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4.5.5. Fishing Communities

For the purposes of fishing community assessment, a two-part approach was used. First, tables based on existing quantitative fishery information were developed to identify patterns of engagement in and dependence[1] on the relevant sectors of the UCI salmon drift gillnet fishery, i.e., the sectors most likely to be directly affected by one or more of the proposed action alternatives. This approach is consistent with the portion of the National Standard 8 guidelines that state:

> *To address the sustained participation of fishing communities that will be affected by management measures, the analysis should first identify affected fishing communities and then assess their differing levels of dependence on and engagement in the fishery being regulated* (50 CFR 600.345[2]).

The tabular information and accompanying narrative developed under this approach are presented in Section 4.5.5.1. There are, however, considerable limitations on the data that can be utilized for these purposes, based on confidentiality restrictions. A prime example of this is where a community is the site of one or two shoreside processors active in a given year. No information can be disclosed about the volume and/or value of landings in those communities. This, obviously, severely limits quantitative community level discussions of the potential impacts of the management alternatives being analyzed.

The second approach involved selecting a subset of Alaska communities participating in the UCI salmon drift gillnet fishery for characterization of the community context of the fishery to support subsequent analysis of the range, direction, and order of magnitude of potential social- and community-level impacts of the proposed alternatives. The communities engaged in the UCI salmon drift gillnet fishery are numerous and far-flung. Figure 1 shows the location Alaska communities engaged in the fishery through local ownership of one or more catcher vessels and/or the local operation of one or more shore-based processors that participated in the fishery any year 2009-2018. Figure 2 shows the location of Pacific Northwest communities engaged in the fishery through local ownership of one or more catcher vessels active in the fishery on an annual average basis over the period 2009-2018.

[1] Dependence on a fishery can be measured in multiple ways and is a complex concept with economic, social, and other dimensions. In the case of the referenced summary tables, the economic dimension of dependence is characterized simply as the proportional contribution of ex-vessel gross revenues (for catcher vessels) or first wholesale gross revenues (for processors) resulting from engagement in the relevant fishery relative to the overall ex-vessel gross revenues or first wholesale gross revenues generated by the catcher vessels or shore-based processors from their engagement in all species, gear, and area fisheries.

[2] The National Standard 8 guidelines referenced in this SIA, current as of January 1, 2020, are from the Electronic Code of Federal Regulations (CFR) Title 50, Chapter VI, Part 600, Subpart D, Section 600.345 (cited as 50 CFR 600.345) are available at https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=6b0acea089174af8594db02314f26914&mc=true&r=SECTION&n=se50.12.600_1345 accessed 2/4/20.

Figure 1 **Map of selected Alaska communities engaged in the UCI salmon drift gillnet fishery during the 2009-2018 period and adjacent North Pacific and International Pacific Halibut Commission Fisheries regulatory areas**

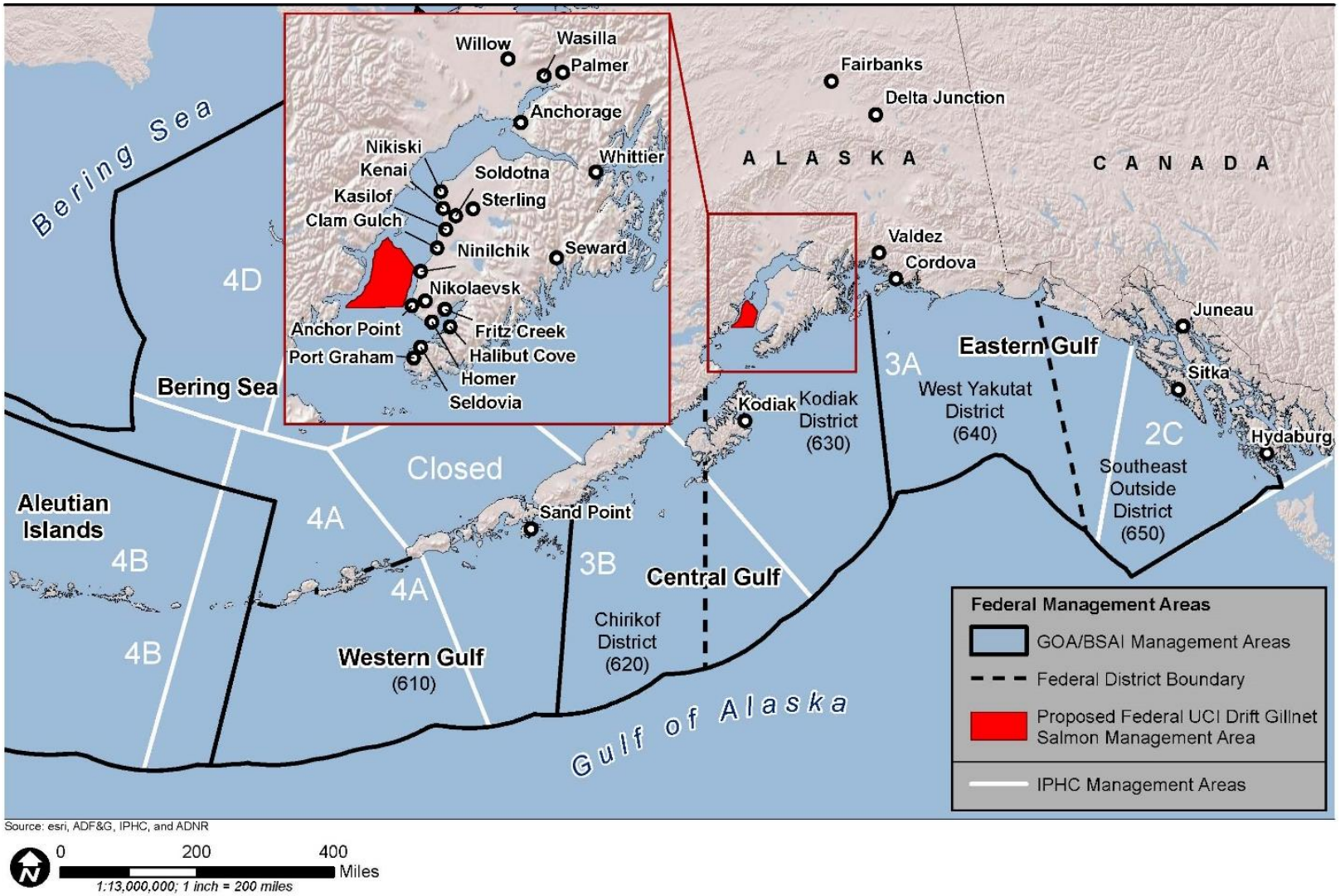
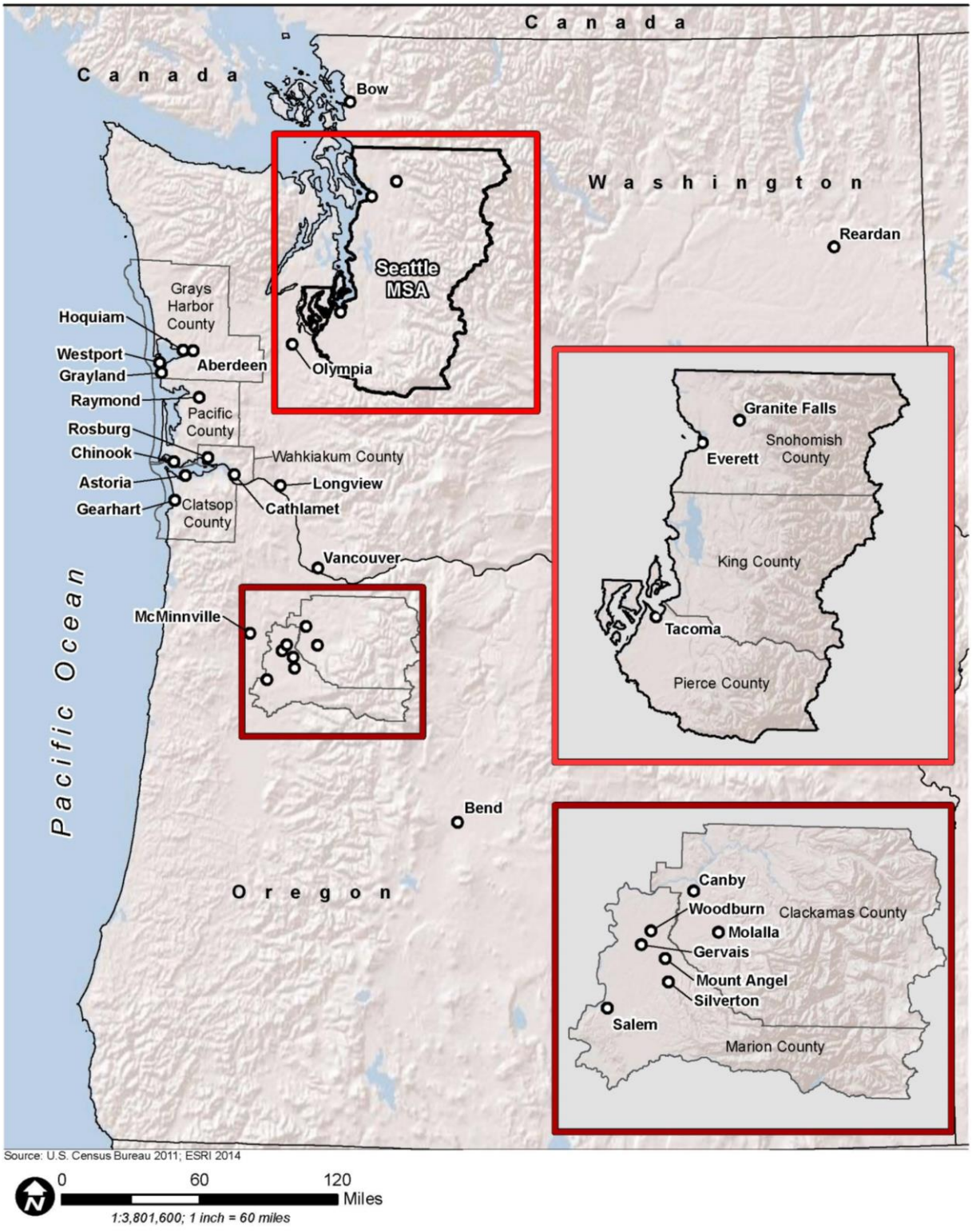


