

# Swordfish Management and Monitoring Plan

Supplemental NMFS Report 1
September 13, 2022

#### Overview

- NMFS Perspective on the Goals and Utility of the SMMP
- Update on U.S. West Coast Swordfish fishery by Gear Type
- Progress report on "Actions to be taken" in Section 4 of the SMMP, and measures listed under each



#### Goals and Utility of the SMMP

- SMMP goals are compatible, but not replaceable with goals in FMP
  - SMMP goals are more specific
  - Include strategic elements, like reducing bycatch "through mitigation, gear innovation, and individual accountability"
  - Include objectives, like "meet demand for fresh high quality, locally caught product" and "reduce reliance on imported seafood"
- SMMP goals are integral to NMFS's work to implement Council-recommendations
  - Provide broader purpose and need for actions, individually and cumulatively
  - Particularly relevant to EFP actions to test alternative gear



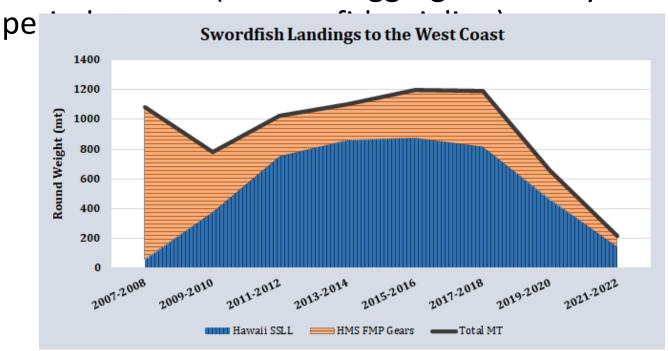
#### Goals and Utility of the SMMP

- Current structure of SMMP lends itself to progress reports (such as this) on measures listed under "Actions to be taken," to support Council evaluation of next steps
- SMMP agenda time provides for Council discussion of overall fishery performance and HMS-focused workload prioritization



### Overall Domestic SWO Landings to West Coast

Figure 1. Swordfish landings to the West Coast: Hawaii Longline relative to all West Coast HMS FMP fisheries. (Data are aggregated to 2-year





#### SWO Landings by Gear Type

#### Table 1. Landings of swordfish by fishery, 2008-2021 (PacFIN)

Metric Tons							Percent					
Year	DGN	Harp.	LL	DSBG	Other	Total	DGN	Harp.	LL	DSBG	Other	Total
2008	406.1	48	59.1		17.9	531.1	76.5%	9.0%	11.1%	0.0%	3.4%	100%
2009	252.6	49.8	106		0.2	408.6	61.8%	12.2%	25.9%	0.0%	0.0%	100%
2010	61.6	37.4	270.7		*	369.8	16.7%	10.1%	73.2%	0.0%	*	100%
2011	119	24.3	476.2		*	619.5	19.2%	3.9%	76.9%	0.0%	*	100%
2012	118.2	5.4	279.2			402.7	29.4%	1.3%	69.3%	0.0%	0.0%	100%
2013	101.8	6.4	424.5		0.2	533	19.1%	1.2%	79.6%	0.0%	0.0%	100%
2014	87.2	4.3	300.9	*	*	392.4	22.2%	1.1%	76.7%	*	*	100%
2015	69.5	3.7	349.2	7.9	*	430.3	16.2%	0.9%	81.2%	1.8%	*	100%
2016	127.1	18.0	260.2	28.1	0.4	433.9	29.3%	4.2%	60.0%	6.5%	0.1%	100%
2017	123.8	19.3	299.0	30.2	0.4	472.7	26.2%	4.1%	63.2%	6.4%	0.1%	100%
2018	101.8	6.8	269.2	46.4	0.3	424.5	24.0%	1.6%	63.4%	10.9%	0.1%	100%
2019	35.5	7.7	118.0	72.4	57.0	290.6	12.2%	2.7%	40.6%	24.9%	19.6%	100%
2020	24.1	4.3	205.7	85.5	0.9	320.5	7.5%	1.3%	64.2%	26.7%	0.3%	100%
2021	9.5	4.7	85.4	36.9	1.2	137.7	6.9%	3.4%	62.1%	26.8%	0.8%	100%

<sup>\*</sup>Confidential data (less than 3 vessels or dealers) suppressed. Totals for non-confidential data only.



<sup>-</sup> LL (pelagic longline) includes both Hawaii and HMS FMP permitted vessels. (Note that only Hawaii permitted vessels may target swordfish but HMS permitted vessels may land swordfish caught incidentally.)

#### Table 1 Highlights

- Longline landings are fairly steady, with recent low years, and are the largest proportion of landings
- DSBG landings have been increasing
- DGN landings have been decreasing
- Harpoon landings are variable, and remain a small proportion of the total
- SWO landings by all gear types were low in 2021



#### Vessel Participation by Gear Type

Table 2. Number of vessels landing swordfish by fishery,

2008-2021 (PacFIN).

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Year	DGN	Harpoon	Longline	<b>DSBG</b>	fisheries
2008	37	31	4	0	3
2009	34	27	3	0	3
2010	25	25	7	0	1
2011	20	17	10	0	2
2012	17	10	8	0	0
2013	16	13	8	0	3
2014	21	10	15	2	1
2015	19	12	18	4	2
2016	20	19	18	6	3
2017	18	21	13	5	4
2018	21	15	19	20	3
2019	15	16	20	21	14
2020	12	15	14	25	8
2021	6	11	14	26	7

- DGN participation has been decreasing, with six vessels fishing in 2021
- Harpoon and longline have been fairly steady recently
- DSBG EFP effort has increased, then remained steady over past few years



#### Ex-vessel revenue by gear type

Table 3. Inflation-adjusted ex-vessel revenue by fishery, 2008-2021 (PacFIN).

