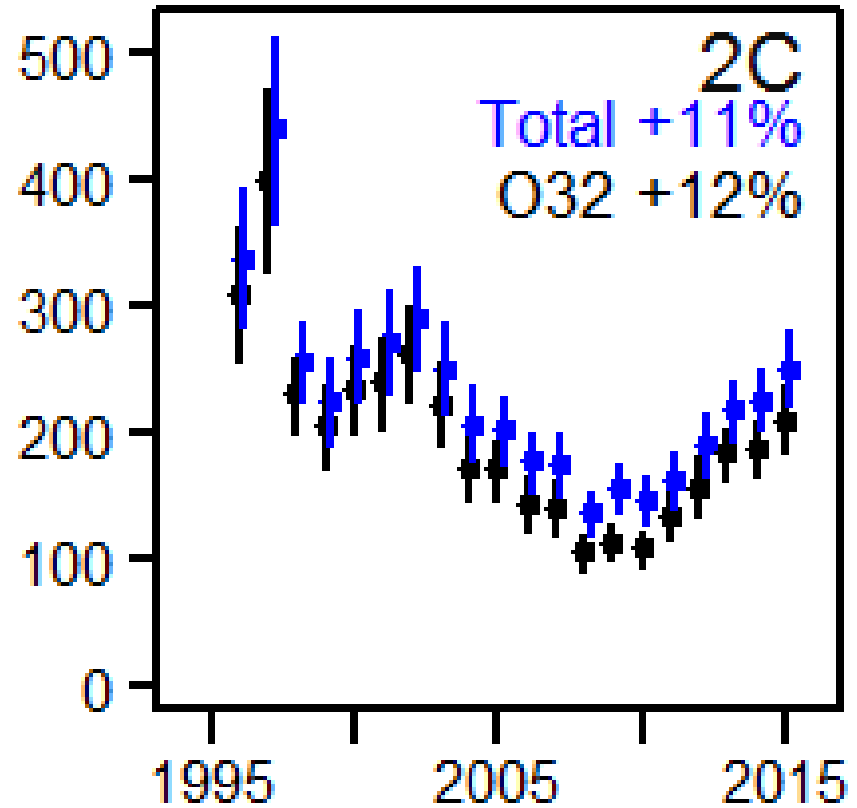
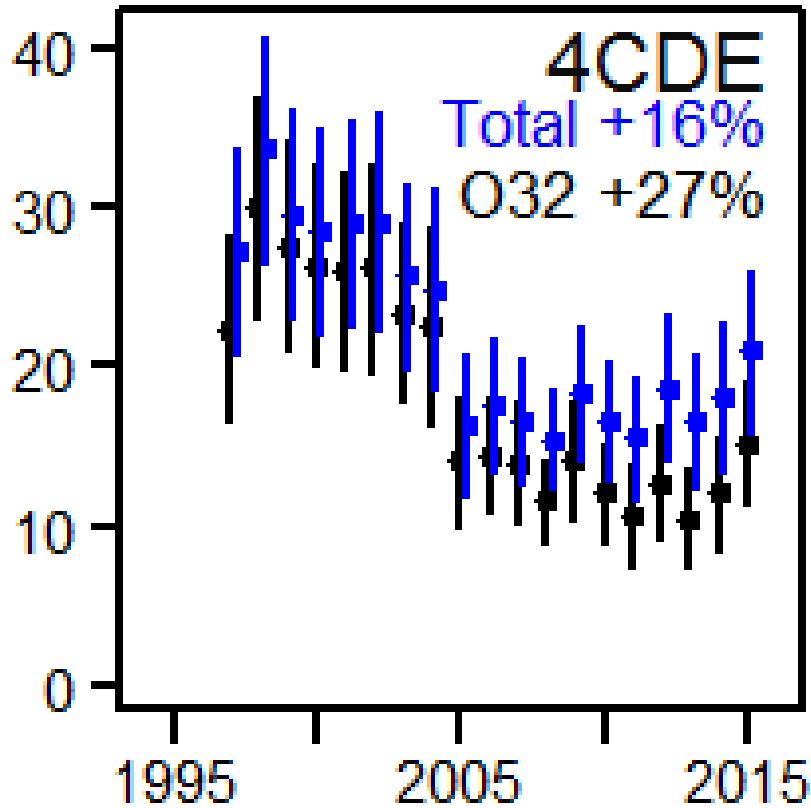
Distribution of the resource: 2011-2015 (pounds)



