California Department of Fish and Wildlife
Report to the International Pacific Halibut Commission
on 2017 California Fisheries

California Department of Fish and Wildlife
Marine Region
January 2018
Contents

Executive Summary ........................................................................................................................................... 3
Background ....................................................................................................................................................... 4
Recreational Fishery ........................................................................................................................................ 4
  California Recreational Allocation and Regulations .................................................................................... 4
  Corrections to Final Annual Estimates ...................................................................................................... 4
  2017 Inseason Catch Tracking .................................................................................................................... 5
  Reporting and Coordination with NMFS, IPHC and the PFMC ................................................................. 6
  Location of Sampled Pacific Halibut ............................................................................................................ 7
Fishery Closure .............................................................................................................................................. 8
Estimating Discard Mortality ....................................................................................................................... 10
  2017 Noteables ........................................................................................................................................... 11
California Commercial Fishery ...................................................................................................................... 12
Summary ......................................................................................................................................................... 14
**Executive Summary**

This report provides a summary of the performance of the 2017 Pacific halibut recreational and directed commercial fisheries off California.

The recreational season was scheduled to be open from May 1-June 15, July 1-15, August 1-15, and September 1-October 31 as long as there was unharvested quota available. However, following discussions with the International Pacific Halibut Commission (IPHC), Pacific Fishery Management Council (PFMC) and National Marine Fisheries Service (NMFS), an inseason fishery closure was implemented on September 11, based on projected early attainment of the 2017 California quota.

Final 2017 recreational catch estimates totaled 30,541 net pounds—or 88 percent of the quota. The average net weight per fish was approximately 19 net pounds.

A total of five vessels made landings across three opening days in the directed commercial fishery; the preliminary landings were 3,872 dressed pounds – significantly higher than prior recent years.
Background
The California coastline plays a unique part in Pacific halibut management as it is located at the southern extent of the population range and has historically been a minor, and irregular, contributor to harvest removals compared to other management areas. However, recently, a robust recreational fishery in northern California has developed and has prompted science, management and policy discussions about the portion of the stock off California. California Department of Fish and Wildlife (CDFW) is optimistic that Pacific halibut can continue to be a viable and sustainable resource for the local and regional economies of the north coast.

Recreational Fishery

California Recreational Allocation and Regulations
The IPHC set the Area 2A Total Allowable Catch at 1,330,000 net pounds at their annual meeting on January 27, 2017, which resulted in a 2017 California recreational Pacific halibut quota of 34,580 net pounds per the PFMC's Catch Sharing Plan (CSP).

Regulations for California’s 2017 fishery provided for a season that would be open May 1-June 15; July 1-15; August 1-15; and from September 1- October 31; or until the quota was projected to be attained, whichever was earlier. However, partially due to significant effort and catch in August, the fishery closed early through an inseason action effective September 11 for the remainder of the year. During 2017, the fishery was open for a total of 86 days. The daily bag and possession limit was one fish and there was no size limit.

Corrections to Final Annual Estimates
CDFW’s California Recreational Fisheries Survey (CRFS) staff regularly review their catch estimation programs to verify and cross-check outputs for accuracy. In the fall of 2017, an examination of programming language revealed the conversion from round to net weight for Pacific halibut was inadvertently excluded from the catch estimate calculation. Therefore, CDFW had been reporting round weight rather than net weight for management use in 2015-2017. Prior to 2015, the round to net weight conversions were calculated by hand outside of the programs used to generate catch estimates.

This error resulted in over-reporting of catch and closure of fisheries earlier than was necessary. Revised estimates based on net weight are provided below in Table 1. Consistent with west coast and IPHC protocols, all future CDFW reporting will occur in net weight.
Table 1. Revised recreational Pacific halibut catch estimates for California from 2015-2017. Corrected net weight estimates are provided below. Data for 2017 are preliminary and incomplete.

