

An aerial photograph of a fishing net spread across the water's surface. The net is a complex, web-like structure with numerous small, circular openings. Several fish are visible, swimming through the net. The water is dark and textured with ripples. A dark teal rectangular box is overlaid on the right side of the image, containing the title and author information in white text.

Gulf of Alaska Fisheries Limitation Study

Written by:
Courtney Carothers and Brett Watson

Prepared by:
Chloey Cavanaugh



CONTENTS

02

ABOUT

03

EXECUTIVE SUMMARY

04

BACKGROUND & NEED

07

METHODS

09

RESULTS & DISCUSSION

21

CONCLUSION

23

ACKNOWLEDGEMENTS

24

REFERENCES CITED





About The Gulf of Alaska Fisheries Limitation Study

This study documents the cumulative impact of state and federal fisheries access limitation programs (e.g., limited entry and individual fishing quotas, or IFQs) on the economy and sociocultural fabric of Alaska Native villages in the Gulf of Alaska. This summary report highlights major findings. Watson and Burke (2024) provide more background on community, economic, fishery, and demographic changes over period of 1950 to 2023. Carothers (2024) provides more detail on a 2024 online survey of Koniag and Sealaska shareholders and descendants that explored fishing connections and engagements, community connections and impacts, and residency and demographics.



Executive Summary

This study investigates the socioeconomic and cultural impacts of fisheries access limitation programs, such as limited entry and individual fishing quotas (IFQs), on Alaska Native villages in the Gulf of Alaska. The research documents how these programs have altered local economies, disrupted cultural practices, and contributed to outmigration. A 2024 survey of over 4,300 Koniag and Sealaska shareholders and descendants reveals that fishing is a central element of economic and cultural life, with 98% of respondents affirming its importance. However, 80% report that limited access to fisheries has led to significant community crises. Since the introduction of limited entry in the 1970's, permit ownership in key fisheries has declined by 32%, with the Koniag region experiencing a more severe decline of 63%. Halibut quota ownership has also fallen by 69%. The Community Quota Entity (CQE) program, aimed at restoring some access, has had limited success. The survey results emphasize that fishing is a vital part of cultural identity and village sustainability, with 90% of respondents stating that village survival depends on access to fisheries. Strikingly, only 12-13% of respondents have any current engagement in commercial fishing; only 11% agree that the future looks good for young people who stay in the regional villages. In contrast, the Metlakatla Indian Community, while experiencing similar trends with limited entry and IFQs, manages their own active Tribal fisheries where fishing participation, youth engagement, and earnings are high. The study suggests that significant policy reforms to restore fishing access, especially for Indigenous youth, are necessary to avoid continued economic decline and negative social and cultural impacts. The report calls for targeted policies to support fishing livelihoods and village sustainability in the Gulf of Alaska.



Background & Need

Previous research has demonstrated important economic and social aspects of change resulting from the limitation and commodification of fishing access. For example, Watson et al., (2021) shows that the economic impacts of the commercial fishing industry in Alaska extends far beyond the income it provides to vessel captains. Fishing activity also provides for crew member and shore-side processing jobs and spillover effects into upstream and downstream industries. It also creates broader induced economic effects as income and wages are spent on local goods and services. However, as Watson et al. (2021) shows, these effects only tend to materialize in the home communities of fishermen. In other words, economic impacts follow fishermen.

Fisheries access limitation programs have also been shown to cause social and “cultural upheaval through the exclusion of indigenous and subsistence users” (Young et al. 2018) and generate exclusions primarily for new and young fishermen and rural and Indigenous fishing communities (NASEM 2021). For example, Langdon (1980) and Kamali (1984) documented the loss of access from Alaska Native and rural local communities early in the existence of the Alaska limited entry program. These programs also tend to create and entrench inequities within and between generations of fishing families (e.g., Carothers and Chambers 2012; Donkersloot 2021; Olson 2011; Pinkerton and Davis 2015; Ringer et al. 2024; Steinkruger and Szymkowiak 2023). Fishing community members in Alaska describe negative impacts from fishing limitation programs to core fishing values; disempowerment of crew and the next generation; and long-lasting conflict and community divisiveness (Carothers 2015).



The North Pacific Fishery Management Council tried to address some of these negative outcomes by implementing the Community Quota Entity (CQE) program in 2004. Through the program, 46 designated communities are eligible to form non-profit corporations that can purchase and lease quota for halibut and sablefish (Fields 2016). As of 2024, only six communities own quota through the CQE program. A potential lack of information and capital and concerns of adverse impacts may help explain the little take up in the CQE program (e.g., Carothers 2011; Langdon 2008; NOAA Fisheries Service 2010). Eligibility to participate in the CQE Program was limited to communities with fewer than 1,500 people, documented historical participation in the IFQ fisheries (at least one landing of halibut or sablefish), direct access to saltwater on the Gulf of Alaska coast, and no road access to a larger community (NPFMC 2016).

Among the CQE-eligible communities, we highlight changes for a subset of particularly small, rural, and predominately Alaska Native villages in the Koniag, Inc. (Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, Port Lions) and Sealaska regions (Angoon, Hoonah, Hydaburg, Kake, Klawock, Yakutat), as well as the village of Metlakatla (the only Tribal reservation in Alaska who manages the largest Tribal fishery in the U.S.), and CQE Other (including 30 other regional communities not contained in the other groupings) (see Watson and Burke 2024).

"Fewer and fewer young people entered the fisheries. The ones that did were predominantly from non-Indigenous families with the means to purchase permits and boats. The money they made mostly gets spent outside of the community."

- Survey Respondent





Methods

An online survey collected data from 1,320 Koniag (30% response rate) and 3,024 Sealaska (15% response rate) shareholders and descendants through a 29-question questionnaire on fishing, community impacts, and demographics. Place-level data tracked trends in economic, demographic, and fishing factors for communities eligible for the Community Quota Entity (CQE) Program. More detail can be found in Carothers (2024) and Watson and Burke (2024)

75%

of respondents report that they are living in, from, or have direct experience or knowledge of communities of their regions.

98%

agree that fishing is an important part of traditional culture.

90%

agree that village survival depends on access to fisheries.