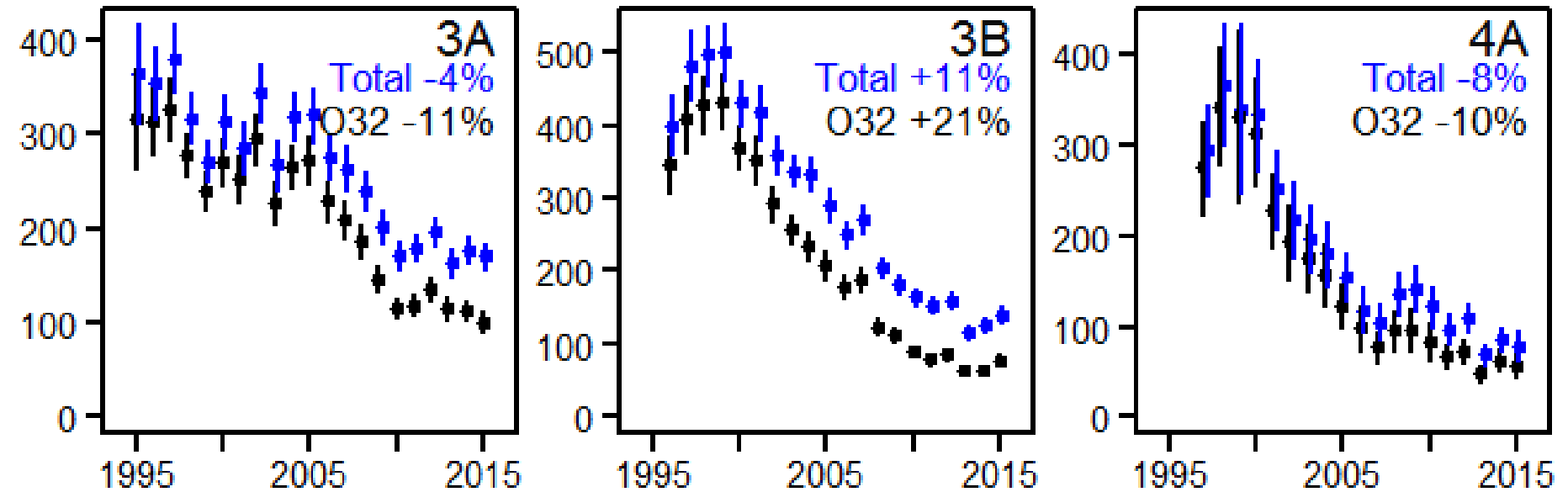
Survey coastwide Weight-Per-Unit-Effort



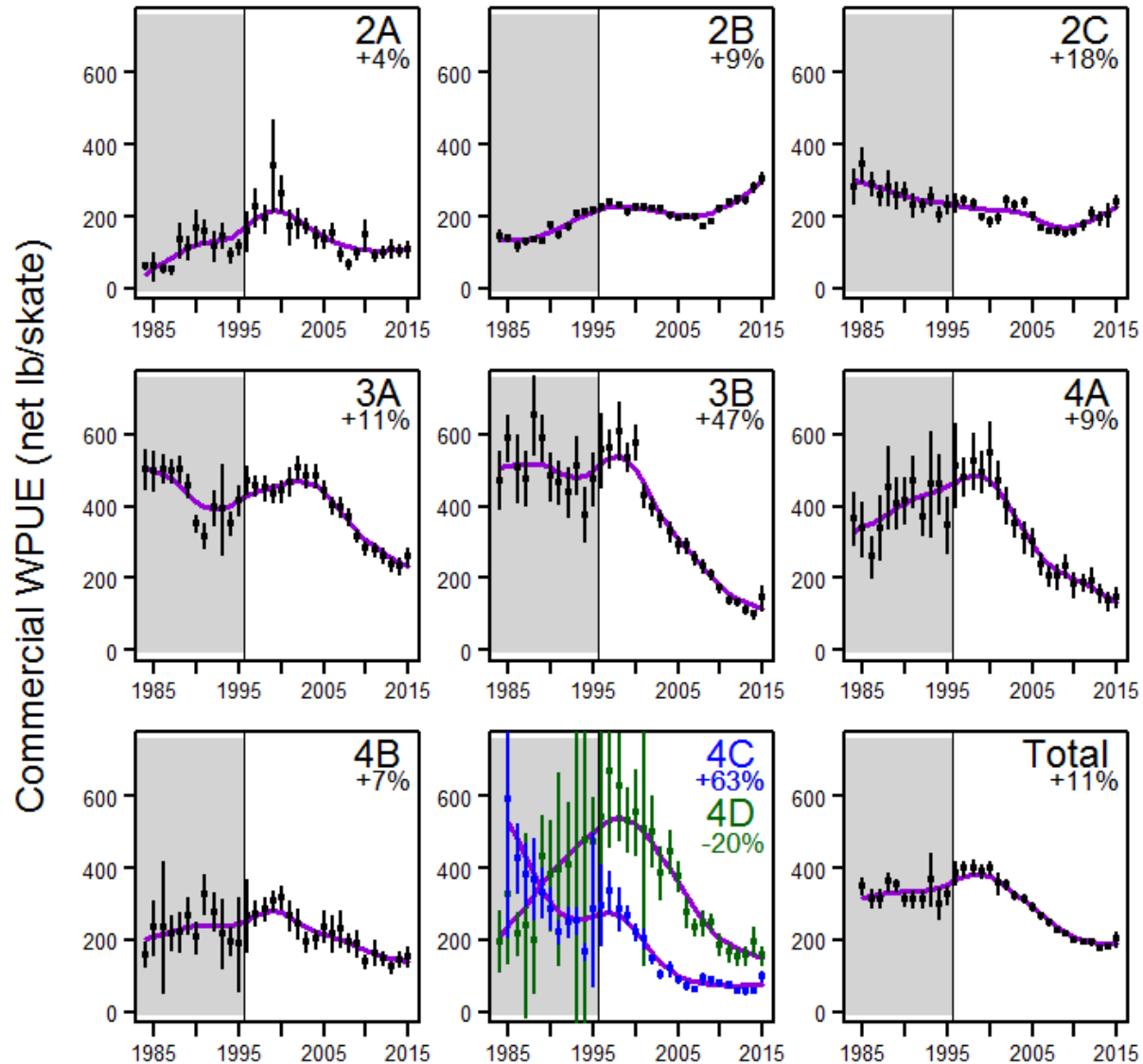