Figure 2 **Map of selected Washington and Oregon communities engaged in the UCI salmon drift gillnet fishery during the 2009-2018 period**



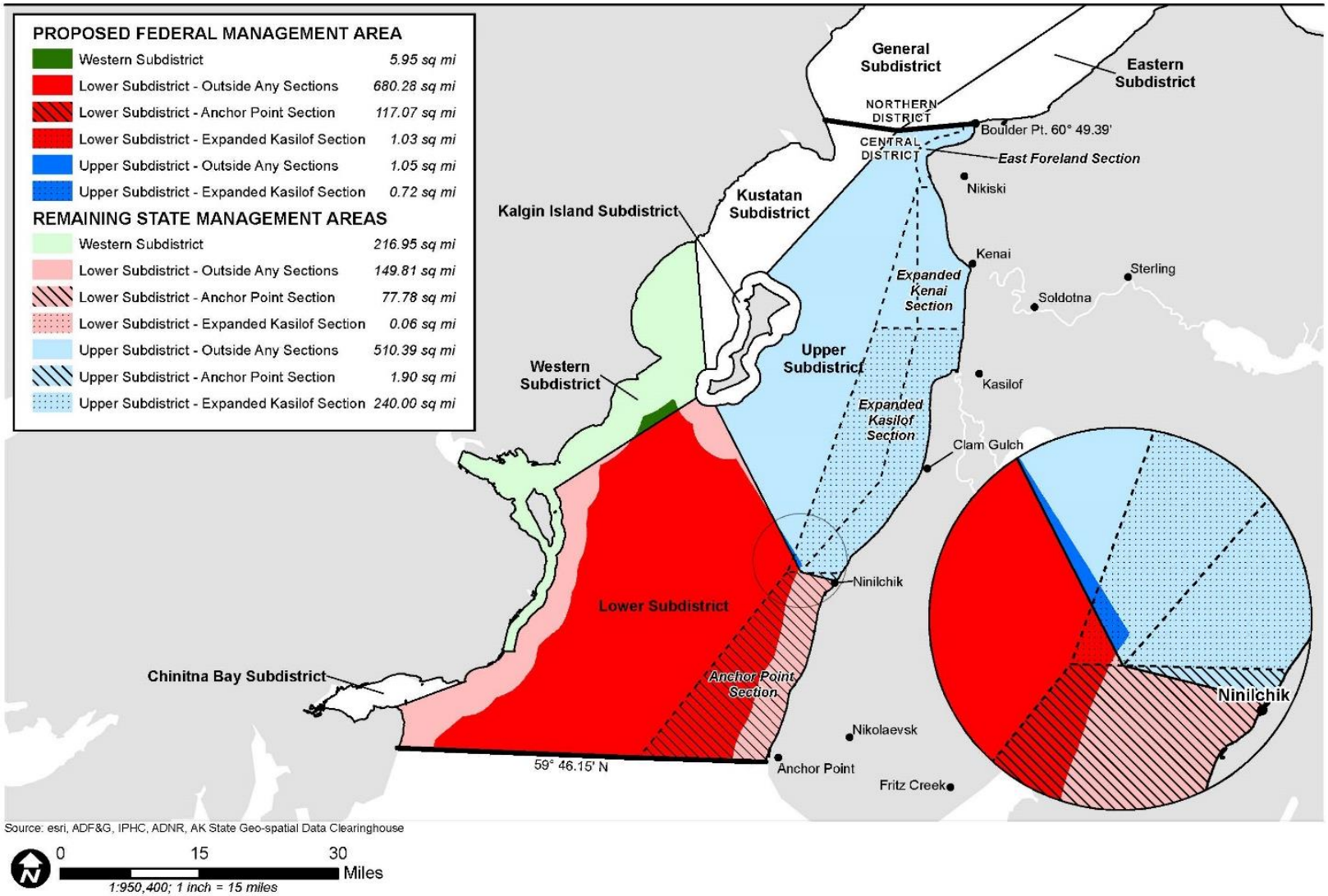
The approach of using a subset of communities rather than attempting characterization of all the communities in the region(s) involved in the fishery was chosen due to the practicalities of time and resource constraints. This is consistent with the portion of the National Standard 8 guidelines that state:

> *The best available data on the history, extent, and type of participation in these fishing communities in the fishery should be incorporated into the social and economic information presented in the FMP. The analysis does not have to contain an exhaustive listing of all communities that might fit the definition; a judgment can be made as to which are primarily affected* (50 CFR 600.345).

Communities (and types of potential community/social impacts) vary based upon the type of engagement of the individual community in the fishery, whether it is through being home to a portion of the catcher vessel fleet; being the location of shoreside processing; or being the location of fishery support sector businesses. In short, the second approach employed in this analysis uses the community or region as the frame of reference or unit of analysis (as opposed to the fishery sector as in the first approach). This approach examines, within the community or region, the local nature of engagement or dependence on the fishery in terms of the various sectors present in the community and the relationship of those sectors (in terms of size and composition, among other factors) to the rest of the local social and economic context. This approach then qualitatively provides a context for potential community impacts that may occur because of fishery management-associated changes to the locally present sectors in combination with other community-specific attributes and socioeconomic characteristics. The characterization of the relevant communities has been largely undertaken with existing information, supplemented with phone and email contact with a limited number of individuals.

Figure 3 shows the coincidence of the federal UCI drift gillnet salmon management area, as proposed under one of more of the action alternatives, with existing state UCI management area districts, subdistricts, and sections, and the location of communities in the immediate vicinity that were engaged in the UCI salmon drift gillnet fishery through local ownership of one or more catcher vessels and/or the local operation of one or more shore-based processors that participated in the fishery any year 2009-2018.

Figure 3 **Map of EEZ waters of Upper Cook Inlet, ADF&G management areas, and adjacent Alaska communities engaged in the UCI salmon drift gillnet fishery during the 2009-2018 period**



4.5.5.1. Quantitative Indicators of Community Fishery Engagement and Dependency

Within the quantitative characterization of fishery participation, several simplifying assumptions were made. For the purposes of this analysis, assignment of catcher vessels to a region or community has been made based upon ownership address information as listed in the Alaska Commercial Fisheries Entry Commission (CFEC) vessel registration files. Thus, some caution in the interpretation of this information is warranted. It is not unusual for vessels to have complex ownership structures involving more than one entity in more than one region. Further, the community of ownership address does not directly indicate where a vessel spends most of its time, purchases services, or hires its crew as, for example, some of the vessels with ownership addresses in the Pacific Northwest spend a great deal of time in Alaska ports and hire at least some crew members from these ports. The region or community of ownership address, however, does provide a rough indicator of the direction or nature of ownership ties (and a proxy for associated economic activity, as no existing datasets provide information on where BSAI catcher vessel earnings are spent), especially when patterns are viewed at the sector or vessel class level. Ownership location has further been chosen for this analysis as the link of vessels to communities rather than other indicators, such as vessel homeport information, based on previous NPFMC FMP social impact assessment experience (e.g., AECOM 2010) that has indicated the problematic nature of existing homeport data. For shore-based processors, regional or community designation was based on the operating location of the plant (rather than ownership address) to provide a relative indicator of the local level of fishery-related economic activity, which can also serve as a rough proxy for the relative level of associated employment and local government revenues. This is also consistent with established NPFMC FMP community/social impact assessment practice. *<< NOTE: Similarly, when relevant data are available, S03H permits will be assigned to communities based on permit ownership address. >>*

The sections below provide quantitative participation information, within the bounds of confidentiality restrictions, for the communities most directly engaged in and/or dependent upon relevant sectors within the UCI salmon drift gillnet fishery. Specifically, Sections 4.5.5.1.1 and 4.5.5.1.2 include a series of tables containing a range of quantitative information describing the distribution of sector-specific community engagement (or participation) in and dependency (or reliance) on the commercial UCI salmon drift gillnet fishery for the catcher vessel and shore-based processing sectors, respectively. *<< NOTE: Analogous tables and accompanying discussion for S03H permits will be presented in Section 4.5.5.1.3 when relevant data are available.>>* These detailed year-by-year, community-by-community tables focus on the most recent 10 years of data available (2009-2018). Longer term trends in landings by port (1992-2018) and cumulative ex-vessel gross revenues for the ten communities with the greatest number of S03H permit holders (1975-2018) are illustrated in figure format at the end of Sections 4.5.5.1.2 and 4.5.5.1.3, respectively.

