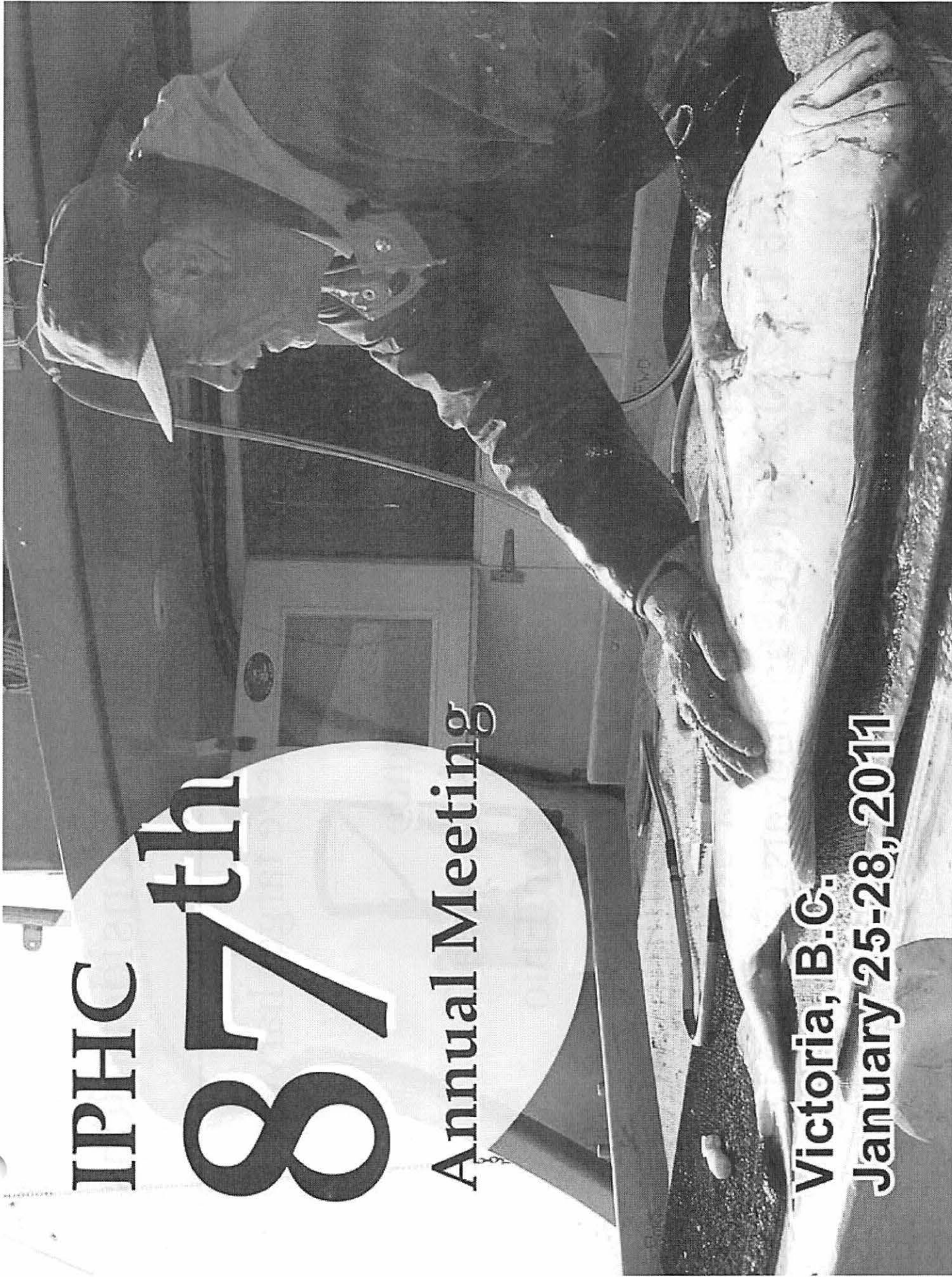


IPHC

87th

Annual Meeting

**Victoria, B.C.
January 25-28, 2011**

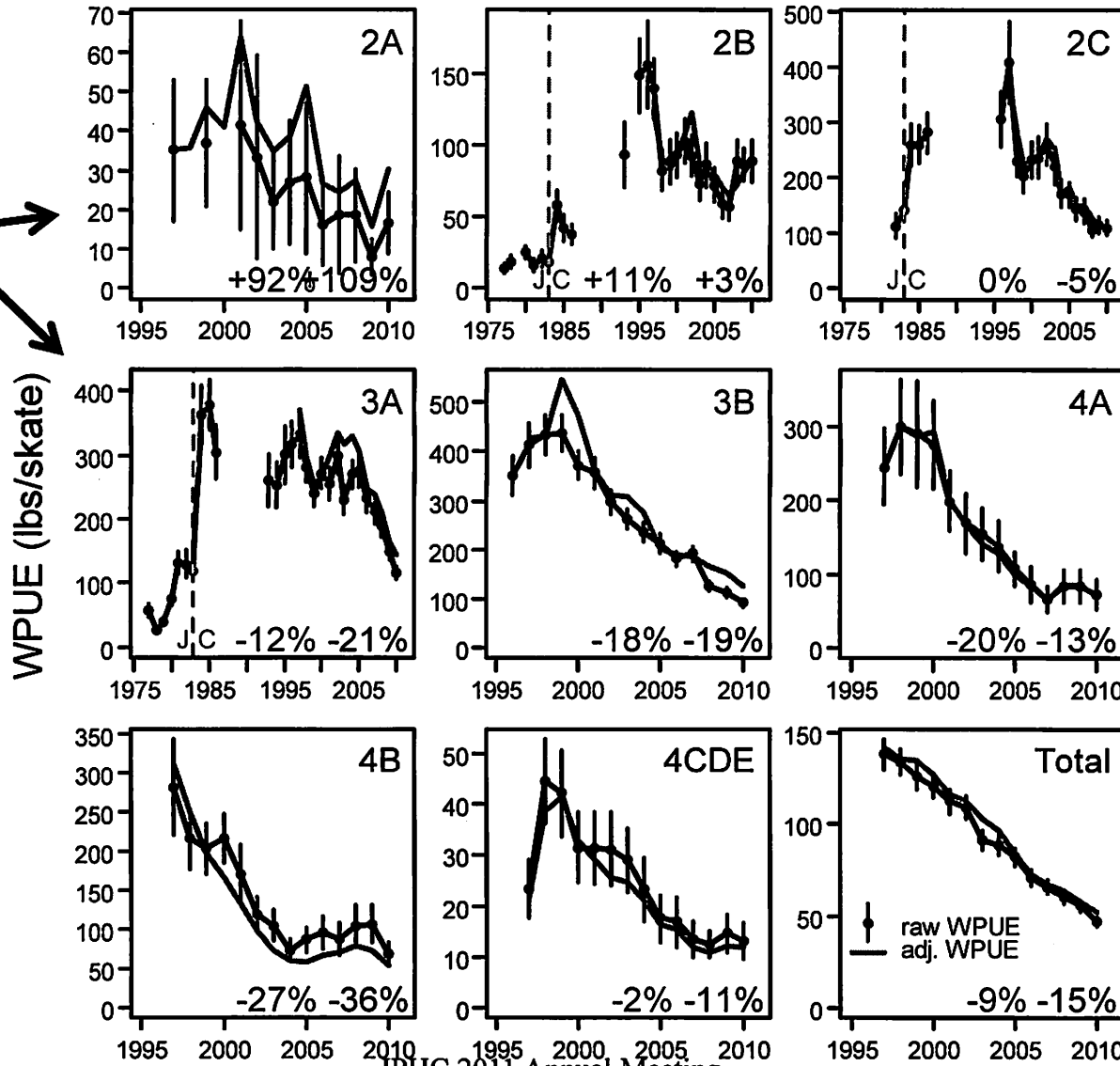


Recommended Catch Limit Considerations

- ❖ Commission's desire to achieve target harvest rates in all areas
- ❖ Declining indices of abundance
- ❖ Recent high exploitation rates in Area 2