Survey Weight-Per-Unit-Effort



Survey Weight-Per-Unit-Effort

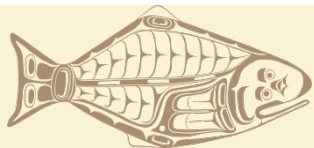
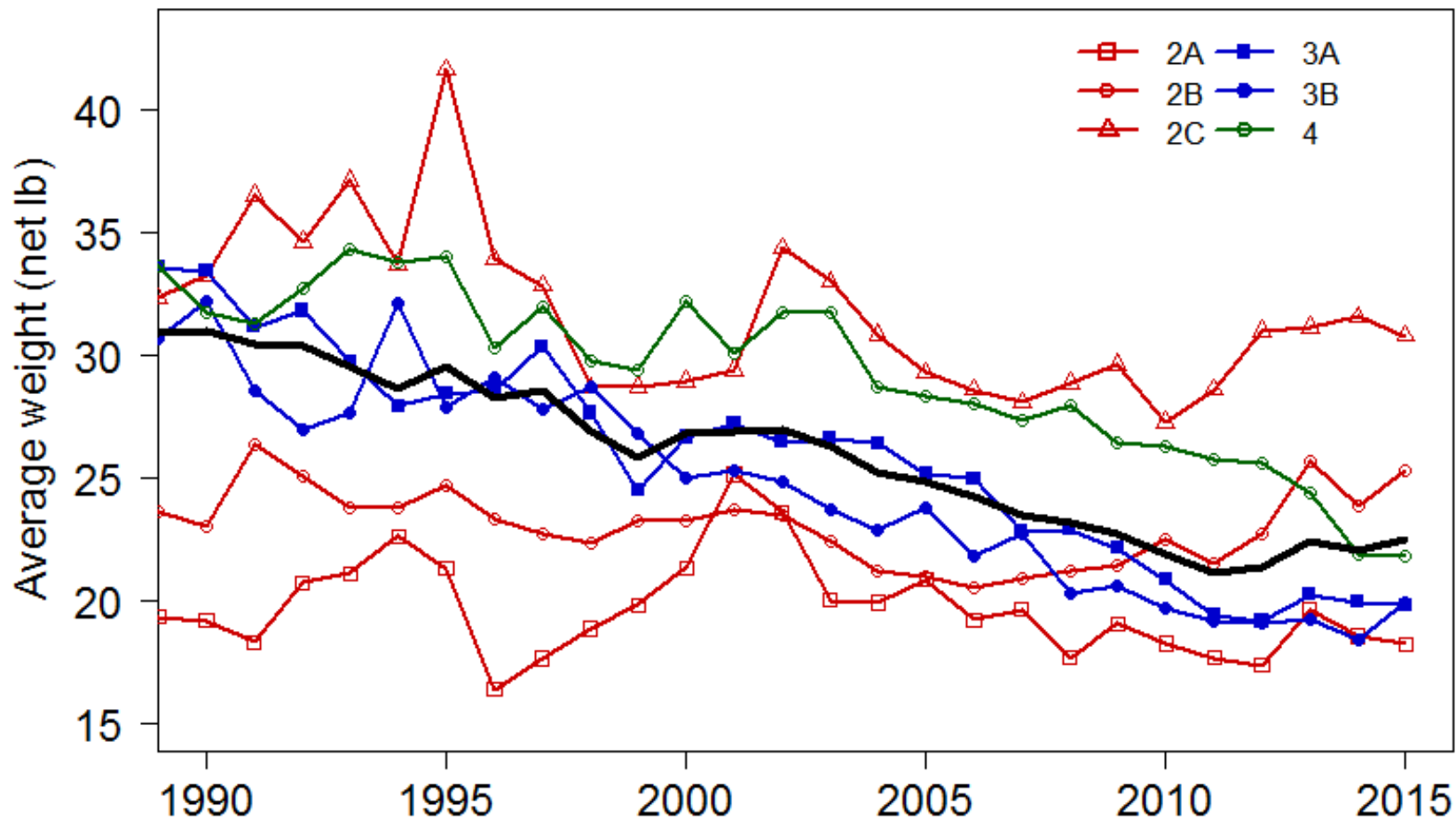


