Review of the RIR/IRFA/EA for Establishing a Recreation Quota Entity in the Charter Halibut Sector

Presentation to

The NPFMC

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December 9, 2016

Northern Economics

Final Review Draft Goals:

- Build on our April review draft in determining how effective an RQE could be. With a focus on
  - early years of operation,
  - different levels of QS ownership,
  - the different restrictions as defined by the Council's motion.
- Provide additional information on how an RQE might affect the QS markets, the sectors, and communities.

Your Alternatives

1. No Action
2. Establish an RQE(s)
   - With the potential for restrictions on
     - annual QS purchases,
     - total QS ownership,
     - and block/class ownership restrictions.

Alternative 2: Establishing the RQE

- Element 1- Number of Entities
  1. One entity or two entities
- Element 2- Restrictions on Transfers
  1. No restrictions
  2. Annual transfer limits (0.5-5 Percent)
  3. Total cumulative limits (5-20 percent)
     a) Combined RQE/GAF Limits of 10% (2C) or 15% (3A)
  4. Block and/or Class Limits (D-Class, Small/Large Blocks)
- Element 3- Annual Reallocations during High Abundance
- Element 4- Limits on RQE Fund Limits
- Element 5- RQE Organizational Structure

Alt 2, Element 2, Option 2

- Annual transfer limits would restrict the RQE's purchase in a given year. Unsurprisingly, the stricter the limit the longer it takes to acquire enough QS for the RQE to affect a given change.

Table 4-31 Annual transfer allowance across a range of QS/IFQ ratios, 2011-2015 examples

Ratio Year	QS Units	QS/IFQ Ratio	Pounds of Annual Transfer Allowance (by Percent)					
			0.5	1	2	3	4	5
Area 2C								
2011	59,477,396	25.56	0.012	0.023	0.047	0.070	0.093	0.116
2012	59,477,396	22.70	0.013	0.026	0.052	0.079	0.105	0.131
2013	59,477,396	20.05	0.015	0.030	0.059	0.089	0.119	0.148
2014	59,477,396	17.94	0.017	0.033	0.066	0.099	0.133	0.166
2015	59,477,396	16.17	0.018	0.037	0.074	0.110	0.147	0.184
Area 3A								
2011	184,893,008	12.88	0.072	0.144	0.287	0.431	0.574	0.718
2012	184,893,008	15.52	0.060	0.119	0.238	0.357	0.477	0.596
2013	184,893,008	16.76	0.055	0.110	0.221	0.331	0.441	0.552
2014	184,893,008	26.27	0.035	0.070	0.141	0.211	0.282	0.352
2015	184,893,008	23.73	0.039	0.078	0.156	0.234	0.312	0.389

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

How Did We Estimate the Effect of Ownership?

Lower Limit (in)	Upper length limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	1.251	1.181	1.117	1.047	0.990	0.939	0.873	0.806	0.770	0.738	0.705	0.686	0.660	0.643	0.640	0.624
36	1.283	1.214	1.151	1.083	1.026	0.976	0.910	0.843	0.808	0.777	0.743	0.723	0.698	0.681	0.678	0.663
37	1.303	1.236	1.173	1.105	1.050	0.999	0.933	0.867	0.832	0.801	0.768	0.749	0.723	0.706	0.703	0.688
38	1.334	1.267	1.206	1.138	1.084	1.034	0.969	0.903	0.869	0.837	0.804	0.786	0.761	0.743	0.740	0.725
39	1.357	1.290	1.230	1.163	1.109	1.059	0.995	0.930	0.895	0.863	0.830	0.812	0.787	0.770	0.767	0.751
40	1.376	1.310	1.251	1.185	1.131	1.082	1.018	0.953	0.919	0.888	0.856	0.837	0.811	0.795	0.791	0.777
41	1.400	1.336	1.277	1.211	1.159	1.110	1.046	0.983	0.948	0.917	0.885	0.866	0.842	0.824	0.822	0.807
42	1.417	1.354	1.296	1.230	1.178	1.130	1.067	1.003	0.970	0.939	0.907	0.888	0.863	0.846	0.843	0.829
43	1.435	1.373	1.316	1.251	1.200	1.152	1.089	1.026	0.992	0.962	0.930	0.911	0.886	0.870	0.866	0.852
44	1.458	1.397	1.341	1.277	1.226	1.179	1.117	1.054	1.021	0.990	0.958	0.940	0.916	0.898	0.896	0.881
45	1.484	1.424	1.370	1.307	1.257	1.210	1.148	1.085	1.052	1.023	0.990	0.972	0.948	0.930	0.928	0.913
46	1.503	1.443	1.389	1.327	1.277	1.230	1.170	1.108	1.075	1.045	1.013	0.995	0.970	0.954	0.950	0.937
47	1.527	1.470	1.416	1.354	1.305	1.259	1.198	1.137	1.104	1.075	1.043	1.025	1.001	0.984	0.982	0.967
48	1.543	1.486	1.433	1.372	1.323	1.278	1.217	1.157	1.124	1.095	1.063	1.045	1.021	1.004	1.002	0.987
49	1.572	1.517	1.464	1.405	1.357	1.312	1.253	1.192	1.160	1.131	1.100	1.082	1.057	1.041	1.038	1.024
50	1.595	1.540	1.489	1.430	1.383	1.338	1.280	1.220	1.188	1.159	1.128	1.110	1.086	1.070	1.067	1.053

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How Did We Estimate the Effect of Ownership?

Lower Limit (in)	Upper length limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	11	9	8	6	4	3	1	UCA	UCA	UCA	UCA	UCA	UCA	UCA	UCA	UCA
36	12	10	9	7	5	4	2	UCA	UCA	UCA	UCA	UCA	UCA	UCA	UCA	UCA
37	13	11	9	7	6	5	3	1	UCA	UCA	UCA	UCA	UCA	UCA	UCA	UCA
38	14	12	10	8	7	5	4	2	1	UCA	UCA	UCA	UCA	UCA	UCA	UCA
39	14	12	11	9	8	6	4	3	2	1	UCA	UCA	UCA	UCA	UCA	UCA
40	15	13	11	10	8	7	5	3	2	2	1	UCA	UCA	UCA	UCA	UCA
41	15	14	12	10	9	8	6	4	3	2	1	1	UCA	UCA	UCA	UCA
42	16	14	13	11	9	8	6	5	4	3	2	2	1	UCA	UCA	UCA
43	16	15	13	11	10	9	7	5	4	4	3	2	1	1	1	1
44	17	15	14	12	11	9	8	6	5	4	3	3	2	2	2	1
45	18	16	15	13	12	10	9	7	6	5	4	4	3	3	3	2
46	18	17	15	13	12	11	9	7	7	6	5	4	4	3	3	3
47	19	17	16	14	13	12	10	8	7	7	6	5	5	4	4	4
48	19	18	16	15	13	12	10	9	8	7	6	6	5	5	5	4
49	20	19	17	16	14	13	11	10	9	8	7	7	6	6	6	5
50	N/A	19	18	16	15	14	12	11	10	9	8	8	7	6	6	6

How Did We Estimate the Effect of Ownership?

