# Norton Sound Red King Crab Participation Recency

December 2025[1]



## 1 Introduction

In October 2025, the Council requested a discussion paper outlining historical and current participation in the Norton Sound red king crab, *Paralithodes camtschaticus*, (NSRKC) summer commercial fishery to facilitate consideration of a recency action for license limitation.

This request stems from a series of recent proposals and public testimony related to this fishery. In February 2024, the Council received public testimony requesting consideration of a rationalization program for the NSRKC summer commercial fishery. In April 2024, the Council received a written proposal outlining potential program elements for consideration.[2] In December 2024, the Council received a modified request to consider other management approaches to address changes in recent participation and provide stability to long-term participants, including a reduction in the number of Federal License Limitation Permit (LLP) licenses for the fishery, eliminating the provision that exempts small vessels from the LLP license requirement, and establishing a harvest set aside for smaller vessels without LLP licenses. In June and October 2025, the Council received public testimony requesting Council action to remove latent LLP permits and consider other management actions to address overcapitalization in the fishery.

This paper provides a summary of NSRKC stock and fishery harvest and participation information to inform potential management actions.

## 2 Background

### 2.1 Description of the Stock

The NSRKC stock is one of the northernmost red king crab populations that can support a commercial fishery (Powell et al. 1983). Red king crab are distributed throughout Norton Sound at depths above 30 meters, with a westward limit of 167-168° W. longitude (Hamazaki 2024). Red king crab is the most

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[2] Written proposal (April 2024; Donald Stiles) https://meetings.npfmc.org/CommentReview/DownloadFile?p=91104d8c-bf49-42f5-9b68-62f6ed7439ca.pdf&fileName=Norton%20Sound%20Red%20King%20Crab%20Fishery%20Rationalization%20Doc.pdf

abundant commercial crab species in this area and is the primary target of subsistence and commercial crab fisheries in Norton Sound. The Norton Sound Section consists of all waters in Registration Area Q north of the latitude of Cape Romanzof at 61°49'N. latitude, east of the U.S.-Russia maritime boundary line and south of 66°N. latitude. Since 1981, an area delineated by a line approximately 10 to 15 miles offshore of the southern Seward Peninsula from Sledge Island to Black Point has been closed to the summer commercial fishery to protect crab utilized by the inshore subsistence fishery from commercial harvest (Figure 1).

