



December 15, 2020

Final 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 fishery disaster assistance for the Pacific cod fishery in the Gulf of Alaska (GOA). The distribution plan informs the federal grant application submitted by Pacific States Marine Fisheries Commission (PSMFC) to NOAA Fisheries and is subject to change based on approval of the final grant.

Process to develop the distribution plan: ADF&G posted an initial draft distribution plan for public comment in August 2020 and received 35 written comments on the draft plan. Based on the initial comments, the draft plan was revised and posted for public comment in October 2020. Twenty-two public comments were received on the second draft plan. In response to the second round of comments, ADF&G is recommending the following revisions:

- Eligibility criteria for crew was modified to replace use of skipper or permit holder affidavit to 2018 1099-MISC tax form.
- Eligibility criteria for trawl catcher processors was changed to a minimum 100,000-pound threshold of retained catch in two of three years. One additional vessel that operates only in the GOA is expected to qualify under the revised criteria.

Guiding principles for disaster funds distribution: Disbursement of funds are intended to 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 mitigate the impacts of future fishery disasters that cannot be prevented.

Proposed categories for disaster relief funds:

- **Harvesters:** Direct payments to commercial fishery participants and vessel crew who meet all eligibility criteria. This plan allocates 10% off the top for vessel crew and then subdivides the remaining 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 are developed based on input from participants within each sector and are therefore not consistent across all sectors.
- **Processors:** Direct payments to shore-based processing facilities and tender vessel owners who meet all eligibility criteria. This plan allocates 2% off the top for tender vessels and the remaining 98% will be available to eligible processing facilities. Fisheries production and value data from the Commercial Operators Annual Report (COAR) will be used to determine eligibility and payments for shore-based processing facilities. ADF&G fish ticket information will be used to determine eligibility for tender vessel owners.
- **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 management of the GOA Pacific cod stock in the future. Research funds will be distributed through an open competitive bid process administered by PSMFC. Entities authorized to receive federal grant funds may submit proposals for the research funds.
- **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 PSMFC.

Proposed allocations to project categories:

Harvesters – 40%: The five-year (2013-2017) average exvessel value of the GOA Pacific cod fishery for catcher vessels is \$39.5 million dollars and the exvessel value of the 2018 fishery was \$10.7 million dollars, for a total estimated loss due to the disaster of \$28.8 million. The funds allocated to the harvesting sector are intended to mitigate this loss by providing funds to bring the harvesting sector up to 50% of their recent historic value.

A pool for vessel crew will be established with 10% of the harvester funds. The remaining harvester funds (90%) will be allocated among six fishery harvesting sectors.

Vessel crew (10% of harvester pool): Vessel crew that meet the criteria are eligible to receive an **equal payment** from the vessel crew pool. The intent is to identify those crew who participated during the 2018 season and were impacted by the fishery disaster.

Eligibility criteria for vessel crew:

1. Crew member must have held a 2018 commercial crew license or 2018 CFEC permit for any fishery. This information will be verified using the ADF&G Licensing database and the CFEC permit database.
2. Crew member must have worked for a permit holder (jig sector) or vessel (pot, longline, and trawl sectors) that is eligible to receive funds for the 2018 Pacific cod fishery disaster. This information will be verified based on crew contract, crew settlement, or 1099-MISC tax form from 2018.
3. Crew member must not be eligible for fishery disaster funds under another category of this distribution plan.

Based on an estimate of the number of vessels that would qualify under the proposed eligibility criteria and a coarse estimate of the average number of crew utilized by each operation type, approximately 600 crew members may qualify under this category.

Fishery Sectors (90% of harvester pool): Eligibility criteria and fund distribution are informed by data from the NOAA Fisheries Catch Accounting Database and ADF&G fish tickets and the comments received from sector stakeholders.

Permit-based distributions for the jig sector will be paid to the individual named on the CFEC commercial fishing permit. Vessel-based distributions for all other sectors will be paid to the person or entity named as the vessel owner on the 2018 CFEC commercial vessel license.

Allocations to each of the six fishery harvesting sectors are based on the proportion of each sector's loss resulting from the 2018 fishery disaster. ADF&G used wholesale value rather than exvessel value to compare relative loss across all harvesting sectors because the harvesting sectors includes 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:

Sector	Average wholesale value (2013-2017)	2018 wholesale value	2018 value compared to average value	Value of Loss	Proportion of total loss
Pot CV	\$53,637,455	\$17,298,472	-68%	\$36,338,983	51%
Jig CV and CP	\$3,366,800	\$688,894	-80%	\$2,677,906	4%
Longline CV	\$8,586,895	\$2,976,148	-65%	\$5,610,746	8%
Trawl CV	\$23,702,145	\$2,990,845	-87%	\$20,711,300	29%
Longline CP	\$7,467,919	\$2,544,996	-66%	\$4,922,923	7%
Trawl CP	\$1,206,113	\$555,932	-54%	\$650,182	1%
Total	\$97,967,327	\$27,055,288	-72%	\$70,912,040	100%

Pot catcher vessels (51% of Fishery Sector pool): **Vessel-based** distribution.

Eligibility criteria for pot vessels:

1. Vessel must have been used to harvest GOA Pacific cod with pot gear in a directed fishery in any three of five years from 2014 to 2018.
2. Average directed GOA Pacific cod landings from 2014 to 2018 must be equal to or greater than 80,000 pounds.

Distribution for pot vessels will be based on four tiers as follows: establish four tiers based on average annual pounds of directed GOA Pacific cod harvested by the vessel in the best three of five years (2014 to 2018). Twenty-five percent of the pot CV allocation will be apportioned to each tier and each vessel owner in the same tier would receive an equal payment.