80%

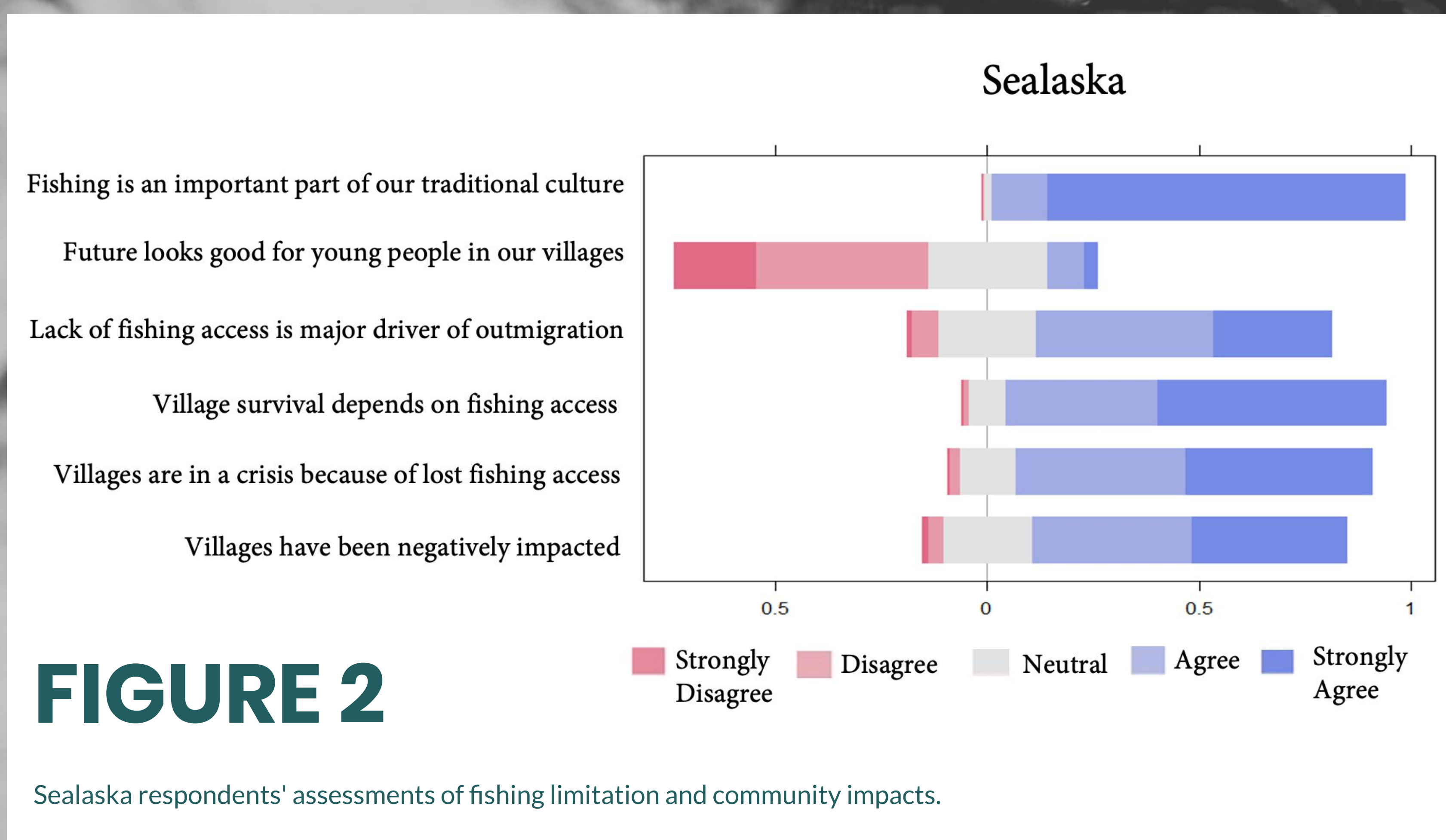
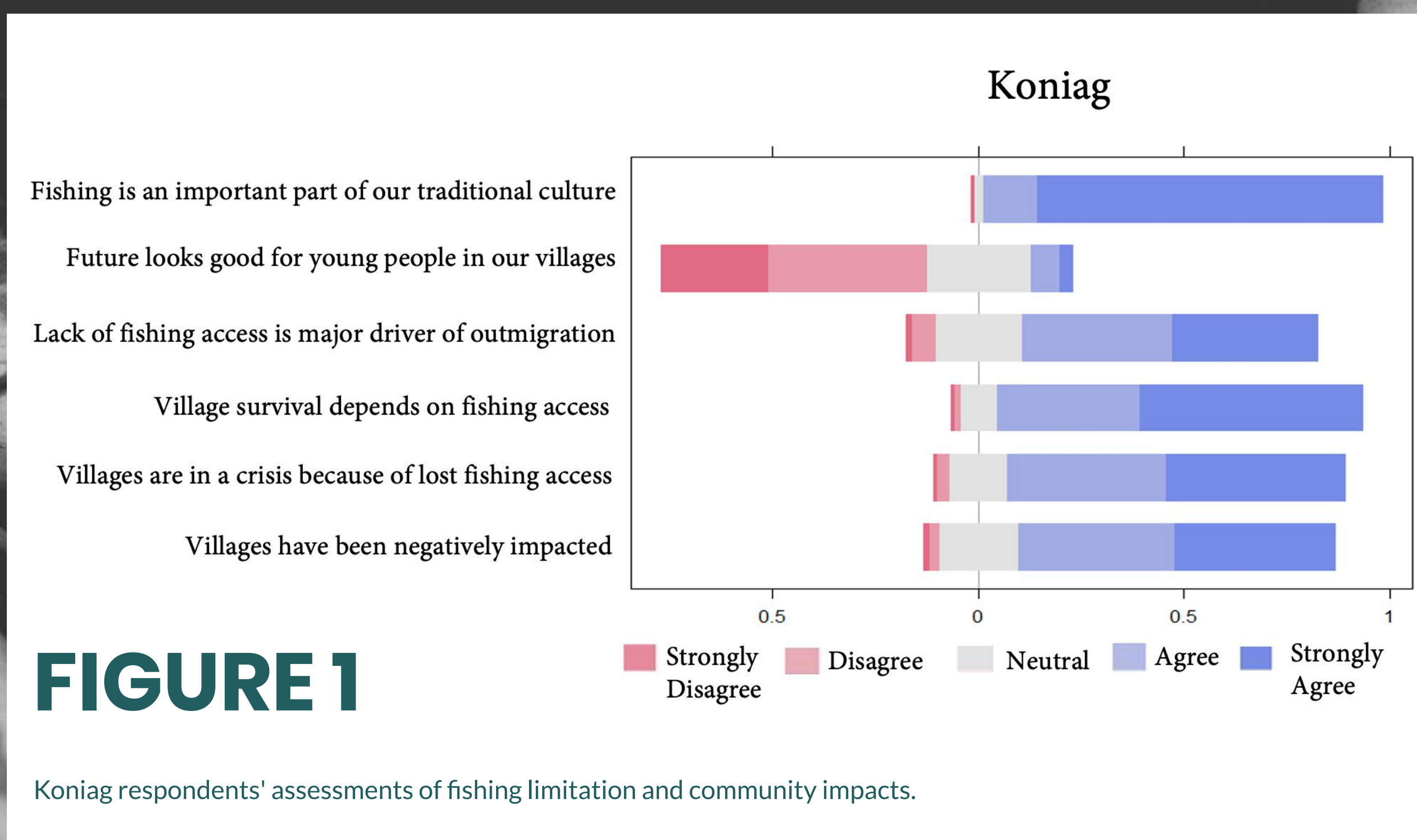
of respondents agree that villages are in crisis of sustainability because of lost access to fisheries.