4.5.5.1.1. Catcher Vessels

The following tables provide a series of quantitative indicators of sector engagement in and dependency on the UCI salmon drift gillnet fishery, by community and/or regional geography depending on data confidentiality restrictions, for UCI salmon drift gillnet vessels by community of ownership address.

Table 1 provides a count, by historic ownership address community[3] and year (2009-2018), of UCI salmon drift gillnet catcher vessels for all Alaska communities, all Washington communities, all Oregon communities, and a combined total for all communities outside the states of Alaska, Washington, and Oregon. Also shown are subtotals of groupings of communities that will be carried forward in subsequent tables to comply with fishery volume and value data confidentiality restrictions, while allowing the greatest degree of analytically meaningful disaggregation feasible. Also shown by community and

[3] "Historic" ownership address is defined as the ownership address for the vessel in the individual data years shown (as opposed to the most recent year ownership address of the vessel, if different).

groupings of communities are annual average counts and percentages, and the number of unique vessels participating over the 2009-2018 period. As shown, the largest component of fleet ownership during any given year is, by far, in the Kenai Peninsula Borough (on an average annual basis accounting for between 60 and 63 percent of all participating vessels and featuring 10 communities with five or more vessels active in the fishery on an annual average basis 2009-2018). The only communities outside of the Kenai Peninsula Borough annually averaging five or more UCI salmon drift gillnet vessels with local ownership addresses active in the fishery 2009-2018 were Anchorage and Wasilla, Alaska, and Astoria, Oregon.[4]

Table 1 UCI Salmon Drift Gillnet Catcher Vessels by Community of Vessel Historic Ownership Address, 2009-2018 (number of vessels).

Geography	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2009-2018 (number)	Annual Average 2009-2018 (percent)	Total Unique Vessels 2009-2018 (number)
ANCHOR POINT	10	8	13	12	7	8	8	8	4	4	8.2	1.91%	23
FRITZ CREEK	3	4	6	6	6	7	7	6	6	5	5.6	1.30%	10
HOMER	90	83	103	118	121	120	116	113	96	89	104.9	24.38%	197
KASILOF	25	21	24	23	25	27	26	27	27	23	24.8	5.76%	48
KENAI	43	41	46	52	55	51	50	50	37	38	46.3	10.76%	85
NIKISKI	10	8	8	8	10	12	11	10	13	11	10.1	2.35%	20
NIKOLAEVSK	6	6	6	9	12	12	12	10	11	11	9.5	2.21%	16
NINILCHIK	4	5	7	9	8	7	7	5	6	6	6.4	1.49%	12
SOLDOTNA	29	29	31	28	30	32	34	37	32	28	31.0	7.21%	64
STERLING	10	9	9	11	12	13	13	12	13	12	11.4	2.65%	21
Other KPB Communities - CLAM GULCH	2	2	1	1	1	1	1	1	1	2	1.3	0.30%	3
Other KPB Communities - HALIBUT COVE	3	2	2	2	2	2	2	2	2	2	2.1	0.49%	3
Other KPB Communities - PORT GRAHAM	0	0	0	2	2	2	2	3	2	2	1.5	0.35%	3
Other KPB Communities - SELDOVIA	2	2	3	3	2	4	3	4	4	3	3.0	0.70%	5
Other KPB Communities - SEWARD	1	1	1	1	0	0	0	0	0	0	0.4	0.09%	1
Subtotal, Other KPB Communiities	8	7	7	9	7	9	8	10	9	9	8.3	1.93%	15
Subtotal, All Kenai Peninsula Borough Commu	238	221	260	285	293	298	292	288	254	236	266.5	61.95%	437
ANCHORAGE	21	20	26	27	24	27	31	29	28	24	20.5	4.77%	53
DELTA JUNCTION	4	3	4	5	6	6	5	6	4	5	4.8	1.12%	8
WASILLA	12	9	9	12	14	12	10	11	11	12	11.2	2.60%	29
All Other AK Communities - CORDOVA	1	0	0	0	0	1	0	1	0	0	0.3	0.07%	3
All Other AK Communities - FAIRBANKS	0	0	0	0	0	0	0	1	1	1	0.3	0.07%	1
All Other AK Communities - HYDABURG	0	0	0	0	0	0	0	0	0	1	0.1	0.02%	1
All Other AK Communities - JUNEAU	1	0	0	1	3	3	3	3	2	1	1.7	0.40%	4
All Other AK Communities - KODIAK	3	3	4	4	5	5	4	3	1	2	3.4	0.79%	10
All Other AK Communities - PALMER	3	2	2	3	3	3	2	3	2	2	2.5	0.58%	7
All Other AK Communities - SAND POINT	0	0	0	1	0	0	0	0	0	0	0.1	0.02%	1
All Other AK Communities - SITKA	0	0	0	1	1	1	1	1	1	1	0.7	0.16%	1
All Other AK Communities - VALDEZ	1	1	1	0	0	0	0	0	0	0	0.3	0.07%	1
All Other AK Communities - WHITTIER	0	1	1	1	2	2	2	2	2	1	1.4	0.33%	2
All Other AK Communities - WILLOW	1	2	2	2	2	2	2	1	2	2	1.8	0.42%	3
Subtotal, All Other AK Communities	10	9	10	13	16	17	14	15	11	11	12.6	2.93%	34
Subtotal, All AK Communities Outside the KPB	47	41	49	57	60	62	60	61	54	52	54.3	12.62%	117
Alaska Total	285	262	309	342	353	360	352	349	308	288	320.8	74.57%	505

[4] Adding communities that round to five or more vessels active per year on an average annual basis 2009-2018 would expand the list to include Delta Junction, Alaska; the Seattle MSA (taken as a whole) and Cathlamet, Washington; and Salem, Oregon.

Table 1, Continued

Geography	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2009-2018 (number)	Annual Average 2009-2018 (percent)	Total Unique Vessels 2009-2018 (number)
ARLINGTON	0	0	0	0	0	0	1	2	2	2	0.7	0.16%	2
BLACK DIAMOND	0	0	0	0	0	0	0	1	1	1	0.3	0.07%	1
BUCKLEY	1	0	0	0	0	0	1	1	1	1	0.5	0.12%	2
EDMONDS	0	0	1	2	1	0	0	0	0	0	0.4	0.09%	2
EVERETT	1	1	2	1	1	1	1	1	1	1	1.1	0.26%	2
GIG HARBOR	1	1	1	1	1	1	1	0	0	0	0.7	0.16%	1
GRAHAM	0	0	0	0	1	1	1	0	0	0	0.3	0.07%	1
GRANITE FALLS	1	1	1	1	1	1	1	1	1	1	1.0	0.23%	1
MUKILTEO	1	1	1	1	1	1	1	0	1	1	0.9	0.21%	1
PUYALLUP	0	0	1	2	1	1	1	1	1	1	0.9	0.21%	2
SEATTLE	0	0	0	0	1	1	1	1	1	2	0.7	0.16%	2
SHORELINE	1	1	2	1	1	0	0	0	0	0	0.6	0.14%	2
SPANAWAY	0	0	0	0	0	0	0	0	0	1	0.1	0.02%	1
TACOMA	2	1	1	1	1	1	1	1	1	2	1.2	0.28%	3
UNIVERSITY PLACE	0	0	0	0	0	0	0	1	1	1	0.3	0.07%	1
Seattle MSA Subtotal	8	6	10	10	10	8	10	10	11	14	9.7	2.25%	21
ABERDEEN	1	1	2	3	3	3	3	2	3	3	2.4	0.56%	3
ELMA	2	2	2	0	0	0	0	0	0	0	0.6	0.14%	2
GRAYLAND	0	0	0	2	3	3	2	1	1	1	1.3	0.30%	3
HOQUIAM	2	2	2	1	1	1	1	1	1	1	1.3	0.30%	2
MCCLEARY	1	0	0	0	0	0	0	0	0	0	0.1	0.02%	1
WESTPORT	2	2	2	1	1	1	1	2	2	2	1.6	0.37%	3
Grays Harbor County WA Subtotal	8	7	8	7	8	8	7	6	7	7	7.3	1.70%	12
CHINOOK	1	1	1	2	2	2	2	2	0	0	1.3	0.30%	3
NASELLE	0	0	1	1	1	1	1	1	1	1	0.8	0.19%	1
RAYMOND	2	4	3	3	4	4	4	4	3	3	3.4	0.79%	5
Pacific County WA Subtotal	3	5	5	6	7	7	7	7	4	4	5.5	1.28%	9
CATHLAMET	8	6	6	6	5	4	4	3	3	3	4.8	1.12%	8
ROSBURG	0	0	2	2	2	2	1	1	1	0	1.1	0.26%	2
Wahkiakum WA County Subtotal	8	6	8	8	7	6	5	4	4	3	5.9	1.37%	10
AIRWAY HEIGHTS	0	0	0	0	0	0	1	1	0	0	0.2	0.05%	1
BOW	1	1	1	1	1	1	1	1	1	1	1.0	0.23%	1
COUPEVILLE	0	0	1	1	0	0	0	0	0	0	0.2	0.05%	1
FORD	0	0	0	0	0	0	0	0	1	0	0.1	0.02%	1
KENNEWICK	0	0	0	0	1	1	1	1	1	1	0.6	0.14%	1
LANGLEY	0	0	0	0	0	1	1	1	1	1	0.5	0.12%	1
LONGVIEW	2	1	1	1	1	1	1	1	1	1	1.1	0.26%	2
LYNDEN	0	0	3	1	0	0	0	0	0	0	0.4	0.09%	3
MOSES LAKE	1	0	0	0	0	0	0	0	0	0	0.1	0.02%	1
OAK HARBOR	1	1	1	1	1	1	1	1	1	0	0.9	0.21%	1
OLYMPIA	1	4	4	3	2	2	1	1	1	0	1.9	0.44%	5
PORT TOWNSEND	0	0	0	0	0	0	1	1	1	1	0.4	0.09%	1
REARDAN	1	1	2	2	2	2	0	0	0	0	1.0	0.23%	2
RIVERSIDE	0	0	0	0	0	1	0	0	0	0	0.1	0.02%	1
SEABECK	1	1	1	1	1	1	1	0	0	0	0.7	0.16%	1
VANCOUVER	1	1	1	1	1	1	1	1	1	1	1.0	0.23%	1
WOODLAND	0	1	1	0	0	0	0	0	0	0	0.2	0.05%	1
Other Washington Subtotal	9	11	16	12	10	12	10	9	9	6	10.4	2.42%	24
Washington Total	36	35	47	43	42	41	39	36	35	34	38.8	9.02%	67