Size Limit on 2nd fish (in)	Annual Limit										
	1	2	3	4	5	6	7	8	9	10	None
26	CA	CA	CA	1	2	2	2	2	2	3	3
27	CA	CA	CA	2	2	3	3	3	3	3	3
28	CA	CA	1	2	3	3	5	5	5	5	5
29	CA	CA	1	3	3	5	5	5	5	5	5
30	CA	CA	2	5	5	5	5	5	5	5	5
31	CA	CA	2	5	5	5	5	6	6	6	6
32	CA	CA	3	5	5	6	6	6	6	6	7
33	CA	1	3	5	6	6	7	7	7	7	7
34	CA	1	5	6	6	7	7	7	7	7	7
35	CA	1	5	6	7	7	7	8	8	8	8
36	CA	2	5	6	7	8	8	8	8	8	8
37	CA	2	5	7	7	8	8	8	8	8	8
38	CA	2	5	7	7	8	8	8	8	9	9
39	CA	2	5	7	8	8	8	9	9	9	9
40	CA	2	5	7	8	8	9	9	9	9	9
41	CA	2	5	7	8	9	9	9	9	9	9
42	CA	3	5	7	8	9	9	9	9	9	9
43	CA	3	5	8	8	9	9	9	9	9	10
44	CA	3	5	8	8	9	9	9	9	9	10
45	CA	3	6	8	9	9	9	9	10	10	10
46	CA	3	6	8	9	9	9	10	10	10	10
47	CA	3	6	8	9	9	10	10	10	10	10
48	CA	3	6	8	9	9	10	10	10	10	10
49	CA	3	6	8	9	10	10	10	10	10	10
50	CA	3	6	8	9	10	10	10	10	10	10

- Area 3A is a little different as it presumes the elimination of the DOW closure first and that's not included in the table.
- Under 2015 conditions that RQE needs 3 percent of QS for the current bag limit and eliminating the DOW closure.

RQE Efficacy at Low QS Levels

- In both Areas, even small percentages of QS would help liberalize bag limits. Below are two 2015 examples.

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

Category	Status Quo	Portion of Area QS Held by RQE					
		0.5	1	2	3	4	5
Harvest Limit+IFQ	0.851	0.870	0.888	0.925	0.961	0.998	1.035
Regulation	1F-U42 O80	1F-U43 O76	1F-U44 O80	1F-U45 O80	1F-U46 O80	1F-U48 O80	1F-U49 O80

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

Category	Status Quo	Portion of Area QS Held by RQE					
		0.5	1	2	3	4	5
Harvest Limit+IFQ	1.89	1.929	1.968	2.046	2.124	2.202	2.279
Regulation	2F-U29	2F-U29	2F-U29	2F-U29	2F-U29 W/O DOW Restriction	2F-U30 W/O DOW Restriction	2F-U32 W/O DOW Restriction

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Alt 2, Elt 3, Opt. 3 & 3A: Cumulative Limits

Option 3. Total (cumulative) limit on amount held by RQE by regulatory area (Area 2C and 3A)

Sub-option 1. 5% - 20% of any commercial QS based on 2015

Sub-option 2. 5% - 20% of each class of QS based on 2015

Option 3A. **Total (cumulative) limit on amount of commercial quota share held by RQE and leased under GA Ten percent of the 2015 commercial QS pool may be held as RQE and GAF combined in Area 2 and 15% of the 2015 commercial QS pool may be held as RQE and GAF combined in Area 3A. T cumulative cap will be managed annually on a sliding scale between RQE and GAF, with GA transfers restricted to accommodate RQE QS holdings.**

Sub-option 1. GAF shall not be reduced below a range of 1%-3% of the 2015 commercial QS pool for Area 2C and 3A

Sub-option 2. GAF shall not be reduced below 1.15 times the previous year's GAF transfers for either Area 2C and Ar 3A.

Alt 2, Elt 3, Option 3A: Cumulative Limits

- This option would revise the legal GAF cap.
- SO1: 1 percent to 3-percent set aside.
  - Creates a potential inefficiency in that as the RQE becomes more successful the need for, and attractiveness of, GAF is reduced, but there's a portion of the limit that can't be used by the RQE.
- SO2: 1.15X prior year multiplier.
  - No permanent set aside….
  - GAF could consume combined limit (unlikely be actual).

Alt 2, Element 3, Option 4, SO1: Class Restrictions

- In Area 2C, C-Class QS represent 78.5 percent of all QS while, D-Class shares are 15 percent. Restricting D-Class QS would further focus the RQE into the C-Class market.
- In Area 3A, C-Class and B-Class are the largest QS classes with D-Class representing just 6.9 percent of all QS.

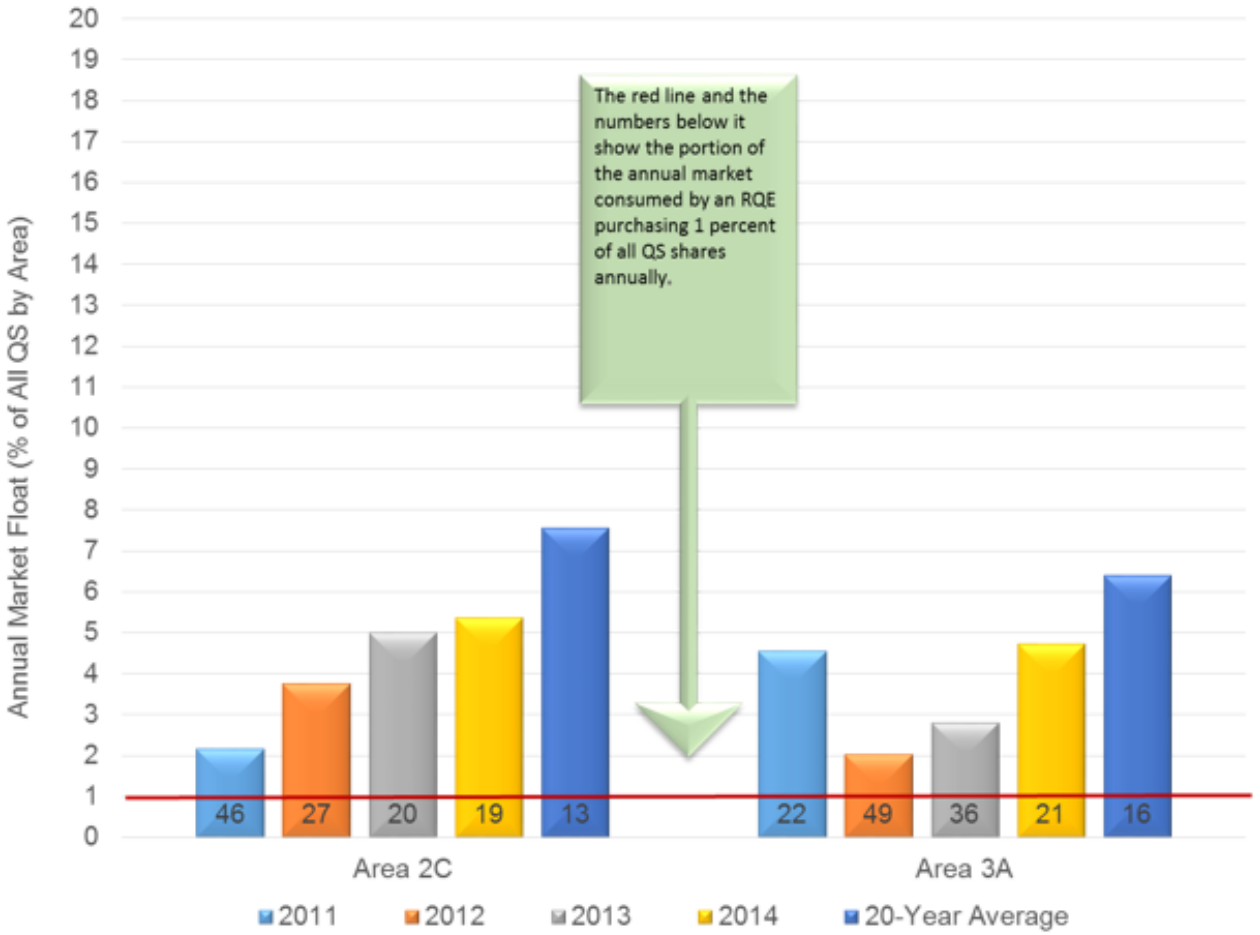
Table 4-40 2015 QS units by class, Area 3A