11%

agree that the future looks good for young people who stay in the regional villages.

Results & Discussion

First, this study unequivocally confirms that fisheries are vital to the economies and cultures and Gulf of Alaska communities. Nearly all survey respondents noted that fishing is a core part of traditional culture, fishing access is necessary for village sustainability, and regional villages are in crisis because of lost fishing access. About three quarters of respondents agree that villages in the Gulf of Alaska have been negatively impacted by limited entry and IFQ programs and that a lack of fishing opportunities has been a main driver of people moving out of the villages. Most respondents do not think the future looks good for young people who stay in their villages (Figures 1-2).



Salmon Limited Entry Permits

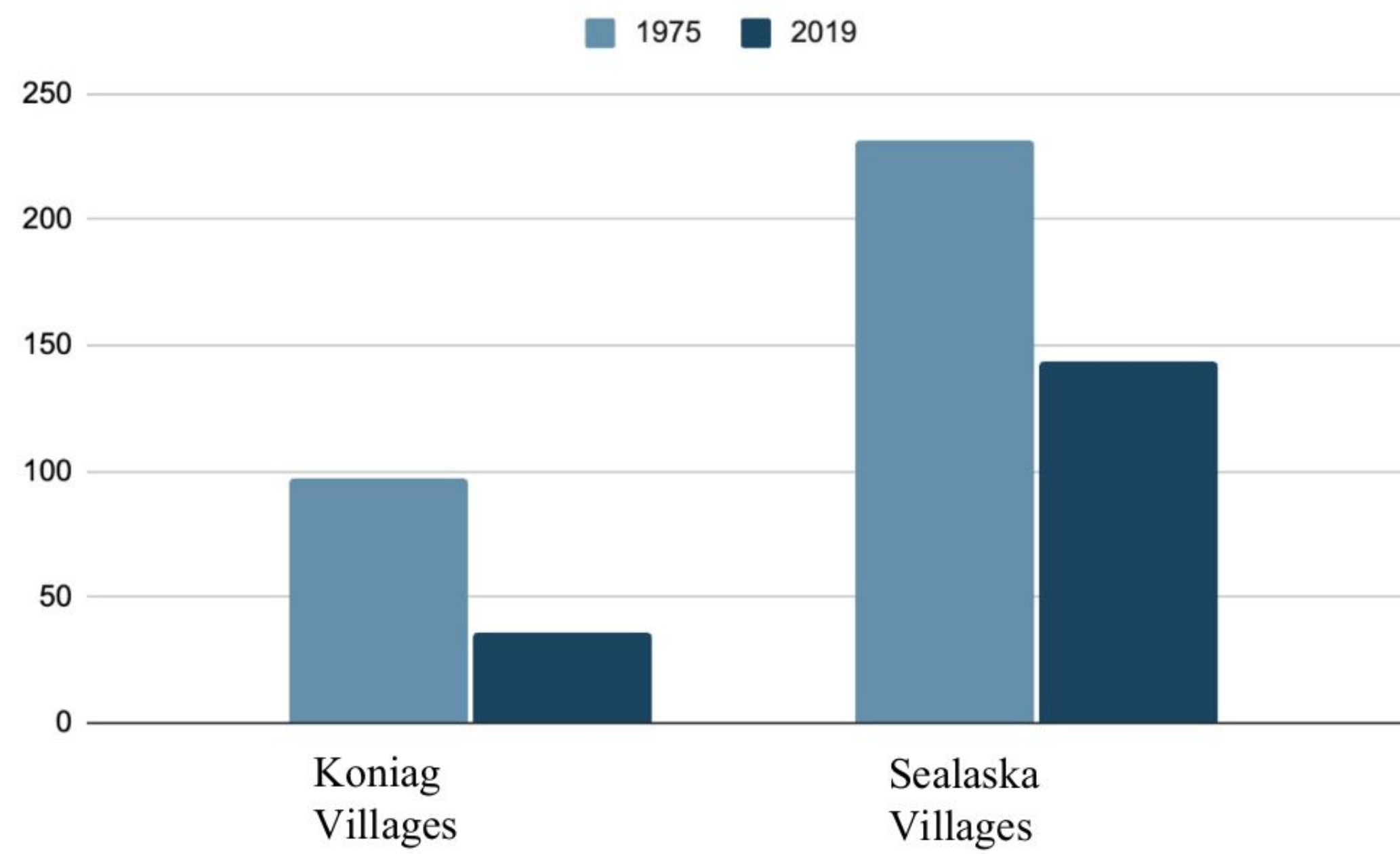


FIGURE 3

Total permanent limited entry permits originally issued in 1975 to residents of Koniag and Sealaska villages compared to permit holdings in those villages in 2019. Data source: Commercial Fisheries Entry Commission. See Watson and Burke 2024.