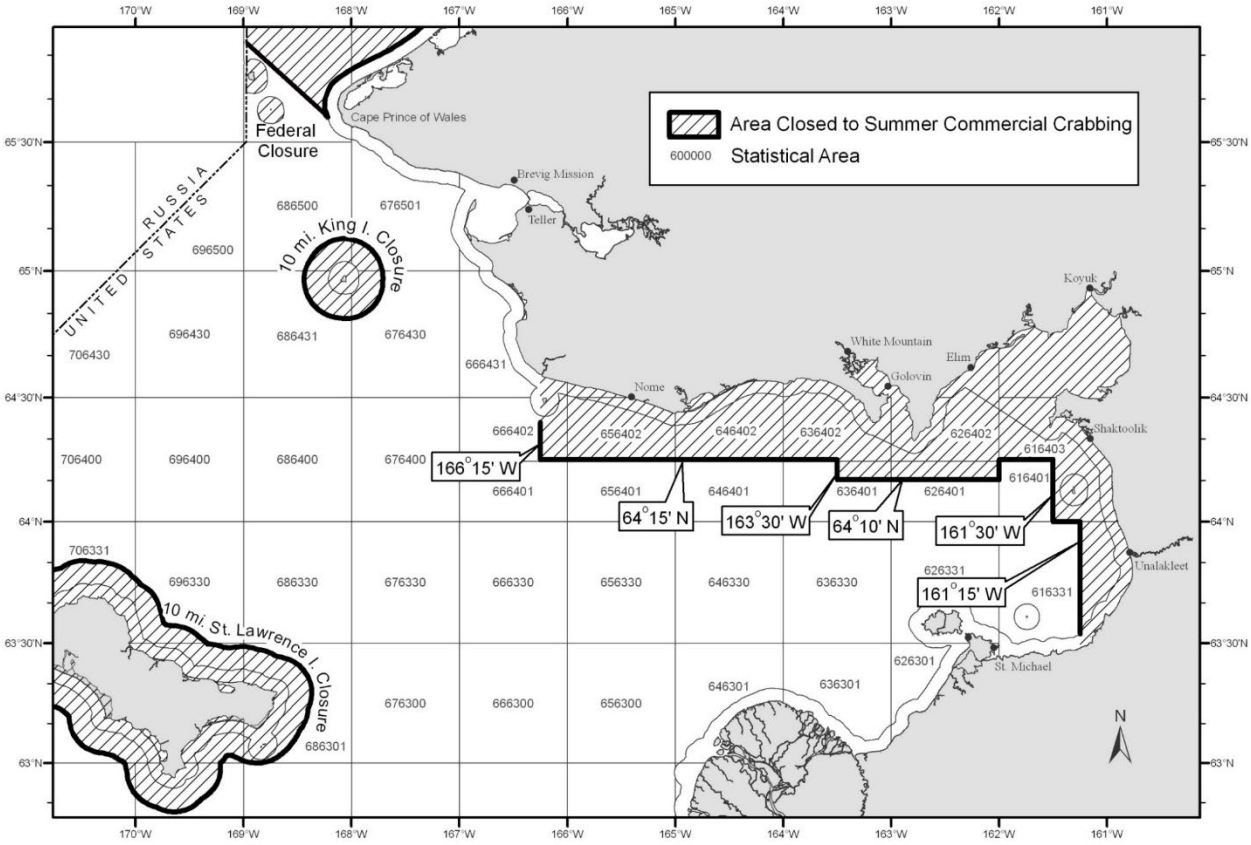


**Figure 1 Closed waters area in effect for the Norton Sound summer commercial crab fishery.**
Source: Menard et al. 2022c

## 2.2 Description and History of the Fishery

The Bering Sea/Aleutian Islands (BSAI) King and Tanner crab Fishery Management Plan (Crab FMP) was implemented in 1989 and established a State of Alaska and Federal cooperative management regime that delegates most management measures to the State. Alaska Department of Fish and Game (ADF&G) manages the commercial NSRKC fishery as a winter near-shore fishery where crabs are harvested through the ice and a summer offshore fishery that occurs in federal waters. The fishery is not limited by the State under the Commercial Fisheries Entry Commission (CFEC) permit system but is designated as super exclusive in both State and Federal regulations. This means any vessel that participates in the NSRKC fishery cannot participate in any other State or Federal king crab fishery during the same year.

From 1977 through 1990, the fishery was dominated by large vessels over 100 feet in length overall (LOA) and in 1993, the Alaska Board of Fisheries (BOF) implemented a limit of 40 pots for vessels less than or equal to 125 feet LOA and 50 pots for vessels greater than 125 feet LOA. Management actions to designate the fishery as super exclusive and implement pot limits were intended to further promote participation by the local fleet and positively impact employment and economies of communities in the Norton Sound area.

Based on historical use, 62 LLP licenses have been available for NSRKC participants[3] since the onset of the federal crab LLP in 2000. These crab licenses were issued based on at least one documented harvest of red or blue king crab in the Norton Sound area between the start of 1993 and the end of 1994. The licenses were issued with an endorsement to participate in the Norton Sound red and blue king crab fishery and with a Maximum Length Overall (MLOA) restriction based on the length of the vessel used for qualifying harvests. The MLOA indicates the largest vessel that the licenses may be used on; hence an LLP license with a 60 ft MLOA could be used on any vessel less than or equal to 60 ft.

During the development of the crab LLP, federal regulations granted an exemption to all vessels less than or equal to 32 ft LOA in the BSAI for the requirement to hold an LLP license.[4] This exemption was recommended by the Council following a determination that limitation of these vessels through the LLP was not necessary because the amount of overall harvest was limited and did not contribute significantly to overcapitalization. When NMFS initially issued 62 NSRKC LLP licenses, seven of those licenses were issued to vessels less than or equal 32 feet LOA based on qualified landings, even though an LLP license is not required to participate in the fishery.

The Council did not include NSRKC in the BSAI Crab Rationalization Program because it determined the fishery was not experiencing the same conservation and economic challenges facing other BSAI crab fisheries at the time. The Council noted the 'super exclusive' designation of the NSRKC fishery was an effective management tool.

ADF&G establishes an annual guideline harvest level (GHL) to limit commercial harvest of NSRKC. The Community Development Quota (CDQ) fishery is allocated 7.5% of the total commercial GHL and the remaining GHL is apportioned between the nearshore winter (8%) and offshore summer (92%) commercial fisheries. Any winter GHL remaining after the fishery closes is added to the summer GHL.

The summer commercial fishery typically harvests over 90% of the GHL (Figure 2) but in 2019, low catch rates led to limited effort throughout the season and Norton Sound Seafood Products (NSSP), the only buyer registered in Norton Sound at the time, stopped buying crab prior to the regulatory closure date (Menard et al. 2022a). In 2020 and 2021, ADF&G opened the NSRKC summer fishery but there was no commercial buyer (Menard et al. 2022b, 2022c). In response to requests from the State of Alaska, the Secretary of Commerce made positive Federal fishery resource disaster determinations for the 2019, 2020, and 2021 NSRKC summer and winter fisheries. The fishery was prosecuted again in 2022-2025 setting records for prices in 2022 ($12 per pound) and CPUE in 2024 (40 crab per pot) (Table 2). A second buyer, Pacific Seafoods Kodiak, registered in Norton Sound in 2024 and 2025, as well as three fishermen registered as catcher sellers (ADFG 2025).