	Class			
Category	**A-Freezer**	**B-GT 60 ft.**	**C- 36-60 ft.**	**D- LE 35 ft.**
Area 2C				
Total QS Units	1,249,141	2,655,243	46,677,536	8,895,476
Portion of All Units (%)	2.1	4.5	78.5	15.0
Area 3A				
Total QS Units	4,773,918	68,568,976	98,876,488	12,673,626
Portion of All Units (%)	2.6	37.1	53.5	6.9

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

Potential Absorption in the QS Market

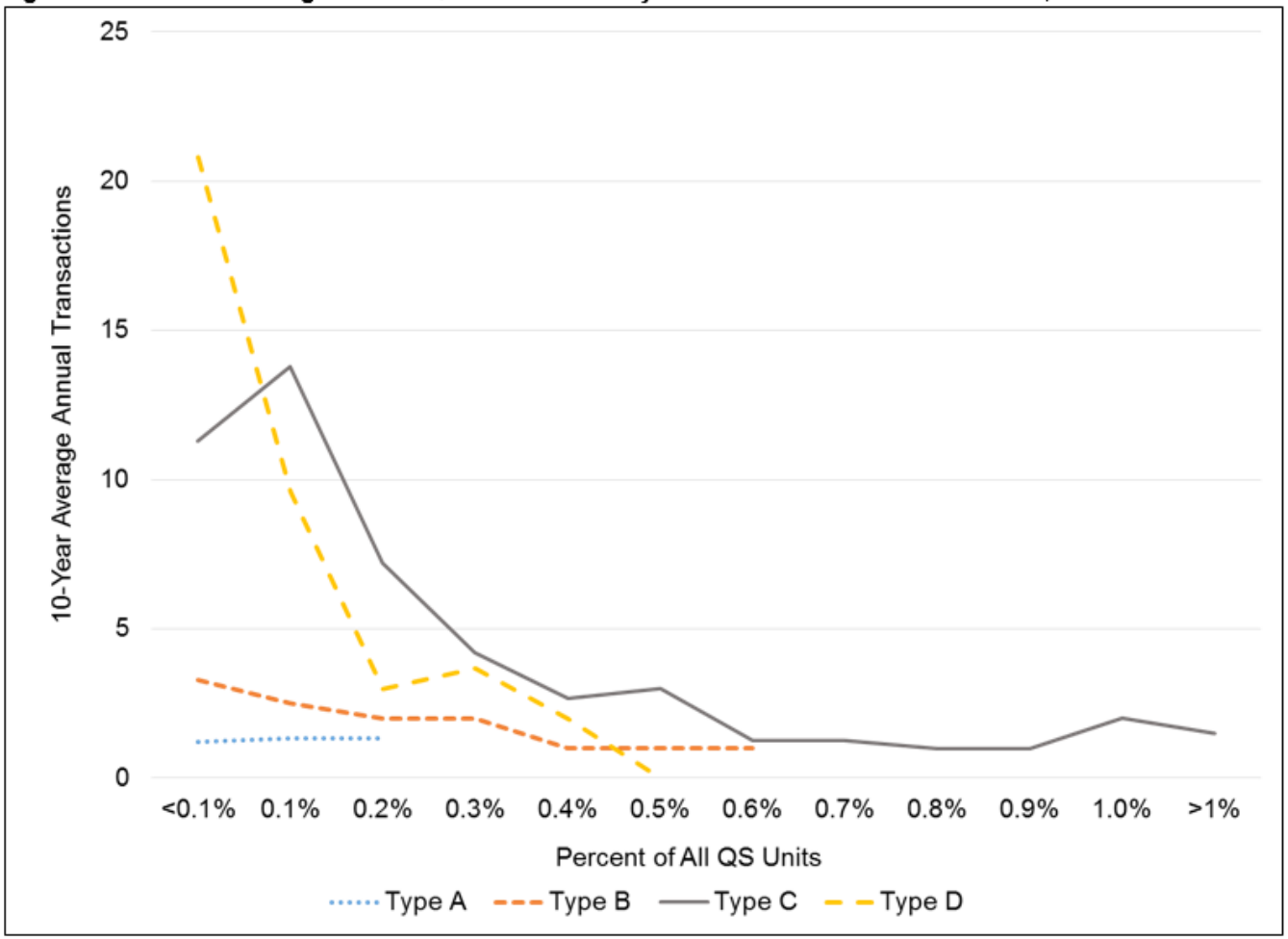
Figure 4-15 Annual QS market size by year compared with a 1-Percent Annual Transfer Limit



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

Area 2C QS Market Frequencies

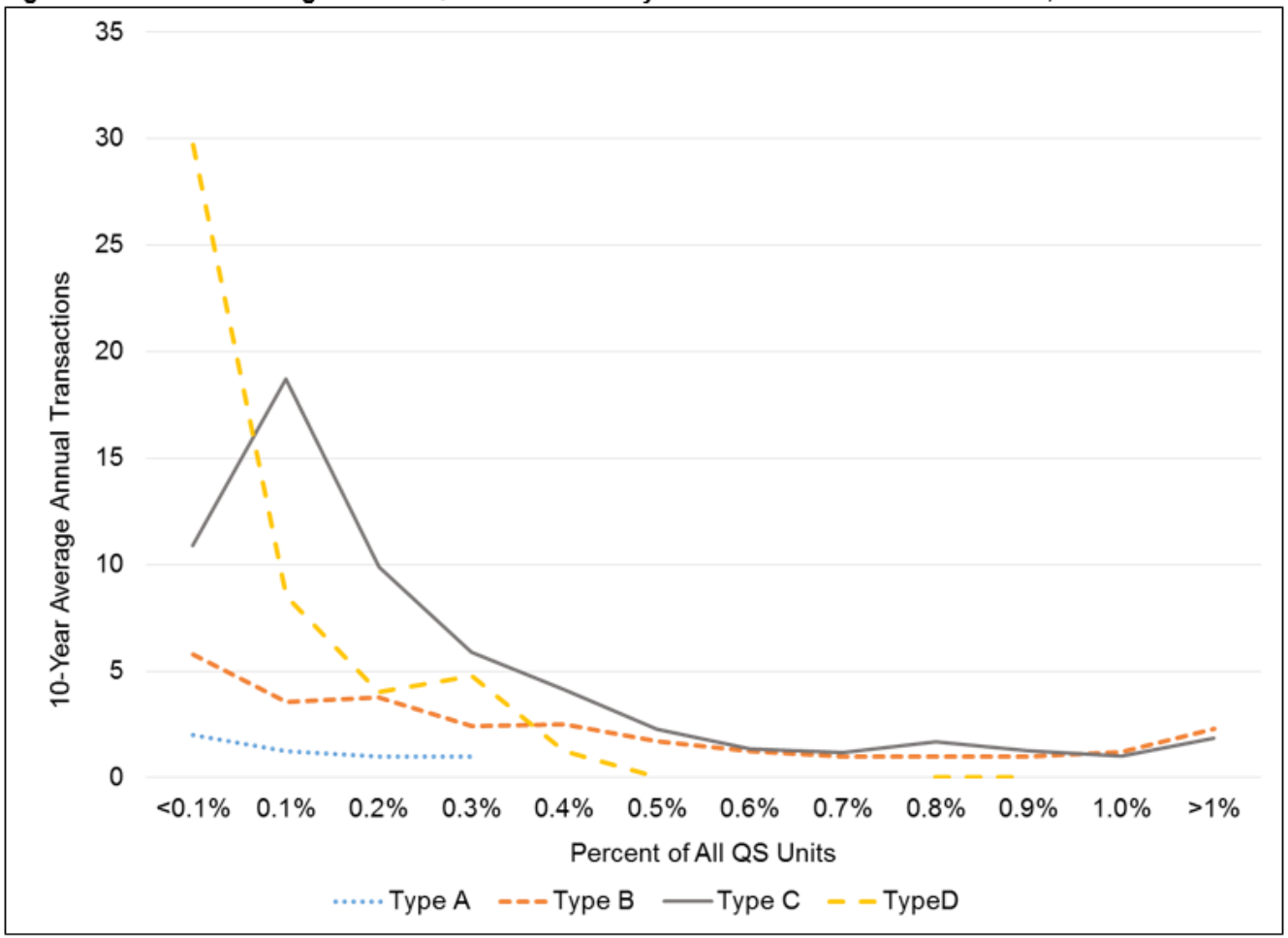
Figure 4-12 10-Year Average Annual QS Transactions by Vessel Size and Transaction Size, Area 2C



