DRAFT Distribution Plan for funds appropriated to address the 2018 Gulf of Alaska Pacific cod disaster declaration. NOAA fisheries has allocated $24,416,440 for the Pacific cod fishery disaster.

Written comments are requested on all elements of the proposed distribution plan and should be as specific as possible to be the most helpful. Comments may be posted online and therefore ADF&G requests that no business proprietary information, copyrighted information, or personally identifiable information be submitted in your written comments. Comments can be submitted by email to: DFG.2018GOAPacificCod@alaska.gov or my mail to: ADF&G, Attn: Kari Winkel PO Box 115526 Juneau, AK 99811-5526

Comments must be sent by Friday, August 14, 2020 for consideration in the next iteration of the distribution plan.

Proposed guiding principles for disaster funds distribution: Disbursement of funds are intended to: 1) assist fishery participants harmed by the 2018 Gulf of Alaska (GOA) Pacific cod fishery disaster and; 2) improve fishery information used to assess and forecast future fishery performance and to develop management approaches that avoid and/or mitigate the impacts of future fishery disasters that cannot be prevented.

Proposed categories for disaster relief funds:

- **Harvesters**: Direct payments to commercial fishery participants. This draft plan proposes to divide the harvester funds among six fishery sectors based on gear and operation type: pot catcher vessels (CVs), jig vessels, longline CVs, longline catcher processors (CPs), trawl CVs, and trawl CPs. Eligibility criteria and distribution of funds within each sector will be further developed based on input from participants.

- **Processors**: Direct payments to processing facilities. Fisheries production and value data from the Commercial Operators Annual Report (COAR) will be used to determine eligibility and payments for processors. An option to include Tender vessels is included in this category and more input from participants is needed to further develop eligibility criteria and the distribution process.

- **Communities**: Municipalities and boroughs rely on revenue generated from GOA Pacific cod landings and other economic activities related to the GOA Pacific cod fishery. Funds designated for communities can be used for managing, repairing, or maintaining infrastructure, services, or habitat that support Pacific cod fisheries in the region.

- **Research**: The 2018 Pacific cod fishery disaster resulted from warmer than average ocean conditions, among other factors, beyond the control of fishery managers that reduced biomass and access to the fishery. Funds will be used for scientific research activities to better understand the effects of warming temperatures on GOA Pacific cod and to improve our ability to manage the GOA Pacific cod stock in the future.

- **Program Support**: The Alaska Department of Fish and Game (ADF&G) is proposing to allocate funds for staff time dedicated to fishery disaster plan development and implementation in coordination with Pacific States Marine Fisheries Commission (PSMFC).
Proposed allocations to project categories and eligibility criteria: The proposed categories and allocations reflect comments received from initial stakeholder input and the Governor’s office.

Harvesters – 40%: Based on initial comments from stakeholders, ADF&G proposes to divide the allocation to harvesters among six fishery sectors based on the proportion of each sector’s loss resulting from the 2018 fishery disaster. Wholesale value was used as a metric to compare relative loss across all sectors, which include both CVs and CPs. The loss to each sector is determined by comparing the 5-year average adjusted wholesale value (2013 to 2017) to the 2018 wholesale value as shown in the following table.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Average wholesale value (2013-2017)</th>
<th>2018 wholesale value</th>
<th>2018 value compared to average value</th>
<th>Value of Loss</th>
<th>Proportion of total loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot CV</td>
<td>$53,637,455</td>
<td>$47,906,272</td>
<td>-32%</td>
<td>$5,731,183</td>
<td>6%</td>
</tr>
<tr>
<td>Jig CV and CP</td>
<td>$3,366,800</td>
<td>$2,976,148</td>
<td>-12%</td>
<td>$390,652</td>
<td>4%</td>
</tr>
<tr>
<td>Longline CV</td>
<td>$8,586,895</td>
<td>$688,894</td>
<td>-91%</td>
<td>$2,898,001</td>
<td>32%</td>
</tr>
<tr>
<td>Trawl CV</td>
<td>$23,702,145</td>
<td>$2,990,845</td>
<td>-87%</td>
<td>$20,711,300</td>
<td>29%</td>
</tr>
<tr>
<td>Longline CP</td>
<td>$7,467,919</td>
<td>$2,544,996</td>
<td>-66%</td>
<td>$4,922,923</td>
<td>7%</td>
</tr>
<tr>
<td>Trawl CP</td>
<td>$1,206,113</td>
<td>$555,932</td>
<td>-54%</td>
<td>$650,182</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>$97,967,327</td>
<td>$27,055,288</td>
<td>-72%</td>
<td>$70,912,040</td>
<td>100%</td>
</tr>
</tbody>
</table>

The proposed eligibility criteria in this draft plan for each sector were based on initial input from stakeholders and an evaluation of GOA Pacific cod fishery landings data from the NOAA Fisheries Catch Accounting Database.