Individual Fishing Quota Holders

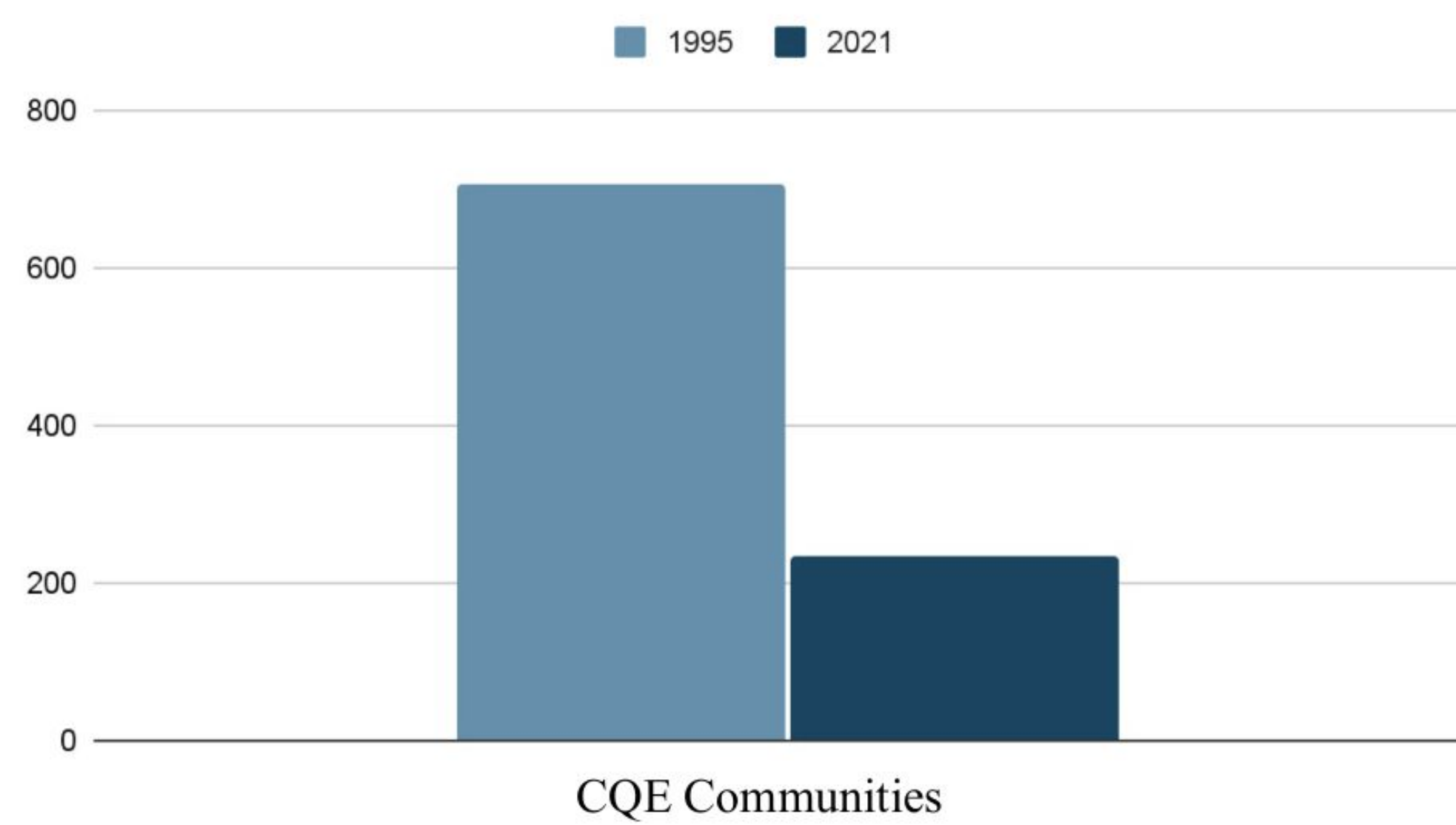


FIGURE 4

Number of individual fishing quota holders in Community Quota Entity (CQE) communities in 1995 and 2021. Data Source: NOAA Fisheries. See Watson and Burke 2024.



Second, this study confirms there has been a marked decrease in fisheries participation in Gulf of Alaska villages. Since the issuance of limited entry permits in 1975 for a set of the most important salmon fisheries, ownership of these transferable permits has declined by 32% on average for the CQE communities. The loss is most pronounced in Koniag villages. In 1975, Koniag villages were initially issued 97 permits; in 2019 they hold 36 (a 63% decline). Sealaska villages were originally issued 232 salmon permits in 1975; in 2019 they hold 144 (a 38% decline) (FIGURE 3). Change in access rights has been similar since the 1995 inception of the halibut quota program. In 1995, 707 fishermen living in CQE communities were quota owners. By 2021 this number had fallen to 235 (a decrease of 69%) (FIGURE 4). This is due primarily to consolidation of these quota share into a smaller number of owners. As a result of these declines in participation, these communities have seen declines in ex-vessel earnings from commercial fishing.

Most survey respondents have fishing experience and/or come from fishing families. A majority have multi-generational ties to commercial fishing, yet less than 15% currently participate in commercial fishing. A small percentage of respondents note holding a limited entry at the present (7%) or in the past (8-9%). Nearly a third of fishing-engaged respondents report permits held by parents or grandparents. A very small percentage (0-1.5%) report being denied permits, had permits canceled, or were issued non-transferable permits. A small percentage also list current (2.5-3.5%) or former (4.3-5.4%) ownership of individual fishing quotas (IFQs); most report being issued an amount of quota too small to fish.