Source: RAM Division, NMFS sourced through AKFIN

Area 3A QS Market Frequencies

Figure 4-13 10-Year Average Annual QS Transactions by Vessel Size and Transaction Size, Area 3A



Source: RAM Division, NMFS sourced through AKFIN

Alt 2, Elem. 3, Opt. 4, SO1&2, Area 2C Small Block Rest.

- Blocks ≤1,500 lb. (2015) comprised 13.8 percent of QS units while ≤2,000 lb. blocks comprised 23.4 percent of all QS units.
- There's substantial overlap between the D-Class shares and the small block shares. Combined the block and class restrictions remove 22.6 percent or 29.3 percent of QS from the market.

		QS from 2015 Blocks ≤		Percent of Class QS	
Class	**Total Shares**	**1,500 lb**	**2,000 lb**	**1,500 lb**	**2,000 lb**
A	1,249,141	41,280	151,533	3.3	12.1
B	2,655,425	176,366	367,404	6.6	13.8
C	46,677,536	4,357,464	7,999,184	9.3	17.1
D	8,895,294	3,603,482	5,384,115	40.5	60.5
All Classes	59,477,396	8,178,592	13,902,236	13.8	23.4
All D-Class+Blocks	59,477,396	13,470,404	17,413,415	22.6	29.3

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

Effect of Exclusion from the Cumulative

Option 4. **Restrictions on RQE quota share purchases (in either or both areas)**

Sub-option 1. **Restrict purchase of D class quota share (limits selected under Option 2 and 3 are calculated using excluding D class QS)**

Table 4-53 Comparison of Sub-Option Effects on Annual Transfer Limits, Area 2C

Year	Available QS Units	QS/IFQ Ratio	Pounds of Annual Transfer Allowance (by Percent)					
			0.5	1	2	3	4	5
No Exclusions								
2011	59,477,396	25.56	0.012	0.023	0.047	0.070	0.093	0.116
2012	59,477,396	22.70	0.013	0.026	0.052	0.079	0.105	0.131
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2015	59,477,396	16.17	0.019	0.037	0.074	0.110	0.147	0.184
Excluding D-Class								
2011	50,581,920	25.56	0.010	0.020	0.040	0.059	0.079	0.099
2012	50,581,920	22.70	0.011	0.022	0.045	0.067	0.089	0.111
2013	50,581,920	20.05	0.013	0.025	0.050	0.076	0.101	0.126
2014	50,581,920	17.94	0.014	0.028	0.056	0.085	0.113	0.141
2015	50,581,920	16.17	0.016	0.031	0.063	0.094	0.125	0.156

Effect of Block/Class Restrictions, Area 2C 2015 Stock

Table 4-61 Comparison of Element 2 Options and Sub-Options, Area 2C 2015 Stock Conditions/2015 Demand

Cumulative Cap (Percent)	No Restrictions	No D-Class	≤1,500 lb Blocks		≤2,000 lb Blocks	
			No Blocks	No Blocks and D-Class	No Blocks	No Blocks and D-Class
5	U49-O80	U48-O76	U48-O76	U48-O80	U48-O80	U47-O80
6	U50-O76	U49-O78	U49-O76	U48-O74	U48-O76	U48-O76
7	U50-O74	U50-O76	U50-O76	U49-O76	U49-O76	U49-O80
8	U50-O70	U50-O74	U50-O74	U50-O76	U50-O76	U50-O80
9	U50-O68	U50-O72	U50-O70	U50-O74	U50-O74	U50-O76
10	U50-O66	U50-O68	U50-O68	U50-O70	U50-O70	U50-O74
11	U50-O64	U50-O66	U50-O66	U50-O68	U50-O68	U50-O70
12	U50-O62	U50-O64	U50-O64	U50-O66	U50-O66	U50-O68
13	U49-O60	U49-O62	U49-O62	U50-O64	U49-O64	U50-O66
14	U50-O60	U50-O62	U50-O62	U46-O60	U50-O64	U49-O64
15	U50-O58	U49-O60	U49-O60	U49-O62	U49-O62	U50-O64
16	U50-O56	U50-O60	U50-O60	U50-O62	U50-O62	U49-O62
17	U49-O54	U50-O58	U50-O58	U49-O60	U49-O60	U50-O62
18	U50-O54	U49-O56	U49-O56	U50-O60	U50-O60	U49-O60
19	U50-O52	U50-O56	U50-O56	U50-O58	U50-O58	U50-O60
20	U49-O50	U49-O54	U49-O54	U49-O56	U49-O56	U49-O58

Source: Northern Economics, Inc. estimates from ADF&G (2015) and NOAA (2015a).

