

Agenda Item J.6.a
Supplemental NMFS Presentation 1
June 2019



**NOAA
FISHERIES**

**West Coast
Region**

National Marine Fisheries Service (NMFS) Report on Deep-Set Buoy Gear Authorization and Review of Analyses

Agenda Item J.6

June 24, 2019

Overview

- **Updates on NEPA Analysis**
- **Preliminary Analysis of Biological Impacts**
- **Discussion**
- **APPENDIX – Preliminary DEIS Table of Contents**

Preliminary Analysis of Biological Impacts

- **Data Sources**
- **Species Included**
- **Fishing Effort Assumptions**
- **Examples of Catch Predictions**

Table 1

Summary of Reported SBG Catch, 2015-2019						
	2015	2016	2017	2018	2019 *	TOTAL
<i>Swordfish</i>	136	474	556	481	13	1660
<i>Bigeye thresher shark</i>	66	57	35	32	0	190
<i>Pelagic thresher shark</i>	0	0	0	2	0	2
<i>Common thresher shark</i>	0	0	0	1	0	1
<i>Shortfin mako shark</i>	0	1	0	1	0	2
<i>Blue shark</i>	3	4	2	1	0	10
<i>Common mola</i>	0	0	0	1	0	1
<i>Opah</i>	2	1	0	0	0	3
<i>Escolar</i>	4	4	3	2	0	13
<i>Humboldt squid</i>	0	0	1	0	0	1
<i>Giant squid</i>	0	0	1	0	0	1
<i>Yelloweye rockfish</i>	0	0	1	0	0	1
<i>Northern elephant seal</i>	1	0	0	1	0	2
<i>Loggerhead sea turtle</i>	0	0	0	1	0	1
Total Days Fished	132	280	325	496	17	1250

* Only includes January & February 2019

Table 2

Total Permit Issuance under Council ROA

Alternative	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Open Access	500	500	500	500	500	500	500	500	500	500	500	500
Limited Entry 3.1	25	50	75	100	125	150	175	200	225	250	275	300
Limited Entry 3.2	50	100	150	200	250	300	300	300	300	300	300	300
Limited Entry 3.3	100	200	300	300	300	300	300	300	300	300	300	300
Limited Entry 3.4	300	300	300	300	300	300	300	300	300	300	300	300
Limited Entry 3.5 (PPA)	50	75	100	125	150	175	200	225	250	275	300	300

Table 3

Effort Assumptions

Active Fishing	43% of available permits will be acquired & fished
Gear Selection	83% of vessels will fish SBG only
Average Effort	20.67 days fished per active vessel

Table 4

Assumed Effort for Each Alternative		
Alternative	12-Yr Rampup	Annual Ongoing
Open Access	44,476	3,706
Limited Entry 3.1	14,455	2,224
Limited Entry 3.2	21,126	2,224
Limited Entry 3.3	24,462	2,224
Limited Entry 3.4	26,686	2,224
Limited Entry 3.5 (PPA)	16,493	2,224