- ❖ Declining size at age and effect on Ebio
- ❖ Addressing inconsistencies in treatment of U32/O26 removals among different categories of removals. Options for direct deductions of both U32/O26 and U26 removals examined

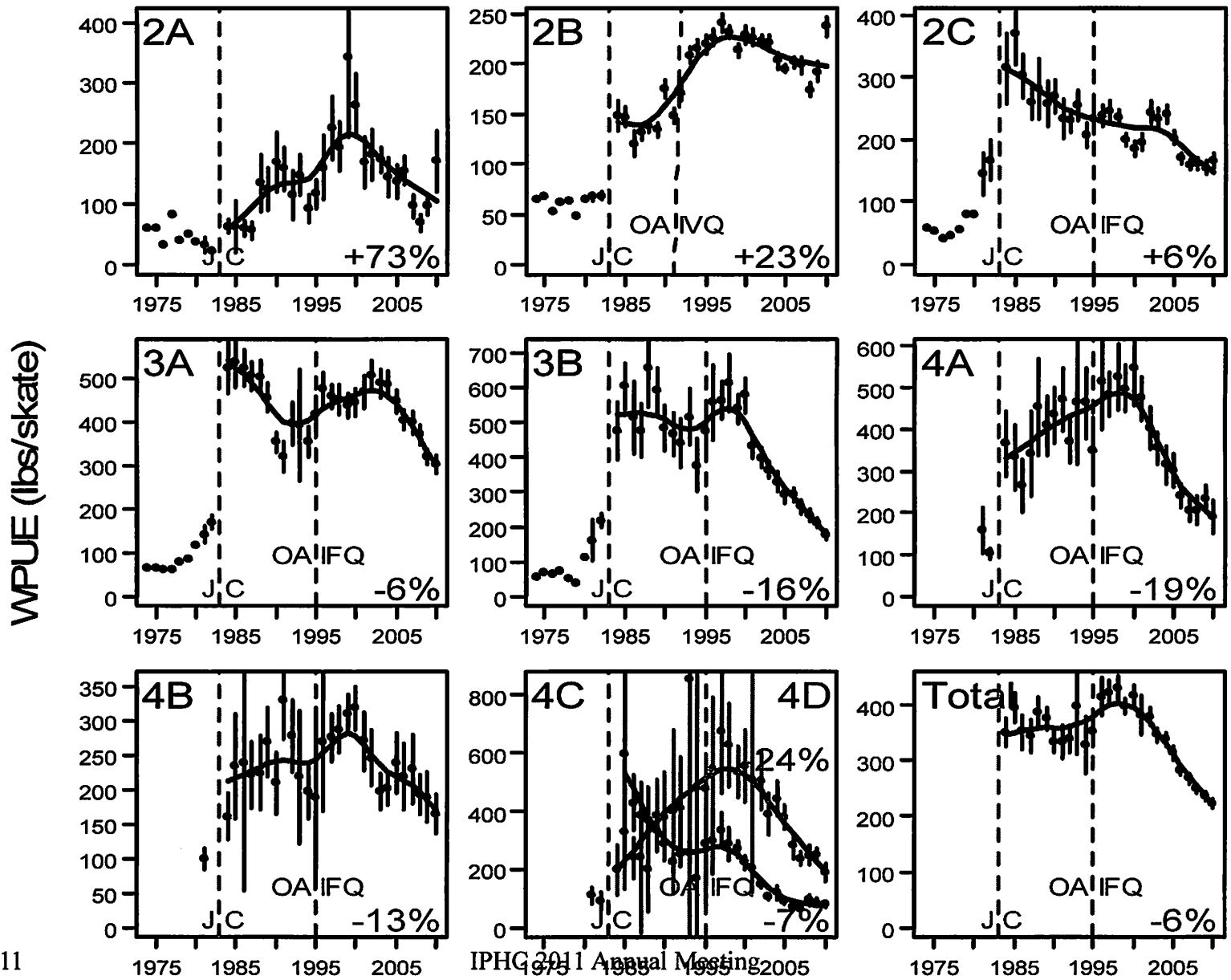
Raw and Adjusted Survey WPUE (O32)