Effect of Block/Class Restrictions, Area 2C 2011 Stock

Table 4-62 Comparison of Element 2 Options and Sub-Options, Area 2C 2011 Stock Conditions/2015 Demand

Cumulative Cap (Percent)	No Restrictions	No D-Class	≤1,500 lb Blocks		≤2,000 lb Blocks	
			No Blocks	No Blocks and D-Class	No Blocks	No Blocks and D-Class
5	U44-O76	U44-U80	U44-O80	U43-O76	U43-O76	U43-O76
6	U44-O74	U44-U76	U44-O76	U44-O78	U44-O80	U44-O80
7	U46-O78	U45-O80	U45-O78	U45-O80	U44-O76	U44-O76
8	U47-O80	U46-O80	U46-O80	U45-O76	U45-O76	U45-O80
9	U48-O80	U46-O76	U47-O80	U46-O80	U46-O80	U45-O76
10	U48-O76	U47-O76	U48-O80	U47-O80	U46-O76	U46-O78
11	U49-O76	U48-O76	U48-O76	U47-O76	U47-O78	U47-O80
12	U50-O78	U49-O80	U49-O80	U48-O80	U48-O78	U47-O76
13	U50-O74	U49-O76	U49-O76	U48-O74	U48-O76	U48-O78
14	U50-O72	U50-O80	U50-O80	U49-O78	U49-O80	U48-O76
15	U50-O70	U50-O76	U50-O74	U50-O80	U50-O80	U49-O80
16	U50-O68	U50-O74	U49-O70	U50-O76	U50-O76	U49-O76
17	U46-O62	U50-O72	U50-O70	U50-O74	U50-O74	U50-O78
18	U50-O66	U50-O70	U49-O68	U50-O72	U49-O70	U50-O76
19	U50-O64	U50-O68	U50-O68	U50-O70	U50-O72	U50-O74
20	U49-O62	U46-O62	U50-O66	U49-O68	U50-O70	U50-O72

Source: Northern Economics, Inc. estimates from ADF&G (2015) and NOAA (2015a).

Alt 2, Elem. 3, Opt. 4, SO1&2, Area 3A Small Block Rest.

- Blocks ≤1,500 lb. (2015) comprised 7.2 percent of QS units while ≤2,000 lb. blocks comprised 13.2 percent of all QS units.
- As with Area 2C, there's substantial overlap between the D-Class shares and the small block shares. Combined the block and class restrictions remove 11.7 percent or 15.7 percent of QS from the market.

		QS from 2015 Blocks ≤		Percent of Class QS	
Class	**Total Shares**	**1,500 lb**	**2,000 lb**	**1,500 lb**	**2,000 lb**
A	4,773,918	70,692	270,203	1.5	5.7
B	68,568,976	920,969	1,534,265	1.3	2.2
C	98,876,488	7,960,195	14,630,933	8.1	14.8
D	12,664,467	4,403,783	7,924,495	34.8	62.6
All Classes	184,883,849	13,355,639	24,359,896	7.2	13.2
All D-Class+Blocks	184,883,849	21,616,323	29,099,868	11.7	15.7

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

Effect of Block/Class Restrictions, Area 3A 2015 Stock

- Even at the highest block/class restriction levels considered, a 3A RQE could provide for a U50 limit (2015 conditions) with roughly 11 percent of the Area QS.

			≤1,500 lb Blocks		≤2,000 lb Blocks	
Cumulative Cap (Percent)	No Restrictions	No D-Class	Only Blocks	Blocks and D-Class	Only Blocks	Blocks and D-Class
5	U32	U31	U31	U31	U31	U30
6	U34	U33	U33	U32	U32	U32
7	U38	U35	U35	U35	U34	U34
8	U44	U40	U40	U38	U37	U37
9	U50	U48	U48	U44	U42	U41
10		U50	U50	U50	U50	U48
11						U50
12						
13						
14						
15						
16						
17						
18						
19						
20						

This blue shaded area indicated allowances that would allow managers to select a maximum size on the second fish larger than 50” in length or relax the 5-fish annual limit.

Click Here

Alt 2, Elem. 3, Opt. 4, SO4, 2C Large Blocks

- In Area 2C eliminating all blocks and D-class would leave 29.1 percent of the QS pool eligible, ~90 percent of which would be C-Class.

Table 4-65 Distribution (%) of 2015 Area 2C QS by Vessel Class and Block Status

Vessel Class	Blocked, but Not Small	Small Blocks	Unblocked	Total
≤1,500 lb Small Block Standard				
A	1.0	0.1	1.0	2.1
B	2.1	0.3	2.1	4.5
C	45.2	7.3	25.9	78.5
D	8.8	6.1	0.1	15.0
Total	*57.0*	*13.8*	*29.2*	*100.0*
≤2,000 lb Small Block Standard				
A	0.8	0.3	1.0	2.1
B	1.7	0.6	2.1	4.5
C	39.1	13.4	25.9	78.5
D	5.8	9.1	0.1	15.0
Total	47.4	23.4	29.2	100.0

Source: RAM Division, NMFS sourced through AKFIN

Effect of 2C Large Block Restrictions

Table 4-66 Program Efficacy Element 2, Sub–Option 3, Area 2C 2011 Stock Conditions/2015 Demand

Cumulative Cap (Percent)	No Restrictions	No Small Blocks and D-Class	Large C-Block Exclusion Rate (%)			
			25	50	75	100
5	U44-O76	U43-O76	U43-O78	U43-O80	U42-O78	U42-O80
6	U44-O74	U44-O78	U44-O80	U43-O78	U43-O80	U42-O79
7	U46-O78	U45-O80	U44-O78	U44-O80	U43-O78	U42-O76
8	U47-O80	U45-O76	U45-O80	U44-O79	U43-O76	U43-O80
9	U48-O80	U46-O80	U45-O78	U44-O78	U44-O80	U43-O78
10	U48-O76	U47-O80	U46-O80	U45-O80	U44-O76	U43-O76
11	U49-O76	U47-O76	U46-O76	U45-O76	U44-O75	U44-O80
12	U50-O78	U48-O80	U47-O80	U46-O80	U45-O80	U44-O79
13	U50-O74	U48-O74	U48-O80	U46-O76	U45-O76	U44-O76
14	U50-O72	U49-O78	U48-O76	U46-O80	U46-O80	U44-O76
15	U50-O70	U50-O80	U48-O74	U47-O76	U46-O76	U45-O80
16	U50-O68	U50-O76	U49-O78	U48-O78	U46-O75	U45-O76
17	U46-O62	U50-O74	U49-O76	U48-O76	U47-O80	U46-O80
18	U50-O66	U50-O72	U50-O76	U49-O80	U48-O80	U46-O79
19	U50-O64	U50-O70	U50-O74	U49-O76	U48-O79	U46-O76
20	U49-O62	U49-O68	U49-O70	U50-O80	U48-O76	U46-O75

Source: Northern Economics, Inc. estimates from ADF&G (2015) and NOAA (2015a).

Alt 2, Elem. 3, Opt. 4, SO4, 3A Large Blocks

- In Area 3A eliminating all blocks and D-class would leave 36 percent of the QS pool eligible, 90+ percent of which would be B-Class and C-Class.

Table 4-67 Distribution (%) of 2015 Area 3A QS by Vessel Class and Block Status

Vessel Class	Blocked, but Not Small	Small Blocks	Unblocked	Total
≤1,500 lb Small Block Standard				
A	0.4	0.0	2.2	2.6
B	3.3	0.5	33.3	37.1
C	20.7	4.3	28.5	53.5
D	3.8	2.4	0.7	6.8
Total	*28.1*	*7.2*	*64.7*	*100.0*
≤2,000 lb Small Block Standard				
A	0.3	0.1	2.2	2.6
B	2.9	0.8	33.3	37.1
C	17.0	7.9	28.5	53.5
D	1.9	4.3	0.7	6.8
Total	22.2	13.2	64.7	100.0

Source: RAM Division, NMFS sourced through AKFIN

Effect of 3A Large Block Restrictions

Table 4-68 Program Efficacy Element 2, Sub–Option 3, Area 3A 2011 Stock Conditions/2015 Demand

Cumulative Cap (Percent)	No Restrictions	No Blocks and D-Class	Large C-Block Exclusion Rate (%)			
			25	50	75	100
5	U32	U31	U30	U30	U30	U29
6	U34	U32	U32	U31	U31	U30
7	U38	U35	U34	U33	U32	U32
8	U44	U38	U37	U35	U34	U33
9	U50	U44	U41	U38	U37	U35
10		U50	U48	U44	U41	U38
11			U50	U50	U48	U43
12					U50	U49
13	In this area regulators can choose between liberalizing the 5-fish annual limit or relaxing the size restriction.					U50
14						
15						
16						
17						
18						
19						
20						

Source: Northern Economics, Inc. estimates from ADF&G (2015) and NOAA (2015a).