Commercial fishery logbooks

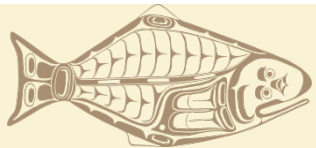
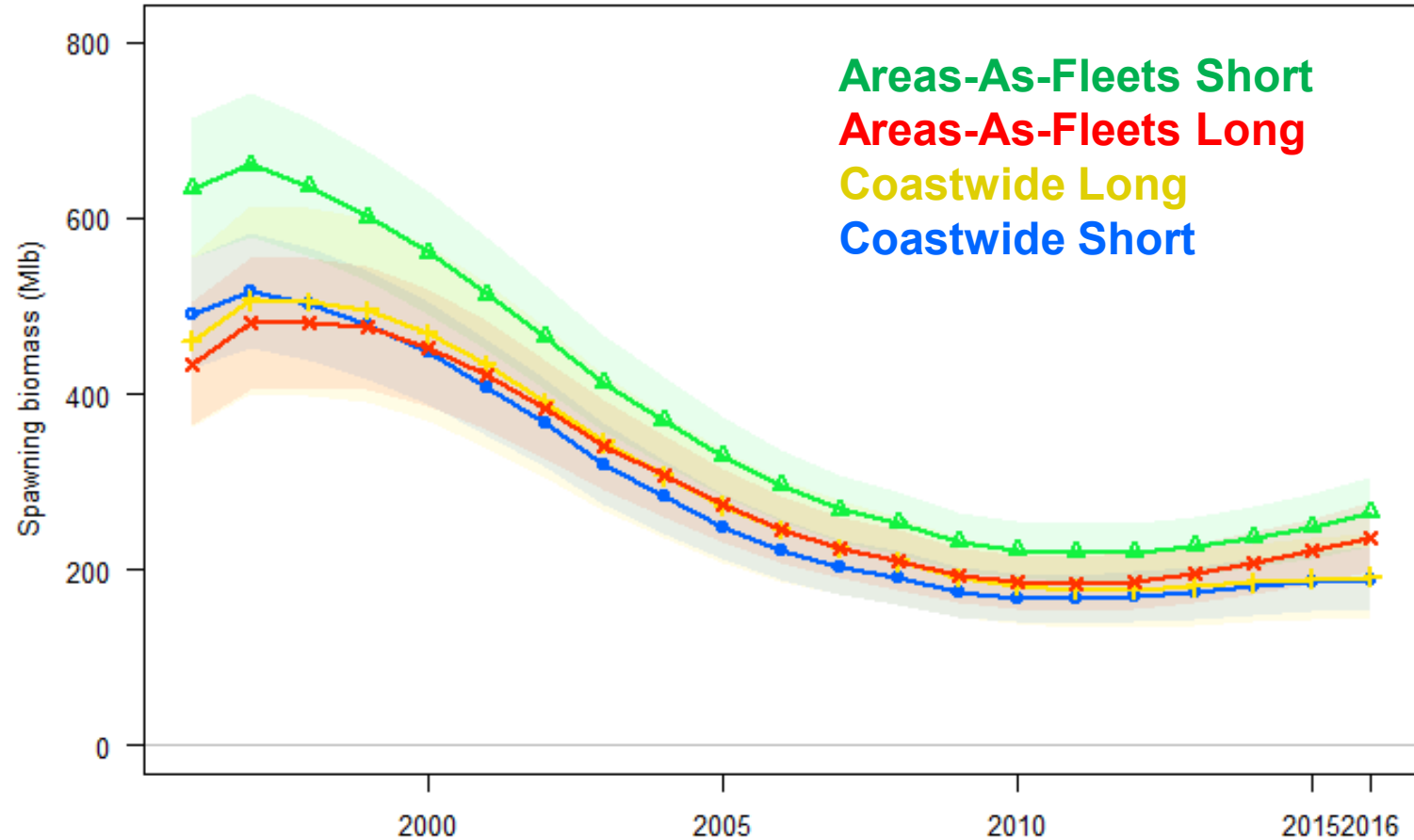


2015 logs are still incomplete and unverified.

Mean weight in the landings



Assessment ensemble



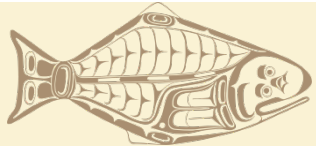
Salient results

- Low (3/100) chance the stock is below harvest policy threshold ($SB_{30\%}$)
- Current status ($SB_{43\%}$) consistent with targets for other species
- Current (2016) spawning biomass estimated to be increasing gradually



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FCEY Comparison

	<u>2A</u>	<u>2B</u>	<u>2C</u>	<u>3A</u>	<u>3B</u>	<u>4A</u>	<u>4B</u>	<u>4CDE</u>	<u>Total</u>
2014 Blue Line	0.72	4.98	4.16	9.43	2.84	0.85	0.82	0.64	24.45
2015 Blue Line	0.75	4.96	4.30	10.10	2.46	1.39	0.73	0.52	25.22
2016 Blue Line	1.02	5.22	4.62	9.27	2.71	1.30	0.92	1.64	26.70