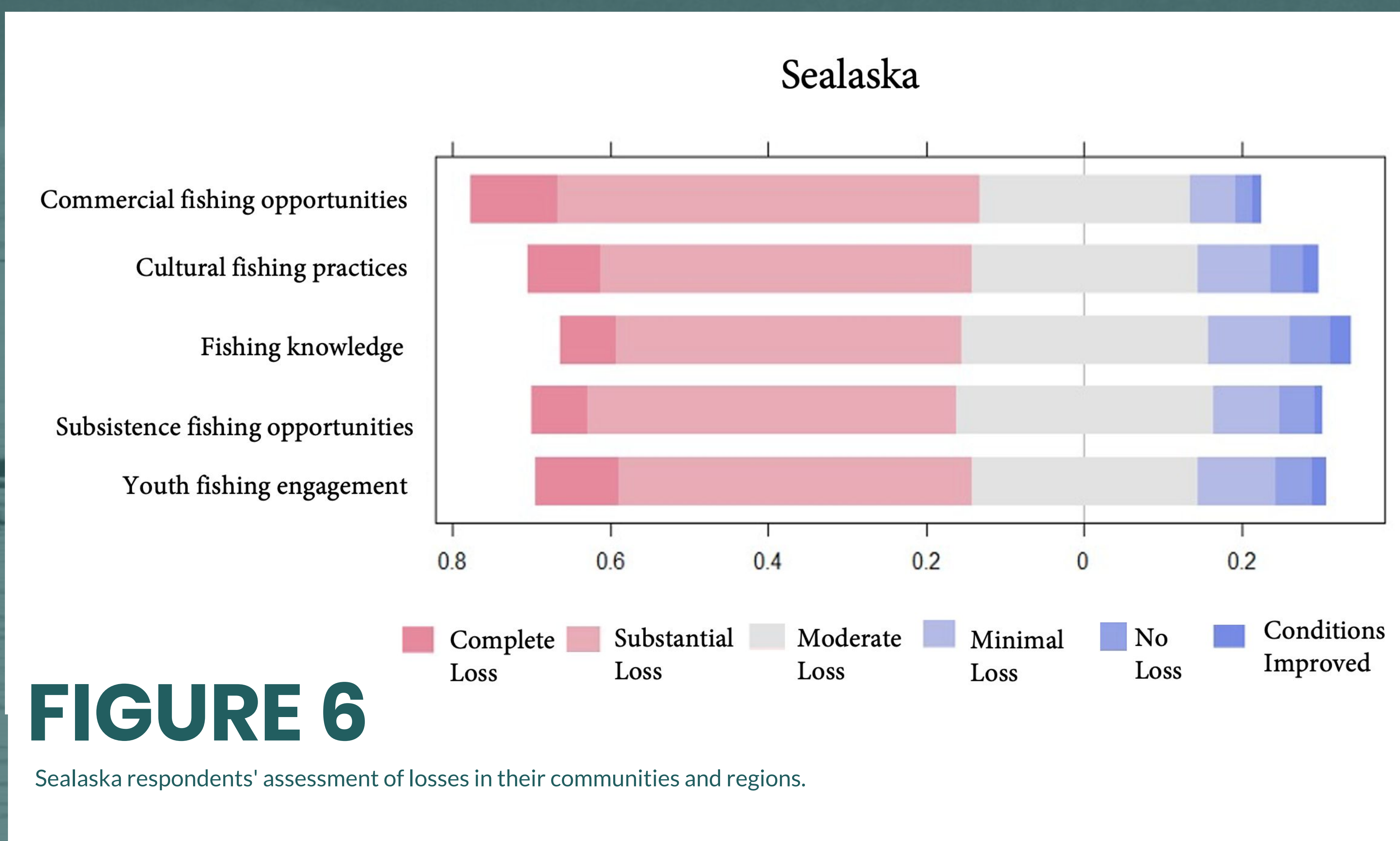
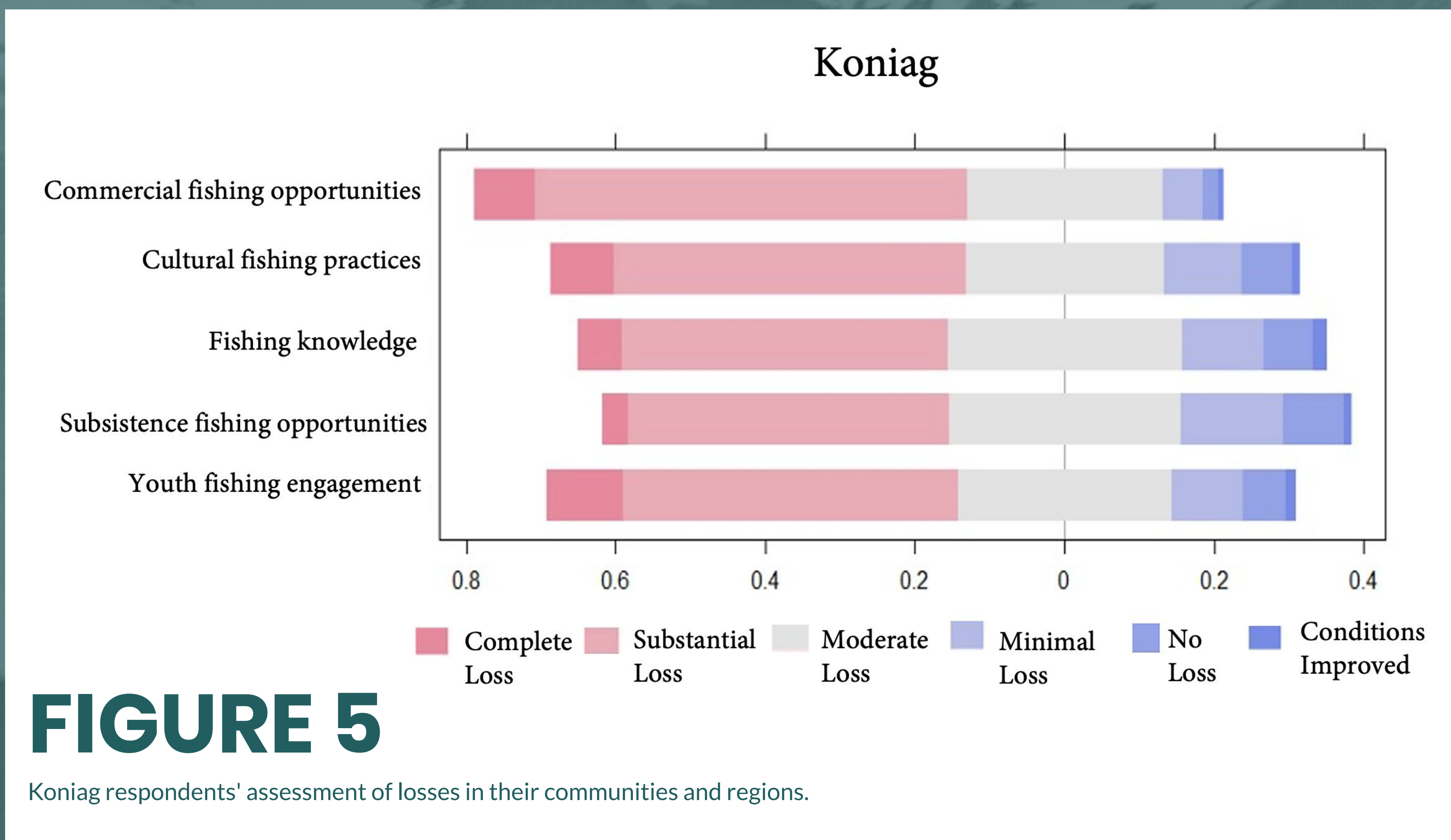
- Approximately 80% of respondents stated they have direct fishing experience and/or come from a fishing family.
- About half (56% Koniag; 46% Sealaska) of fishing-engaged respondents have commercial fishing experience.
- Only 13% (Koniag) and 12% (Sealaska) of those who have fishing experience in their family currently participate in the fisheries.
- Current participation in commercial fishing among those who currently live in Koniag and Sealaska regional villages is 20% and 14% respectively.
- A majority report parents (68% Koniag and 53% Sealaska) and grandparents (64% Koniag and 55% Sealaska) fished commercially.
- Just over half of fishing-engaged respondents are familiar with the state limited entry program; 68% (Koniag) and 60% (Sealaska) of fishing-engaged respondents are familiar with the federal individual fishing quota (IFQ) program.