Alt. 2, Element 3

Element 3. **Setting of annual charter management measures. Use RQE quota share holdings as of October 1 each year as the basis to estimate IFQ pounds to add to the estimated guided recreational allocation under the catch sharing plan for the upcoming year. This amount must be maintained for the following fishin year. This estimated combined allocation would be used to recommend the guided recreational harves measures for the following year. The procedural process steps and timeline would remain unchanged.**

Option 1. **If the RQE holdings provide a charter harvest opportunity greater than the unguid recreational bag limit in either area, NMFS would not issue annual IFQ in excess the amount needed for the charter sector to obtain the unguided recreational bag lin to the RQE for that area. Unallocated RQE IFQ would be reallocated as follows:**

Sub-option 1. Equally to all catcher vessel QS holders which hold not more than 1,500 to 3,000 poun in 2015 pounds (by area, proportional to QS holdings)

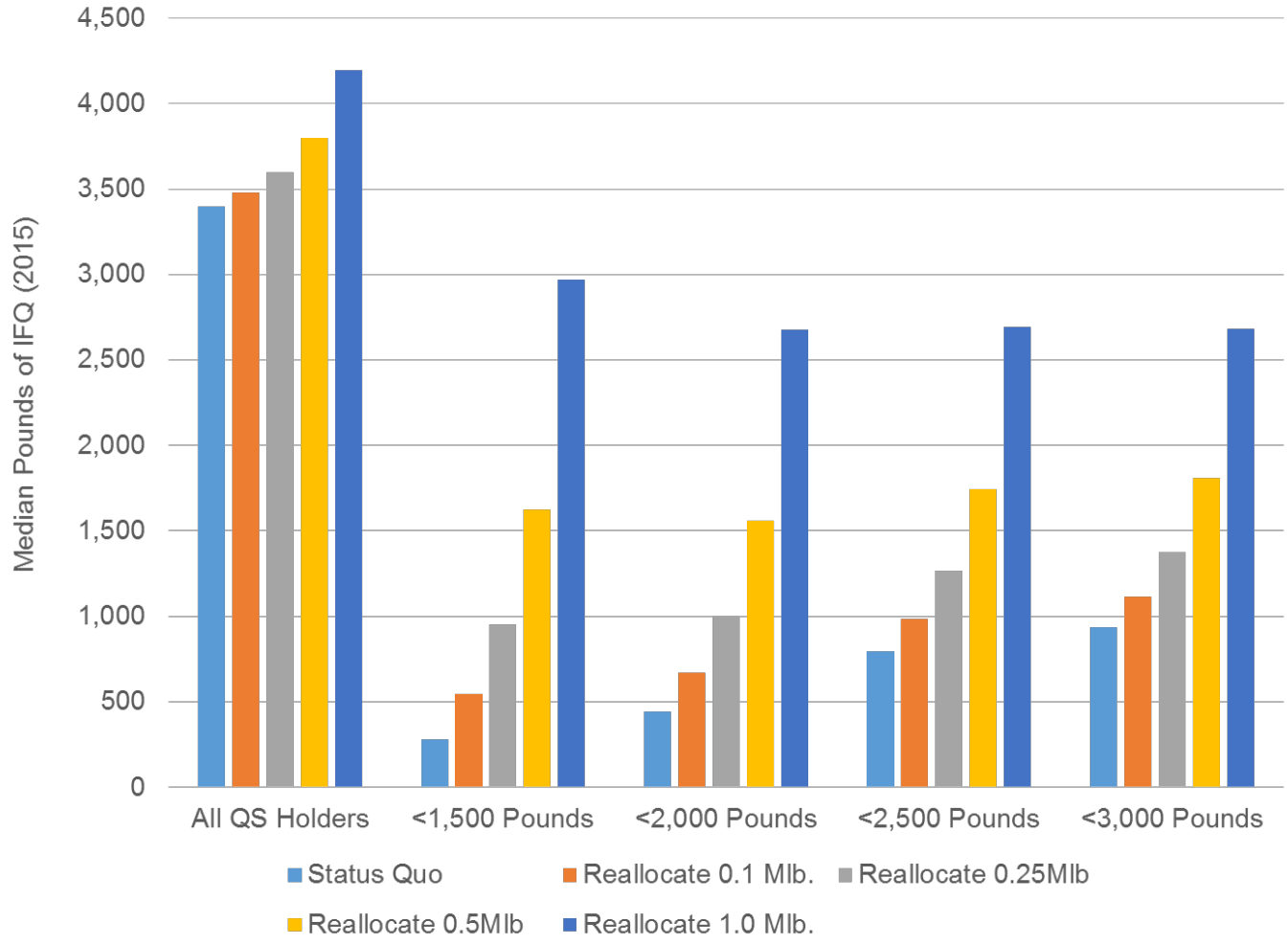
Sub-option 2. Equally to all catcher vessel QS holders (by area, proportional to QS holdings) and bas on the percent of each class of QS purchased by the RQE.

Sub-option 3. Equally to all CQEs actively participating in Area 2C/Area 3A

Sub-option 4. Unallocated RQE IFQ would not be allocated (left in the water)

Sub-option 5. **50% equally to all CQEs actively participating in Area 2C/3A and either 1) 50 equally to all catcher vessel QS holders which hold not more than 1,500 to 3,0 pounds in 2015 pounds (by area, propositional to QS holdings);** or 2) equally to catcher vessel QS holders (by area, propositional to QS holdings and based on the perce of each class of QS purchased by the RQE).

Alt 2, Element 3-Rellocation Effects



Document Page: New Figure Based on 144-150

Element 4: Limit on Fund Usage

RQE funds are limited in their use to acquisition of commercial halibut quota; acquisition of charter halibut permits; halibut conservation/research; promotion of the halibut resource; and administrative costs. RQE funds shall not be used directly or indirectly to lobby local, state, or federal officials.

- Option 1-RQE will be responsible for associated IFQ program fees (Observer fees and administrative fees) and fish taxes that are collectible.

Element 4, Option 1: Levying fees

	Federal Cost Recovery Fee	Federal Observer Program Fee	Other Fish Taxes that are Collectible
Council/ NMFS authority?	Yes	Yes	No, these are predominately state and municipal/ borough-level taxes
Level of implementation complexity?	Relatively low. If an RQE holds QS, it's participating in the IFQ Program. It would be responsible to contribute to IFQ cost recovery fees.	High. This can only be collectible under Observer Program, and may or may not require an RQE or charter vessels to be placed in the Research Plan.	N/A
Notes	Not a Council decision point. RQE is amending the IFQ Program. Data collection, monitoring, enforcement costs related to this contribute to IFQ cost recovery.	Given the implementation complexity, NMFS recommends waiting until an RQE is established and acquires QS, at which point relative benefits of collecting this fee can be weighed.	Not within the Council's authority to impose these fees, but should be considered under the action's net benefits to the Nation.