Table 1, Continued

Geography	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2009-2018 (number)	Annual Average 2009-2018 (percent)	Total Unique Vessels 2009-2018 (number)
BORING	0	0	0	0	0	1	1	1	1	1	0.5	0.12%	1
CANBY	2	2	3	2	2	3	2	2	2	2	2.2	0.51%	5
MOLALLA	2	3	3	4	5	7	5	3	4	4	4.0	0.93%	9
MULINO	0	0	1	1	1	0	0	0	0	0	0.3	0.07%	1
OREGON CITY	1	1	0	0	0	0	0	0	0	0	0.2	0.05%	1
MILWAUKIE	1	1	1	0	0	0	0	0	0	0	0.3	0.07%	1
Clackamas County OR Subtotal	6	7	8	7	8	11	8	6	7	7	7.5	1.74%	15
ASTORIA	8	4	7	10	8	8	5	7	4	3	6.4	1.49%	13
GEARHART	1	1	1	1	1	1	1	1	1	1	1.0	0.23%	1
WARRENTON	1	1	1	1	1	1	1	0	1	1	0.9	0.21%	1
Clatsop County OR Subtotal	10	6	9	12	10	10	7	8	6	5	8.3	1.93%	15
AURORA	0	1	1	1	1	0	0	0	0	0	0.4	0.09%	1
GERVAIS	2	2	2	2	2	1	2	1	1	0	1.5	0.35%	2
HUBBARD	0	0	0	1	1	1	1	1	1	1	0.7	0.16%	1
KEIZER	0	0	0	0	0	0	0	0	0	1	0.1	0.02%	1
MOUNT ANGEL	1	1	1	1	1	1	1	1	1	1	1.0	0.23%	1
SALEM	4	4	5	6	6	5	4	4	4	4	4.6	1.07%	6
SILVERTON	3	3	3	3	4	4	3	3	3	3	3.2	0.74%	4
WOODBURN	3	2	3	4	1	3	5	4	4	3	3.2	0.74%	10
Marion County OR Subtotal	13	13	15	18	16	15	16	14	14	13	14.7	3.42%	26
BEND	1	1	1	1	1	1	1	1	1	1	1.0	0.23%	1
GRANTS PASS	0	0	0	0	0	0	0	0	0	1	0.1	0.02%	1
MCMINNVILLE	1	1	1	1	1	1	1	1	1	1	1.0	0.23%	1
PENDLETON	1	0	0	0	0	0	0	0	0	0	0.1	0.02%	1
PORTLAND	1	1	1	1	1	1	1	0	1	1	0.9	0.21%	1
TUALATIN	1	1	0	0	0	0	0	0	0	0	0.2	0.05%	1
VALE	0	0	0	0	1	0	0	0	0	0	0.1	0.02%	1
Other Oregon Subtotal	5	4	3	3	4	3	3	2	3	4	3.4	0.79%	7
Oregon Total	34	30	35	40	38	39	34	30	30	30	34	7.90%	59
Other States	34	27	36	36	41	42	42	39	33	36	36.6	8.51%	74
Grand Total	**389**	**354**	**427**	**461**	**474**	**482**	**467**	**454**	**406**	**388**	**430.2**	**100.00%**	**705**

*Seattle MSA includes all communities in King, Pierce, and Snohomish counties.

Note: Due to catcher vessel ownerhship movement between communities over the years shown, total unique catcher vessels per community may not sum to state or grand totals.

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 2 provides UCI salmon drift gillnet catcher vessel ex-vessel gross revenue information by community of historic ownership address and year (2009-2018) to the extent possible within data confidentiality restrictions, along with annual averages in terms of dollars and percentages. This table clearly shows the concentration of the UCI salmon drift gillnet catcher vessel fleet ex-vessel annual average values in Alaska in general (approximately 75 percent) and the Kenai Peninsula Borough communities of Homer and Kenai in particular (together accounting for approximately 39 percent of all ex-vessel revenues and over half of the Alaska total). Also as shown in this table, there is a relatively even distribution of annual average ex-vessel revenues among vessels from Washington (8.5 percent), Oregon (7.9 percent), and all states other than Alaska, Washington and Oregon combined (8.1 percent).

Table 3 provides information on UCI salmon drift gillnet catcher vessel dependency on the UCI salmon drift gillnet fishery itself compared to all other areas, gear types, and species fished by those same vessels as measured by ex-vessel gross revenues on an average annual basis 2009-2018. As shown, dependency on UCI drift gillnet-caught salmon, as measured in percentage of total ex-vessel revenues, ranges between approximately 53 percent for catcher vessels with Alaska ownership addresses to roughly 57 percent for catcher vessels with Washington ownership addresses to roughly 66 percent for catcher vessels with

Oregon ownership addresses. Apparent, however, is the wide variation between levels of dependency of vessels owned in different communities. For example, UCI salmon drift gillnet vessels with ownership addresses in the Kenai Peninsula Borough communities of Kasilof, Kenai, and Nikiski show an approximately 95 percent or greater dependency on this one fishery, while vessels with ownership addresses in the communities of Anchor Point, Fritz Creek, Homer, and Sterling, within the same Borough, are in the 34 to 39 percent range. The estimated dependency on UCI drift gillnet-caught salmon coming from the proposed federal UCI drift gillnet salmon management area alone has been calculated as approximately 49 percent of the total catch on an aggregate basis over the years 2009-2018, which is also shown in the table.

Table 4 provides information on "community catcher vessel fleet" dependency on the UCI salmon drift gillnet fishery compared to all other areas, gear types, and species fished by the "community catcher vessel fleet" vessels to the extent possible given data confidentiality restrictions (with the "community catcher vessel fleet" defined as all commercial fishing catcher vessels with ownership addresses in the communities with at least one catcher vessel active in the UCI salmon drift gillnet fishery during the period 2009-2018, not just vessels that participated in the UCI salmon drift gillnet fishery itself). As shown, UCI drift gillnet-caught salmon accounted for less than 10 percent of the "community catcher vessel fleet" total ex-vessel gross revenues for quite a few communities, but accounted for on average between 20 and 40 percent of "community catcher vessel fleet" ex-vessel gross revenues for six Kenai Peninsula Borough communities (Kasilof, Kenai, Nikolaevsk, Ninilchik, Soldotna, and Sterling), and over 60 percent of all ex-vessel gross revenues for the locally owned community fleet of Nikiski. The estimated dependency on UCI drift gillnet-caught salmon coming from the proposed federal UCI drift gillnet salmon management area alone has been calculated as approximately 49 percent of the total catch on an aggregate basis over the years 2009-2018, which is also shown in the table.