Note the different vertical scales for each area

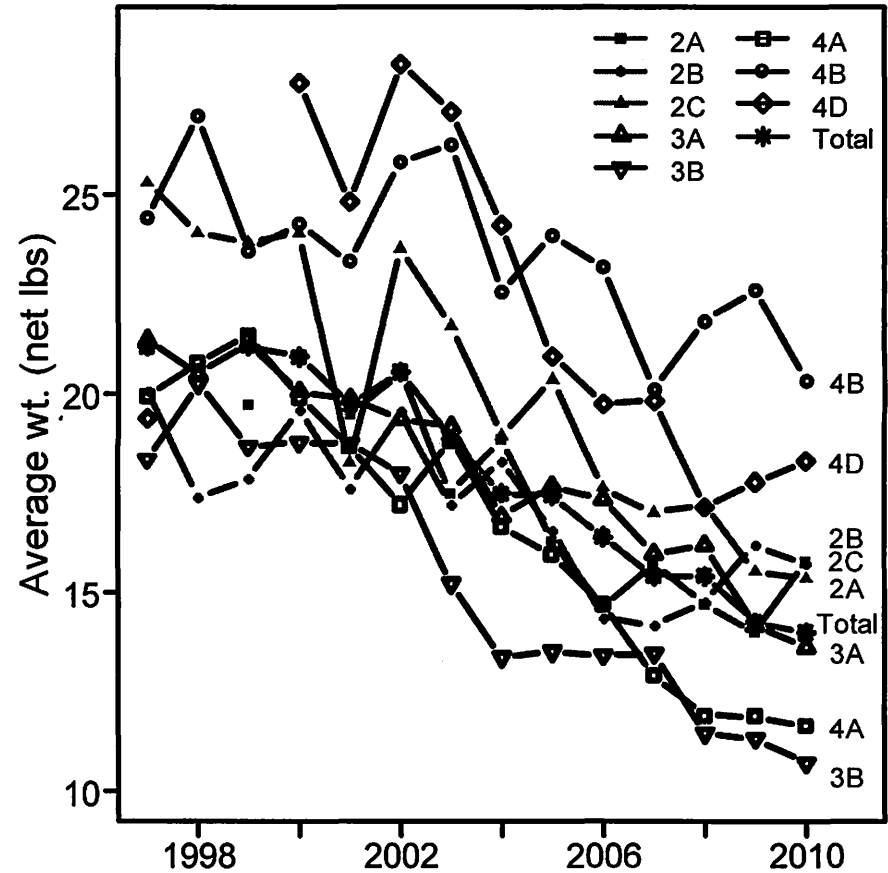
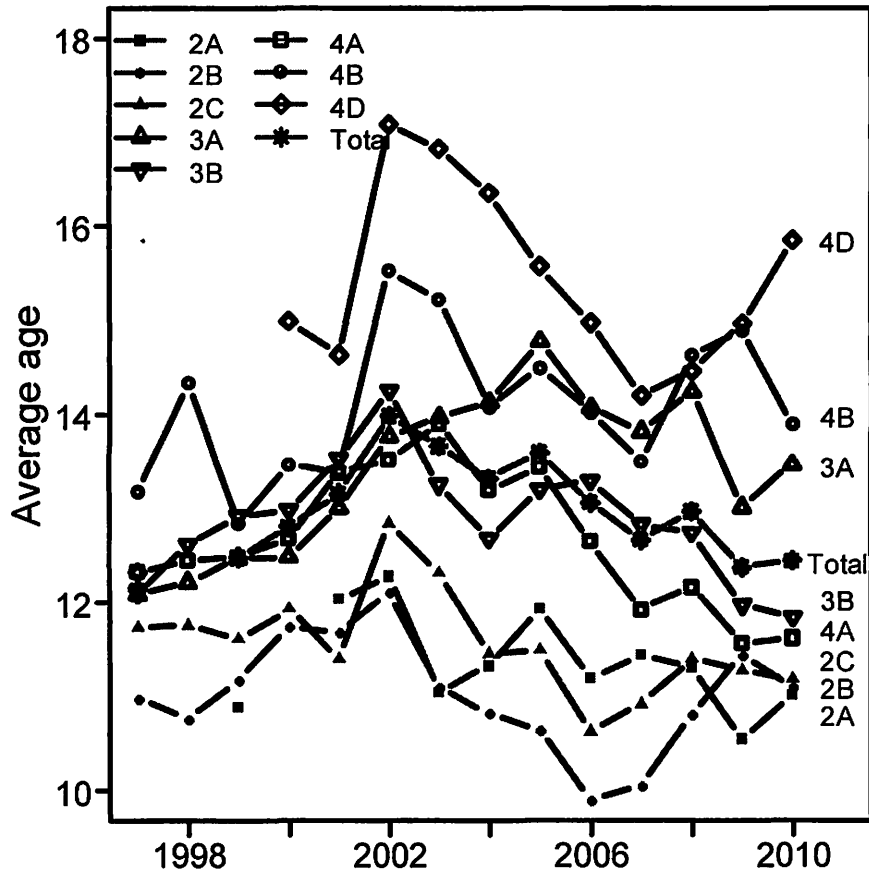


Note the different timeline for Areas 2B, 2C, 3A

Commercial WPUE, 1974-2010

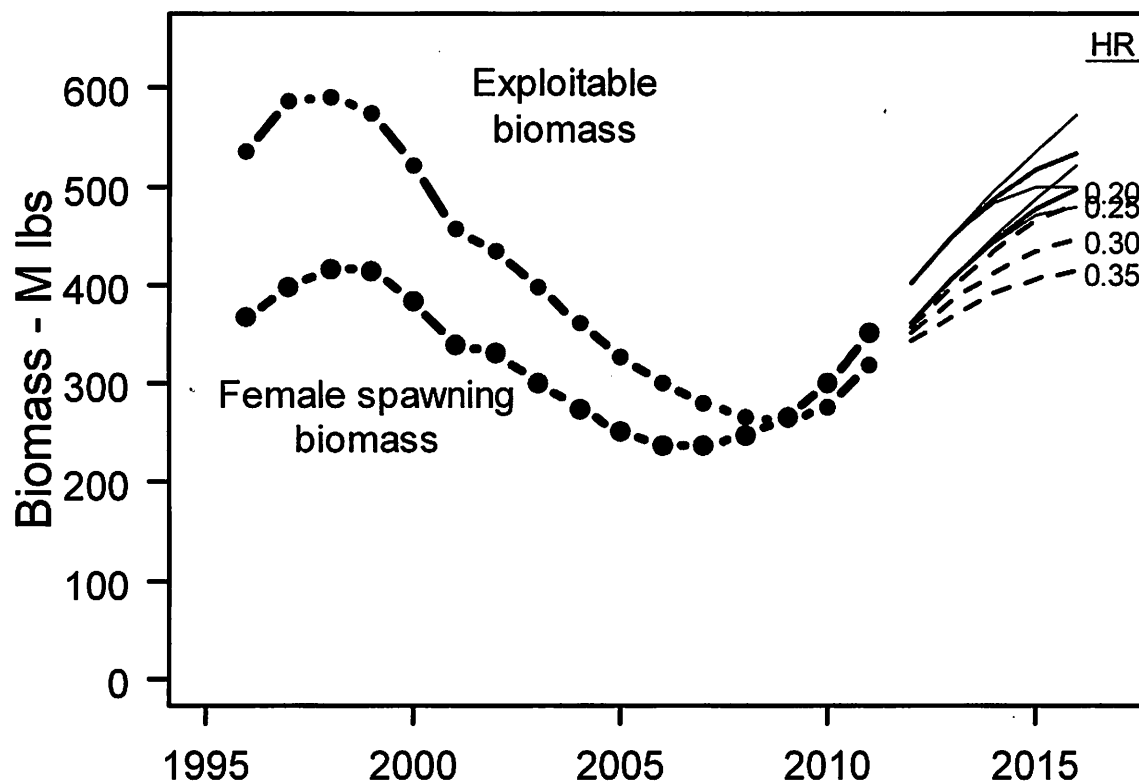


Reg area age and weight trends (survey)



