



**December 26, 2023**

**Final Draft Spend Plan for funds appropriated to address the 2020 and 2021 Norton Sound red king crab disaster determination.** NOAA Fisheries allocated \$2,804,214 for the 2020 and 2021 Norton Sound red king crab fishery disaster. This spend plan informs the federal grant application submitted by Pacific States Marine Fisheries Commission to NOAA Fisheries and is subject to change based on approval of the final grant.

**Process to develop the spend plan:** ADF&G provided an initial draft spend plan for public comment in October 2023 and received no public comments on the initial plan. ADF&G revised the plan slightly, based on internal recommendations and revised estimates of Pacific States Marine Fisheries Commission fees, and posted a second draft in November 2023 that also received no public comments. Changes from the second draft include the addition of a research project developed by ADF&G staff that is focused on improving information for early life history and environmental effects on the survival of Norton Sound red king crab.

**Guiding principles for disaster fund distribution:** Disbursement of funds is intended to 1) assist fishery participants harmed by the 2020 and 2021 Norton Sound red king crab 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.

The categories and allocations for this draft spend plan were informed by the 2019 Norton Sound red king crab disaster spend plan and initial stakeholder comments.

**Categories and allocations for disaster relief funds:**

Category	Allocation	Estimated funds <sup>a</sup>
Research	10%	\$279,000
Communities	3%	\$83,000
Harvesters	70%	\$1,945,000
Processors	17%	\$470,000
Program Support	0.1%	\$3,000
<b>Total</b>	<b>100%</b>	<b>\$2,780,000</b>

<sup>a</sup> Additional funds will be allocated to Pacific States Marine Fisheries Commission to administer the federal grant.

The impact of the fishery disaster created significant loss of income to those involved in the harvesting and processing sectors and to the community in which the cultural and basic economic structure is the marine economy. Some of these funds will be allocated to research activities that provide additional information that may help mitigate the impacts of future fishery disasters, and funds will also be used to help assist the fishing community that was affected by this fishery resource disaster by recognizing the loss of incomes. These direct payments will compensate participants consistent with fishery investments

and/or historical fishery performance. Historically one of the purposes of disaster funding was to get funds to communities and fishermen as fast as possible. Direct payments provide that method.

**Research – 10% of total funds (~\$279,000):** Research funds will be allocated to improve available fishery information and help prevent and/or mitigate future fishery disasters. The following research project is responsive to the research themes that were developed by ADF&G staff. The project will be funded directly in the federal fishery disaster grant. Directing fishery disaster research funds to this project in the spend plan expedites the administrative process and maximizes the amount of time for investigators to conduct research.

**Project: Larval and juvenile red king crab seasonal development and distribution along the northern coast of Norton Sound.**

This study will help improve information for early life history and environmental effects on survival of red king crab. Red king crab (*Paralithodes camtschaticus*) are an important subsistence and commercial resource for the residents of Norton Sound. In recent years, as subsistence and commercial harvests have declined, the harvest of red king crab is increasingly reliant upon successful cohorts, years apart, aging through the population. This has created a high-low abundance cycle, which has become more pervasive and economically volatile in the last decade. A more complete assessment of the recruitment dynamics for red king crab in the early life history stages may be the key to understanding the current Norton Sound fisheries, yet there is no information on larva or juvenile settler stages. Larval development of Norton Sound red king crab occurs in a unique environment with extensive winter and spring sea ice cover over a very shallow shelf. These characteristics, along with increasing shifts in seasonal climate and ecosystem norms, highlight the need to establish a baseline for *in situ* larval and settling juvenile red king crab development and distribution to help inform recruitment pathways.

**Project cost for ADF&G is estimated at \$279,000 across four years.**

**Communities – 3% of total funds (~\$83,000):** A portion of the funds are allocated to the City of Nome to mitigate lost revenue from reductions in fish landings and other economic activity related to the fishery. The state's Fishery Business tax rate is 3% for shore-based crab landings and is shared 50/50 with the state and municipalities/boroughs where the landings occur. If landings occur in the bounds of a municipality and borough, landing tax revenues are shared 50/50 between each entity. Some municipalities and boroughs levy an additional local raw fish tax at a rate of 2% to 3.5% depending on the location and species.

All Norton Sound red king crab is landed in the City of Nome, therefore the community allocation of funds will be provided as a direct payment to the City of Nome, which demonstrated a significant loss of landings due to the red king crab fishery disaster.