<table>
<thead>
<tr>
<th>Month</th>
<th>2015 Round Weight</th>
<th>2015 Net Weight</th>
<th>2016 Round Weight</th>
<th>2016 Net Weight</th>
<th>2017 Round Weight</th>
<th>2017 Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>378</td>
<td>284</td>
<td>2,322</td>
<td>1,746</td>
<td>2,181</td>
<td>1,640</td>
</tr>
<tr>
<td>June</td>
<td>1,783</td>
<td>1,341</td>
<td>5,658</td>
<td>4,254</td>
<td>9,230</td>
<td>6,940</td>
</tr>
<tr>
<td>July</td>
<td>13,768</td>
<td>10,352</td>
<td>5,558</td>
<td>4,179</td>
<td>6,094</td>
<td>4,582</td>
</tr>
<tr>
<td>August</td>
<td>8,977</td>
<td>6,750</td>
<td>11,025</td>
<td>8,290</td>
<td>19,172</td>
<td>14,415</td>
</tr>
<tr>
<td>September</td>
<td>-</td>
<td>-</td>
<td>6,331</td>
<td>4,760</td>
<td>3,942</td>
<td>2,964</td>
</tr>
<tr>
<td>October</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>24,906</td>
<td>18,727</td>
<td>30,894</td>
<td>23,229</td>
<td>40,619</td>
<td>30,541</td>
</tr>
</tbody>
</table>

2017 Inseason Catch Tracking
Monthly estimates produced by CDFW’s CRFS program serve as California’s best estimate of catch. However, production of these estimates involves a time lag of about six weeks after the month’s end. Therefore, CDFW uses weekly projections to approximate catch for any months for which CRFS estimates are not yet available – allowing for timely estimation of cumulative catch during the season. As the CRFS estimates for a given month become available, those monthly estimates replace the total monthly projection values for that month.

In light of the discovery that reported catch estimates for 2015 through 2017 were not in net weight, CDFW updated both the total monthly projections and catch estimates for 2017 (Table 2). CDFW’s 2017 preliminary season catch estimate is 30,541 net pounds, or 88 percent of the 34,580 net pound quota.

Table 2. Corrected 2017 Pacific halibut catch estimates in California by month. CDFW projection values are provided in Strikeout to illustrate the process of replacing the projections with CRFS estimates when those estimates became available. Data are from CRFS and are preliminary and subject to change.

<table>
<thead>
<tr>
<th>Month</th>
<th>Net Pounds Accrued</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CDFW Projection</td>
</tr>
<tr>
<td>May</td>
<td>2,674</td>
</tr>
<tr>
<td>June</td>
<td>4,525</td>
</tr>
<tr>
<td>July</td>
<td>3,805</td>
</tr>
<tr>
<td>August</td>
<td>11,003</td>
</tr>
<tr>
<td>September</td>
<td>2,982</td>
</tr>
<tr>
<td>October</td>
<td>0 (CLOSED)</td>
</tr>
<tr>
<td>Total</td>
<td>30,541</td>
</tr>
</tbody>
</table>
manage inseason, as reflected in Table 2. In addition to the net weight – round weight issue (previously discussed), there may be an issue with low sample sizes in the Party/Charter (PC) mode in District 5 (covering Cape Mendocino to Point Arena), which resulted in unrealistic estimates in some months.

CDFW will undertake a review of PC sampling levels and estimation procedures in 2018 for Pacific halibut to determine if additional steps can be taken to reduce discrepancies between weekly catch projections and monthly CRFS catch estimates.

CDFW also plans to revisit the Private/Rental (PR) Private Access or Night (PAN) mode estimates that were identified in 2012 as being too uncertain for use in estimating the state’s recreational Pacific halibut catch in these areas/modes. The PR-PAN component was expected to be a minor contribution to the Pacific halibut catch; and information available from CRFS in the most recent years should allow for review of this assumption.

**Reporting and Coordination with NMFS, IPHC and the PFMC**
The weekly projection and cumulative total projected catch were provided by CDFW staff to NMFS, the IPHC, and PFMC for discussion to evaluate the catch status to date. CDFW also posted weekly updates to its Pacific halibut webpage¹ and Pacific halibut inseason catch tracking “thermometer” to inform the public of projected catch to date throughout the season (Figure 1).

---

Figure 1. Examples of the CDFW online Pacific halibut inseason catch tracking “thermometer” that were posted online during 2017. The figure on the left shows catch projections (colored gradient) combined with monthly estimates (grey) that were available after August 13, 2017. The figure on the right shows the same graphic at the end of the season with only the monthly estimates, which replaced all projections. The “thermometer” was updated weekly during the open season, with a final update when the preliminary 2017 season total became available.

Location of Sampled Pacific Halibut
A total of 243 Pacific halibut were examined by CRFS samplers throughout the 2017 season. Similar to previous years, the greatest number of Pacific halibut observed by samplers (87 fish), were encountered in Trinidad followed by Eureka and Crescent City (Error! Reference source not found.2). The majority of sampled fish (and estimated catch) occurred in August.
Figure 2. Northern California port areas where Pacific halibut are most frequently encountered and number of sampler examined Pacific halibut by month and port area during 2017.