All effort figures in days fished

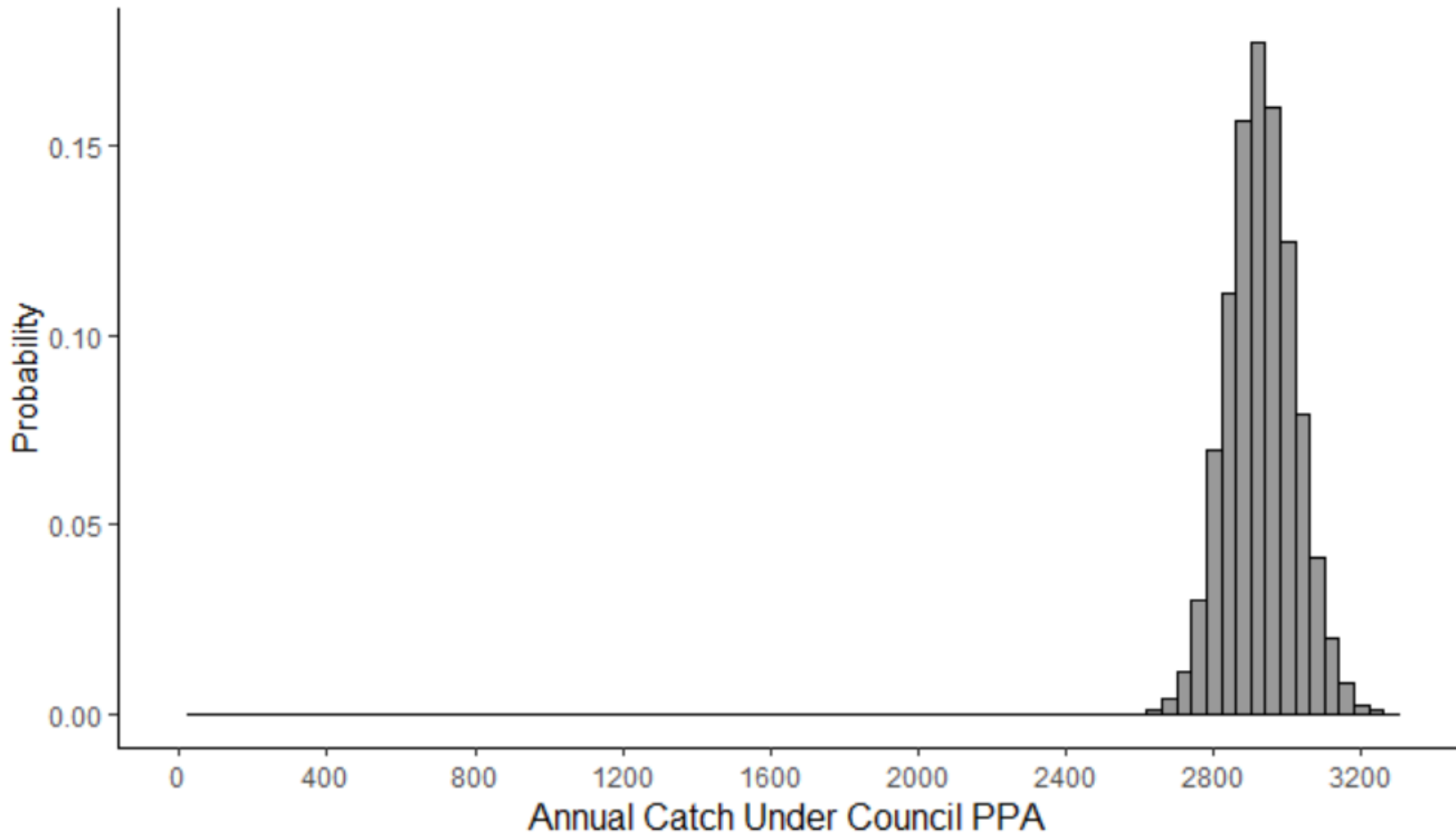
Results: Swordfish

Swordfish

		Mean	CI 2.5%	Median	CI 97.5%	Mode
<i>CPUE</i>	<i>Per Hook Hour</i>	<i>0.01998</i>	<i>0.01902</i>	<i>0.01996</i>	<i>0.02096</i>	
	<i>Per Day Fished</i>	<i>1.31574</i>	<i>1.25288</i>	<i>1.31457</i>	<i>1.38080</i>	
<i>Open</i>	12-Yr Ramp-Up	58,543	55,727	58,520	61,438	59,122
<i>Access</i>	Ongoing Annual	4,877	4,612	4,875	5,150	4,900
<i>LE</i>	12-Yr Ramp-Up	19,027	18,087	19,019	19,985	18,865
<i>3.1</i>	Ongoing Annual	2,928	2,757	2,926	3,107	2,907
<i>LE</i>	12-Yr Ramp-Up	27,809	26,447	27,800	29,216	27,651
<i>3.2</i>	Ongoing Annual	2,928	2,756	2,927	3,104	2,945
<i>LE</i>	12-Yr Ramp-Up	32,198	30,657	32,192	33,828	32,070
<i>3.3</i>	Ongoing Annual	2,927	2,753	2,927	3,104	2,947
<i>LE</i>	12-Yr Ramp-Up	35,126	33,431	35,120	36,894	35,086
<i>3.4</i>	Ongoing Annual	2,928	2,757	2,926	3,105	2,945
<i>LE</i>	12-Yr Ramp-Up	21,711	20,649	21,708	22,807	21,720
<i>3.5</i>	Ongoing Annual	2,928	2,756	2,926	3,109	2,910