ADF&G must determine whether eligibility for payment would be license/permit-based or vessel-based. ADF&G initially proposes vessel-based eligibility for all sectors except the jig sector. For the jig sector, funds for permit-based distributions are proposed to be paid to the individual named on the Commercial Fisheries Entry Commission (CFEC) commercial fishing permit. For all other sectors, funds for vessel-based distributions are proposed to be paid to the person named on the CFEC commercial vessel license. ADF&G requests comments on these proposed eligibility criteria.

Pot catcher vessels (51%): Proposed vessel-based distribution.

Proposed eligibility criteria for pot vessels:
1. Vessel must have been used to harvest GOA Pacific cod in a directed fishery in any two of three years from 2016 to 2018.
2. Average directed GOA Pacific cod landings from 2016 to 2018 must be equal to or greater than 100,000 pounds.

Proposed distribution for pot vessels:
Option 1: Equal share – all eligible vessel owners will receive an equal share of the pot allocation.

Option 2: Tiers – establish four tiers based on average annual pounds of directed GOA Pacific cod harvested by the vessel in the best two of three years (2016 to 2018). Twenty-five percent of the pot CV allocation will be apportioned to each tier and each vessel owner receives an equal share of the tier allocation.
**Jig vessels (4%)**: Proposed **permit-based** distribution.

Proposed eligibility criteria for jig permit holders:
1. 2018 CFEC M05B, M05G, M26B, or M26G permit holders.
2. Permit holder must have a directed GOA Pacific cod landing in at least one year from 2015 to 2018.
3. Total directed GOA Pacific cod landings from 2015 to 2018 must be equal to or greater than 1,500 pounds.

Proposed distribution for jig permit holders: eligible jig permit holders will receive an **equal share** of the jig allocation. An estimated 207 jig permit holders would qualify for disaster funds based on the proposed eligibility criteria.

**Longline catcher vessels (8%)**: Proposed **vessel-based** distribution.

Proposed eligibility criteria for longline catcher vessels:
1. Vessel must have been used to harvest GOA Pacific cod in a directed fishery in any two of three years from 2016 to 2018.
2. Average directed GOA Pacific cod landings from 2016 to 2018 must be equal to or greater than 20,000 pounds.

Proposed distribution for longline catcher vessels:
Option 1: Equal share – all eligible vessel owners will receive an equal share of the longline catcher vessel allocation.
Option 2: Tiers – establish four tiers based on average annual pounds of directed GOA Pacific cod harvested by the vessel in the best two of three years (2016 to 2018). Twenty-five percent of the longline catcher vessel allocation will be allocated to each tier and each vessel owner receives an equal share of the tier allocation.

<table>
<thead>
<tr>
<th>Tier level</th>
<th>Average landings (best 2 of 3 years)</th>
<th>Allocation (from the longline CV pool)</th>
<th>Est. number of eligible vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt; 220,000 pounds</td>
<td>25%</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>160,000 - 219,999 pounds</td>
<td>25%</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>125,000 - 159,999 pounds</td>
<td>25%</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>&lt; 124,999 pounds</td>
<td>25%</td>
<td>24</td>
</tr>
</tbody>
</table>

**Trawl catcher vessels (29%)**: Proposed **vessel-based** distribution.

Proposed eligibility criteria for trawl catcher vessels:
1. Vessel must have been used to harvest GOA Pacific cod in a directed fishery in any two of three years from 2016 to 2018.
2. Average directed GOA Pacific cod landings from 2016 to 2018 must be equal to or greater than 100,000 pounds.

Proposed distribution for trawl catcher vessels:
Option 1: Equal share – all eligible vessel owners will receive an equal share of the trawl catcher vessel allocation.
Option 2: Tiers – establish four tiers based on average annual pounds of directed GOA Pacific cod harvested by the vessel in the best two of three years (2016 to 2018). Twenty-five percent of the trawl catcher vessel allocation will be allocated to each tier and each vessel owner receives an equal share of the tier allocation.

<table>
<thead>
<tr>
<th>Tier level</th>
<th>Average landings (best 2 of 3 years)</th>
<th>Allocation (from the trawl CV pool)</th>
<th>Est. number of eligible vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt; 1,160,000 pounds</td>
<td>25%</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>840,000 – 1,159,999 pounds</td>
<td>25%</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>575,000 – 839,999 pounds</td>
<td>25%</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>&lt; 574,999 pounds</td>
<td>25%</td>
<td>18</td>
</tr>
</tbody>
</table>

Longline catcher processors (7%): Proposed vessel-based distribution.

Proposed eligibility criteria for longline catcher processors:
Vessel must have been used to harvest GOA Pacific cod in a directed fishery in any two of three years from 2016 to 2018.

Proposed distribution for longline catcher processors:
Option 1: Equal share – all eligible vessel owners will receive an equal share of the longline catcher processor allocation.

Option 2: Tiers – establish three tiers based on total pounds of directed GOA Pacific cod harvested by the vessel from 2016 to 2018. Vessel owners receive an equal share of the tier allocation.