[3] NMFS Restricted Access Management (RAM) Division records indicate that there were up to 65 LLPs issued at the onset of the program; however, there have been 62 licenses registered with RAM consistently since 2004.
[4] CFR 50 § 679.4(k)(2)(ii).

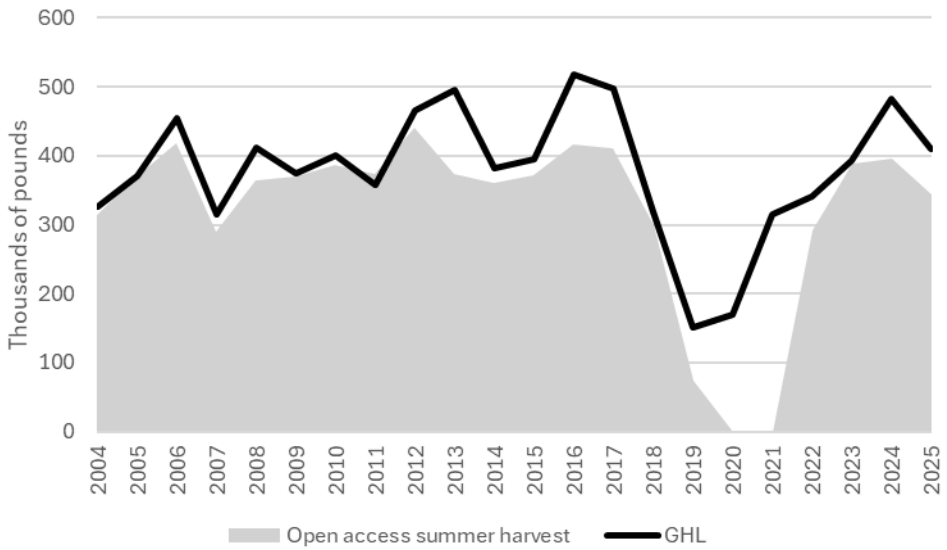


**Figure 2 NSRKC total GHL and harvest in the summer fishery, 2004-2025.**
Source: ADFG 2025

The Council previously considered changes to NSRKC LLP license requirements in response to public comment. In 2013, the Council received requests to remove the LLP license exemption for vessels less than or equal to 32 feet LOA and reduce the number of existing LLP crab licenses endorsed for NSRKC to address increases in fishery participation and concerns about overcapitalization. At the June 2014 meeting, the Council reviewed a discussion paper[5] describing the characteristics of the NSRKC stock, the fishery, harvest levels and participation over time and received comments supporting and opposing further action. The Council took no further action on the issue at that time based on the lack of consensus among participants that a management problem existed. Table 1 provides a summary of historical management changes in the NSRKC fishery.

**Table 1 Summary of NSRKC fishery management history**

| Year | Notable historical management changes |
|---|---|
| 1976 | Abundance survey started |
| 1977 | Large vessel commercial fisheries began |
| 1994 | Super exclusive designations in FMP and State regulation went into effect |
| 1998 | Community Development Quota (CDQ) allocation went into effect |
| 1999 | Guideline Harvest Level (GHL) went into effect |
| 2000 | North Pacific License Limitation Program (LLP) went into effect |
| 2002 | Change in closed water boundaries |
| 2008 | Start date of the summer fishery changed from July 1 to after June 15 by emergency order |
| 2012 | The BOF adopted a revised GHL for summer fishery |
| 2016 | Winter GHL for commercial fisheries was established and modified winter fishing season dates were implemented |
| 2020 | The BOF closed summer commercial fishery East of 167 longitude |
| 2021 | Winter fishery opening date changed to February 1 |

Source: Hamazaki 2024

[5] June 2014 discussion paper: https://meetings.npfmc.org/CommentReview/DownloadFile?p=31dd9396-ab0a-4738-a2d2-ceb01e7bf2df.pdf&fileName=D3%20NSRKC%20Discussion%20Paper.pdf

# 3 Participation

Table 2 shows annual GHL, harvest in pounds, the number of vessels that made landings, active LLP licenses, season length, CPUE, ex-vessel price per pound and value in the commercial summer fishery. The total number of vessels that annually participate in the fishery has varied from 22 in 2008 to 36 from 2015 to 2017 (Table 2). The season length has also varied, although the 13-day 2025 season was the shortest on record. The recent five-year average season length of 29 days is about one week shorter than the recent ten-year average season length of 35 days. Relatively high prices since 2022 have led to an increasingly valuable fishery. Since 2013, an average of 21 vessels were assigned an LLP license, which is much less than the 62 total LLP licenses issued for the fishery. The proportion of vessels with LLP licenses varies annually, ranging from 59 to 80 percent of the fleet since 2014 (Table 3).

