

Addendum to C9: Initial Review Draft RIR/IRFA/EA for a proposed regulatory amendment to allow a recreational quota entity to hold commercial halibut quota share for use by the halibut charter anglers

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The initial review draft of the RIR/IRFA/EA for a proposed regulatory amendment for the development and operation of Recreational Quota Entities (RQE) examines proposed changes to the management of the Pacific halibut charter fisheries and commercial setline fisheries in International Pacific Halibut Commission (IPHC) Regulatory Areas 2C and 3A in the Gulf of Alaska. This addendum clarifies some of the underlying assumptions and caveats in the draft analysis particularly with respect to the impact of transfer restrictions the halibut charter sector in Area 3A.

The analysis demonstrates that RQEs in either IPHC regulatory Area 2C or IPHC Area 3A could have been effective at liberalizing regulations on daily bag limits for charter anglers under 2015 conditions, provided funds could be secured and QS was available for transfer. However, the draft analysis shows that in a 2015 scenario, an RQE in Area 3A would have needed a higher percentage of that area's QS units to "move the needle" and relax some of the management measures in Area 3A, than in Area 2C. This addendum corrects and clarifies that interpretation.

The analysts prioritize two questions by conducting the analysis in the framework of the decision making and regulations that took place to set the 2015 fishing regulations.

1. Can an RQE be effective in liberalizing charter halibut regulatory measures?
2. What are the likely effects of the program on the range of stakeholders affected by the program?

For Area 2C, this approach means analyzing the effect of modifying the reverse slot limit. In Area 3A, the charter industry faced a length limit, an annual limit, a day of the week closure, and daily trip limit. The complexity of compounding management measures in Area 3A, the uncertainty around their isolated impacts in a given year, and the uncertainty around charter industry/charter angler preferences for liberalization, increases the challenge of predicting how charter halibut regulatory measures might have been liberalized given access to halibut IFQ.

The analysis uses the following table from ADF&G¹ (Table 4-33 in the analysis) which shows projected harvest for 2015 under the adopted management measures: a 5-fish annual bag limit, with a U29 limit on the second fish. For 2015, the catch limit for the charter industry in Area 3A was 1.89 Milb. The yellow shaded cell shows projected removals with these management measures to be 2.124 Milb. This would have been 0.234 Milb above the annual charter catch limit for Area 3A.

¹ Meyer, S.C. and R. Powers. 2014. Analysis of management options for the Area 2C and 3A charter halibut fisheries for 2015. A report to the North Pacific Fishery Management Council, Alaska Department of Fish and Game, Division of Sport Fish. December 5, 2014.

Table 4-33 Area 3A projected charter removals for 2015 including release mortality under a range of maximum size limits and annual limits (including no annual limit).

Projected total removals including release mortality											
Size Limit on 2nd fish (in)	Annual Limit										
	1	2	3	4	5	6	7	8	9	10	None
26	0.856	1.633	1.798	1.939	1.981	2.016	2.029	2.040	2.044	2.047	2.056
27	0.874	1.666	1.834	1.979	2.022	2.058	2.071	2.081	2.086	2.089	2.098
28	0.901	1.716	1.891	2.039	2.084	2.120	2.134	2.145	2.149	2.153	2.162
29	0.918	1.749	1.926	2.078	2.124	2.160	2.174	2.186	2.191	2.194	2.204
30	0.944	1.800	1.981	2.136	2.184	2.222	2.236	2.248	2.253	2.256	2.266
31	0.961	1.834	2.019	2.176	2.225	2.264	2.279	2.291	2.295	2.299	2.308
32	0.984	1.878	2.066	2.228	2.278	2.316	2.333	2.345	2.349	2.353	2.364
33	0.998	1.905	2.095	2.260	2.309	2.349	2.366	2.378	2.382	2.387	2.396
34	1.013	1.933	2.127	2.294	2.345	2.386	2.401	2.414	2.419	2.424	2.433
35	1.024	1.953	2.148	2.316	2.368	2.409	2.426	2.438	2.444	2.447	2.458
36	1.036	1.978	2.176	2.347	2.399	2.440	2.456	2.469	2.474	2.479	2.489
37	1.042	1.991	2.189	2.361	2.413	2.455	2.472	2.485	2.489	2.494	2.505
38	1.052	2.007	2.208	2.381	2.434	2.476	2.493	2.506	2.511	2.515	2.526
39	1.059	2.021	2.224	2.398	2.451	2.494	2.511	2.524	2.528	2.533	2.544
40	1.065	2.032	2.235	2.411	2.464	2.507	2.524	2.536	2.541	2.546	2.556
41	1.069	2.041	2.246	2.422	2.475	2.519	2.535	2.548	2.554	2.558	2.569
42	1.074	2.049	2.255	2.432	2.485	2.528	2.545	2.558	2.564	2.568	2.579
43	1.080	2.061	2.267	2.445	2.499	2.542	2.559	2.573	2.578	2.582	2.593
44	1.084	2.067	2.274	2.452	2.506	2.549	2.567	2.580	2.585	2.589	2.601
45	1.087	2.075	2.284	2.461	2.515	2.560	2.576	2.589	2.595	2.600	2.611
46	1.091	2.081	2.288	2.468	2.522	2.566	2.584	2.596	2.601	2.606	2.618
47	1.094	2.088	2.298	2.478	2.532	2.575	2.593	2.606	2.612	2.616	2.627
48	1.096	2.093	2.302	2.482	2.536	2.581	2.598	2.612	2.616	2.621	2.633
49	1.102	2.105	2.315	2.495	2.551	2.595	2.612	2.626	2.631	2.635	2.647
50	1.107	2.113	2.324	2.506	2.561	2.605	2.622	2.635	2.641	2.646	2.658