Results: Swordfish

PPD of Annual Swordfish Catch



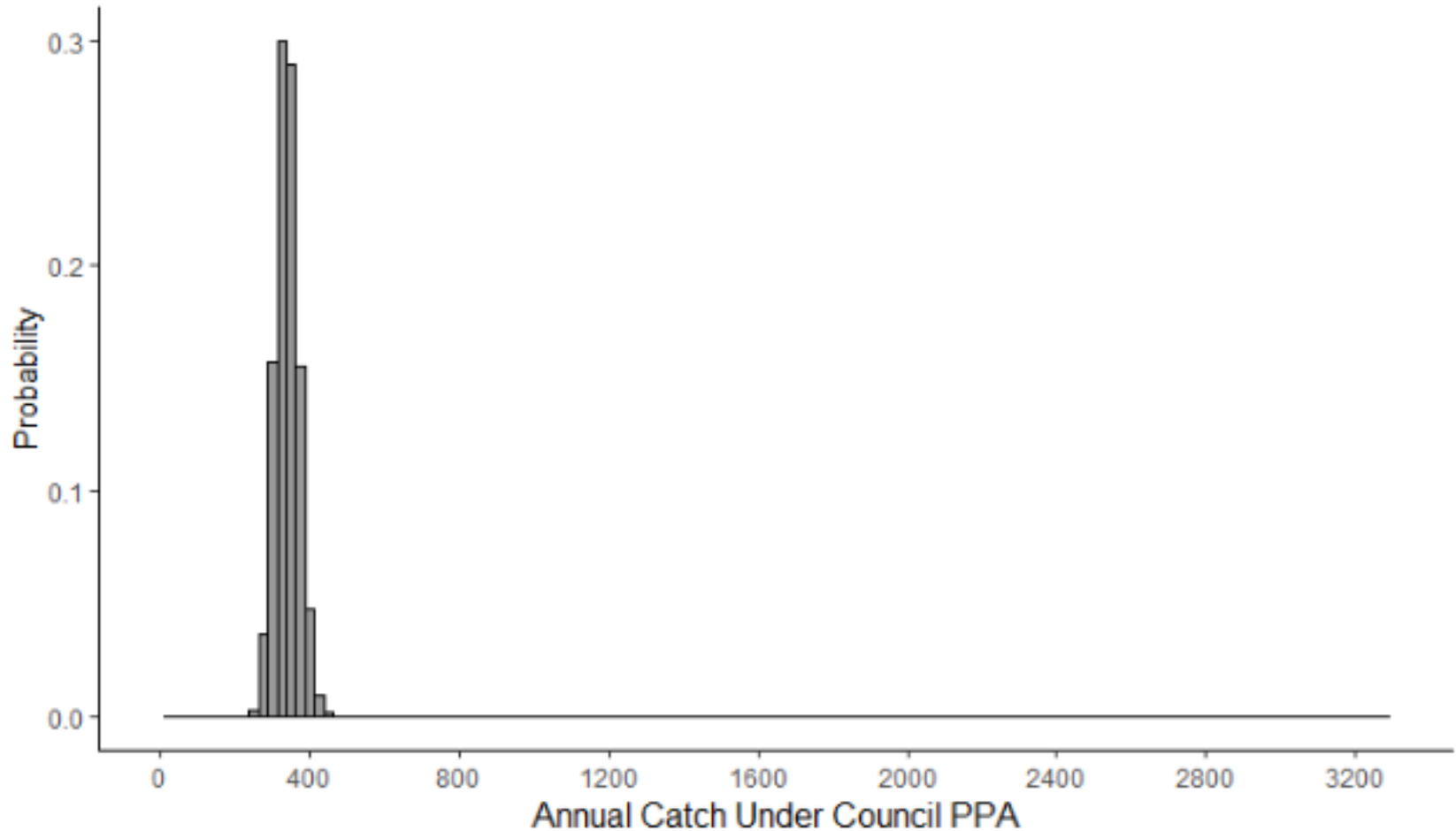
Results: Bigeye Thresher Shark

Bigeye Thresher Shark

		Mean	CI 2.5%	Median	CI 97.5%	Mode
<i>CPUE</i>	<i>Per Hook Hour</i>	<i>0.00231</i>	<i>0.00199</i>	<i>0.00230</i>	<i>0.00265</i>	
	<i>Per Day Fished</i>	<i>0.15224</i>	<i>0.13112</i>	<i>0.15157</i>	<i>0.17479</i>	
<i>Open</i>	12-Yr Ramp-Up	6,764	5,822	6,754	7,784	6,757
<i>Access</i>	Ongoing Annual	563	474	562	661	561
<i>LE</i>	12-Yr Ramp-Up	2,198	1,881	2,194	2,535	2,193
<i>3.1</i>	Ongoing Annual	338	280	338	402	344
<i>LE</i>	12-Yr Ramp-Up	3,213	2,754	3,208	3,705	3,122
<i>3.2</i>	Ongoing Annual	338	281	338	401	340
<i>LE</i>	12-Yr Ramp-Up	3,720	3,192	3,715	4,285	3,696
<i>3.3</i>	Ongoing Annual	338	281	338	401	332
<i>LE</i>	12-Yr Ramp-Up	4,058	3,486	4,052	4,674	4,008
<i>3.4</i>	Ongoing Annual	338	280	337	401	334
<i>LE</i>	12-Yr Ramp-Up	2,508	2,149	2,505	2,895	2,555
<i>3.5</i>	Ongoing Annual	338	280	338	402	343