67

95-97% of the examples of community impacts of limited entry and IFQ programs were negative. These include restriction of access, erosion of village livelihood and culture, outmigration of people, economic impacts, and negative outcomes for the next generation. Only 2-3% mention any positive impacts. More Koniag respondents are familiar with the Community Quota Entity (CQE) program (28%) compared to Sealaska respondents (19%). Most respondents assess the program as having minor success in bringing fishing opportunities back to their communities.

Respondents noted that there have been substantial to moderate losses in villages in their regions of commercial fishing, cultural fishing practices, fishing knowledge, subsistence fishing opportunities, and youth engagement in fishing (Figures 5-6). Most respondents view the limited entry and IFQ programs as playing a moderate to primary role in these losses.





The exception to this trend is Metlakatla. While the community of Metlakatla experienced similar and even more pronounced losses of access to state limited entry fisheries (see Watson and Burke 2024), the community's Tribal fisheries have buoyed the participation in, and earnings from, commercial fisheries in this community compared to all other villages in the Gulf of Alaska (Figure 7; see Watson and Burke 2024).

Communities may see declines in the number of permits held by resident because permits are transferred to someone outside the community, because a resident of the community moves out of a community, or because a permit is canceled. Several circumstances can result in permit cancellation, including revocations, buybacks, forfeitures and lapses. As of 2022, 50 transferable limited entry permits and 203 non-transferable limited entry permits had been canceled in CQE communities.

Declines in participation are also reflected in declines in fleet capitalization (the quantity and size of commercial fishing vessels owned by members of a community) and in jobs for crew members.

Average Community Total Salmon Limited Entry and Tribal Landings for CQE Communities

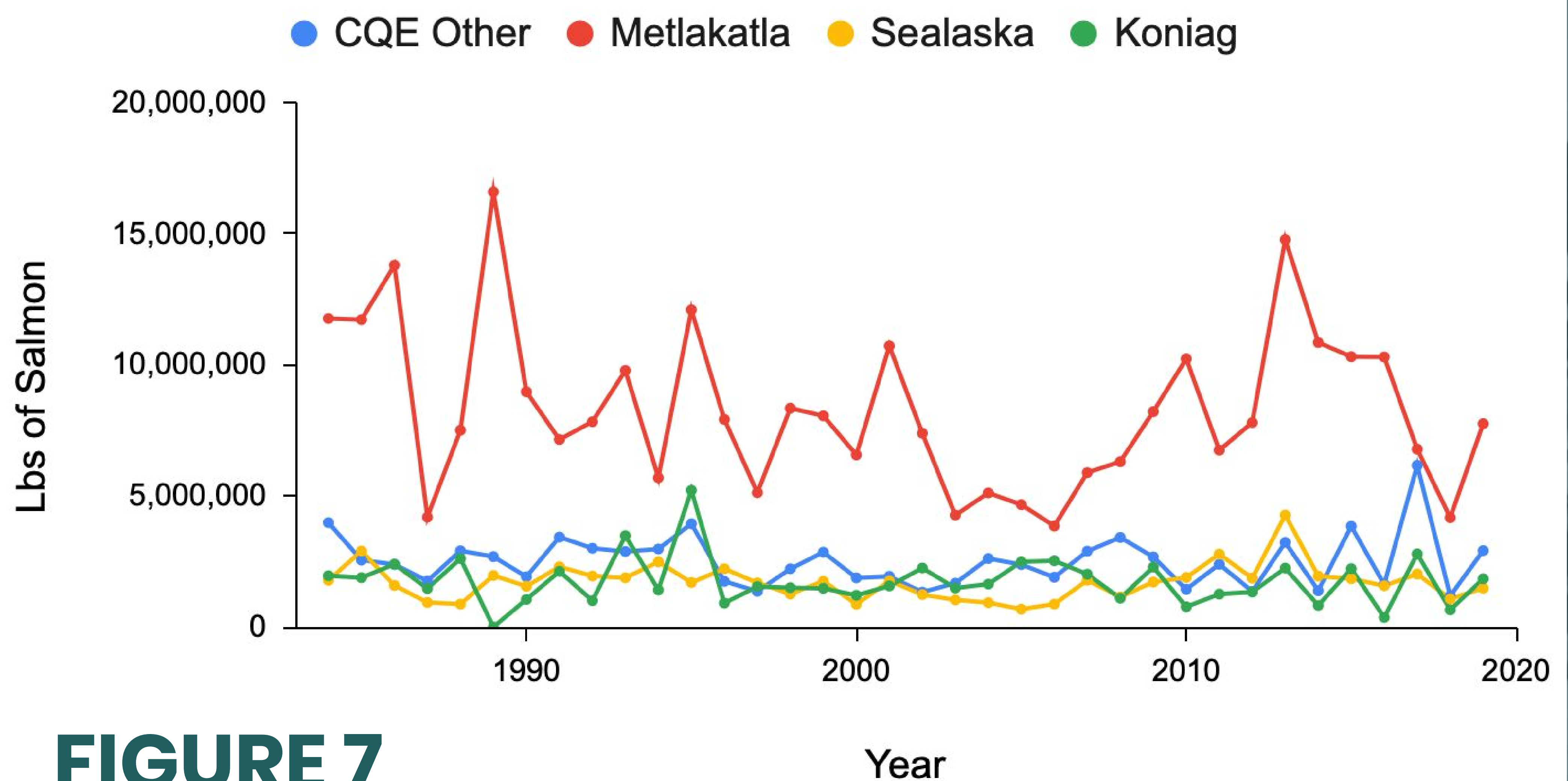


FIGURE 7

Salmon landings over time for Annette Island and Limited Entry from 1984 to 2019 for all CQE communities. Source: Commercial Fisheries Entry Commission; Department of Fish and Wildlife, Metlakatla Indian Community.