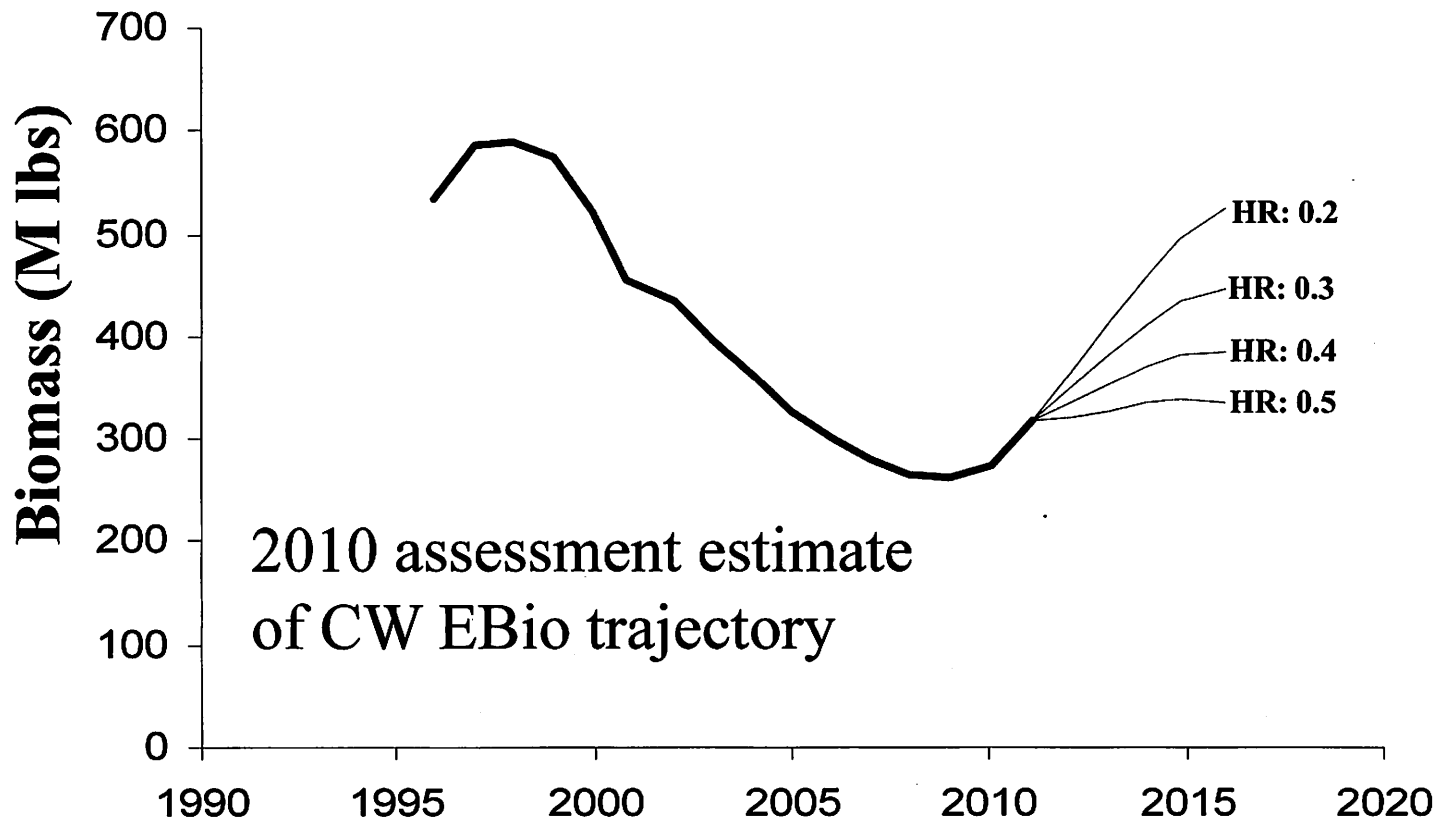
Ebio projections - Coastwide

- Cautionary notes on projections
 - Based on current estimated population structure
 - Assumes no change in size-at-age
 - Assumes near average recruitment
 - Assumes removals will be at target HR of 0.20.