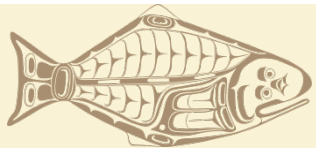
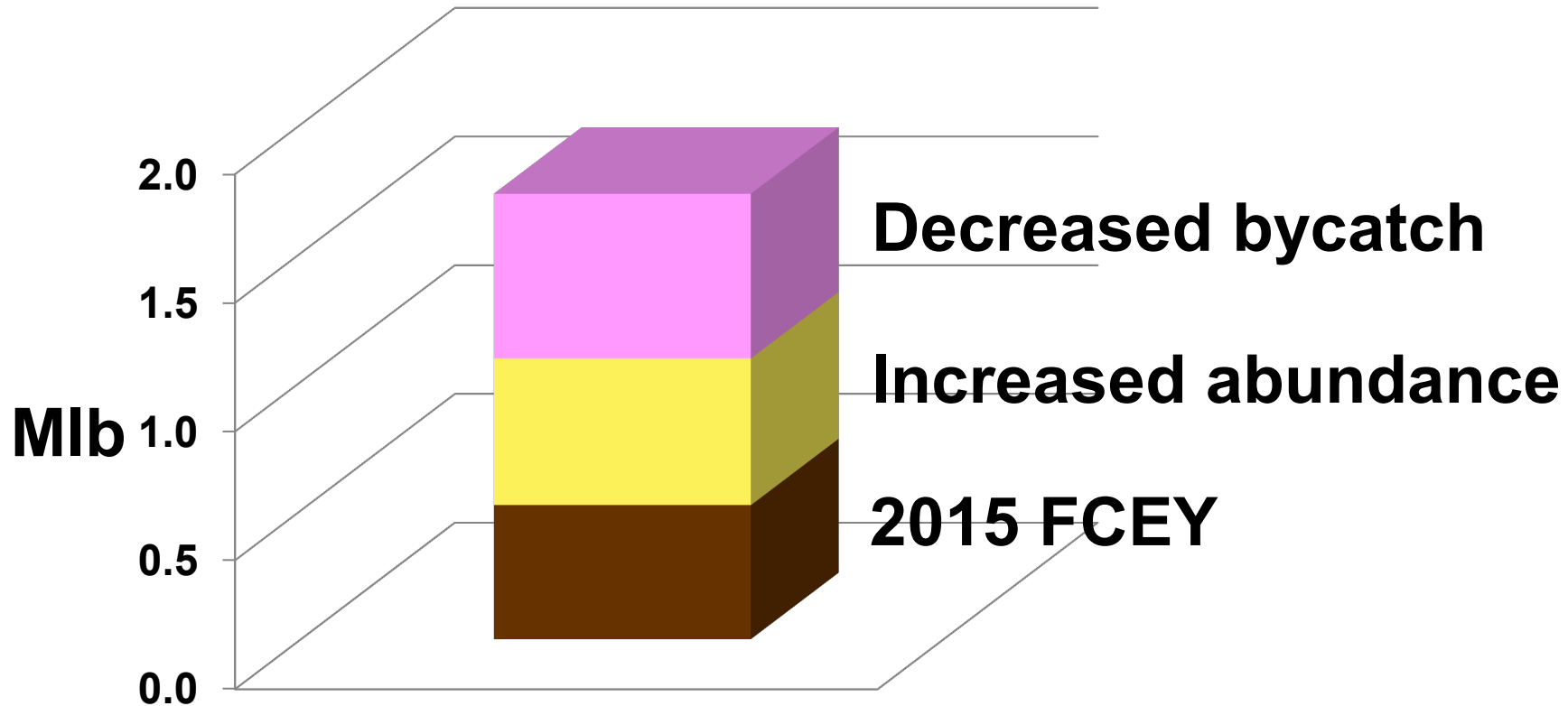


Changing spatial distribution
and other sources of mortality

↑
Increasing
abundance



2016 Blue Line 4CDE FCEY



2016 Catch Limits (Mlb, net wt)

Regulatory Area	2015 Catch Limit	Blue Line	Conference Board Advice	Processors Advisory Group Advice	IPHC Approved
2A ¹	0.97	1.02	1.33	1.42	1.14
2B ¹	7.04	5.22	7.35	7.35	7.30
2C ²	4.65	4.62	5.64	6.87	4.95
3A ²	10.10	9.27	10.10	10.10	9.60
3B	2.65	2.71	3.00	2.71	2.71
4A	1.39	1.30	1.39	1.39	1.39
4B	1.14	0.92	1.30	1.16	1.14
4CDE ³	1.29	1.64	1.64	1.64	1.66
4C ⁴	0.597	0.76	0.76	0.76	0.734
4D ⁴	0.597	0.76	0.76	0.76	0.734
4E ⁴	0.092	0.12	0.12	0.12	0.193
Total	29.22	26.70	31.75	32.63	29.89

¹ Combined sport and commercial allocation (2A includes tribal)