"Because of limited entry our youth find it impossible to follow a way of life that has been a part of us for centuries..."

- Survey Respondent

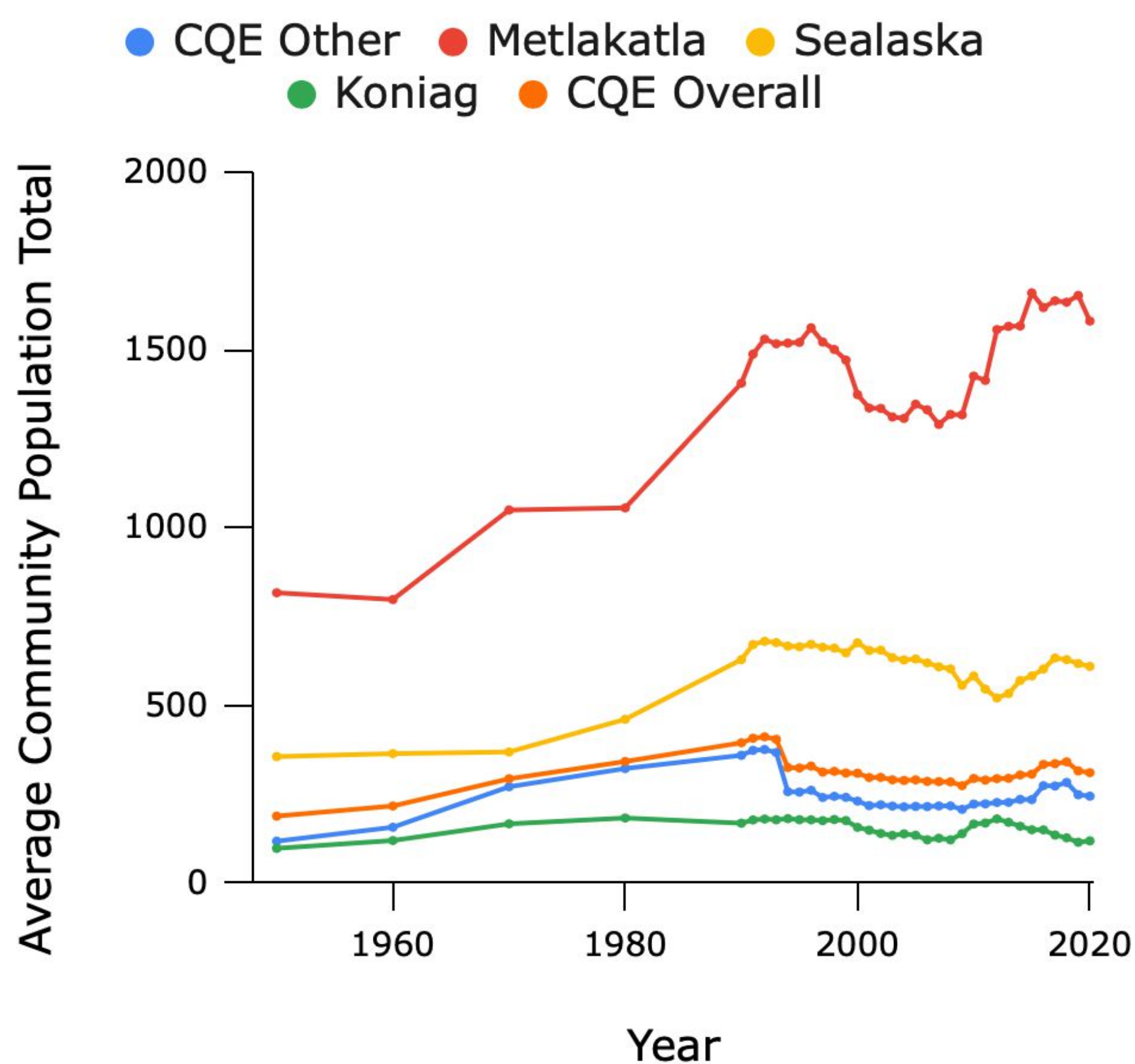


From 1978 to 2019, the number of vessels owned by CQE communities declined from 632 to 327. For Sealaska villages, total vessel ownership declined from 470 in 1978 to 236 in 2019 (a 50% decline). Koniag villages went from a fleet of 78 vessels in 1978 to 61 in 2019 (a 22% decline). In Metlakatla there were 84 vessels in 1987 and 30 vessels in 2019 (a 64% decline). From 1995 to 2014, the total number of crew licenses issued by Alaska Department of Fish and Game to residents of CQE communities declined from 2,666 to 1,482. For the target villages of Sealaska, Koniag, and Metlakatla, these crew licenses declined from 587 to 318, 225 to 94, and 102 to 21, respectively.

Understanding broader socioeconomic changes in CQE communities is complicated by the available data for small places. Watson and Burke (2024) compile census data (a precise measure of population), survey data (an imprecise measure of income, unemployment, and poverty in places where sample sizes are small), and administrative data (a precise measure, but are often limited in scope).

In terms of population, CQE communities in aggregate were seeing decade-over-decade growth prior to 1980. After 1980, Sealaska villages (on average) continued their growth through the mid-1990's but have fallen in population by 10% (on average) since population peaked in 1992. Koniag village populations declined from 1980 through around 2010, when populations briefly began growing again, before falling again. Populations in these villages have declined 35% (on average) since their peak in 1980. In Metlakatla population increased steadily each decade through the mid-1990's. Population declined and rebounded from the late-1990's to the late-2010's in Metlakatla. Metlakatla's population peaked in 2015 at 1,661 people and the population fell by 5% since then (Figure 8).