Source: Table 17 from Meyer and Powers (2014)

Table note: Values originally produced for this table rely on a method of predicting average weight that results in projections that underestimate removals by about 15 percent. Therefore values presented here are inflated by 15 percent to address this expected level and direction of prediction error in average weight (refer to Meyer and Powers (2014) for further explanation).

The analysts had understood the total removals projected in this table to also include the effect of day of the week closure, incorrectly assuming that the Area 3A fishery had received an effective bump in their allocation at the time IPHC established annual regulations. In reality, this table did not include the effect of the day of the week closure. Table 4-33 in the analysis only illustrates the effect of the 5-fish annual limit and the length limit.² The Area 3A charter representatives at the Charter Halibut Implementation Committee recommended the day of the week closure in order to further reduce the projected 2.124 Milb of total removals to the sector limit of 1.89 Milb.

In December 2014, ADF&G staff emphasized the difficulty in predicting the effect of a regulations like day of the week closure, given the uncertainty in angler’s willingness and ability to rebook their trip on a different day of the week. If no trips were rebooked, the analysis predicted a maximum estimated reduction of 12.3% based for a Thursday day of the week closure between June 15 through August 15. Since some trips would likely be rebooked, the time period for which the day of the week closure applied was extended later in the season order to account for additional reduction in removals and bring the projected harvest down to the allocated Area 3A catch limit.

Based on the analysts’ misconception that 3A had been bumped to a larger 2nd fish size limit, and corresponding higher catch limit in 2015, Table 1-2, which appears in both the Executive Summary and in Section 4.8.1.2.2 (page 84) of the analysis shows that the Area 3A fishery management measure would not change if the RQE held one, two, or three percent of the Area 3A QS units.

² Trip limits, i.e., one trip per vessel per day, is also an implicit assumption in the projected removals in the ADF&G analysis (Meyer & Powers 2014).

Table 1-2 Projected 2015 fishing regulations based portion of QS held, Area 3A

Category	Status Quo	Portion of Area QS Held by RQE				
		1	2	3	4	5
Harvest Limit+IFQ	1.89	1.968	2.046	2.124	2.202	2.279
Regulation	2F-U29	2F-U29	2F-U29	2F-U29	2F-U30	2F-U32

Source: Northern Economics, Inc. estimates from NOAA (2015a).

However, this result does not stand when Table 4-33 is corrected for the day of the week closure and the analysis should have adjusted for the effect of these measures on Area 3A demand. To correct for this omission, the analysts note that under 2015 conditions every 1 percent of Area 3A QS would have been worth 0.078 Milb. If the Area 3A charter industry reduced projected harvest roughly 0.234 Milb by accepting the Thursday closure, then the RQE could have eliminated the Thursday closure by owning 3 percent of the area-wide QS as 3 percent of the area-wide QS would equal the needed 0.234 Milb reduction. Thus, Table 1-2 should show that Area 3A regulations could be liberalized at 3 percent QS ownership under 2015 conditions.

In addition, this clarification impacts the interpretation of some the information presented in the analysis. Any of estimates of liberalized bag limits for Area 3A, including maximum length on the second fish or the annual limit, should presume that the day of the week closure has been removed; liberalized length limits or annual limits *plus* fishing on all seven days of the week.

Any RQE would operate in a very complex environment with angler demand, halibut stock conditions, and average halibut weights varying annually. At the same time, the RQE would be working with regulators and the Charter Halibut Implementation Committee to select the most appropriate management measures from a host of options including reverse slot limits, bag reductions, annual limits, day of the week closures, length limits, and trips limits. This combination of environmental variability and a wide range of management measures, some of which are of relatively unknown efficacy, produces a very challenging environment to predict was level of QS would be needed to achieve a certain regulatory regime. It is important to note that the analysis presented here and in the greater document represents a snapshot of potential changes given predicted removals in 2015. The effectiveness of a certain level of QS is expected be as variable as the exogenous factors that would impact it.