Year	DGN	Harpoon	Pelagic Longline	DSBG	Other fisheries	Grand Total
2008	\$1,959,165	\$524,045	\$164,303		\$64,555	\$2,712,068
2009	\$1,228,880	\$529,175	\$437,733		\$788	\$2,196,576
2010	\$456,737	\$411,032	\$1,604,166		*	\$2,471,935
2011	\$852,251	\$277,031	\$2,553,351		*	\$3,682,633
2012	\$871,791	\$68,415	\$1,316,904			\$2,257,110
2013	\$723,160	\$89,718	\$2,051,958		\$1,684	\$2,866,520
2014	\$826,889	\$80,078	\$2,106,546	*	*	\$3,013,513
2015	\$606,092	\$72,745	\$2,853,465	\$105,294	*	\$3,637,596
2016	\$1,138,533	\$295,426	\$1,874,689	\$448,252	\$6,087	\$3,762,987
2017	\$915,869	\$311,421	\$2,272,501	\$440,234	\$7,277	\$3,947,302
2018	\$711,542	\$124,697	\$1,825,884	\$614,786	\$4,651	\$3,281,560
2019	\$281,086	\$132,500	\$840,747	\$890,135	\$385,269	\$2,529,737
2020	\$184,204	\$75,329	\$1,422,587	\$1,057,379	\$11,950	\$2,751,449
2021	\$132,907	\$90,997	\$604,046	\$623,356	\$19,706	\$1,471,012

<sup>\*</sup>Confidential data (less than 3 vessels or dealers) suppressed. Totals for non-confidential data only.



<sup>-</sup> LL (pelagic longline) includes both Hawaii and HMS FMP permitted vessels. (Note that only Hawaii permitted vessels may target swordfish but HMS permitted vessels may land swordfish caught incidentally.)

#### Table 3 Highlights

- DGN revenues are decreasing
- DSBG revenues have been increasing
- Total fisheries revenue was low in 2021 compared to previous years



#### Avg price/pound of SWO, by gear type

Table 4. Average swordfish price per pound by fishery, 2008-2021 (PacFIN).

Year	DGN	Harpoon	Pelagic Longline	DSBG	Other fisheries
2008	\$3.01	\$6.71	\$2.68		\$4.08
2009	\$2.95	\$6.47	\$3.44		**
2010	\$4.47	\$6.99	\$3.55		*
2011	\$4.54	\$7.57	\$3.58		*
2012	\$4.89	\$7.44	\$3.26		
2013	\$4.63	\$8.68	\$2.99		**
2014	\$4.38	\$8.85	\$2.28	*	*
2015	\$3.95	\$8.76	\$2.20	\$6.60	*
2016	\$3.93	\$8.15	\$2.47	\$7.18	**
2017	\$3.35	\$7.89	\$2.57	\$6.23	**
2018	\$2.98	\$8.58	\$2.34	\$6.23	**
2019	\$3.69	\$8.15	\$2.53	\$5.54	\$4.84
2020	\$3.31	\$7.78	\$2.47	\$5.48	\$6.43
2021	\$5.82	\$8.65	\$3.22	\$7.66	\$8.02



<sup>\*</sup>Confidential data (less than 3 vessels or dealers) suppressed.

<sup>\*\*</sup>Average price per pound for landings less than 5 mt excluded.

<sup>-</sup> LL (pelagic longline) includes both Hawaii and HMS FMP permitted vessels. (Note that only Hawaii permitted vessels may target swordfish but HMS permitted vessels may land swordfish caught incidentally.)

#### Table 4 Highlights

- Harpoon and DSBG SWO price per pound is higher than DGN and longline
- SWO price per pound increased for all fisheries in 2021



# Action A: Reduce bycatch in the DGN fishery through hard caps and performance standards

- Protected species hard caps were established, and removed. The Council is currently evaluating additional hard caps alternatives
- Performance metrics were established for the DGN fishery. Metrics have been revised to consider BPUE, and reviews are ongoing
- Regression tree bycatch estimation methods were developed and in use
- Industry-sponsored HMS EM work is ongoing;
   NMFS funding may be needed to support
- Improvements and investments in dynamic ocean modeling tools, such as EcoCast, continue



#### Action B: Develop DSBG

- DSBG EFPs have been issued and monitored since 2015
- EFP results used for Council recommendation to authorize DSBG as a legal gear type
- NMFS Draft EIS published
- Proposed rule and FMP Amendment forthcoming
- The FMP amendment and draft regulations include Council's proposal for an LE program that takes into account current participation in the WC swordfish fishery



## Action C: Limit fishing effort in the DGN fishery

- Federal DGN LE permit is in place
- Proposed DSBG LE permit qualifying criteria prioritize DGN fishermen who participate in a permit buyback program



### Action D: Allow DGN vessels to access to the PLCA

 EFP application to use modified DGN in the PLCA is still pending, awaiting EcoCast program refinement



#### Action E: Develop longline fisheries

- Council scoped shallow-set longline in 2019
  - o did not schedule an ROA
  - instead directed HMSMT to bring back additional analyses under SMMP, which remain incomplete
- Council recommended EFP applications to use modified longline gear and midwater snap gear, and these recommendations are undergoing federal review.



#### End