Table 2 **UCI Salmon Drift Gillnet Catcher Vessel Ex-Vessel Gross Revenues, UCI Drift Gillnet-Caught Salmon Only (in 2018 dollars), by Community of Vessel Historic Ownership Address, 2009-2018.**

Geography	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2009-2018 (number)	Annual Average 2009-2018 (percent)
ANCHOR POINT	285,213	463,869	918,585	627,371	465,287	294,575	178,315	209,707	116,341	46,447	360,571	1.9%
FRITZ CREEK	77,480	233,847	435,099	420,287	352,018	291,543	136,457	142,558	241,213	95,111	242,561	1.3%
HOMER	2,575,794	5,843,275	9,337,735	9,637,068	8,445,414	6,672,872	3,398,581	3,549,705	3,901,992	1,688,556	5,505,099	28.6%
KASILOF	693,981	1,390,246	2,129,762	1,671,443	1,343,601	1,170,295	555,666	659,207	783,868	368,714	1,076,678	5.6%
KENAI	1,150,245	2,707,418	3,398,929	3,402,469	2,730,089	2,319,603	1,043,724	1,183,805	1,012,452	565,772	1,951,451	10.2%
NIKISKI	231,501	381,114	712,150	652,420	582,893	541,784	210,154	376,937	370,366	220,607	427,993	2.2%
NIKOLAEVSK	142,837	427,921	577,081	837,832	665,016	698,023	292,409	280,339	387,630	222,872	453,196	2.4%
NINILCHIK	66,734	296,402	467,169	537,563	421,437	314,257	138,013	151,754	207,267	112,121	271,272	1.4%
SOLDOTNA	653,905	1,467,090	2,130,828	1,789,051	1,528,910	1,474,464	709,941	891,409	886,893	489,442	1,202,193	6.3%
STERLING	195,058	476,117	552,194	692,395	617,360	521,178	254,723	260,383	286,472	190,926	404,681	2.1%
OTHER KPB COMMUNITIES	192,181	476,426	681,554	615,186	506,387	530,636	217,311	277,459	286,248	178,984	396,237	2.1%
Subotal, KPB Communties Only	**6,264,930**	**14,163,726**	**21,341,085**	**20,883,085**	**17,658,412**	**14,829,231**	**7,135,294**	**7,983,263**	**8,480,742**	**4,179,552**	**12,291,932**	**64.0%**
ANCHORAGE	493,120	1,145,396	1,764,624	1,800,866	1,216,430	1,145,815	496,930	663,011	670,966	387,728	978,489	5.1%
DELTA JUNCTION	113,911	237,127	463,230	437,809	411,626	276,555	134,869	171,185	183,486	75,131	250,493	1.3%
WASILLA	215,301	553,157	703,439	876,103	885,235	592,032	240,500	320,121	252,221	150,900	478,901	2.5%
ALL OTHER AK COMMUNITIES	280,256	531,613	727,989	847,554	823,017	797,279	283,956	348,955	341,177	164,095	514,589	2.7%
Subtotal, AK Outside the KPB	**1,102,588**	**2,467,293**	**3,659,283**	**3,962,332**	**3,336,307**	**2,811,681**	**1,156,254**	**1,503,271**	**1,447,850**	**777,854**	**2,222,471**	**11.6%**
Alaska Total	**7,367,518**	**16,631,019**	**25,000,368**	**24,845,417**	**20,994,719**	**17,640,912**	**8,291,549**	**9,486,534**	**9,928,592**	**4,957,406**	**14,514,403**	**75.5%**
Seattle MSA, WA*	112,430	287,467	643,382	806,950	499,666	373,948	164,394	246,727	249,062	216,076	360,010	1.9%
Grays Harbor County WA	167,133	441,150	497,781	539,815	421,358	345,507	95,431	154,136	144,890	120,371	292,757	1.5%
Pacific County WA	87,500	366,854	398,956	447,424	397,724	404,734	108,253	230,577	113,843	78,023	263,389	1.4%
Wahkiakum County WA	163,525	352,909	531,931	485,889	247,596	164,792	69,777	79,661	65,654	45,692	220,743	1.1%
All Other Washington	172,942	632,131	1,200,180	887,907	534,821	579,712	243,525	311,371	240,707	119,334	492,263	2.6%
Washington Total	**703,531**	**2,080,510**	**3,272,229**	**3,167,987**	**2,101,165**	**1,868,692**	**681,381**	**1,022,472**	**814,156**	**579,494**	**1,629,162**	**8.5%**
Clackamas County OR	210,923	592,235	1,045,636	903,580	740,397	645,153	186,337		212,268	127,511		
Clatsop County OR	157,978	270,432	609,078	861,791	493,139	398,262	78,960	140,699	72,463	51,922	313,472	1.6%
Marion County OR	314,795	753,809	1,191,085	1,205,782	814,682	610,608	329,484	299,759	322,380	138,680	598,106	3.1%
All Other Oregon	99,003	255,602	200,142	195,180	168,985	130,953	53,338		60,485	59,099		
Oregon Total	**782,698**	**1,872,077**	**3,045,940**	**3,166,335**	**2,217,203**	**1,784,976**	**648,119**	**639,500**	**667,595**	**377,212**	**1,520,166**	**7.9%**
Other States	**706,007**	**1,615,641**	**2,908,851**	**2,674,709**	**2,133,091**	**2,091,268**	**853,147**	**1,093,478**	**783,005**	**655,478**	**1,551,467**	**8.1%**
Grand Total	**9,559,753**	**22,199,247**	**34,227,388**	**33,854,446**	**27,446,178**	**23,385,849**	**10,474,195**	**12,241,984**	**12,193,349**	**6,569,591**	**19,215,198**	**100.0%**

*Seattle MSA includes all communities in King, Pierce, and Snohomish counties.

Note: Due to catcher vessel ownerhship movement between communities over the years shown, total unique catcher vessels per community may not sum to state or grand totals.

Red cells indicate confidential data or data suppressed to protect confidential data in other cells.

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 3 UCI Salmon Drift Gillnet Catcher Vessel Ex-Vessel Gross Revenue Diversification by Community of Historic Ownership Address, All Communities, 2009-2018 (2018 dollars).

Geography	Annual Average Number of UCI Drift Gillnet Salmon CVs 2009-2018	UCI Salmon Drift Gillnet CVs Annual Average Ex-Vessel Gross Revenues from ALL UCI Drift Gillnet-Caught Salmon 2009-2018	UCI Drift Gillnet Salmon CVs Annual Average Ex-Vessel Gross Revenues from Estimated EEZ UCI Drift Gillnet- Caught Salmon Only 2009-2018*	UCI Salmon Drift Gillnet CVs Annual Average Total Ex-Vessel Gross Revenues from All Area, Gear, and Species Fisheries 2009-2018	UCI Salmon Drift Gillnet CVs Ex-Vessel Gross Revenue from ALL UCI Drift Gillnet-Caught Salmon as a Percentage of Total Ex-Vessel Gross Revenue Annual Average 2009-2018	UCI Salmon Drift Gillnet CVs Ex-Vessel Gross Revenue from Estimated EEZ UCI Drift Gillnet-Caught Salmon Only as a Percentage of Total Ex-Vessel Gross Revenue Annual Average 2009-2018*
ANCHOR POINT	8.2	360,571	176,680	1,065,051	33.9%	16.6%
FRITZ CREEK	5.6	242,561	118,855	620,795	39.1%	19.1%
HOMER	104.9	5,505,099	2,697,499	14,237,555	38.7%	18.9%
KASILOF	24.8	1,076,678	527,572	1,106,088	97.3%	47.7%
KENAI	46.3	1,951,451	956,211	2,064,872	94.5%	46.3%
NIKISKI	10.1	427,993	209,716	434,206	98.6%	48.3%
NIKOLAEVSK	9.5	453,196	222,066	616,257	73.5%	36.0%
NINILCHIK	6.4	271,272	132,923	486,368	55.8%	27.3%
SOLDOTNA	31.0	1,202,193	589,075	1,415,258	84.9%	41.6%
STERLING	11.4	404,681	198,293	1,078,462	37.5%	18.4%
OTHER KPB COMMUNITIES	8.3	396,237	194,156	1,153,071	34.4%	16.8%
Subtotal, KPB Communities Only	266.5	12,291,932	6,023,047	23,845,766	51.5%	25.3%
ANCHORAGE	20.5	387,728	189,986	1,287,321	30.1%	14.8%
DELTA JUNCTION	4.8	75,131	36,814	843,740	8.9%	4.4%
WASILLA	11.2	150,900	73,941	591,735	25.5%	12.5%
ALL OTHER AK COMMUNITIES	12.6	164,095	80,407	1,100,413	14.9%	7.3%
Subtotal, AK Outside the KPB	54.3	2,222,471	1,089,011	3,823,209	58.1%	28.5%
Alaska Total	320.8	14,514,403	7,112,058	27,668,976	52.5%	25.7%
Seattle MSA, WA	9.7	360,010	176,405	1,238,878	29.1%	14.2%
Grays Harbor County WA	7.3	292,757	143,451	293,201	99.8%	48.9%
Pacific County WA	5.5	263,389	129,061	402,336	65.5%	32.1%
Wahkiakum County WA	5.9	220,743	108,164	220,743	100.0%	49.0%
All Other Washington	10.4	492,263	241,209	713,948	68.9%	33.8%
Washington Total	38.8	1,629,162	798,289	2,869,105	56.8%	27.8%
Clackamas County OR	7.5	482,039	236,199	930,589	51.8%	25.4%
Clatsop County OR	8.3	313,472	153,601	313,472	100.0%	49.0%
Marion County OR	14.7	598,106	293,072	917,836	65.2%	31.9%
All Other Oregon	3.4	126,548	62,008	126,548	100.0%	49.0%
Oregon Total	34.0	1,520,166	744,881	2,288,445	66.4%	32.5%
Other States	36.6	1,551,467	760,219	35,113,727	4.4%	2.2%
Grand Total	**430.2**	**19,215,198**	**9,415,447**	**65,071,148**	**29.5%**	**14.5%**

*Estimated on an estimated aggregate average 51 percent state waters/49 percent federal EEZ waters split over the period 2009-2018.
Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 4 All Catcher Vessel Ex-Vessel Gross Revenue Diversification by Community of Vessel Historic Ownership Address (for all communities with at least one catcher vessel active in the UCI salmon drift gillnet fishery), 2009-2018 (2018 dollars).