**Fishery Closure**

Provisions in the CSP allow for flexible inseason management of the recreational Pacific halibut fisheries in Area 2A. These provisions include modifications to sport fishing periods, or the length of the season via inseason changes. Notice of any inseason action is provided to the public by NMFS on their halibut hotline.

Catch projections through September 3 showed more than 90 percent of the quota had already been taken. Good weather forecasts and the resulting potential for high catch rates prompted CDFW to hold conference calls with NMFS, the IPHC, and PFMC on September 6 and 8. Based on then-current fishery trends and predicted weather conditions, CDFW, NMFS, PFMC and IPHC determined that a fishery closure effective Monday, September 11, was necessary to avoid exceeding the quota.²

CDFW provided notice of the early closure to its constituents through a variety of methods: a news release³, the details of which were carried in several local north coast news publications; information on its Pacific halibut webpage⁴; CDFW groundfish

---

² The correction to catch estimates occurred in November 2017, after the fishery closure had occurred. As a result, the corrected catch estimates were not available for use in in-season management during 2017.
⁴ https://www.wildlife.ca.gov/Conservation/Marine/Pacific-Halibut
regulations hotline; and a flyer (Figure 3) posted at local harbors, launch ramps (Figure 4), and tackle shops which was also handed out to the public by CRFS samplers. NMFS updated its Pacific halibut hotline with the closure information, and the IPHC posted a news release about the closure to its website.

Figure 3. CDFW flyer announcing the September 10, 2017 end of the recreational Pacific halibut fishery in California. The flyer was posted at launch ramps and marinas, and provided to tackle shops and the public to notify them of the early season closure.
Figure 4. Fishery closure flyer posted at the public launch ramp in Eureka, CA. CDFW photo.

Estimating Discard Mortality
In recent years, the IPHC requested that State agencies provide an annual estimate, if possible, of discard mortality in their recreational fisheries. The current sampling protocol of CDFW’s CRFS program includes observation and estimation of the total number of both retained and discarded fish, and documentation of the weight of retained fish when possible. Discarded fish that are returned dead are also documented. However, unlike retained fish, no information on the size of discarded fish is collected.

Using CFRS data from 2004 to 2017, CDFW estimated the weight of fish discarded alive and those discarded dead, assuming that the average weight of a discarded fish is the same as a retained fish in each year. In 2017, no fish were estimated as discarded dead (Table 3). Meanwhile, 87 fish were estimated to have been released alive.

A mortality rate of seven percent was applied to fish reported as discarded either dead or alive. This mortality rate was established by the PFMC’s Groundfish Management Team as a presumed rate of discard mortality for flatfish. Application of this rate to...
discarded fish is also consistent with methods used to estimate discard mortality by the Oregon Department of Fish and Wildlife and Washington Department of Fish and Wildlife. **CDFW’s resulting preliminary discard estimate in its 2017 recreational fisheries is 117 net pounds.**

Table 3. Estimated number of fish and weight of recreationally caught Pacific halibut discards, and estimated total discard mortality (net pounds) in California from 2004-2017. Data from 2017 are preliminary and subject to change. Data are from CRFS.

<table>
<thead>
<tr>
<th>Year</th>
<th>Discarded Alive</th>
<th>Discarded Dead</th>
<th>Total Discard Mortality (net pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated Number of Fish</td>
<td>Estimated Net Pounds</td>
<td>Estimated Discard Mortality (7 percent of net pounds)</td>
</tr>
<tr>
<td>2004</td>
<td>62</td>
<td>1,061</td>
<td>74</td>
</tr>
<tr>
<td>2005</td>
<td>37</td>
<td>905</td>
<td>63</td>
</tr>
<tr>
<td>2006</td>
<td>205</td>
<td>3,558</td>
<td>249</td>
</tr>
<tr>
<td>2007</td>
<td>27</td>
<td>319</td>
<td>22</td>
</tr>
<tr>
<td>2008</td>
<td>133</td>
<td>1,559</td>
<td>109</td>
</tr>
<tr>
<td>2009</td>
<td>226</td>
<td>3,040</td>
<td>213</td>
</tr>
<tr>
<td>2010</td>
<td>63</td>
<td>865</td>
<td>61</td>
</tr>
<tr>
<td>2011</td>
<td>24</td>
<td>293</td>
<td>21</td>
</tr>
<tr>
<td>2012</td>
<td>157</td>
<td>2,315</td>
<td>162</td>
</tr>
<tr>
<td>2013</td>
<td>120</td>
<td>2,095</td>
<td>147</td>
</tr>
<tr>
<td>2014</td>
<td>197</td>
<td>2,938</td>
<td>206</td>
</tr>
<tr>
<td>2015</td>
<td>117</td>
<td>2,470</td>
<td>173</td>
</tr>
<tr>
<td>2016</td>
<td>151</td>
<td>2,743</td>
<td>192</td>
</tr>
<tr>
<td>2017</td>
<td>87</td>
<td>1,678</td>
<td>117</td>
</tr>
<tr>
<td>Average</td>
<td>115</td>
<td>1,846</td>
<td>126</td>
</tr>
</tbody>
</table>