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Elements 5: Structure

The RQE shall consist of a board of eleven people and shall include the following: 6 CHP holders, 2 commercial halibut quota share holders, 2 community representatives (not a holder of a CHP or commercial QS), and Commissioner of Alaska Department of Fish and Game, or designee.

- Option 1- A representative of ADOR shall sit as an ex-officio member.
- Option 2- Board terms of [3 or 5] years.
- Option 3- No less than two (2) board meetings annually.
- Option 4- Filing an annual report to NMFS

Expansion to the Environmental Analysis

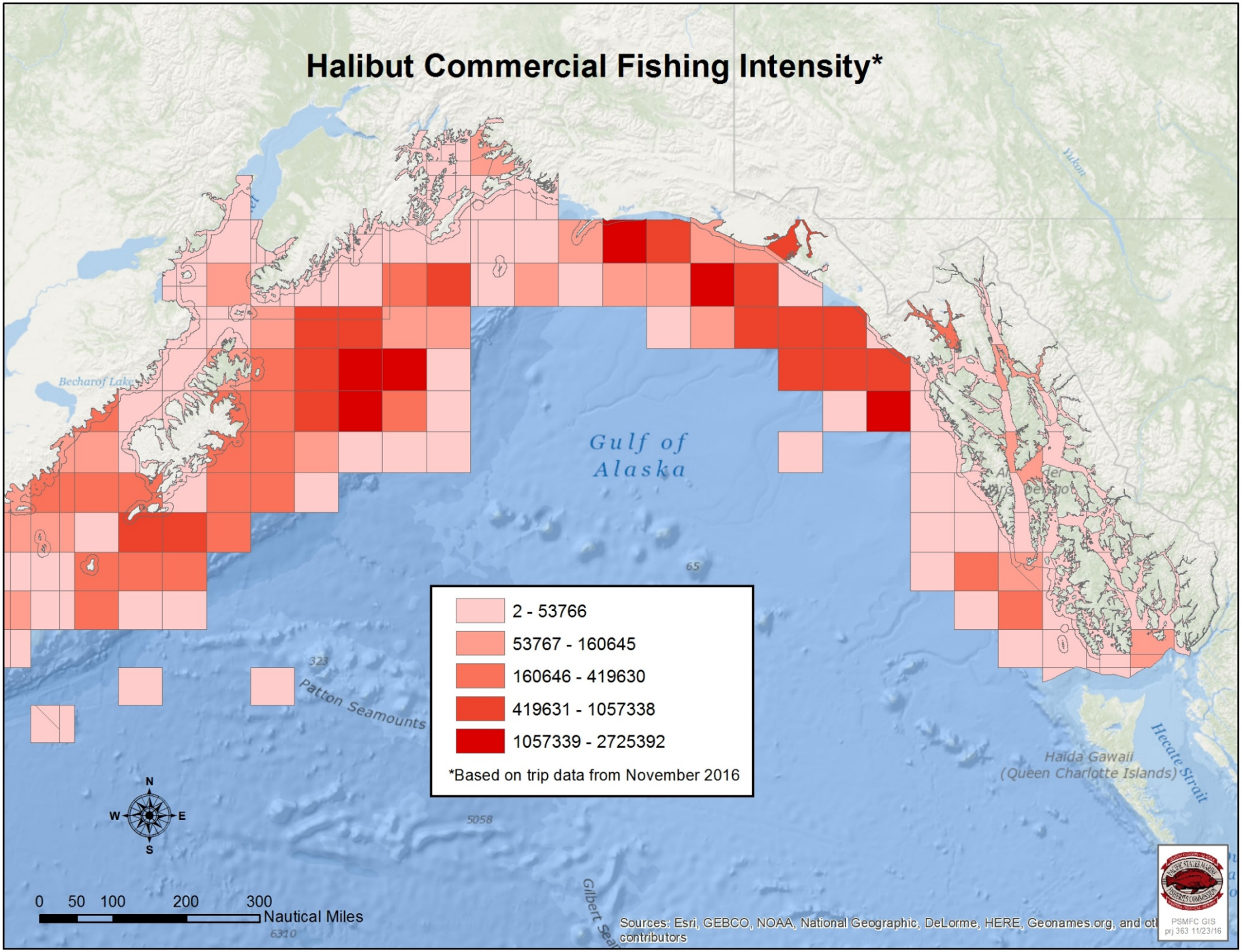
- IPHC considers Pacific halibut to be single coast-wide stock due to its migratory nature, thus changes in harvest under Alt 2 not likely to effect the ability of the stock to sustain itself relative to status quo.
- Challenges associated with analyzing local changes to the halibut resource is in understanding:
  - Spatial changes in harvest intensity, and
  - Changes in size selectivity (particularly with charter regs)
- Expansion included highlighting the data we do have…