**Table 2 NSRKC summer fishery harvest, effort, and season information, 2004 – 2025.**

| Year | GHL | Harvest | Vessels | Active LLP Licenses | Season length (days) | CPUE* | Ex-vessel price ($/lb)* | Value (mil $)* |
|---|---|---|---|---|---|---|---|---|
| 2004 | 326,500 | 314,472 | 26 | 16 | 39 | 15 | 3.13 | 1.038 |
| 2005 | 370,000 | 370,744 | 30 | 20 | 46 | 16 | 3.18 | 1.264 |
| 2006 | 454,000 | 419,191 | 27 | 18 | 53 | 17 | 2.26 | 1.021 |
| 2007 | 315,000 | 289,264 | 28 | 18 | 48 | 12 | 2.84 | 0.75 |
| 2008 | 412,000 | 364,235 | 22 | 16 | 57 | 16 | 3.2 | 1.231 |
| 2009 | 375,000 | 369,462 | 23 | 15 | 98 | 12 | 3.17 | 1.225 |
| 2010 | 400,000 | 387,304 | 23 | 16 | 55 | 16 | 3.73 | 1.528 |
| 2011 | 358,000 | 373,990 | 24 | 17 | 33 | 21 | 5.23 | 2.016 |
| 2012 | 465,450 | 441,080 | 29 | 20 | 44 | 16 | 5.41 | 2.556 |
| 2013 | 495,600 | 373,278 | 33 | 23 | 74 | 9 | 5.63 | 2.165 |
| 2014 | 382,800 | 360,860 | 33 | 25 | 39 | 13 | 5.12 | 1.96 |
| 2015 | 394,600 | 371,520 | 36 | 26 | 26 | 17 | 5.4 | 2.13 |
| 2016 | 517,200 | 416,576 | 36 | 25 | 25 | 17 | 6.5 | 2.713 |
| 2017 | 496,800 | 411,739 | 36 | 24 | 30 | 14 | 6.25 | 2.56 |
| 2018 | 319,400 | 298,396 | 33 | 25 | 35 | 10 | 6.25 | 1.846 |
| 2019 | 150,600 | 73,784 | 24 | 22 | 71 | 5 | 6.98 | 0.514 |
| 2020 | 170,100 | | | | | | | |
| 2021 | 314,400 | | | | | | | |
| 2022 | 341,600 | 291,553 | 27 | 23 | 40 | 24 | 12 | 3.708 |
| 2023 | 392,500 | 387,031 | 24 | 19 | 29 | 28 | 6.5 | 2.688 |
| 2024 | 483,000 | 421,301 | 29 | 24 | 29 | 40 | 7.42 | 3.23 |
| 2025 | 410,000 | 343,372 | 30 | 24 | 13 | 16 | 10.21 | 3.54 |

Source: ADFG 2025. *includes CDQ fishery

Table 3 shows the total number of vessels and LLP licenses that have been active from 2014-2025. This table also breaks out the number of vessels, % vessels and % catch for all vessels with LLP licenses, for vessels ≤32 ft LOA with LLP licenses and vessels without LLP licenses (≤32 ft LOA). Since 2014, a majority of the vessels participating in the summer fishery were assigned to an LLP license. This includes all vessels larger than 32 feet LOA and those vessels less than or equal to 32 feet LOA that are assigned to an LLP license even though it is not required to participate in the fishery. From 2014 through 2025, not

including years when there was a fishery disaster, an average of 32 vessels participated in the NSRKC summer fishery and 67 percent of those were assigned an LLP license.

The majority of vessels participating in the summer fishery are 'smaller' vessels less than or equal to 32 feet LOA (as can be seen by combining the number of active vessels ≤32 ft LOA with and without an LLP license (Table 3)). Since 2014, these smaller vessels have made up 72% to 83% of the fleet. In 2023, the proportion of total crab harvested by small vessels reached a recent high of 81%. Most active vessels are in the 30-32 foot LOA range. Fewer small vessels have participated in recent years compared to the pre-2019 time period. From 2014 to 2018, a range of 10 to 14 vessels participated without an LLP license. This decreased to four non-LLP vessels in 2019, before increasing to nine vessels participating without an LLP license in 2024 and 2025.