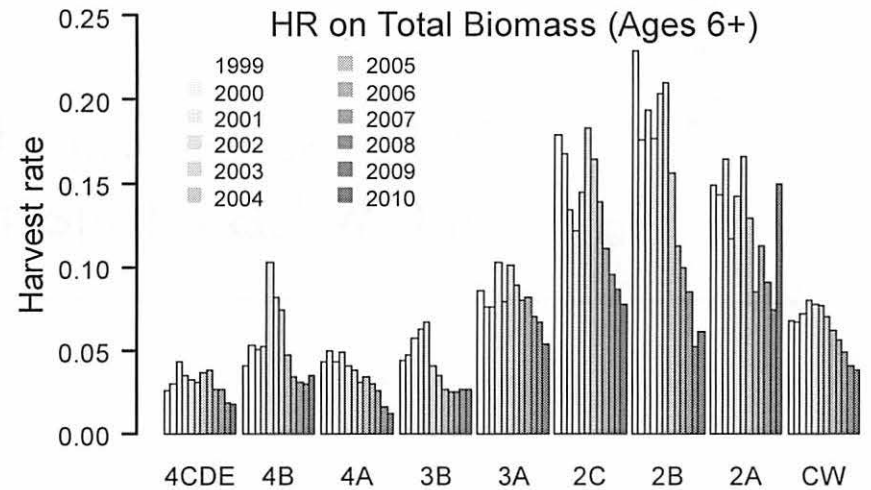
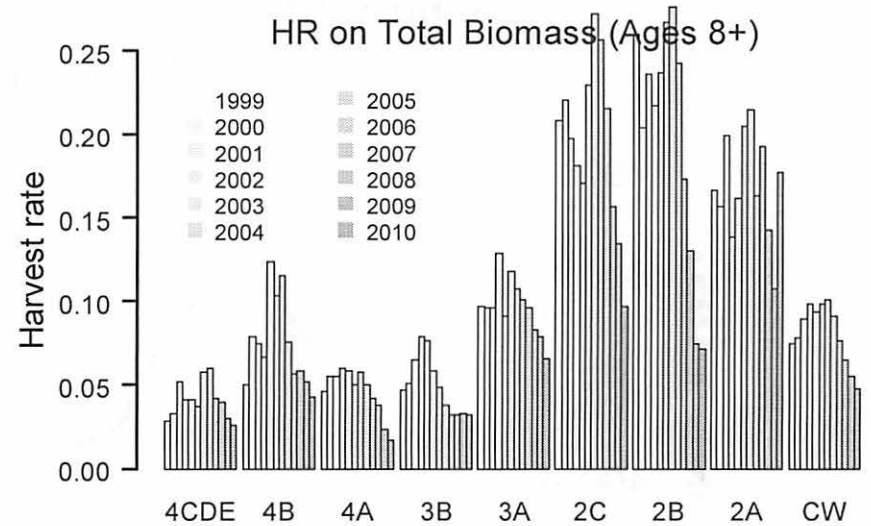
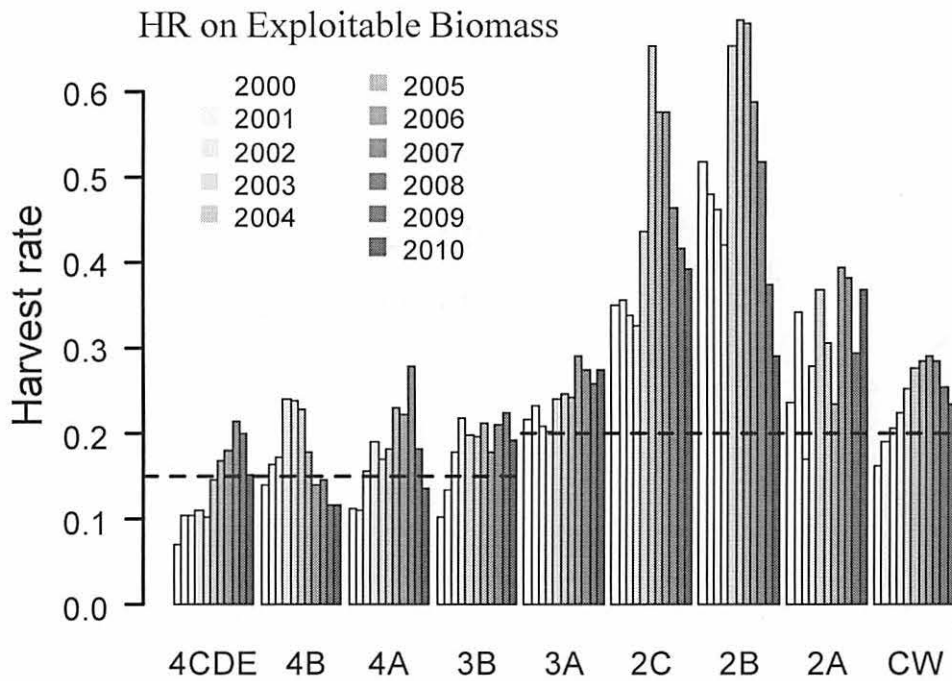


Projected CW EBio (no change in trends)

- Using Min, Avg and Max CW estimated recruitment
- Changing trends: 1) no further decreases in size-at-age
2) no further decreases of recruitment estimates

