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Supplement to Section 4.5 of DEIS

Summary Review of
Prohibited Species Catch Limits
below 200,000 chum salmon

What led to the preparation of the NMFS supplement?

- NEPA – reasonable range of alternatives

- Public comments at October 2023 Council Meeting

- **Question: do the impacts at a 200,000 chum PSC limit reflect impacts at lower limits, such that an examination of lower limits would be unnecessary for NEPA compliance?**

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What is in Appendix 1?

- Alternative 2 – limits on overall chum salmon
- PSC limits reviewed in Appendix 1
  - 0; 50,000, 100,000, 150,000, and 200,000 chum
- Quantitative analysis of impacts on pollock harvest and chum PSC
- Qualitative description of impacts on communities

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Data and methods

- Data – NMFS Catch Accounting; AKFIN (prices)
- Identify each sector's chum PSC apportionment under pro rata (75% 3-year avg.; 25% AFA)

Pro rata allocation						
Sector	**%**	**0**	**50k**	**100k**	**150k**	**200k**
CDQ	7.1	0	3550	7100	10650	14200
CP	25.4	0	12700	25400	38100	50800
Inshore	58.4	0	29200	58400	87600	116800
Mothership	9.1	0	4550	9100	13650	18200

Appendix 1: Table A-1

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Data and methods

For each year between 2011 and 2022, NMFS identified the day each sector would have met its PSC apportionment

Then calculated:

–total pollock (metric tons) subsequently caught

–total chum salmon (# of salmon) subsequently caught

For forgone pollock:

–Calculated gross ex-vessel value

–Calculated first wholesale value

Methods: CP Example

150,00 PSC limit: 38,100
Apportionment exceeded on DAY 295
Saturday, October 22, 2011

Day	Chum (# fish)	Pollock (mt)
290	35,278	238,035
291	35,409	239,057
292	35,423	240,039
293	35,460	241,066
294	35,491	241,642
295	**40,336**	**242,750**
296	43,213	243,281
297	43,409	243,657
298	43,424	243,993
299	43,982	244,968
TOTAL	**44,299**	**250,219**

Pollock forgone = 7,379 mt
Avoid chum - 3,963 fish

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Results: potential forgone pollock (Pro rata apportionment)

Calcuated using Pro-rata sector apportionment		Sum of Forgone B Season Pollock (mt)	Reduction as % of B Season Total	Mean Annual Forgone B Season Pollock (mt)
If a 0 chum PSC limit had been in place 2011-2022:	**Total**	**8,715,783**	**100%**	**726,315**
	CDQ	877,006	99%	73,084
	CP	3,119,072	100%	259,923
	Mothership	783,052	99%	65,254
	Inshore	3,936,653	100%	328,054
If a 50,000 chum PSC limit had been in place 2011-2022:	**Total**	**4,648,109**	**53%**	**447,228**
	CDQ	319,649	36%	35,517
	CP	1,598,394	51%	159,839
	Mothership	405,279	51%	40,528
	Inshore	2,324,786	59%	211,344
If a 100,000 chum PSC limit had been in place 2011-2022:	**Total**	**3,657,087**	**42%**	**368,553**
	CDQ	241,706	27%	40,284
	CP	1,236,108	40%	123,611
	Mothership	323,832	41%	35,981
	Inshore	1,855,441	47%	168,676
If a 150,000 chum PSC limit had been in place 2011-2022:	**Total**	**2,894,255**	**33%**	**300,045**
	CDQ	213,554	24%	42,711
	CP	955,942	31%	95,594
	Mothership	244,723	31%	27,191
	Inshore	1,480,037	38%	134,549
If a 200,000 chum PSC limit had been in place 2011-2022:	**Total**	**2,068,764**	**24%**	**252,293**
	CDQ	184,178	21%	36,836
	CP	848,644	27%	106,081
	Mothership	134,939	17%	19,277
	Inshore	901,003	23%	90,100

Appendix A-1: Table A-2

Results: potential chum salmon avoided (Pro rata apportionment)

Calcuated using Pro-rata sector apportionment		Sum of B Season Chum Avoided (#)	Reduction as % of B Season Total	Sum of Estimated WAK Chum Avoided (#)	Mean Annual Estimated WAK Chum Avoided (#)
If a 0 chum PSC limit had been in place 2011-2022:	**Total**	**3,364,568**	**100%**	**591,159**	**49,263**
	CDQ	227,068	100%	45,431	3,786
	CP	960,180	100%	121,138	10,095
	Mothership	279,813	100%	51,858	4,322
	Inshore	1,897,507	100%	372,731	31,061
If a 50,000 chum PSC limit had been in place 2011-2022:	**Total**	**2,742,812**	**81%**	**472,310**	**39,359**
	CDQ	187,146	82%	38,082	3,174
	CP	812,087	84%	101,532	8,461
	Mothership	223,404	80%	41,084	3,424
	Inshore	1,520,175	80%	291,612	24,301
If a 100,000 chum PSC limit had been in place 2011-2022:	**Total**	**2,207,747**	**66%**	**371,311**	**30,943**
	CDQ	153,552	67%	31,904	2,659
	CP	677,563	70%	84,814	7,068
	Mothership	176,180	63%	32,373	2,698
	Inshore	1,200,452	63%	222,220	18,518
If a 150,000 chum PSC limit had been in place 2011-2022:	**Total**	**1,710,185**	**51%**	**277,658**	**23,138**
	CDQ	139,922	61%	29,103	2,425
	CP	547,270	57%	69,140	5,762
	Mothership	138,456	49%	25,548	2,129
	Inshore	884,537	47%	153,866	12,822
If a 200,000 chum PSC limit had been in place 2011-2022:	**Total**	**1,203,504**	**40%**	**186,339**	**15,528**
	CDQ	114,078	50%	24,081	2,007
	CP	417,007	43%	54,518	4,543
	Mothership	99,887	36%	18,818	1,568
	Inshore	572,532	30%	88,922	7,410