Geography	Annual Average Number of UCI Salmon Drift Gillnet CVs 2009-2018	Annual Average Number of All Commercial Fishing CVs in those Same Communities (the "Community CV Fleet") 2009-2018	UCI Salmon Drift Gillnet CVs Annual Average Ex-Vessel Gross Revenues from ALL UCI Drift Gillnet Salmon 2009-2018	UCI Salmon Drift Gillnet CVs Annual Average Ex-Vessel Gross Revenues from Estimated EEZ UCI Drift Gillnet-Caught Salmon Only 2009-2018*	All Commercial Fishing CVs Annual Average Total Ex-Vessel Gross Revenues from All Areas, Gears, and Species Fisheries 2009-2018	All Commercial Fishing CVs Ex-Vessel Gross Revenue from ALL UCI Drift Gillnet-Caught Salmon as a Percentage of Total Ex-Vessel Gross Revenue Annual Average 2009-2018	All Commercial Fishing CVs Ex-Vessel Gross Revenue from Estimated EEZ UCI Drift Gillnet-Caught Salmon Only as a Percentage of Total Ex-Vessel Gross Revenue Annual Average 2009-2018*
ANCHOR POINT	8.2	18.7	360,571	176,680	3,193,566	11.3%	5.5%
FRITZ CREEK	5.6	10.5	242,561	118,855	2,031,163	11.9%	5.9%
HOMER	104.9	375.7	5,505,099	2,697,499	89,867,847	6.1%	3.0%
KASILOF	24.8	38.9	1,076,678	527,572	3,453,102	31.2%	15.3%
KENAI	46.3	62.4	1,951,451	956,211	4,855,029	40.2%	19.7%
NIKISKI	10.1	13.9	427,993	209,716	699,537	61.2%	30.0%
NIKOLAEVSK	9.5	13.1	453,196	222,066	1,896,016	23.9%	11.7%
NINILCHIK	6.4	12.2	271,272	132,923	852,359	31.8%	15.6%
SOLDOTNA	31.0	50.4	1,202,193	589,075	3,756,218	32.0%	15.7%
STERLING	11.4	15.9	404,681	198,293	1,943,479	20.8%	10.2%
OTHER KPB COMMUNITIES	8.3	38.9	396,237	194,156	8,870,910	4.5%	2.2%
Subtotal, KPB Communities Only	266.5	650.6	12,291,932	6,023,047	121,419,226	10.1%	5.0%
ANCHORAGE	20.5	237.9	387,728	189,986	65,775,468	0.6%	0.3%
DELTA JUNCTION	4.8	14.8	75,131	36,814	3,485,546	2.2%	1.1%
WASILLA	11.2	81.4	150,900	73,941	14,760,615	1.0%	0.5%
ALL OTHER AK COMMUNITIES	12.6	822.2	164,095	80,407	197,420,910	0.1%	0.0%
Subtotal, AK Outside the KPB	54.3	1156.3	2,222,471	1,089,011	281,442,539	0.8%	0.4%
Alaska Total	320.8	1806.9	14,514,403	7,112,058	402,861,765	3.6%	1.8%
Seattle MSA, WA	9.7	247.5	360,010	176,405	227,862,291	0.2%	0.1%
Grays Harbor County WA	7.3	31	292,757	143,451	3,825,882	7.7%	3.7%
Pacific County WA	5.5	26.2	263,389	129,061	6,011,852	4.4%	2.1%
Wahkiakum County WA	5.9	17.4	220,743	108,164	1,307,785	16.9%	8.3%
All Other Washington	10.4	65.7	492,263	241,209	11,580,978	4.3%	2.1%
Washington Total	38.8	387.8	1,629,162	798,289	250,588,788	0.7%	0.3%
Clackamas County OR	7.5	22.3	482,039	236,199	2,821,397	17.1%	8.4%
Clatsop County OR	8.3	42.6	313,472	153,601	5,101,644	6.1%	3.0%
Marion County OR	14.7	31	598,106	293,072	2,925,134	20.4%	10.0%
All Other Oregon	3.4	16.2	126,548	62,008	5,077,036	2.5%	1.2%
Oregon Total	34.0	112.1	1,520,166	744,881	15,925,210	9.5%	4.7%
Other States	36.6	43.4	1,551,467	760,219	2,560,214	60.6%	29.7%
Grand Total	**430.2**	**2350.2**	**19,215,198**	**9,415,447**	**671,935,977**	**2.9%**	**1.4%**

*Estimated on an estimated aggregate average 51 percent state waters/49 percent federal EEZ waters split over the period 2009-2018.
Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

4.5.5.1.2. Shore-Based Processors

The following tables provide a series of quantitative indicators of engagement in and dependency on deliveries from catcher vessels in the UCI salmon drift gillnet fishery, by community and/or regional geography of operation depending on data confidentiality restrictions, for shore-based processors operating in Alaska, as noted in the following paragraphs. Overall community shore-based processor dependency on UCI drift gillnet-caught salmon deliveries is also shown to the extent possible within data confidentiality restrictions.

Table 5 provides information on the distribution of shore-based processors in Alaska communities that accepted UCI drift gillnet-caught salmon deliveries in the period 2009-2018. For the purposes of this analysis, shore-based UCI salmon drift gillnet processors are defined as those shore-based entities (as identified by F_ID [intent to operate] and SBPR [shore-based processor][5] codes in AKFIN data) accepting catcher vessel deliveries of UCI drift gillnet-caught salmon. As shown, a total of seven Alaska communities were the location of UCI salmon drift gillnet shore-based processors that accepted relevant deliveries over this time period, but three of those communities averaged less than one shore-based processor active in the fishery on an annual average basis 2009-2018 (Nikiski, Ninilchik, and Soldotna). Of the other four communities, one (Seward) had one processor active in the fishery each year and one (Anchorage) had one processor active in eight out of the 10 years in the period. The remaining two communities Homer and Kenai had multiple processors active in the fishery each year 2009-2018, with the exception of Homer in 2018 when only one processor was active in the fishery. With the exception of Anchorage, all communities with shore-based processors active in the fishery 2009-2018 were located within the Kenai Peninsula Borough.

Table 5 Shore-Based Processors in Alaska Accepting UCI Drift Gillnet-Caught Salmon Deliveries, by Community of Operation, 2009-2018 (number of processors).

Community	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2009-2018 (number)	Annual Average 2009-2018 (percent)	Unique SBPRs 2009-2018 (number)
Anchorage	1	1	1	1	1	1	1	1	2	3	1.3	11.02%	5
Homer	3	5	4	3	4	3	2	3	3	1	3.1	26.27%	7
Kenai	7	6	5	5	5	5	7	4	4	3	5.1	43.22%	11
Nikiski	1	1	0	0	0	0	0	0	0	0	0.2	1.69%	1
Ninilchik	1	0	0	0	1	0	0	1	0	1	0.4	3.39%	2
Seward	1	1	1	1	1	1	1	1	1	1	1.0	8.47%	1
Soldotna	1	1	1	0	1	1	0	0	1	1	0.7	5.93%	2
Grand Total	**15**	**15**	**12**	**10**	**13**	**11**	**11**	**10**	**11**	**10**	**11.8**	**100.00%**	**29**

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 6 provides information on the ex-vessel gross payments for UCI drift gillnet-caught salmon deliveries to shore-based processors by community of processor operation and year (2009-2018) to the extent possible within data confidentiality restrictions. As shown, data can be provided for every year for one community only (Kenai) and for only for one other community (Homer) for at least some years. Readily apparent, however, is the concentration of processing of UCI drift gillnet-caught salmon in Kenai which alone accounted for about 63 percent of all ex-vessel gross payments on an annual average basis through the period 2009-2018. While no information can be disclosed for any year for the individual communities of Anchorage, Nikiski, Ninilchik, Seward, and Soldotna (with the potential exception of Anchorage in 2018), as a group these communities accounted for about 63 percent of all ex-vessel gross payments on an annual average basis through the period 2009-2018, with the greatest continuity of processing engagement occurring in Seward, where one and the same shore-based processing plant was

[5] "SBPR" is used as an abbreviation for "shore-based processor(s)" in tables (only) in this SIA.

engaged in the fishery each year 2009-2018, and in Anchorage, where at least one shore-based processor participated in the fishery every year and a total of five different entities did so over the period 2009-2019. Homer, though having multiple shore-based processors participate in the fishery all but one year (2018) over the period 2009-2018 accounted for less than two percent of annual average ex-vessel gross payments for UCI drift gillnet-caught salmon over these years.

Table 6 Shore-Based Processor Ex-Vessel Gross Payments for UCI Drift Gillnet-Caught Salmon, by Community of Processor Operation, 2009-2018 (in 2018 dollars).