Average Community Population Total by Year for CQE Communities



Percent Change in Average Community Population Per Year For CQE Communities

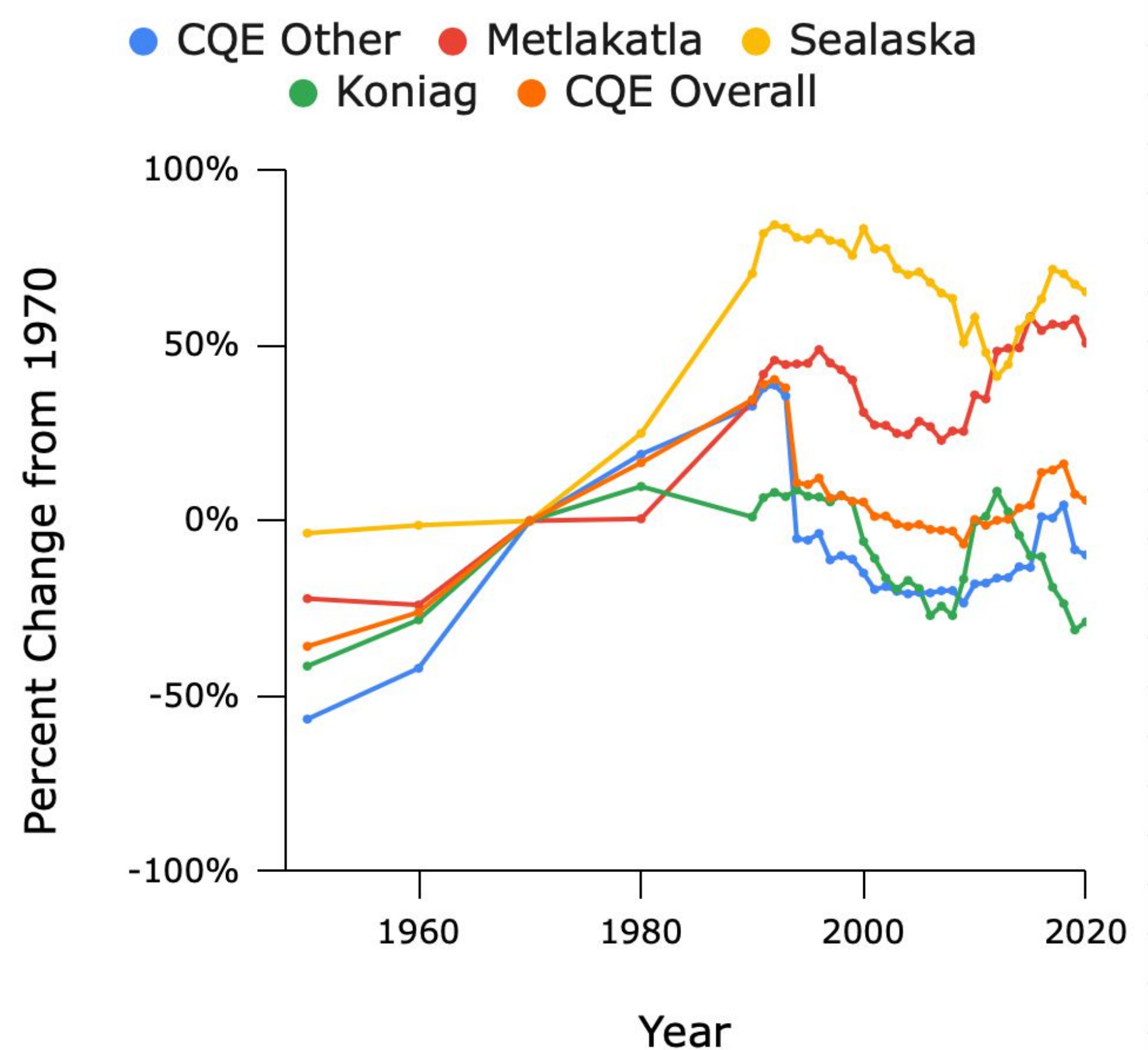


FIGURE 8

Source: U.S. Decennial Census, American Community Survey, Alaska Department of Labor These figures show changes in population from 1950 to 2020 for CQE Communities. In both figures the x-axis shows years. In the left figure, the y-axis represents the average community population total for the community groups. The right figure y-axis shows percent change in average population total from 1970.

Federal survey-based data on outcomes of income, unemployment, and poverty were not able to show statistically significant differences in these economic conditions over time. Administrative data on the employment rate (the percent of the population that are employed in the formal sector of the economy) is available, but for a more limited time period of 2000–2015. All groups on average have lower employment in 2015 than they did in 2000. Some of this decline is likely due to demographic change (overall the US and Alaska populations are aging). However, economically dynamic locations will tend to attract and keep workers.

Watson and Burke (2024) describe each of the aforementioned trends in detail, starting with changes in limited entry permit ownership and proceeding to discuss changes in broader economic conditions. Declines in participation, consolidation in ITQ ownership, declines in fleet capitalization all emerge as important fisheries outcomes. Beyond declines in population, broader socio-economic trends are more difficult to understand with statistical certainty because of limited data.

More Koniag respondents are familiar with the Community Quota Entity (CQE) program (28%) compared to Sealaska respondents (19%). Most respondents assess the program as having only minor success in bringing fishing opportunities back to their communities. Respondents noted that there have been substantial to moderate losses in villages in their regions of commercial fishing, cultural fishing practices, fishing knowledge, subsistence fishing opportunities, and youth engagement in fishing. Most respondents view the limited entry and IFQ programs as playing a moderate to primary role in these losses.





"We used to be people who fished. And now we don't have access to our resources located in our backyard."

- Survey Respondent





Conclusion

This survey research has demonstrated unequivocally that fishing is a foundational component of the traditional culture of the villages in the Koniag and Sealaska regions. As this and previous studies have demonstrated, this pronounced loss of fishing access has interrupted the reproduction of fishing livelihoods that has been the core of culture and economy in Gulf of Alaska villages for generations. Fisheries – mixed commercial and subsistence – have defined social and kin relationships and have been the foundation of identity, pride, and the model of family and village life. Until very recently, most families were engaged in commercial fisheries. Most have multigenerational ties to commercial fishing; however, now only a very small percentage (12-13%) have any current engagement in commercial fishing. Survey results show strong agreement that lack of fishing opportunities has been a major driver of village outmigration, villages are in a crisis and survival depends on fisheries access, villages in the Gulf of Alaska have suffered many losses of commercial fishing access, cultural fishing practices, fishing knowledge, subsistence fishing opportunities, and youth engagement in fishing. Survey respondents state that state and federal access limitation programs like the limited entry and individual fishing quota systems have played a significant role in these losses. Programs like the CQE program have had some small success but have not generated the changes necessary to restore fishing access to regional villages. The active and profitable Tribal fisheries in Metlakatla demonstrate that village youth still desire fishing engagements when the opportunities are there to participate. As these data and survey comments reveal there has been an enormous change in village culture and economy in just a couple of generations where fishing was the mainstay of culture and economy. Policy changes that provide for Indigenous, village, and youth access to fisheries are long overdue and much needed for positive futures for villages of the Gulf of Alaska.

**Háw'aa
Quyanaa
Gunalchéesh
T'oyaxsut 'nüüsm**



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