Document Page: 206-219

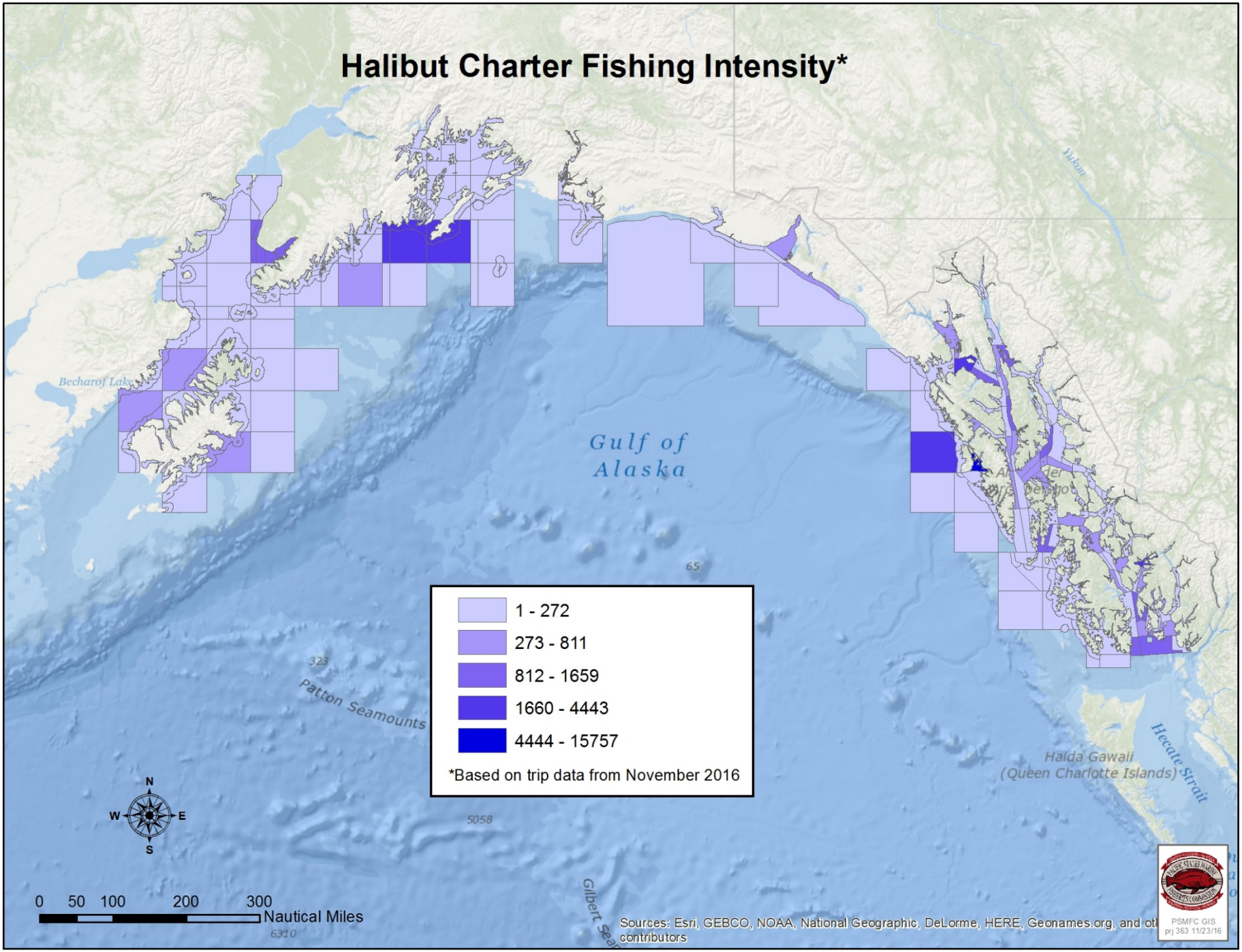
Expansion to the Environmental Analysis

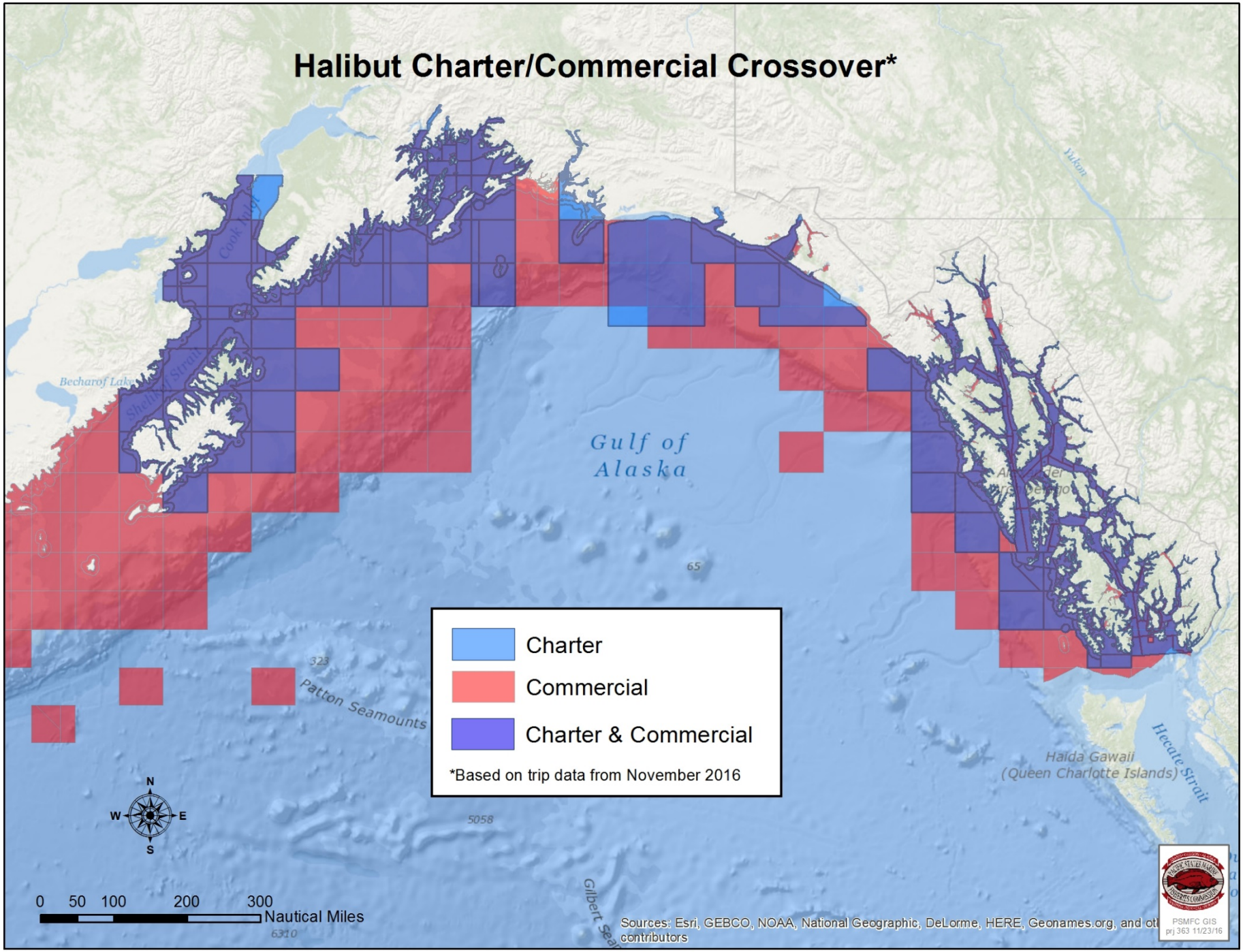
- Few IPHC studies finding no signs of localized depletion (Greernaert et al. 1992; Webster 2008).
- IPHC annual set line surveys
  - Could provide some information on relative abundance over time, but isn't suited to identify localized depletion.
- ADF&G data on harvest, effort, HPUE, and average weight by sub-area
  - Helpful to monitor local fishing pressure, not helpful to demonstrate local abundance or depletion as these metrics are highly influenced by annual management measures.
- Mapped out the footprint of the commercial halibut fishery versus the charter halibut fishery by ADF&G stat area (Addendum)
  - Find that there is substantial overlap; however, the sectors differ in their locational intensity (i.e. hotspots of activity).

Document Page: 219- 228 and Addendum


Halibut Commercial Fishing Intensity*
Becharof Lake
Gulf of Alaska
Yukon
65
323
Patton Seamounts
5058
6310
Gilbert Seamounts
Hecate Strait
Haida Gawaii
(Queen Charlotte Islands)
2 - 53766
53767 - 160645
160646 - 419630
419631 - 1057338
1057339 - 2725392
*Based on trip data from November 2016
N
W
E
S
0 50 100 200 300
Nautical Miles
Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, HERE, Geonames.org, and ot
contributors
PSMFC GIS
prj 363 11/23/16

Halibut Charter Fishing Intensity*




Halibut Charter/Commercial Crossover*
Gulf of Alaska
Becharof Lake
Shelikof Strait
Cook Inlet
Yukon
Patton Seamounts
Haida Gawaii
(Queen Charlotte Islands)
Hecate Strait
Gilbert Seamounts
65
323
5058
6310
Charter
Commercial
Charter & Commercial
*Based on trip data from November 2016
N
W
E
S
0 50 100 200 300
Nautical Miles
Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, HERE, Geonames.org, and ot
contributors
PSMFC GIS
prj 363 11/23/16

Key Takeaways

- Even small percentages of QS would have helped an RQE liberalize bag limits under 2015 conditions in both IPHC Areas.
- There is a direct trade off in the portion of all QS which attains protected status the likelihood of significant market effects
  - Small block/Class restrictions could help protect QS perceived to be used by small/new holders, but would affect program efficiency and likely push the RQE into B-Class QS (3A only) and C-Class shares (2C/3A).
  - Removing large blocks, particularly C-class blocks, shrinks the effective market size rapidly.
- The more of the QS pool which is excluded from the cumulative ownership calculation the higher the portion of the remaining QS needed to achieve the same effect (See Alt 2, Element 2, SO 4).