Community	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2009-2018 (dollars)	Annual Average 2009-2018 (percent)
Homer	35,512	412,315	595,466		423,352	339,432		174,500	280,186		323,585	1.69%
Kenai	4,605,367	11,959,556	22,582,837	21,367,665	17,408,096	15,638,845	6,976,748	8,123,207	7,942,530	3,028,913	11,963,377	62.58%
All Other Communities	4,854,524	9,688,618	10,976,333		9,463,196	7,281,655		3,869,069	3,841,557		6,828,918	35.72%
Grand Total	**9,495,403**	**22,060,490**	**34,154,636**	**33,791,213**	**27,294,644**	**23,259,932**	**10,387,419**	**12,166,776**	**12,064,272**	**6,484,012**	**19,115,880**	**100.00%**

Red cells indicate confidential data or data suppressed to protect confidential data in other cells.

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 7 provides information on average annual dependency of shore-based processors engaged in the processing of UCI drift gillnet-caught salmon on UCI drift gillnet-caught salmon deliveries alone compared to all area, gear, and species fisheries landings processed by those same processors for the years 2009-2018, as measured in relative ex-vessel gross payments for landings. As shown, deliveries of UCI drift gillnet-caught salmon accounted for approximately 35 percent of the combined ex-vessel value paid Kenai UCI drift gillnet-caught salmon processors for all deliveries of all area, gear, and species fisheries over that period to those same processors. The analogous figure for Homer shore-based UCI drift gillnet-caught salmon processors was two percent; for shore-based UCI drift gillnet salmon-caught processors in all communities other than Kenai and Homer combined was approximately 13 percent. The estimated dependency on landings of UCI drift gillnet-caught salmon coming from the proposed federal UCI drift gillnet salmon management area alone has been calculated as approximately 49 percent of the total catch on an aggregate basis over the years 2009-2018, which is also shown in the table.

Table 7 Shore-Based Processors in Alaska Accepting UCI Drift Gillnet-Caught Salmon Deliveries Ex-Vessel Gross Payments Diversity, by Community, 2009-2018 (millions of 2018 dollars).

Geography	Annual Average Number of UCI Drift Gillnet Salmon SBPRs 2009-2018	UCI Drift Gillnet Salmon SBPRs Annual Average Ex-Vessel Gross Payments for ALL UCI Drift Gillnet-Caught Salmon 2009-2018)	UCI Drift Gillnet Salmon SBPRs Annual Average Ex-Vessel Gross Payments for Estimated EEZ UCI Drift Gillnet-Caught Salmon Only 2009-2018*	UCI Drift Gillnet Salmon SBPRs Annual Average Ex-Vessel Gross Payments for All Area, Gear, and Species Fisheries 2009-2018	UCI Drift Gillnet Salmon SBPRs Ex-Vessel Gross Payments for ALL UCI Drift Gillnet-Caught Salmon as a Percentage of Total Ex-Vessel Gross Payments Annual Average 2009-2018	UCI Drift Gillnet Salmon SBPRs Ex-Vessel Gross Paymemts for Estimated EEZ UCI Drift Gillnet-Caught Salmon Only as a Percentage of Total Ex-Vessel Gross Payments Annual Average 2009-2018*
Homer	3.1	$0.32	$0.16	$16.10	2.0%	1.0%
Kenai	5.1	$11.96	$5.86	$34.19	35.0%	17.1%
All Other Communities	3.6	$6.83	$3.35	$51.29	13.3%	6.5%
Grand Total	**11.8**	**$19.12**	**$9.37**	**$101.58**	**18.8%**	**9.2%**

*Estimated on an estimated aggregate average 51 percent state waters/49 percent federal EEZ waters split over the period 2009-2018.

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Table 8 provides information on average annual total shore-based processor dependency (all shore-based processors in the communities that had at least one UCI drift gillnet-caught salmon processor, i.e., the entire "community processing sector," not just those shore-based processors that accepted relevant UCI drift gillnet-caught salmon deliveries) on UCI drift gillnet-caught salmon compared to all area and species fishery landings processed by all processors for the years 2009-2018, within the constraints of confidentiality restrictions. As shown, for 2009-2018, UCI drift gillnet-caught salmon deliveries ex-vessel gross payments accounted for about 34 percent of all shore-based processor ex-vessel gross payments for

all processors present in the community combined. The analogous figure for Homer was two percent and for all communities other than Kenai and Homer combined was six percent. The estimated dependency on landings of UCI drift gillnet-caught salmon coming from the proposed federal UCI drift gillnet salmon management area alone has been calculated as approximately 49 percent of the total catch on an aggregate basis over the years 2009-2018, which is also shown in the table.

Table 8 All Areas and Species Ex-vessel Gross Payments Diversity by Community of Operation for All Shore-Based Processors (for Alaska communities with at least one SBPR accepting UCI drift gillnet-caught salmon deliveries) , 2009-2018 (millions of 2018 dollars).

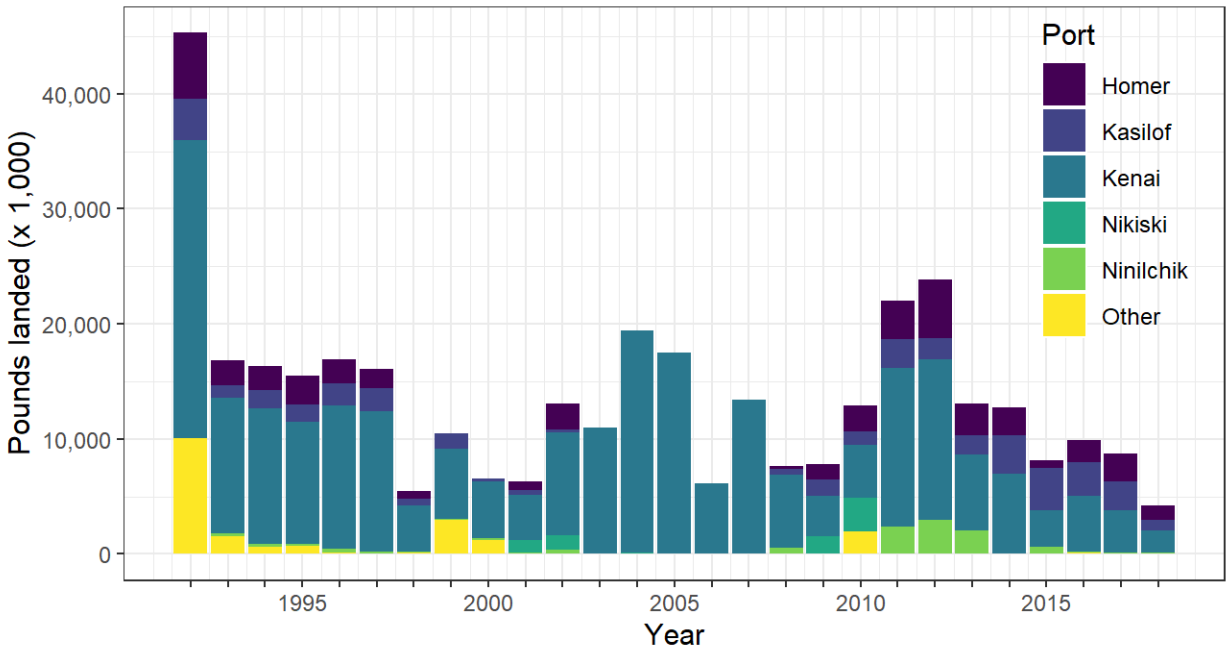
Geography	Annual Average Number of UCI Drift Gillnet Salmon SBPRs 2009-2018	Annual Average Number of All SBPRs in those Same Communities (the "Community SBPR Sector") 2009-2018	All Community SBPRs Annual Average Ex-Vessel Payments for ALL UCI Drift Gillnet-Caught Salmon 2009-2018	All Community SBPRs Annual Average Ex-Vessel Gross Payments for Estimated EEZ UCI Drift Gillnet-Caught Salmon Only 2009-2018*	All Community SBPRs Annual Average Total Ex-Vessel Gross Payments for All Area, Gear, and Species Fisheries 2009-2018	All Community SBPRs Average Annual Ex-Vessel Gross Payments for ALL UCI Drift Gillnet-Caught Salmon as a Percentage of Total Annual Average Ex-Vessel Gross Payments for All Area, Gear, and Species Fisheries 2009-2018	All Community SBPRs Average Annual Ex-Vessel Gross Payments for Estimated EEZ UCI Drift Gillnet-Caught Salmon Only as a Percentage of Total Annual Average Ex-Vessel Gross Payments for All Area, Gear, and Species Fisheries 2009-2018*
Homer	3.1	3.9	$0.32	$0.16	$16.46	2.0%	1.0%
Kenai	5.1	6.9	$11.96	$5.86	$34.88	34.3%	16.8%
All Other Communities	3.6	18.0	$6.83	$3.35	$113.89	6.0%	2.9%
Grand Total	**11.8**	**28.8**	**$19.12**	$9.37	**$165.22**	**11.6%**	5.7%

*Estimated on an estimated aggregate average 51 percent state waters/49 percent federal EEZ waters split over the period 2009-2018.