Tier level	Average landings (best 2 of 3 years)	Allocation (from the pot CV pool)	Est. number of eligible vessels
1	> 1,880,000 pounds	25%	9
2	1,080,000 - 1,879,999 pounds	25%	16
3	680,000 – 1,079,999 pounds	25%	23
4	< 679,999 pounds	25%	50

Jig vessels (4% of Fishery Sector pool): **Permit-based** distribution.

Eligibility criteria for jig permit holders:

1. Permit holder must have landed GOA Pacific cod in at least three of five years from 2014 to 2018 on a M05B, M05G, M26B, or M26G CFEC permit card.
2. Total GOA Pacific cod landings from 2014 to 2018 must be equal to or greater than 1,500 pounds.

Distribution for jig permit holders: eligible jig permit holders will receive an **equal share** of the jig allocation. An estimated 72 jig permit holders would qualify for disaster funds based on the proposed eligibility criteria.

Longline catcher vessels (8% of Fishery Sector pool): **Vessel-based** distribution.

Eligibility criteria for longline catcher vessels:

1. Vessel must have been used to harvest GOA Pacific cod with longline gear in a directed fishery in any three of five years from 2014 to 2018.
2. Average directed GOA Pacific cod landings from 2014 to 2018 must be equal to or greater than 20,000 pounds.

Distribution for longline catcher vessels will be based on four tiers as follows: establish four tiers based on average annual pounds of directed GOA Pacific cod harvested by the vessel in the best three of five

years (2014 to 2018). Twenty-five percent of the longline catcher vessel allocation will be allocated to each tier and each vessel owner in the same tier would receive an equal payment.

Tier level	Average landings (best 2 of 3 years)	Allocation (from the longline CV pool)	Est. number of eligible vessels
1	> 280,000 pounds	25%	8
2	194,000 - 279,999 pounds	25%	10
3	150,000 - 193,999 pounds	25%	13
4	< 149,999 pounds	25%	25

Trawl catcher vessels (29% of Fishery Sector pool): **Vessel-based** distribution.

Eligibility criteria for trawl catcher vessels:

1. Vessel must have retained GOA Pacific cod in a trawl fishery in 2018.
2. Vessel must have retained a minimum of 100,000 pounds of GOA Pacific cod in any four of six years from 2013 to 2018.

Payment distribution for trawl catcher vessels will be based on three tiers as follows: establish three tiers based on average annual pounds of retained GOA Pacific cod harvested by each eligible vessel in the best four of six years (2013 to 2018). Each vessels' average retained catch from their best four years were ranked from smallest to largest and breakpoints between the tiers were established based on the largest 'breaks' in the data, i.e. where the average harvest from one vessel had the greatest difference from the next vessel on the list. Based on this evaluation, the data separated into three tiers. The allocation from the trawl CV pool apportioned to each tier is based on the total proportion of harvest by the vessels in each tier. Each vessel owner in the same tier would receive an equal payment.

Tier level	Average landings (best 4 of 6 years)	Allocation (from the trawl CV pool)	Est. number of eligible vessels
1	> 1,300,000 pounds	47%	11
2	720,000 – 1,299,999 pounds	31%	12
3	< 719,999 pounds	22%	17

Longline catcher processors (7% of Fishery Sector pool): **Vessel-based** distribution; if a company owns more than one vessel, the payments will be aggregated at the company level.

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.

Distribution for longline catcher processors: eligible vessel owners will receive an **equal share** of the longline catcher processor allocation. An estimated six vessels would qualify for disaster funds based on the proposed eligibility criteria.

Trawl catcher processors (1% of Fishery Sector pool): Vessel-based distribution.

Eligibility criteria for trawl catcher processors:

Vessel must have retained 100,000 pounds of GOA Pacific cod in any two of three years from 2016 to 2018.

Distribution for trawl catcher processors: eligible vessel owners will receive an **equal share** of the trawl catcher processor allocation. Two trawl catcher processing vessels are estimated to qualify for disaster funds based on the proposed eligibility criteria.

Processors – 30% The five-year (2013-2017) average wholesale value of the GOA Pacific cod fishery for shorebased processors is \$82.5 million dollars and the wholesale value of the 2018 fishery was \$21.2 million dollars, for a total estimated loss due to the disaster of \$61.3 million. The funds allocated to the harvesting sector are intended to mitigate this loss by providing funds to bring the harvesting sector up to 36% of their recent average wholesale value.

Include tender vessels by subdividing the processor allocation into two pools: one for tender vessels (2%) and one for processing facilities (98%).

Tender vessels (2% of processor pool):

Eligibility criteria for tender vessels:

1. Vessel must have operated as a tender in a directed GOA Pacific cod fishery in 2018.
2. Tender vessel must be able to demonstrate a revenue loss as a result of the disaster by comparing the average pounds of GOA Pacific cod tendered from 2015 to 2017 to the total pounds of GOA Pacific cod tendered in 2018.

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

Shore-based processing facilities (98% of processor pool): The allocation to eligible GOA Pacific cod shore-based processing facilities is 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. If a company owns more than one eligible facility, then payments will be aggregated at the company level.

Shore-based 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 first wholesale value loss for GOA Pacific cod in 2018 as compared to their annual average wholesale value of GOA Pacific cod processed at the facility from 2013 to 2017.

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

Communities – 5%: A portion of the funds is allocated 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.

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 disaster funds.

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 annual average.

Disaster funds for communities will be **pro rata** to their demonstrated loss.

Research - 25%: Research funds will be available through an open and competitive bid process administered by PSMFC. Entities that are authorized to receive federal grant funds are eligible to submit proposals for research projects based on the themes outlined below. Allowable expenses for selected research projects are qualified for reimbursement by PSMFC up to the amount awarded through the competitive bid process.

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.

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.

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, acoustic telemetry, 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.