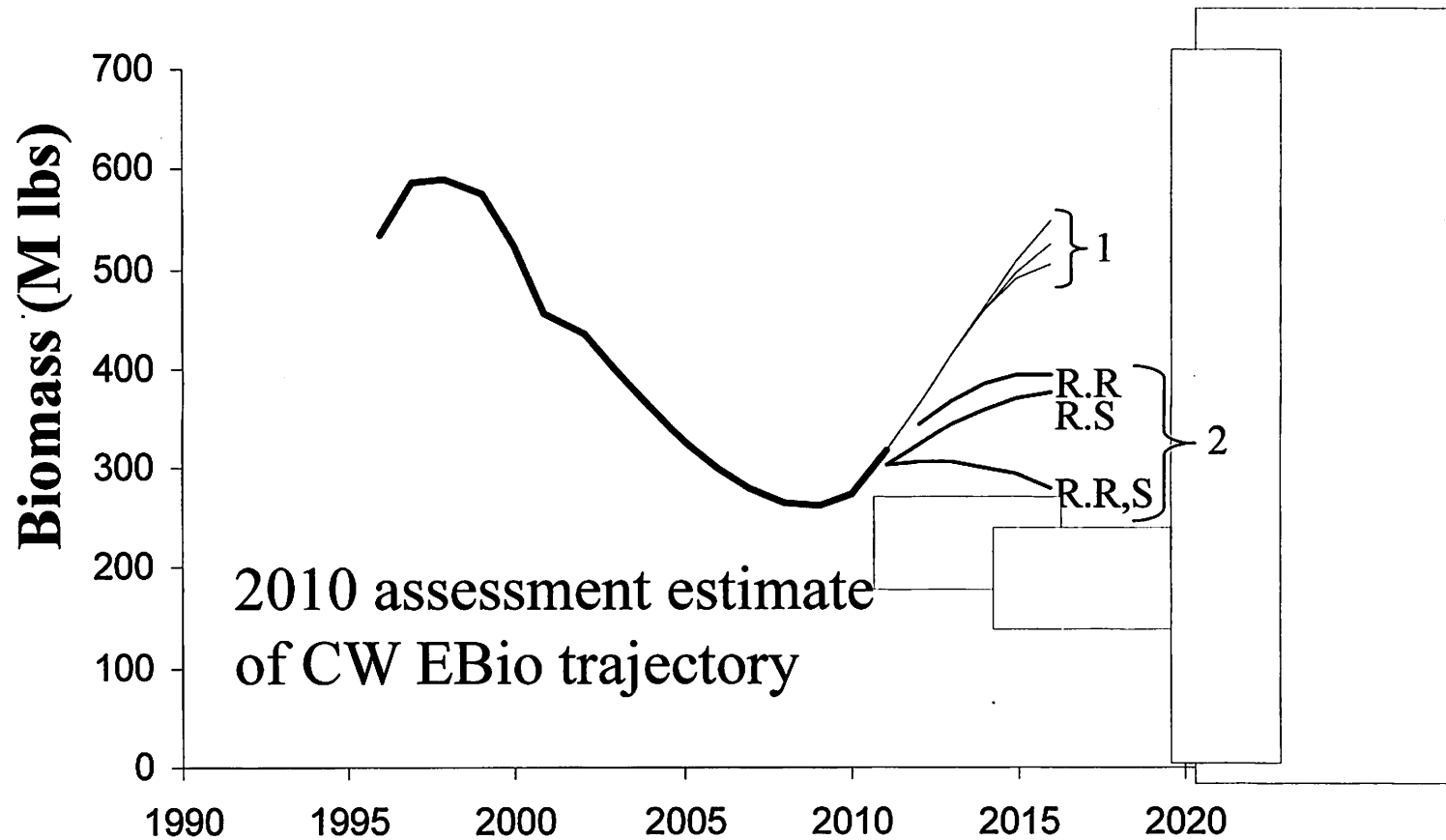


Realized harvest rates



Projected CW EBio (alternative method)

- 1) Using Min, Avg and Max CW estimated recruitment
- 2) Avg Recruits, reduced rec. (R.R), reduced size-at-age (R.S) and both (R.R,S)



Apportionment Process

- ❖ Adjustment factors used same as those in 2010
 - Hook competition
 - Survey timing
- ❖ Data averaging
 - Statistical analysis used Kalman filter approach to develop 75:20:5 reverse weighting for the past three years of survey data, most recent year's data weighted highest
- ❖ Final apportionment uses adjusted, reverse-weighted WPUE, and bottom areas (0-400 fm)

Change to Slow Up Fast Down (SUFD)

- ❖ SUFastD phases in changes asymmetrically
- ❖ EBio (x HR) -> TCEY (- OR) -> FCEY (SUFastD) -> CLR
- ❖ Fishery CEY adjustment termed “Slow Up Fast Down”
 - Option to modify to Slow Up Full Down (SUFullD)
- ❖ SUFastD has resulted in Coastwide quotas 9-14% over the Fishery CEY (FCEY) the last few years
 - Individual regulatory areas have been as much as 75% over FCEY
- ❖ Analysis shows that SUFastD does not work as well under conditions of:
 - Starting from catch levels well above FCEY
 - Continuing decline in size at age

Commission Requested Analysis

- ❖ Current treatment of U32/O26 removals is not consistent across all fishery types (commercial, sport, subsistence). Some is by direct deduction, some is by harvest rate adjustment.
- ❖ Commission requested that staff attempt to rationalize the treatment of such fish
- ❖ Staff developed method to directly deduct all such removals from Total CEY, in combination with a modified harvest rate
- ❖ Results indicate previous treatment was adequate but proposed method more apparent and consistent

Scenarios Considered

Reg Area	Standard Deductions, All U32 BAWM in HR			Direct U32/O26 Deductions, All U26 BAWM in HR			Direct U32 Deductions, No U32 BAWM in HR		
	No SUFD	SUFD	SUFuIID	No SUFD	SUFD	SUFuIID	No SUFD	SUFD	SUFuIID
2A	1.13	0.92	0.92	0.95	0.91	0.91	0.97	0.92	0.92
2B	7.65	7.55	7.55	7.94	7.65	7.65	8.07	7.69	7.69
2C	2.27	3.34	2.27	2.33	3.36	2.33	2.41	3.40	2.41
3A	14.85	17.42	14.85	14.36	17.17	14.36	14.70	17.34	14.70
3B	8.08	8.99	8.08	7.51	8.70	7.51	7.47	8.69	7.47
4A	2.67	2.44	2.44	2.57	2.41	2.41	2.56	2.41	2.41
4B	2.14	2.15	2.14	2.21	2.18	2.18	2.20	2.17	2.17
4CDE	4.44	3.87	3.87	3.99	3.72	3.72	3.96	3.71	3.71
Total	43.22	46.67	42.11	41.85	46.10	41.07	42.34	46.33	41.48

Revised from initial staff recommendations

All cases use Hook/Timing Adjustment Factors and reverse weighted averaging of survey WPUEs

Staff Recommendation

	Direct U32/O26 Deductions All U26 BAWM in HR
Reg Area	SUFulID
2A	0.91
2B	7.65
2C	2.33
3A	14.36
3B	7.51
4A	2.41
4B	2.18
4CDE	3.72
Total	41.07

Recommendations based on use of Hook/Timing adjustment factors and reverse weighting of survey WPUEs

Coastwide Assessment: Hook Competition and Timing AFs, reverse averaging to Survey Apportionment, SUFullD, and Direct U32/O26 Deduction

Reg Area	Exploitable biomass	Harvest Rate	Total CEY	2010 Other Removals	2010 Catch Limit	2011 Fishery CEY	Slow Up-Full Down Adjustment	2011 Catch Limit Recomm.	
2A	6.63	21.5%	1.43	0.31	0.81	1.11	-0.20	0.91	1,3
2B	40.89	21.5%	8.79	0.85	7.50	7.94	-0.30	7.65	2,3
2C	25.05	21.5%	5.39	3.06	4.40	2.33	0.00	2.33	4
3A	109.39	21.5%	23.52	9.16	19.99	14.36	0.00	14.36	4
3B	57.32	16.1%	9.24	1.73	9.90	7.51	0.00	7.51	4
4A	21.25	16.1%	3.43	0.86	2.33	2.57	-0.16	2.41	3
4B	16.14	16.1%	2.60	0.39	2.16	2.21	-0.03	2.18	3
4CDE	40.32	16.1%	6.50	2.52	3.58	3.99	-0.27	3.72	3
Total	317.00	19.2%	60.90	18.88	50.67	42.02	-0.95	41.07	

Note: Exploitable biomass is coastwide assessment, survey partitioning; Hook & Timing Afs; Kalman wts

¹ Catch limits and Fishery CEY for 2A includes commercial, sport, and treaty subsistence catches

² Catch limits and Fishery CEY for 2B includes commercial and sport catch

³ Calculated as 2010 catch limit plus 1/3 of the difference between
2011 Fishery CEY and 2010 Catch Limit