Six 'larger' vessels, greater than or equal to 33 feet LOA, participated in the fishery from 2014 through 2022 and four larger vessels participated in 2023 (as can be seen by subtracting the vessels ≤32 ft with LLP from all vessels with LLPs in Table 3). In 2024 and 2025, the number of larger vessels increased to seven and eight, respectively, and these vessels harvested 42% of the total catch in 2025 (Table 3). Recent increases in large vessel participation have raised concerns from long-term fishery participants in the Norton Sound region that participation by larger vessels may continue to increase in the future. However, it could be possible to see more participation from larger vessels even with no change in the number of active licenses, as many of the active licenses are operated by vessels that are shorter than the MLOA on the LLP license. Over the past 10 years, on average 22 active LLP licenses could be operating on vessels around 20 feet longer, if utilizing the full MLOA. Vessel size is often attributed with higher capacity, however in this fishery, many small vessels are capable of harvesting a significant amount of catch. For example, in 2025, five of the top ten vessels in landings were 32 feet and under.

**Table 3 Number of vessels and percent of harvest by length in the NSRKC summer fishery, 2013-2025.**

| | | | All vessels with LLP Licenses | | | Vessels ≤32 ft with LLP Licenses | | | Vessels without LLP License (≤32 ft) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Total vessels | Active LLP Licenses | vessels | %vessels | %catch | vessels | %vessels | %catch | vessels | %vessels | %catch |
| 2014 | 33 | 25 | 23 | 68% | 66% | 17 | 50% | 43% | 10 | 29% | 34% |
| 2015 | 36 | 26 | 24 | 65% | 63% | 18 | 49% | 38% | 12 | 32% | 37% |
| 2016 | 36 | 25 | 23 | 62% | 71% | 17 | 46% | 38% | 13 | 35% | 29% |
| 2017 | 36 | 24 | 22 | 59% | 68% | 16 | 43% | 38% | 14 | 38% | 32% |
| 2018 | 33 | 25 | 23 | 68% | 81% | 17 | 50% | 46% | 10 | 29% | 19% |
| 2019 | 24 | 22 | 20 | 80% | 76% | 14 | 56% | 45% | 4 | 16% | 24% |
| 2020 | | | | | | | | | | | |
| 2021 | | | | | | | | | | | |
| 2022 | 27 | 23 | 20 | 71% | 74% | 14 | 50% | 41% | 7 | 25% | 26% |
| 2023 | 24 | 19 | 16 | 67% | 65% | 12 | 50% | 46% | 8 | 33% | 35% |
| 2024 | 29 | 24 | 20 | 67% | 74% | 13 | 43% | 35% | 9 | 30% | 26% |
| 2025 | 30 | 24 | 21 | 70% | 82% | 13 | 43% | 40% | 9 | 30% | 18% |

Source: ADF&G fish tickets, data compiled by AKFIN.

### 3.1 Crew and Community Connections

Based on the unique identification number assigned to individuals by the CFEC, there have been 134 individuals associated with at least one landing in the summer fishery since 2000 while the average annual number of participants is 29. During this time period, the average number of years a participant was active in the fishery was five years and the median was three years. During the most recent ten years, 2014 to 2025, active participation among all participants averaged five years with a median of three years.

**This indicates that over the past decade, while many participants have a history of consistent participation, there are a number of individuals with short-term or intermittent participation**. For example, there were three new participants in 2023 using vessels ≤ 32 feet LOA without an LLP license, but the total number of vessels was lower than the recent high of 36 vessels in 2017 (Table 2).

Combined with the relatively stable total number of vessels participating over the 25-year time series and a consistent pattern of annual participation among vessels with long-term history, annual fishery data do not show an increasing trend in new entrants or a decreasing trend in long-term participants. However, given the limited number of fishery participants and scale of the fishery, even a small change in number of participants from year to year can impact fishery effort and opportunities for individual participants. For example, three newly active LLP licenses have harvested 13.5% of the total catch over the past two years.

Participants and LLP license holders in the NSRKC fishery are primarily from the Norton Sound region. Of the 62 LLP licenses with a NSRKC endorsement, approximately 63% are registered to addresses in the Norton Sound region (Table 4).

**Table 4 Distribution of crab LLP licenses endorsed to participate in the NSRKC fishery by license holder's registered city, 2025.**

| Registered City | Count of licenses |
|---|---|
| ANCHORAGE | 8 |
| DELTA JUNCTION | 1 |
| HOMER | 1 |
| JUNEAU | 1 |
| KODIAK | 1 |
| NAKNEK | 1 |
| WASILLA | 1 |
| OUTSIDE OF ALASKA | 9 |
| Total Outside Region | 23 |
| ALAKANUK | 1 |
| EMMONAK | 1 |
| GOLOVIN | 1 |
| NOME | 17 |
| SHAKTOOLIK | 2 |
| UNALAKLEET | 15 |
| WHITE MOUNTAIN | 2 |
| Total Inside Region | 39 |
| **Grand Total** | **62** |

Source: NOAA Restricted Access Management, 2025.

Since 2014, one participant in the NSRKC fishery had a registered address outside of the State and participated in 2015 and 2016 (Table 5). In 2024 and 2025 one participant had a registered address outside of the region. It is important to note that for both LLP licenses and CFEC permits, the registered address is self-reported and does not indicate residency with certainty.

