

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON  
PACIFIC SARDINE LANDINGS 2015-2019

The California Department of Fish and Wildlife (CDFW) is providing the following details on commercial Pacific Sardine (sardine) landings in support of Pacific Fishery Management Council (PFMC) discussions regarding annual specifications for the fishery. These details are particularly important in the event that the Secretary of Commerce declares sardine to be in an overfished status, given the coastal pelagic species (CPS) Fishery Management Plan (FMP) limitation on incidental take of overfished stocks.

Sardine are landed incidentally in several CPS fisheries, including Northern Anchovy, Jack Mackerel, Pacific Mackerel, and Market Squid. They are also landed in a variety of non-CPS fisheries, such as groundfish trawl fisheries including Pacific Whiting and prawn trawl. Since 2015, incidental sardine take has been limited to not more than 40% by weight in CPS fisheries, except the targeted live-bait fishery and, since 2018, the minor directed fishery. If sardine are declared to be in an overfished status, incidental landings of the large-scale commercial fishery will be limited to not more than 20% by weight.

On average, 138 landings per year containing incidental sardine have been made from the 2015-2016 to 2018-2019 fishing seasons (Table 1). These supported landings on average of more than 2,300 mt of target species with an ex-vessel value of more than \$1.75 million (Table 1). The proportion of sardine incidentally taken in particular fisheries is highly variable, depending on year, season, and fishery. Landings with greater than 20% incidental sardine occurred most frequently in the Northern Anchovy fishery, but have occurred in all other fisheries with the exception of Jack Mackerel (Table 2). Total sardine landings in California have been fairly constant since the directed fishery was closed in 2015. On average, 2,155 mt of sardine have been landed each year with the vast majority of this coming from the live bait industry (Table 3).

Given this information, CDFW recommends that if sardine are declared to be in an overfished status the Council approve directed take in the live bait fishery, consistent with the CPS FMP amendment 17 in process, and incidental landings of 20% sardine by weight in the large-scale commercial fishery to account for the known landings over the past several years. This will allow for multiple economically important fisheries that unavoidably encounter incidental sardine to continue.

Table 1: Amount and value of incidental sardine take in other California fisheries.

<b>Fishing Season</b>	<b>Number of Landings with Incidental Sardine</b>	<b>CPS landed with Incidental Sardine (mt)</b>	<b>Non-CPS landed with Incidental Sardine (mt)</b>	<b>Value of Landings with Sardine (dollars)</b>
<b>2015-2016</b>	67	1,535	0.4	\$ 527,711
<b>2016-2017</b>	178	3,806	0.85	\$ 2,622,084
<b>2017-2018</b>	93	2,302	9.66	\$ 1,945,469
<b>2018-2019<sup>1</sup></b>	106	1,904	5.09	\$ 1,912,429
<b>Average</b>	<b>138</b>	<b>2,387</b>	<b>4</b>	<b>\$ 1,751,924</b>

<sup>1</sup>2018-2019 data are preliminary and subject to change.

Table 2: Number of California incidental sardine landings by fishery and proportion of incidental sardine for 2015-2016 to 2018-2019 (preliminary data) fishing seasons.

<b>Target Species &amp; Proportion of Incidental Sardine</b>	<b>Number of Landings per Fishing Season</b>			
	<b>2015-2016</b>	<b>2016-2017</b>	<b>2017-2018</b>	<b>2018-2019</b>
<b>Anchovy</b>				
0-10%	12	3	0	0
11-20%	1	3	1	0
21-30%	3	7	8	1
31-40%	0	9	2	3
<b>Jack Mackerel</b>				
0-10%	1	0	1	0
11-20%	0	0	1	0
21-30%	0	0	0	0
31-40%	0	0	0	0
<b>Pacific Mackerel</b>				
0-10%	10	14	1	2
11-20%	5	7	2	1
21-30%	4	4	1	0
31-40%	2	0	0	0
<b>Market Squid</b>				
0-10%	26	101	61	75
11-20%	0	15	7	4
21-30%	1	8	0	5
31-40%	0	1	0	2
<b>Other Fisheries</b>				
0-10%	0	4	5	10
11-20%	0	1	2	3
21-30%	0	1	1	0
31-40%	2	0	0	0

Table 3: California landings (mt) of Pacific Sardine in different components of the fishery.

<b>Season</b>	<b>Incidental<sup>2</sup></b>	<b>EFP<sup>3</sup></b>	<b>Live Bait<sup>4</sup></b>	<b>Minor Directed</b>	<b>Total</b>
<b>2015-2016</b>	164	N/A	2,097	N/A	2,261
<b>2016-2017</b>	514	N/A	1,614	N/A	2,128
<b>2017-2018</b>	275	N/A	1,894	4.5	2,174
<b>2018-2019<sup>1</sup></b>	174	357	1,647	44	2,222
<b>Average</b>	<b>282</b>	<b>N/A</b>	<b>1,813</b>	<b>N/A</b>	<b>2,196</b>

Data extracted from Marine Landings Data System (MLDS) on 4/1/2019.

<sup>1</sup>2018-2019 data are preliminary and subject to change.

<sup>2</sup>Directed Pacific Sardine fishery closed beginning with 2015-2016 season. Pacific Sardine limited to 40% incidental in CPS fisheries.

<sup>3</sup>Research take per 2018 California Wetfish Producers Association Exempted Fishing Permit request ([PFMC April 2018 Agenda Item C.2. Attachment 2](#)).

<sup>4</sup>Based on voluntary logbook submission and information from other CDFW sources.