* No estimates of discarded dead fish available.

### 2017 Noteables

While Pacific halibut are most commonly found north of Point Arena, they can occasionally be found south of that location. On August 2, 2017 an angler aboard a charter vessel fishing off of the Farallon Islands (near San Francisco) caught a 54 pound Pacific halibut ([http://www.norcalfishreports.com/fish_reports/67880414/farallon-flatty.php](http://www.norcalfishreports.com/fish_reports/67880414/farallon-flatty.php)). In response to increasing reports of Pacific halibut catches south of Point Arena, CDFW plans to increase public outreach efforts in those areas.

_Coast Groundfish Fishery Final Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR. January 2009, Table 4-56._

California Commercial Fishery
In 2017, five vessels participated across three of the opening days in the 2017 Area 2A directed fishery (Figure 5); the preliminary landings were 3,872 pounds dressed (head on, gutted). The landings were distributed from Crescent City to Eureka and sale of the fish produced an estimated $28,000 in ex-vessel revenue for northern California coastal communities. The 2017 total is a marked increase from commercial landings made in recent prior years, with only catches in 2016 exceeding 1,000 pounds.

Figure 5. Two commercial vessels offload their catches in Eureka on July 26, 2017 after the third directed commercial fishery opener in Area 2A.
CDFW staff were present during the offloading for four vessels in Eureka, and conducted biological sampling per the IPHC’s protocols (Figure 6). Ageing structures for Pacific halibut were collected and provided to the IPHC for inclusion in the stock assessment.

Figure 6. Fin markings made by directed commercial fishery participants to signify a female Pacific halibut caught in the directed commercial fishery off California in July 2017. Two directed commercial fishery participants chose to participate in the IPHC’s voluntary sex identification study in the directed commercial fishery in Area 2A in 2017.

During the 2017 PFMC process, the IPHC requested the Council consider options to transition from the current derby-style fishery to one that provides more flexibility and safety to the fleet. CDFW solicited input from commercial stakeholders via email and during a teleconference held on July 27, 2017.

Directed commercial fishery constituents expressed support for maintaining open access fishery opportunities on the west coast, and the desire to continue participating in a coastwide directed Pacific halibut fishery under the same terms as participants in Oregon and Washington. They also indicated that although directed commercial fishery participation in California is relatively new, and involves only a handful of individuals, catches have increased since 2015, and it is important to maintain this fishing opportunity as part of their fishing portfolios. For example, at least one directed commercial fishery participant noted that minimal commercial salmon fishing opportunity off Northern California in 2017 prompted his participation in the directed commercial halibut fishery this year. Several California commercial directed fishery participants
expressed support for alternatives that would extend the existing derby fishery to longer time periods, with reduced trip limits depending on the vessel’s size class.

Meanwhile, both open access and limited entry sablefish participants who commented expressed interest in incidental retention of Pacific halibut in the directed groundfish fishery concepts, though not at the exclusion of a directed commercial fishery for Pacific halibut.

CDFW expects some of the alternatives to be favored by California directed participants over the status quo, as it would add some flexibility when prosecuting the fishery to account for weather and other conditions.

**Summary**

CDFW plans to continue participating in the Pacific halibut management process with co-managers at the IPHC, NMFS, PFMC and in Area 2A, and collecting CRFS sample data for use in inseason tracking and monitoring and the catch estimation process in 2018.

For more information about California’s Pacific halibut fishery, contact:

Marci Yaremko (Marci.Yaremko@wildlife.ca.gov)

Melanie Parker (Melanie.Parker@wildlife.ca.gov)