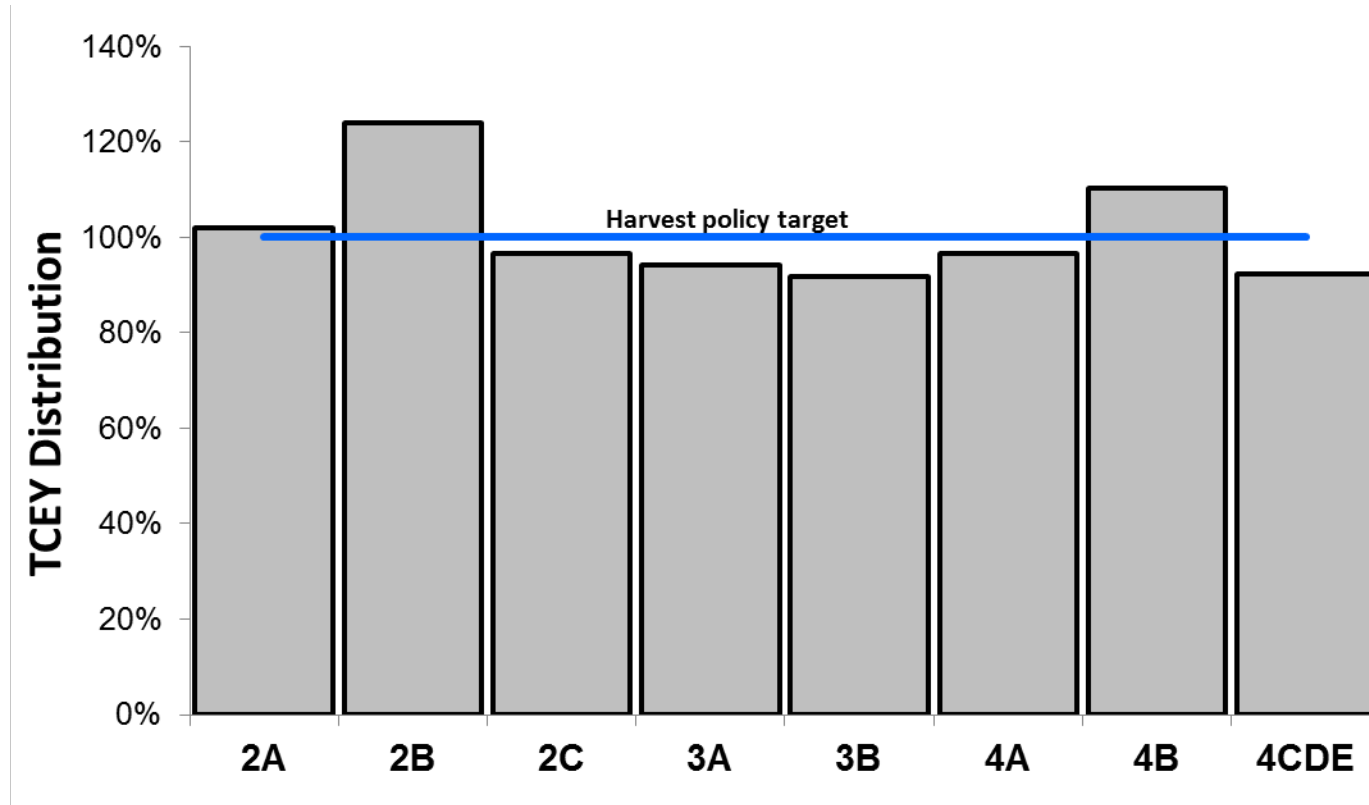
² Includes commercial and recreational charter Catch Sharing Plan