⁴ Calculated as 2011 Fishery CEY

Assumes GHL of 0.788 Milb in Area 2C, 3.65 Milb in Area 3A under Other Removals

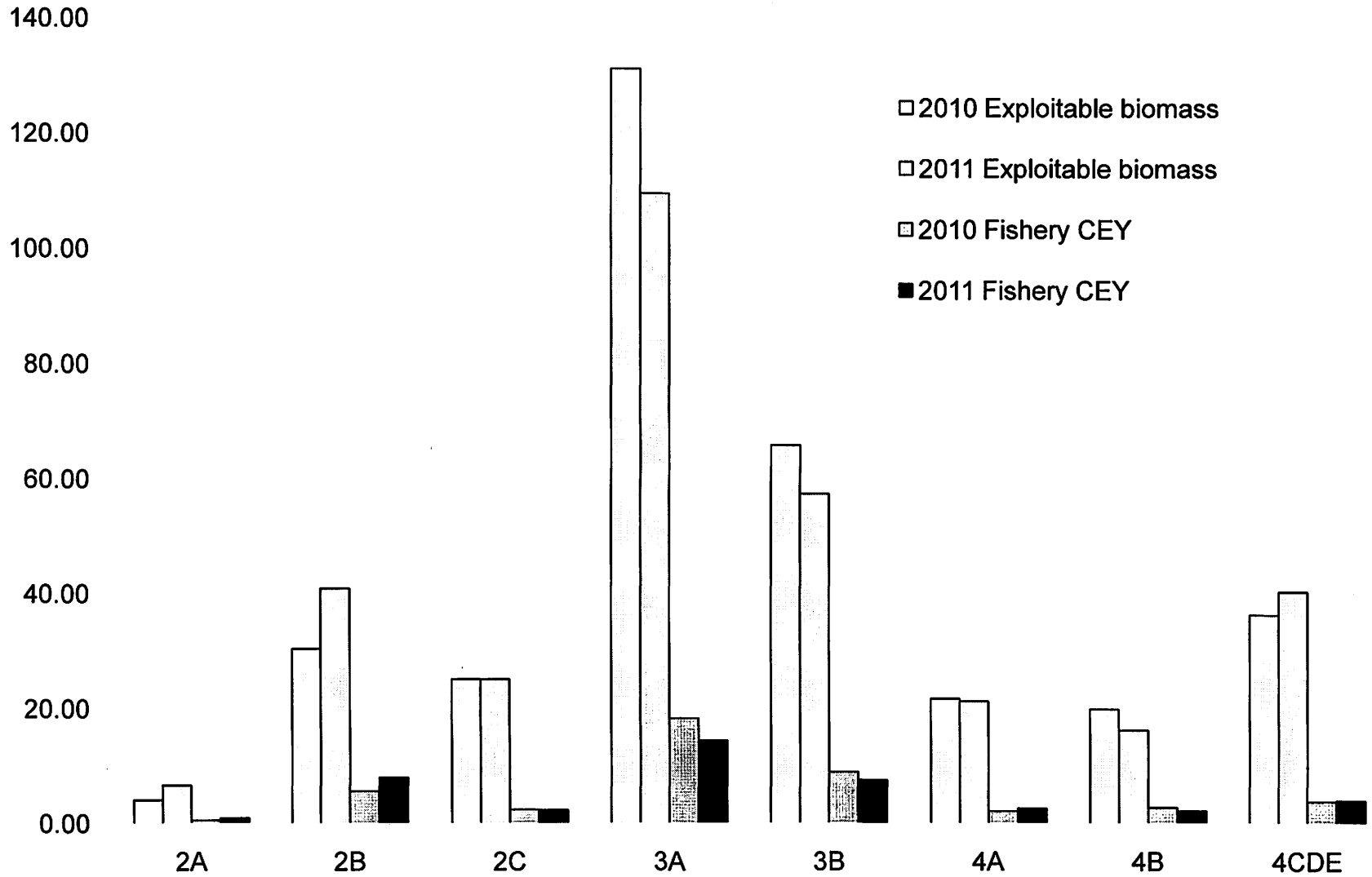
Other removals for 2C and 3A are adding projected unguided harvest to the applicable GHL