Results: Bigeye Thresher Shark

PPD of Annual Bigeye Thresher Shark Catch



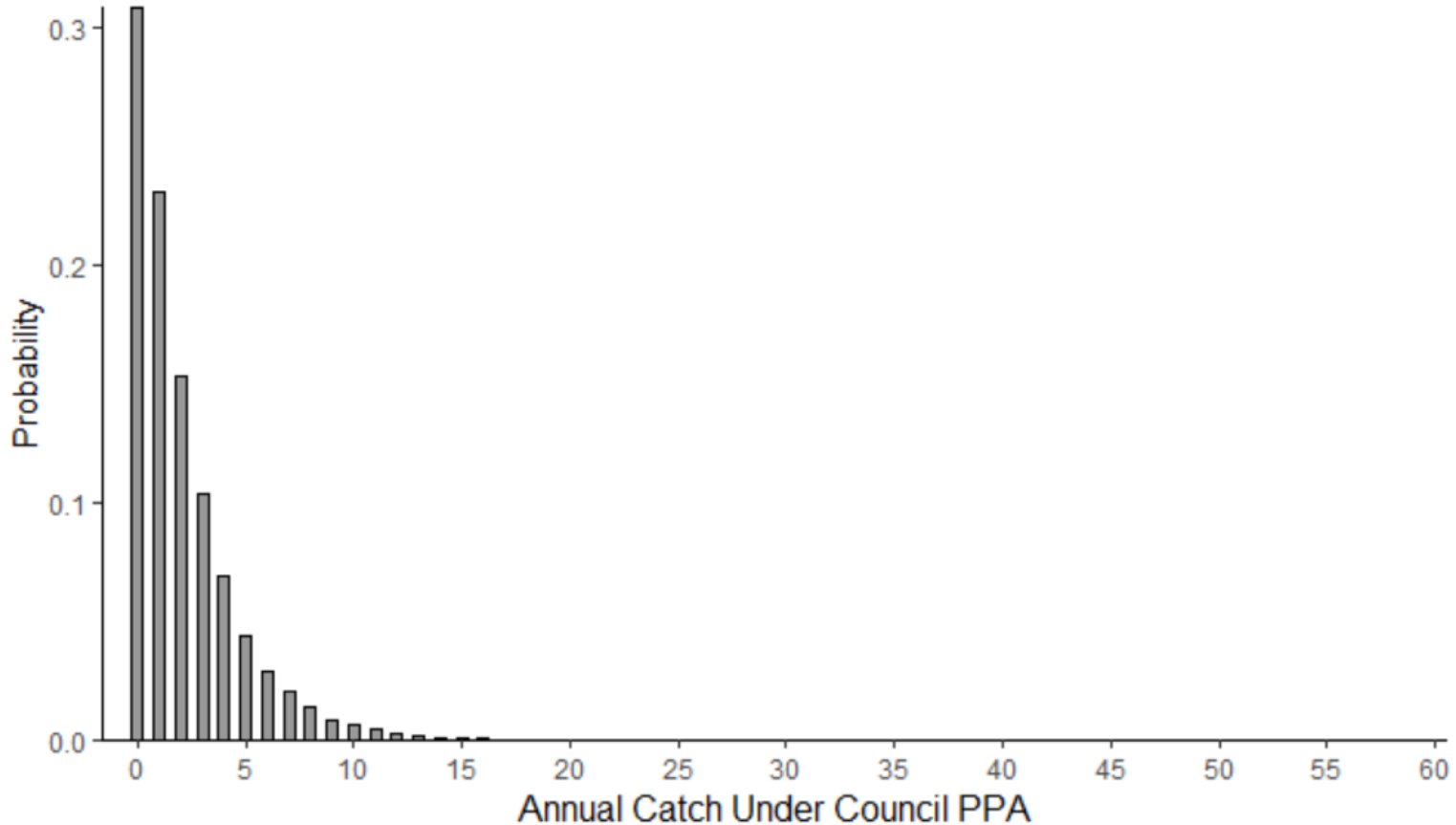
Results: Common Thresher Shark

Common Thresher Shark

		Mean	CI 2.5%	Median	CI 97.5%	Mode
<i>CPUE</i>	<i>Per Hook Hour</i>	<i>0.00001</i>	<i>0.00000</i>	<i>0.00001</i>	<i>0.00005</i>	
	<i>Per Day Fished</i>	<i>0.00092</i>	<i>0.00003</i>	<i>0.00068</i>	<i>0.00310</i>	
<i>Open</i>	12-Yr Ramp-Up	41	1	30	144	5
<i>Access</i>	Ongoing Annual	3	0	2	13	0
<i>LE</i>	12-Yr Ramp-Up	13	0	10	48	1
<i>3.1</i>	Ongoing Annual	2	0	1	8	0
<i>LE</i>	12-Yr Ramp-Up	20	0	14	70	4
<i>3.2</i>	Ongoing Annual	2	0	1	8	0
<i>LE</i>	12-Yr Ramp-Up	23	0	16	80	3
<i>3.3</i>	Ongoing Annual	2	0	1	9	0
<i>LE</i>	12-Yr Ramp-Up	25	0	18	88	2
<i>3.4</i>	Ongoing Annual	2	0	1	8	0
<i>LE</i>	12-Yr Ramp-Up	15	0	11	54	1
<i>3.5</i>	Ongoing Annual	2	0	1	9	0

Results: Common Thresher Shark

PPD of Annual Common Thresher Shark Catch



Discussion

- **Amount of data**
- **Differences in data sources**
- **LBG data is not included**
- **Effort assumptions**
- **Species-specific issues**

Sensitivity Analysis

- **Supplemental J.6 report**
- **Value of additional data**
- **Comments on NOI to prepare an EIS**

Next Steps

- **Update analysis of biological impacts**
- **Incorporate LBG data into the analysis**
- **Complete a socioeconomic analysis**
- **Determine significance of impacts**
- **Provide a preliminary draft EIS to the Council for September 2019 meeting**