**Table 5 Distribution of CFEC permit holders based on the registered address for participants in the NSRKC summer fishery, 2014-2025.**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|---|---|---|---|
| Nome | 16 | 16 | 17 | 20 | 17 | 15 | 12 | 13 | 16 | 16 |
| Unalakleet | 6 | 8 | 8 | 6 | 7 | 7 | 9 | 6 | 6 | 8 |
| Other Norton Sound region | 11 | 11 | 10 | 10 | 9 | 4 | 6 | 5 | 6 | 5 |
| Other Alaska | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Other State | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 33 | 36 | 36 | 36 | 33 | 26 | 27 | 24 | 29 | 30 |

### 3.2 LLP License Recency

There are 62 LLP licenses endorsed for NSRKC and since 2004, 35 LLP licenses were 'active' or assigned to a vessel that had at least one landing (Table 6).[6] This means that 27 LLP licenses, or 44% of all LLP licenses with a NSRKC endorsement, are latent, or have not been used to make a landing, since at least 2004. A total of 29 LLP licenses were active in the most recent five seasons, since 2019. Thirty-two LLP licenses have been active since 2014, and 34 LLP licenses have been active since 2009. In some cases, more than one LLP license is 'stacked', or assigned to, a single vessel and since 2014 there have been two to three active vessels with stacked LLP licenses. Stacking LLPs may allow a vessel to fish in more locations or for different species if the LLPs have different endorsements. Harvesting history is typically credited to each LLP license stacked on a single vessel at the time of landing.

Under a latency action, the Council could choose to link the licenses so they could not be severed if the objective is to reduce the total number of LLPs available. Appendix 1 shows LLP license activity for the 35 LLP licenses that have been active since 2004. As discussed more in Section 4, removing latent LLP licenses without recent participation in the fishery would reduce the risk of a future increase in vessels participating in the fishery from purchase and use of LLP licenses that have not been active.

**Table 6 Number of active and latent LLP licenses in the NSRKC fishery in the past five, ten, fifteen, and twenty seasons.**

| | 2019-2025 | 2012-2025 | 2009-2026 | 2004-2025 |
|---|---|---|---|---|
| **Active LLPs** | 29 | 32 | 34 | 35 |
| **Latent LLPs** | 33 | 30 | 28 | 27 |

Source: ADF&G fish tickets and NOAA Fisheries Restricted Access Management

### 3.3 Participation in Other Fisheries

A majority of participants in the NSRKC fishery do not participate in other fisheries. The past 10 years of revenue data (2013-2024) show an average of 84% of participants received 100% of their revenue from the NSRKC fishery. This increased to 95% of participants over the past three years (2022-2024). Those who are not 100% dependent on NSRKC also participate mainly in salmon and halibut fisheries.

[6] Activity by an LLP license in a given year was determined by comparing the ADF&G vessel number associated with an LLP license to the ADF&G vessel number on fish tickets.

Of the 27 LLP holders that have not been active in the NSRKC fishery in the past 20 years, 24 have also not participated in other fisheries, one has not been active since 2007 and two are currently active in other fisheries. Eleven LLP holders have participated in NSRKC over the past 20 years but were not active in 2025. Nine of these showed no other fishing activity after their last year of NSRKC participation.

# 4 Next Steps

If the Council chooses to move forward with an action, the first step in defining appropriate alternatives is the development of a clear purpose and need statement. The Council has developed previous actions to address latent effort in other fisheries[7] that could be used as guidance for developing a problem statement. Some provisions that have been included in past purpose and need statements are:

- Fishery is fully utilized.
- Current participants have long term investments and dependence on the fishery.
- Potential reentry of a latent license to the fishery could disrupt stability, harm investments, and interfere with expectations.
- The possible future entry of latent effort and disproportionate vessel efficiency would have detrimental effects on LLP holders that have exhibited participation in, and dependence on, the fishery.
- Increased competition due to increased market value, declining TAC, increased participation by harvesters displaced from other fisheries.
- Introduction of capital that has been accrued from participation in rationalized fisheries.
- To prevent the future entry or re-entry of latent fishing capacity that has not been utilized in recent years, and to preserve the traditional vessel operational efficiencies within the fisheries.

Defining the purpose and need is important as it delineates the range of alternatives necessary to address the problem and determines the scope of the analysis. If the purpose of the action is to remove the potential for latent capacity to enter the fishery, the purpose and need statement should define the scale of the problem of this latent capacity and the specific need that would be addressed by the action. For example, the purpose could be simply to remove the LLP licenses that have shown no or very minimal activity to ensure that re-entry in the NSRKC fishery does not occur in an already fully utilized fishery. This general concern that latent licenses could reenter the NSRKC fishery would suggest that the action could remove the latent LLP licenses using broad and general criteria (i.e., licenses with less than a certain number of landings or years of participation would be voided). A slightly expanded purpose could impose more rigid standards to ensure those that have regular dependence on the NSRKC fishery are not impinged by license holders that sporadically participate in the fishery. Expanding the purpose to address overcapacity more broadly could require alternatives that go beyond simply eliminating latent or less recent effort.