³ Allocation for combined Areas 4C, 4D, 4E

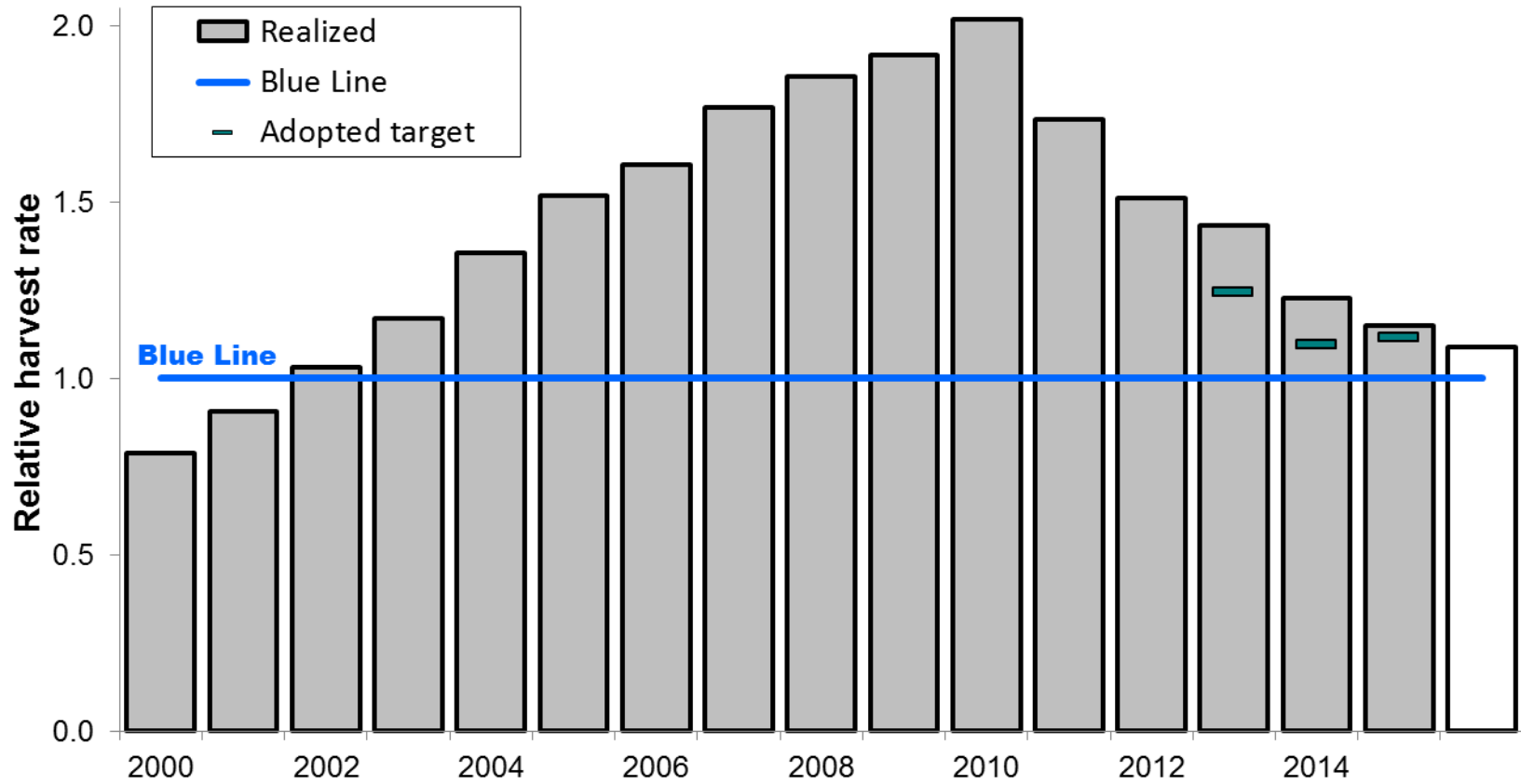
⁴ NPFMC Plan: 4C , 4D: 46.43% of 80K less than 4CDE quota, 4E: 7.14% + 80K if at or above 1.657



2016 Adopted catch limit distribution



Harvest rates



Decision table: Stock trend (times/100)

		Stock Trend			
		Spawning biomass			
		in 2017		in 2019	
		is less than 2016	is 5% less than 2016	is less than 2016	is 5% less than 2016
2016 Alternative	Total removals (M lb)	a	b	c	d
No removals	0.0	<1	<1	<1	<1
FCEY = 0	11.6	<1	<1	<1	<1
	20.0	<1	<1	3	<1
	30.0	3	<1	28	9
Blue Line	38.7	19	<1	45	32
<i>status quo</i> FCEY	41.4	28	<1	48	38
2016 Adopted	41.9	29	<1	49	39
Maintain 2015 SPR	42.9	32	<1	50	40
	50.0	45	3	64	48
	60.0	50	22	73	55



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Adopted regulations

- Season dates:
 - IFQ/IVQ fisheries Areas 2B-4, Area 2A Treaty and incidental: March 19 – November 7
 - Area 2A non-treaty commercial: 10 hr periods:
6/22, 7/6, 7/20, 8/6, 8/17, 8/31, 9/14, 9/28
- Catch sharing plans for Areas 2A, 2B, 2C, 3A, and 4CDE



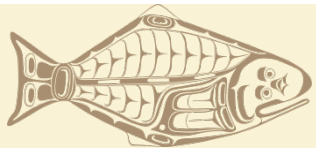
Adopted regulations

- Catch sharing plan Area 2C charter fishery:
 - One fish daily bag limit, ≤ 43 in or ≥ 80 in
- Catch sharing plan Area 3A charter fishery:
 - Two fish daily bag limit
 - Maximum size limit 28 inches on second fish
 - Each vessel limited to one trip per calendar day
 - Each permit limited to one trip per vessel per calendar day
 - Wednesday closure
 - 4-fish annual limit
 - Record (in ink): date, area, # halibut on state license



Adopted regulations

- Areas 2C and 3A charter fisheries:
 - Remove IPHC carcass retention requirement; this was redundant with NMFS regulations



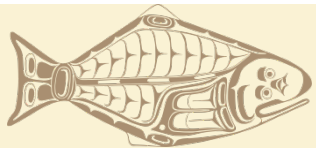
Other actions

- Approved pots as a legal commercial halibut gear in the Gulf of Alaska, as defined by sablefish management areas, with review in three years
- NMFS eLog allowed as an acceptable log for Alaska
- Area 2A Tribal ID (from vessel ID) on fish ticket requirement
- All halibut with an IPHC external tag may be retained in sport and personal use fisheries regardless of season, size, or bag limits



