Economic Impact of Bycatch in Area 4CDE

(millions of pounds, net weight)

<table>
<thead>
<tr>
<th>Year</th>
<th>TCEY</th>
<th>Commercial Wastage, O32/O26 Bycatch</th>
<th>Total O26 non-FCEY</th>
<th>FCEY</th>
<th>Ex-vessel Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Personal Use</td>
<td>Mortality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>6.50</td>
<td>0.23</td>
<td>2.48</td>
<td>3.72</td>
<td>$24,068,400</td>
</tr>
<tr>
<td>2014</td>
<td>3.58</td>
<td>0.09</td>
<td>2.23</td>
<td>1.285</td>
<td>$7,363,050</td>
</tr>
<tr>
<td>2015 Blue Line</td>
<td>3.48</td>
<td>0.05</td>
<td>2.91</td>
<td>0.52</td>
<td>$2,979,600</td>
</tr>
</tbody>
</table>

% Change from 2014 | -2.8% | -44.4% | 30.5% | -59.5% | -59.5% |
% Change from 2011 | -46.5%| -78.3% | 17.6% | -86.0% | -87.6% |

*Ex-vessel value is based on a simple average of the NMFS Standard Ex-vessel prices for the Bering Sea

- The decline in exploitable biomass in Area 4CDE reduced the TCEY, and has resulted in a conservation effort taken in whole by the directed fishery
- Bycatch mortality in Area 4CDE increased over the same time period that the FCEY decreased
- 2015 Blue Line is shown as the current FCEY approved by IPHC is unlikely to be approved next year unless TCEY increases or bycatch mortality decreases
Comparison of O32/O26 Removals in Area 4CDE

- 2002-2011 is the 10-yr period of time prior to sharp reductions in FCEY
- The distribution of O26/O32 removals has changed significantly since 2011
- Bycatch mortality now comprises the bulk the removals in Area 4CDE

- Note that in 2011, IPHC changed the deduction of bycatch from O32 to O26
Impact Percentages for A80-CP PSC Limit Reductions

10 Percent PSC Limit Reduction

Revenue as a Percent of Status Quo

Halibut Fishery
A80-CP Fisheries

Status Quo  Scenario A  Scenario B

20 Percent PSC Limit Reduction

Revenue as a Percent of Status Quo

Halibut Fishery
A80-CP Fisheries

Status Quo  Scenario A  Scenario B

30 Percent PSC Limit Reduction

Revenue as a Percent of Status Quo

Halibut Fishery
A80-CP Fisheries

Status Quo  Scenario A  Scenario B

35 Percent PSC Limit Reduction

Revenue as a Percent of Status Quo

Halibut Fishery
A80-CP Fisheries

Status Quo  Scenario A  Scenario B
**BSAI Bycatch Cap Reduction**

- Based on the 2015 TCEY, to achieve an Area 4CDE FCEY of 1,285,000 lbs., the total BSAI bycatch cap would need to be reduced by 42% to 2,567 MT (-26.1% from 2014 use).

- The current bycatch cap reduction options of 10% to 35% are not sufficient enough to result in any gains to Area 4CDE FCEY, under current conditions.

- A 50% reduction to the cap reduces it to 2,213 MT (-36.3% from 2014 use)
- The Area 4CDE directed fishery FCEY has already been reduced by 65% since 2011.
  
  - Based on the 2015 Blue Line TCEY, a 50% reduction to the bycatch cap – a 36.3% reduction from 2014 use – results in an Area 4CDE FCEY of 1,540,000 lbs. This is an increase of 196% from the Blue Line FCEY.

*Note that these figures are based on NMFS and IPHC numbers that report where bycatch mortality occurred in the BSAI and the size composition of that bycatch in 2014, specifically: 79.3% of BSAI Bycatch was taken in 4CDE
64% of the 4CDE Bycatch was O26
3,474 MT of BSAI bycatch mortality occurred in 2014*