<table>
<thead>
<tr>
<th>Tier level</th>
<th>Average landings (best 2 of 3 years)</th>
<th>Allocation</th>
<th>Est. number of eligible vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt; 4,000,000 pounds</td>
<td>40%</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1,000,000 – 3,999,999 pounds</td>
<td>50%</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>&lt; 999,999 pounds</td>
<td>10%</td>
<td>2</td>
</tr>
</tbody>
</table>

Trawl catcher processors (1%): Proposed vessel-based distribution.

Proposed eligibility criteria for trawl catcher processors:
Vessel must have been used to harvest GOA Pacific cod in a directed fishery in any two of three years from 2016 to 2018.

Proposed distribution for trawl catcher processors: eligible vessel owners will receive an equal share of the trawl catcher processor allocation.

Processors – 26%: Based on initial comments from stakeholders, ADF&G proposes to calculate the allocation to eligible GOA Pacific cod shore-based processing facilities based on the average wholesale value of GOA Pacific cod processed at the facility from 2013 to 2017 using Commercial Operator’s Annual Report (COAR) data.

Proposed processing facility eligibility criteria:
1. Processing facilities must have processed GOA Pacific cod in 2018.
2. Processing facility must have a 2018 first wholesale value of $10,000 or greater for GOA Pacific cod.
3. The COAR data must show that the processing facility had a demonstrated revenue loss for GOA Pacific cod in 2018 as compared to their average wholesale value of GOA Pacific cod processed at the facility from 2013 to 2017.

Disaster payments to processing facilities are proposed to be pro rata to their demonstrated loss.

Option for Tender vessels: Include Tender vessels by subdividing the processor allocation into two pools: one for processing facilities (X%) and one for tender vessels (X%).

Proposed eligibility criteria for tender vessels:
1. Tender vessel must have been listed on a signed a contract with processing company in 2018 to tender Pacific cod in the GOA.
2. Tender vessel must have been used to tender GOA Pacific cod in two out of three years (2015 to 2017) based on signed contracts with a processing company to tender Pacific cod from the GOA.

Tender vessel owners that meet the eligibility criteria will receive an equal payment of the tender vessel allocation.

Communities – 4%: Based on initial comments from stakeholders, ADF&G proposes to allocate a portion of the funds to fishing communities in the GOA that depend on revenue generated from fish landings and other economic activity related to the fishery. These revenues comprise a significant portion of local operating budgets and are used to support education, public works, ports and harbors, and other services.

ADF&G proposes that community entities eligible to receive funds would identify specific expenditures for managing, repairing, or maintaining infrastructure, services, or habitat that support Pacific cod commercial fisheries in the region prior to receiving funds from Pacific States Marine Fisheries Commission.

Proposed eligibility criteria for communities:
1. GOA Pacific cod must have been landed in the community in 2018 based on COAR buying data.
2. GOA Pacific cod landed in the community must have an average exvessel value of $10,000 or greater from 2013 to 2017.
3. Community must have a demonstrated loss in exvessel value for GOA Pacific cod in 2018 as compared to the 2013 to 2017 average.

Disaster payments to communities are proposed to be pro rata to their demonstrated loss.

Research - 30%: Information from NOAA Fisheries shows that over the past 6 years, the GOA has been experiencing extended and severe marine heatwaves. From June 2014 to January 2017 the North Pacific, including the GOA, had increased temperatures over a region of approximately 2 million km² with more than 2.5 °C warmer than the long-term mean (1982 to 2012). The 2014 to 2016 marine heatwave changed the ecology of the region with reduced phytoplankton production, a shift in zooplankton production from large lipid-rich (higher fat) copepods to small lipid-poor copepods, and reduced forage fish populations such as capelin and Pacific sand lance. Species at the top of the marine food chain, including Pacific cod, experienced lower recruitment (reduced juvenile survival) and increased mortality was documented in fishes, birds, and mammals.

Research funds will be available by competitive bid. Funds will be available for scientific research projects that provide information to help fishery scientists and managers to assess GOA Pacific cod stock conditions and develop conservation and management measures for the GOA Pacific cod fishery in response to warm water and other variable ocean conditions. The primary goals of research funds are to further our understanding of the cause of the 2018 GOA Pacific cod fishery failure and to help managers avoid and mitigate the impacts of future Pacific cod fishery disasters that cannot be prevented.

Based on consultations with GOA Pacific cod assessment scientists and managers, ADF&G recommends funding research projects that are focused around three linked themes:
1) Better understanding the effects of warming temperatures on Pacific cod ecology and population dynamics, with a focus on parameters to improve the stock assessment (e.g. mortality, growth, maturity).

2) Expanded early life history studies (spawning, larval, age-0) to focus on spatial-temporal variation in stock reproductive output, survival processes, and how these vary with changes in climate.

3) Resolving stock spatial structure, migration patterns, and connectivity based on new genetics/genomics approaches. Research may cover a wide range of methods, including understanding early life history, tagging, modelling, genetics, surveys, and maturity.

Administrative – <1%: ADF&G is proposing to allocate funds to cover salary and benefits for a Program Coordinator position to oversee the fishery disaster program on behalf of the State of Alaska. Fishery disaster coordination is not expected to require full-time year-round work. Funding for this position is expected to cover an average workload of 37.5 hours per month plus indirect costs.