**Harvesters – 70% of total funds (~\$ 1,945,000):** The recent average annual exvessel value of the Norton Sound red king crab fishery from 2014 to 2018 is \$2.65 million dollars. The total estimated loss due to the 2020 and 2021 disaster is \$5.3 million dollars. The funds allocated to the harvesting sector are intended to mitigate this loss by providing funds to bring the harvesting sector up to 37% of its recent historical value. In addition, the allocation reflects initial stakeholder input suggesting that harvesters should receive the bulk of disaster funds.

Based on public comments, the harvester funds will be divided into two pools, 8% for winter fishery participants and 92% for summer fishery participants based on the guideline harvest level (GHL) proportion allocated to each season. The summer fishery allocation is further subdivided into two pools, 90% for permit holders and 10% for vessel crew. Most fishery permit holders operate with one to three

additional crew members who earn an average crew share of 10%. As no fishing occurred during the 2020 or 2021 seasons, ADF&G used the most recent seasons of 2017 through 2019 to establish eligibility criteria. This period covers years when the most recent management measures were in place, including the GHF split between the winter and summer fishery that was established in 2016, and the winter season pot limit implemented in 2017.

Winter fishery participants - 8% of harvester funds (~\$155,600)

Permit holders who meet the criterion below would be eligible for a tiered payment based on their average winter season landings in 2017 and 2018. Landed pounds from the 2019 winter season are not included in the average because most permit holders did not make landings due to poor ice conditions. Participation during the 2020 and 2021 season is not listed as an eligibility requirement due to the fishery closure.

- K09Z or K09ZE permit holder must have made a Norton Sound red king crab commercial landing during the winter fishing season in any two of three years from 2017 to 2019.

Funds will be allocated among four tiers. The tiers are based on the average annual pounds of Norton Sound red king crab harvested during the winter season by all eligible permit holders in 2017 and 2018. The allocation to each tier approximates the proportion of the total average landings by harvesters in that tier. Each permit holder’s payment will be determined by the tier level corresponding to their average landings in 2017 and 2018. All permit holders in the same tier level will receive the same payment amount.

Tier level	Average landed pounds 2017-2018	Allocation	Est. number of eligible permit holders
1	Less than 800 pounds	10%	7
2	800 - 1,299 pounds	20%	6
3	1,300 - 1,999 pounds	30%	7
4	More than 2,000 pounds	40%	5

Summer fishery participants - 92% of harvester funds (~\$1,789,400)

**Permit holders** - 90% of summer fishery funds or ~\$1,610,460

Permit holders who meet the criterion below would be eligible for a tiered payment based on their average landings in the best two of three years from 2017 through 2019. Participation during the 2020 and 2021 season is not listed as an eligibility requirement due to the fishery closure.

- K09Z or K09ZE permit holder must have made a Norton Sound red king crab landing during the summer fishing season in 2019 or in any two of three years from 2017 to 2019.

Funds will be allocated among four tiers. The tiers are based on the average annual pounds of Norton Sound red king crab harvested during the summer season by all eligible permit holders from 2017 to 2019, not including the lowest year. Each permit holder’s payment will be determined by the tier level corresponding to their average landings from 2017 through 2019, not including the lowest year. All permit holders in the same tier level will receive the same payment amount.

Tier level	Average landed pounds 2017-2019, drop lowest	Allocation	Est. number of eligible permit holders
1	Less than 5,000 pounds	11%	11
2	5,000 - 9,999 pounds	18%	8
3	10,000 - 14,999 pounds	23%	6
4	More than 15,000 pounds	48%	7

**Vessel crew** - 10% of summer fishery funds or ~\$178,940

Vessel crew members who meet both criteria below would be eligible for an equal share payment. All eligible crew members would receive equal payment.

1. Vessel crew member must have held a commercial crew license or CFEC permit for any fishery in 2017, 2018, or 2019. This information will be verified using the ADF&G Licensing database or the CFEC permit database.
2. Vessel crew member must provide information to show they participated as fishing crew during the 2019 summer season for a qualified K09Z or K09ZE permit holder, based on a signed affidavit from the permit holder or vessel owner.

**Processors – 17% of total funds (~\$470,000):** The 2014 through 2018 average annual wholesale value of the Norton Sound red king crab fishery for shore-based processors is \$3.04 million dollars and the total estimated loss due to the 2020 and 2021 disasters is \$6.08 million dollars. The processing sector allocation is intended to mitigate this loss by providing funds to bring the sector up to approximately 8% of its recent wholesale value.

Processing companies that meet the criterion would be eligible for disaster funds. If more than one processing company is eligible, payment would be split pro-rata to each processor's loss.

- Processing company must have processed Norton Sound red king crab in two of three years from 2017 through 2019.

**Program Support - 0.1% of total funds (\$3,000):** ADF&G allocates funds to partially cover salary and benefits for a Program Coordinator to help manage the fishery disaster program on behalf of the State of Alaska.