2010 vs. 2011 Comparison

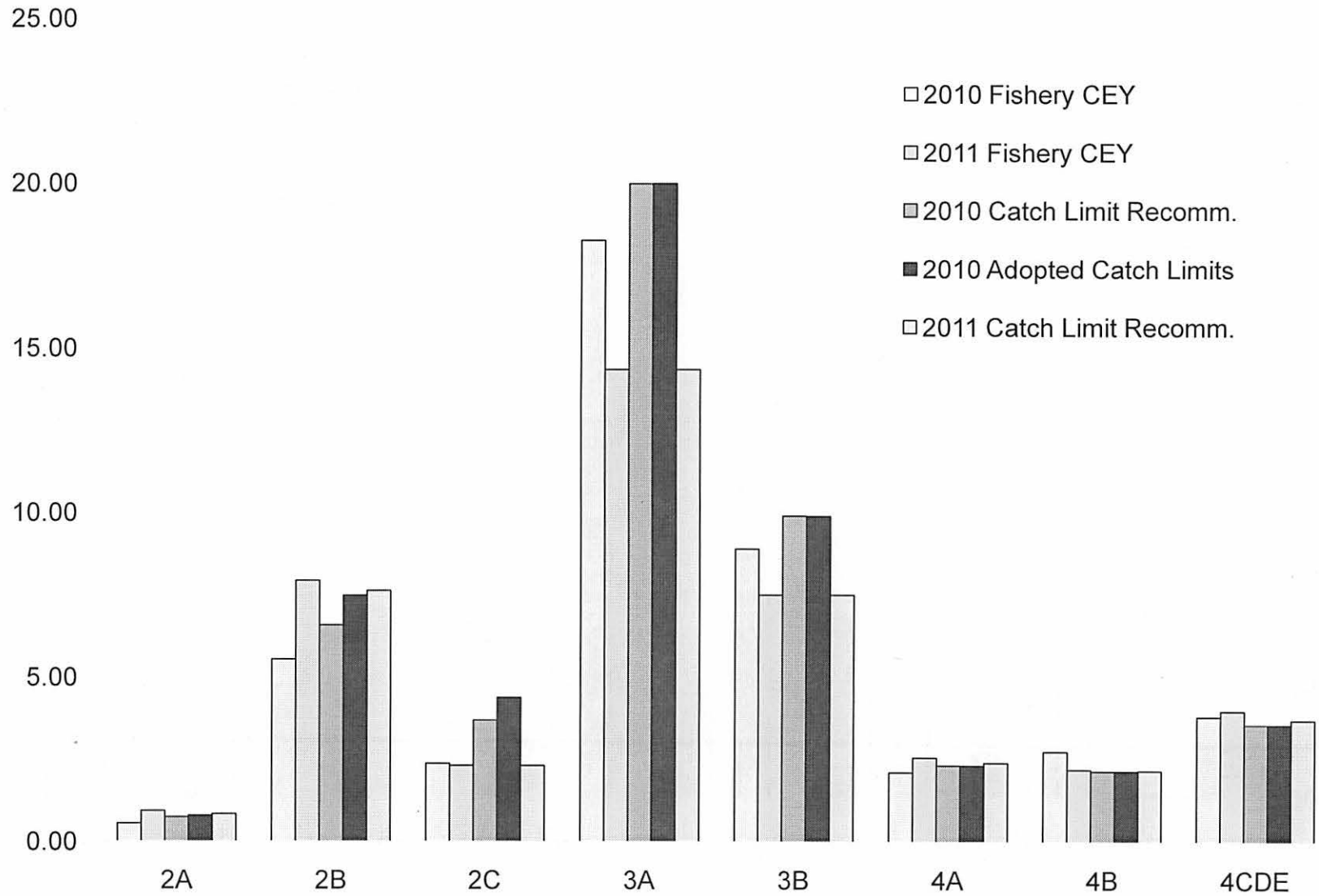
Reg Area	2010 Exploitable biomass	2011 Exploitable biomass	2010 Total CEY	2011 Total CEY	2010 Fishery CEY	2011 Fishery CEY	2010 Catch Limit Recomm	2010 Adopted Catch Limits	2011 Catch Limit Recomm
2A	4.09	6.63	0.82	1.43	0.57	1.11	0.76	0.81	0.91
2B	30.38	40.89	6.08	8.79	5.55	7.94	6.59	7.50	7.65
2C	25.10	25.05	5.02	5.39	2.39	2.33	3.71	4.40	2.33
3A	130.96	109.39	26.19	23.52	18.28	14.36	19.99	19.99	14.36
3B	65.72	57.32	9.86	9.24	8.91	7.51	9.90	9.90	7.51
4A	21.67	21.25	3.25	3.43	2.12	2.57	2.33	2.33	2.41
4B	19.86	16.14	2.98	2.60	2.75	2.21	2.16	2.16	2.18
4CDE	36.21	40.32	5.43	6.50	3.82	3.99	3.58	3.58	3.72
Total	334.00	317.00	59.63	60.90	44.39	42.02	49.02	50.67	41.07

Note: Ebio and FCEY values are directly comparable; TCEY uses different harvest rates in 2010 and 2011

2010 vs. 2011 Ebio and FCEY



2010 vs. 2011 FCEY and CLs



2011 Adopted Catch Limits

Regulatory Area	2010 Catch Limit	Staff	CB	PAG	IPHC Approved
		(Millions of Pounds)			
2A ¹	0.810	0.910	0.860	0.920	0.910
2B ^{1,2}	7.500	7.650	7.650	7.650	7.650
2C ²	4.400	2.330	3.360	3.110	2.330
3A ²	19.990	14.360	14.360	14.360	14.360
3B	9.900	7.510	7.510	7.510	7.510
4A	2.330	2.410	2.410	2.410	2.410
4B	2.160	2.180	2.180	2.180	2.180
4CDE ³	3.580	3.720	3.720	3.720	3.720
4C ⁴	1.625	1.690	1.690	1.690	1.690
4D ⁴	1.625	1.690	1.690	1.690	1.690
4E ⁴	0.330	0.340	0.340	0.340	0.340
Total	50.670	41.070	42.050	41.860	41.070

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

² Presumes adherence to sport management targets

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

Management Recommendations

Fishing periods and catch sharing

- ❖ Staff proposes March 15 - November 15 for quota share fisheries
- ❖ Area 2A commercial and treaty Indian fisheries should fall within adopted season
- ❖ In 2A, a series of 10-h periods starting June 29 for the directed fishery
- ❖ Endorse Management Councils' catch sharing plans for Areas 2A and 4CDE
- ❖ Endorse DFO commercial:sport allocation plan for Area 2B

Regulatory Proposals

From Commission staff

- ❖ Changing logbook regulation to remove the option for use of LORAN coordinates for fishing locations, due to decommissioning of the LORAN-C network

Direction to Staff

- ❖ Analyze potential for using tags as a monitoring tool for non-commercial removals of halibut
- ❖ Analyze biological impacts of incrementally reducing or eliminating the commercial size limit

Alaskan Charter Fishery Control Measures Requested by the Commission

- ❖ At 2010 Annual Meeting, Commission requested staff development of potential control measures for charter halibut fisheries, should the NPFMC Catch Sharing Plan not be implemented in a timely manner
- ❖ Measures considered by the Commission and Advisory bodies at Annual Meeting. Measures in IPHC Blue Book, Appendix I, pp. 156-164
- ❖ Staff worked with NMFS to develop a suite of potential control measures, based largely on existing analyses

Charter Control Options

Objectives

- Meet IPHC conservation goals
- Reduce harvest to GHL
- Minimize season disruption to the extent practicable
- Assure equity of access and applicability to all charter anglers
- Ensure measures result in enforceable accountability
- Simplify application by basing measures on previous analyses where possible

Charter Control Options

Potential Measures

- Existing Catch Sharing Plan measures
- Maximum size limit
- Season limitation

Longer term measure

- Restricted number of halibut tags, with licence and logbook recording

Commission Adopted

- One-fish bag limit, maximum size 37 in., carcass retention until offloading

Bycatch Mortality

- ❖ Commission notes Council's letter of 12/27/2010 concerning PSCs and affirms participation in the Council process
- ❖ Building on activities of Halibut Bycatch Work Group re-formed in 2010, the Commission has formed a Halibut Bycatch Project Team, led by Commissioners
- ❖ Gain better understanding of amounts and impacts, as well as potential control and mitigation measures
- ❖ Report to the Commission at its 2012 Annual Meeting

Performance Review

- ❖ Using a team of external experts in fisheries science, management, and organizational governance, the Commission will conduct a review of its performance relative to the central objectives of the Halibut Convention
- ❖ Will review trends and stock status with regard to relevant reference points, as well as governance and advisory processes relative to advancing the goals of the Commission
- ❖ Team will attend the 2012 Annual Meeting to interact with the Commission's Advisory Bodies and assess decision-making procedures
- ❖ Report to the Commission prior to the 2012 Interim Meeting