Appendix A-1: Table A-2

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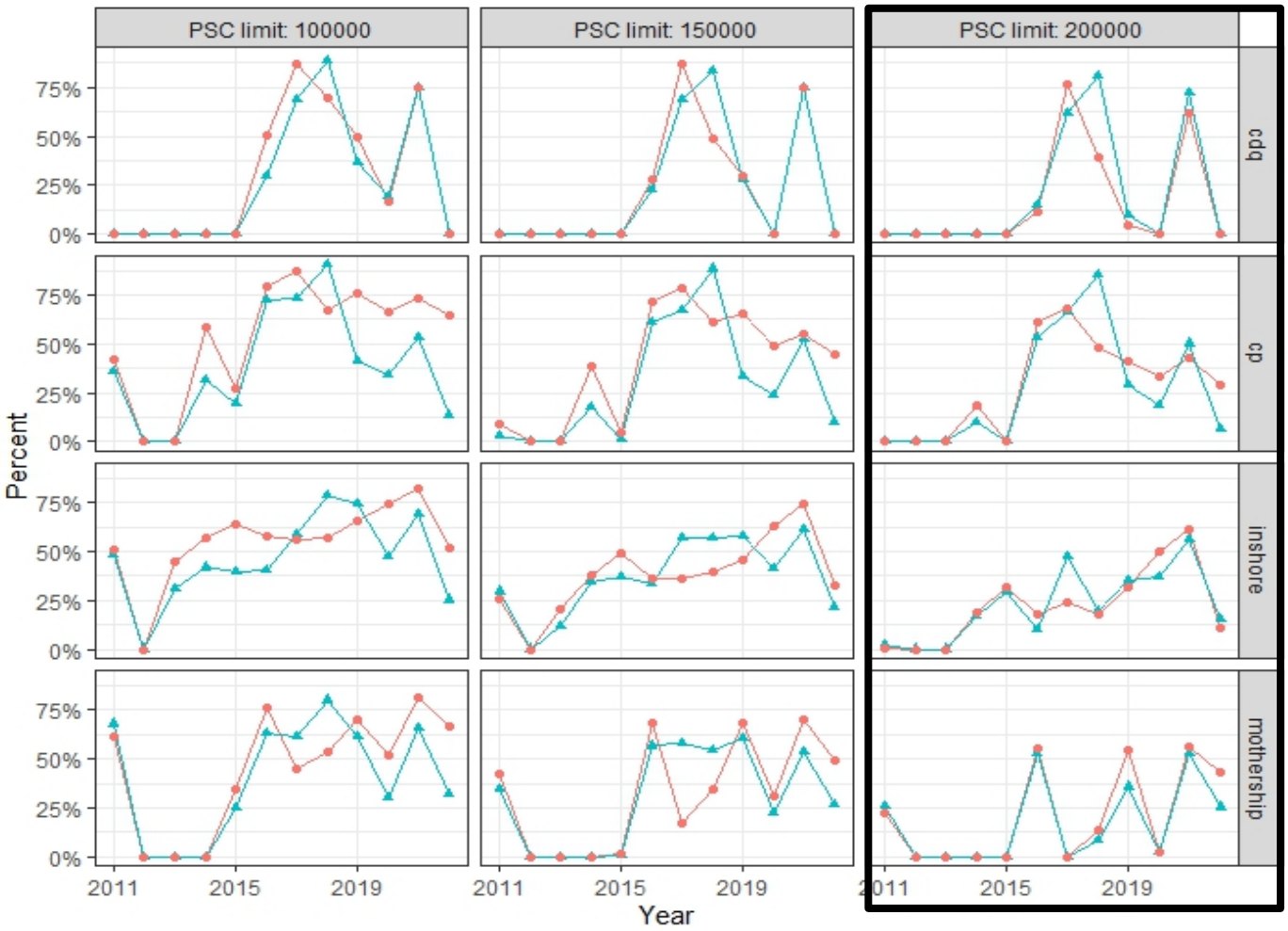
Inter-annual variability (2011-2022)



21% - cumulative

>75% - 2018

27% - cumulative

>85% - 2018

23% cumulative

>50% – 2021

17% cumulative

>50% - 2016/2021

Appendix 1: Figure A-1

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What was not included?

- analysis of avoidance costs
- analysis of potential fishing changes
- comprehensive analysis of economic impacts
- benefits of avoided chum salmon
- ecosystem impacts
- PSC tradeoffs (e.g., 6.2.6 of DEIS)
- stakeholder input
- other?

Questions?

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