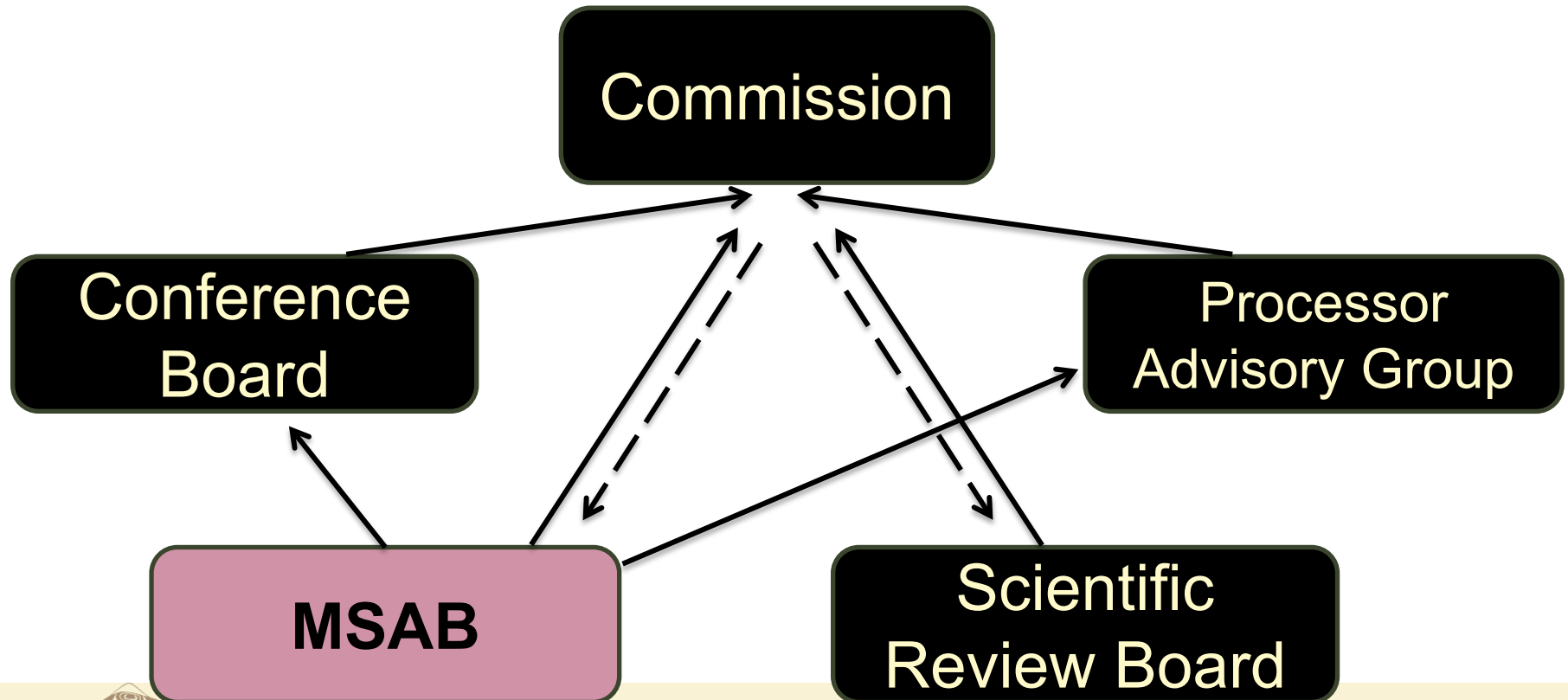
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MSAB 2015

- Defined governance and facilitation structure
- Draft fishery objectives, management procedures
- Model development and user interface



MSE Operating Model Development

- Catarina Wor (UBC student)/Steve Martell
- Operating Model features under development:
 - Population model is age-structured, spatially explicit, sex, stock, recruitment, advection-migration.
 - Fisheries: fleets, areas, selectivity/availability, size-specific fishing mortality, bycatch, discards, sex-specific.
 - Scientific data: sex-specific catch, relative abundance, age- size-composition, weight-at-age sampling.
 - Stochastic elements: recruitment, scientific sampling errors, structural errors, implementation errors.
- Technical details reviewed by IPHC Scientific Review Board



MSAB 2016

- Developing outreach plan
- Developing Terms Of Reference
- Developing 2-3 year work plan
- Continued development of coastwide and spatially explicit operating models

→ *New hire: Dr. Allan Hicks (begins April 4, 2016)*



2016 Staff directives

- Evaluate discard mortality rate (16%) applied to the directed halibut fishery
- Explore other data sources for estimating relative abundance and/or catch rates near Nunivak Island
- Further harvest policy analysis via the MSAB
- Continue to promote bycatch reduction and evaluate of the effects of bycatch



Future Meetings

- **2016 IPHC Interim Meeting:** Seattle, WA
November 29-30, 2016
- **2017 Annual Meeting:** Victoria, BC
January 23-27, 2017
- **2018 Annual Meeting:** Portland, OR
January 22-26, 2018