Actions to remove latent capacity are often based on dependence on the fisheries. Dependence is often best reflected by regular participation across a period of years. Years are defined to include both historical and recent participation. Historical participation is viewed as a reflection of dependence, while recent participation is a reflection of current activity. To remove latent capacity from the NSRKC fishery, the Council will need to specify appropriate catch or participation thresholds, which must be met to maintain

[7] Amendment 86 to the Gulf of Alaska (GOA) Groundfish Fishery Management Plan removed latent capacity by adding a Pacific cod endorsement on licenses issued under the LLP in specific management areas if those licenses have been used on vessels that met minimum recent landing requirements using non-trawl gear. GOA Amendment 82/BSAI Amendment 92 removed latent LLP licenses that had not more than at least two landings using trawl gear between the years 2000 and 2006 in a particular endorsement area by removing that area from the LLP license. The Council also developed alternatives to eliminate the LLP license endorsement for CP vessels to fish for Pacific cod with pot gear in the BS and AI FMP subareas if the license was not credited with a minimum amount of directed Pacific cod landings during a specified period but took no action at final review.

eligibility to participate. The original LLP thresholds were specified as landing requirements (with requirements of at least one documented harvest of red or blue king crab in the Norton Sound area between the start of 1993 and the end of 1994). The specific threshold identified will determine which LLP licenses are impacted and lose the opportunity to enter or re-enter the NSRKC fishery in the future.

An LLP license recency action to remove latent licenses and associated potential harvest capacity in the fishery would require an FMP amendment and revisions to Federal regulations. Federal licensing is a Category 1 management measure under the FMP and changes to these measures require Council action. Eliminating latent LLP licenses requires the Council to determine qualifications for recent participation to maintain an LLP license. Reducing the number of LLP licenses in the fishery could be a stand-alone action or combined with other management actions.

Removing latent LLP licenses that do not have recent participation in the fishery would reduce the risk of a future increase in vessels participating in the fishery from purchase and use of LLP licenses that have not been active. Holding GHLs constant, the extent to which historically active participants are affected by shorter seasons or reduced revenues associated with potential new activity from latent capacity would be dictated by how many additional LLP licenses (vessels) enter the fishery and how much of the available harvest those new vessels absorb. Each new entrant would diminish the expected revenue of current participants by an amount that would vary depending on the new entrant's capacity. The impact of reduced expected harvest would not be uniform across current participants since those vessels vary in their own catch capacity and reliance on the NSRKC fishery as part of their total business portfolio.

### 4.1 Potential Implications

Analysts cannot predict the likelihood of new entry into the fishery from unutilized LLP licenses; however, two circumstances may increase the appeal of entry into the fishery: 1) increase in NSRKC catch limits or prices in the future, or 2) a decrease in alternative economic opportunities (i.e., an individual's opportunity cost associated with participating in the NSRKC fishery). While NSRKC prices and CPUE have been relatively high over the past four years, there is no clear trend in GHL or value that would likely induce new entrants into the fishery (Table 2). Opportunity cost is the value that an individual forgoes when choosing to do one thing instead of another. For example, if participating in the NSRKC fishery means that a vessel cannot participate in another fishery (or can participate less) then the cost of entering the NSRKC fishery is the value that was not achieved in the other fishery. The opportunity cost of entering the NSRKC fishery could be low if the value of other fishing opportunities is suppressed (low prices, low TACs, etc.) or if the other fishery can be accessed in a way that does not preclude or conflict with the NSRKC fishery. Given that a majority of the participants in the NSRKC fishery do not participate in other fisheries and 24 of the 27 latent LLP license holders have also not participated in other fisheries, there are no common secondary fisheries which may have obvious impacts on NSRKC participation. The level of interest from new entrants may also be tied to the availability of other economic opportunities in the region.

Another factor that can influence participation in a fishery is speculative entry from otherwise latent licenses that may be concerned about potential management actions limiting future access to a fishery. This may be the explanation for an increase in license activity beginning in 2013, when the Council began previous discussions about the potential for a recency action in the NSRKC fishery. The Council often manages the potential for speculative fishing behavior by setting a control date, which informs interested parties that the Council is considering a future action that may affect or limit the number of participants in a fishery and that participants should locate and preserve all fishing related documents. Publication of control dates provide notice to the public that any person participating in the applicable sector after the control date may not receive continued access to the fishery under a future management action. This is intended to discourage speculative entry or fishing activity in the fishery while the Council considers whether and how access to the fishery may be further limited under a future management action.

Publication of a control date does not obligate the Council to take any action and does not prevent the Council from selecting another control date. If the Council chooses to proceed with a recency action, it may consider establishing a control date to publicize potential future actions affecting participation in this fishery.

Even with no changes in license activity or restrictions, overall effort in the NSRKC fishery could still increase under the current structure. Vessels 32 ft LOA and smaller are exempt from the LLP requirement, allowing new, exempt entrants to add capacity to the fleet. Additionally, 12 to 18 vessels that have participated since 2014 fall under this exemption but currently operate with an LLP, collectively accounting for over 35% of the annual harvest (Table 3). These vessels could continue fishing under the exemption while transferring their LLPs to larger vessels—potentially up to the MLOA—further increasing the fleet's overall fishing power. On average, 22 active LLPs could be used on vessels roughly 20 feet longer than those currently using them, representing substantial potential growth in capacity.

Although an LLP recency action would reduce the number of eligible vessels, it may not alter the competitive dynamics of the fishery. With the current pool of participants, the incentive to harvest quickly before the guideline harvest level is reached would remain, and the most capable vessels may continue to outperform others. As a result, recency requirements may not extend the current season or lessen the potential for disproportionate harvest, but may instead primarily prevent disruptions from new entrants while disruptions from current participants may still occur. Given this, the Council should carefully consider whether removing latent or recently inactive LLPs will fully address potential overcapacity in the NSRKC fishery.

If the Council defines a purpose and need as addressing overcapacity more broadly than simply eliminating latent effort, other management tools could be considered that may more effectively limit capacity in the fishery. Some examples of these include decreased pot limits (in Norton Sound, the pot limits are 50 for vessels > 125 feet, and 40 for vessels <125 feet), trip limits, or vessel caps. Pot limits are a Category 2 management measure under the FMP which the State can change following criteria set out in the FMP. Trip limits and vessels caps are not described in the FMP and would likely fall under Category 3 'other' and could be adopted by the State if consistent with the FMP, the Magnuson-Stevens Fishery Conservation and Management Act, and other applicable Federal law.

# 5 References

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**Appendix 1 LLP activity since 2004. Note that an additional 27 LLPs were not active any of these years.**

| Generic number | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2022 | 2023 | 2024 | 2025 | Years Active |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LLP 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 20 |
| LLP 2 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 20 |
| LLP 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 20 |
| LLP 4 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 20 |
| LLP 5 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 20 |
| LLP 6 | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | 19 |
| LLP 7 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |  | X | X | X | 19 |
| LLP 8 | X | X | X |  |  | X |  | X | X | X | X | X | X | X | X | X | X | X | X | X | 17 |
| LLP 9 | X | X | X | X | X |  | X | X | X | X | X | X | X | X | X | X |  | X | X | X | 18 |
| LLP 10 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |  |  |  | 17 |
| LLP 11 |  |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 16 |
| LLP 12 | X | X |  | X | X |  |  |  | X | X | X | X | X | X | X | X | X | X | X | X | 16 |
| LLP 13 | X | X | X | X |  |  | X | X |  |  | X | X | X | X | X | X | X | X | X | X | 16 |
| LLP 14 |  | X | X | X |  |  | X | X |  | X | X | X | X | X | X | X | X |  | X | X | 15 |
| LLP 15 | X | X | X | X | X | X | X | X | X | X | X | X | X |  |  | X | X |  |  |  | 15 |
| LLP 16 |  |  | X | X | X | X | X |  | X | X | X | X |  |  | X |  |  | X | X | X | 13 |
| LLP 17 | X | X | X | X | X | X | X | X | X | X | X |  |  |  |  |  | X |  |  |  | 12 |
| LLP 18 | X | X |  | X |  |  | X | X | X | X | X | X | X | X | X |  |  |  |  |  | 12 |
| LLP 19 |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X |  | X | X | 11 |
| LLP 20 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X | 10 |
| LLP 21 |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | X |  |  | 10 |
| LLP 22 |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | 9 |
| LLP 23 |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | X | X | 9 |
| LLP 24 |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |  | X | X | 9 |
| LLP 25 |  | X | X | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  | 9 |
| LLP 26 |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |  | X |  |  |  | 8 |
| LLP 27 |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X | 7 |
| LLP 28 |  | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | 6 |
| LLP 29 |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  | 6 |
| LLP 30 |  | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| LLP 31 |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  |  |  |  |  |  | 4 |
| LLP 32 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | 2 |
| LLP 33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | 2 |
| LLP 34 | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| LLP 35 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | 2 |
| Total active LLPs | 16 | 20 | 18 | 18 | 16 | 15 | 16 | 17 | 20 | 23 | 25 | 26 | 25 | 24 | 25 | 22 | 23 | 19 | 24 | 24 |  |