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT

Look back at the data from 1992-2018, Figure 4 shows that majority of commercially retained salmon harvested using drift gillnet gear in the Central District over time delivered to the port of Kenai, but extent of dominance relative to other communities has varied over time. The average amount of salmon (all species combined) delivered to Kenai (from drift gillnet vessels fishing in the Central District) from 1992 through 2018 was 9,228,411 pounds with an average estimated gross ex-vessel value of $11,940,822. It is also important to note that salmon landed in one port may be trucked to another for processing, e.g., fish landed in Homer may be trucked to Seward for processing.

Figure 4 Pounds of salmon landed in the UCI salmon drift gillnet fishery by port, 1992-2018.



Source: Economic and Community Impacts of Salmon Fishing

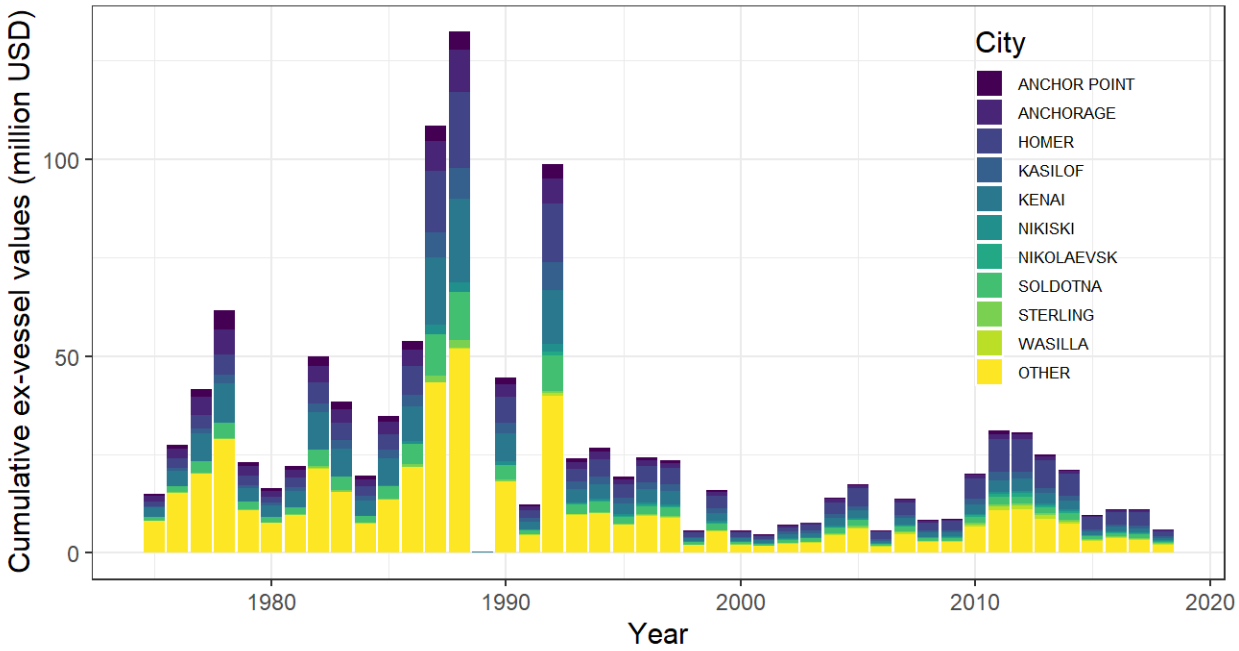
4.5.5.1.3. S03H Permit Holders

<< NOTE: 2009-2018 data analysis TBP: Awaiting detailed permit data by community, including permit portfolio diversity/S03H dependency data >>

Look back at the data from 1975-2018, Figure 5 illustrates the distribution of ex-vessel gross revenues among the ten communities with the greatest number of S03H permit holders.[6] For the time period 1997 through 2018, an average of 100 Homer permit holders were active in the fishery, with a combined annual average estimated gross earnings of $3,144,153 from harvests in the fishery. On average, from 1975-2018, 61 percent of S03H permit holders have resided in one of the top ten towns and they have accounted for an average of 62% of the annual landed value of the fishery.

Figure 6 shows a relatively stable relative participation (based on a permit being active in a season) by community. Eight of the top ten earning communities are located within the Kenai Peninsula Borough, with two other Alaska communities rounding out the top 10 (Anchorage and Wasilla). Communities outside of Alaska with notable concentrations of permit holders over this time span include and Cathlamet, Washington and Astoria, Oregon.

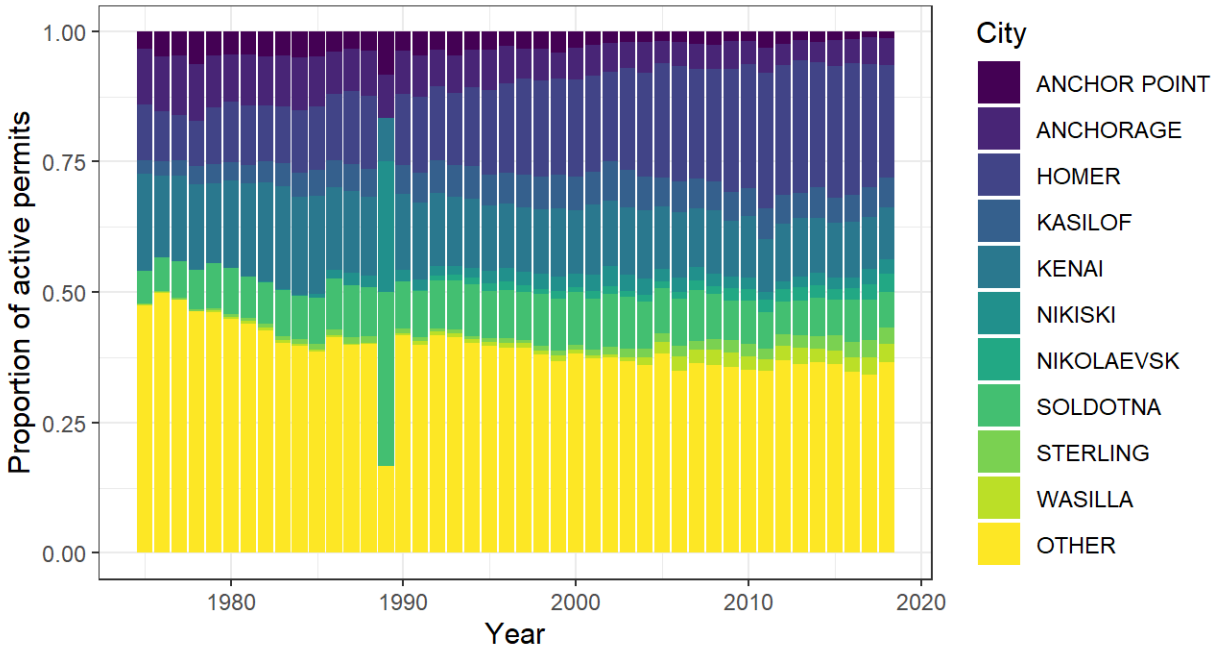
Figure 5 Cumulative ex-vessel revenues for the ten communities with the greatest number of S03H permit holders, 1975-2018.



Source: Economic and Community Impacts of Salmon Fishing

[6] Due to the occurrence of the Exxon Valdez oil spill, 1989 is a particularly anomalous year in this figure as well as the next one.

Figure 6 Proportion of S03H permits fished in a given year by the community in which the permit is registered.



Source: Economic and Community Impacts of Salmon Fishing

<< NOTE: Harvester and crew employment to be added when permit data are available. >>

4.5.5.2. Community Context of the UCI Salmon Drift Gillnet Fishery

Table 31 provides selected demographic indicators for the Kenai Peninsula Borough communities identified as engaged in and/or dependent upon the UCI salmon drift gillnet fishery in one or more years 2009-2018, along with comparative data from Anchorage and that State of Alaska as a whole.[7] Table 32 presents information on the types of municipal governments, relationships to ANCSA regional and village corporations, and the presence (or absence) of a federally recognized tribe in these same communities. As shown, considerable variation among these indices occurs across these communities.

[7] Note: this section currently focuses on Alaska communities within the Kenai Peninsula Borough. As noted above, other Alaska communities are engaged in the UCI salmon drift gillnet fishery. The lesser degree of engagement and/or dependency of these communities, relative to multiple Kenai Peninsula Borough communities, will be further developed in subsequent versions of this analysis.

Table 9 Selected Demographic Indicators for Kenai Peninsula Borough Communities Engaged in the UCI Salmon Driftnet Fishery 2009-2018, Anchorage, and the State of Alaska.

Community	Total Population	Alaska Native[1] Residents (percent of total population)	Minority[2] Residents (percent of total population)	Residents Living in Group Quarters[3] (percent of total population)	Per Capita Income (dollars)	Median Household Income (dollars)	Number of Family Households	Median Family Income (dollars)	Low-Income[4] Residents (percent of total population)
Kenai Peninsula Communities									
Anchor Point	2,093	11.1%	12.8%	0.0%	$30,212	$58,594	487	$75,179	8.8%
Clam Gulch	197	2.5%	7.6%	0.0%	$32,869	$41,833	39	not available	13.2%
Fritz Creek	1,956	2.8%	13.0%	0.0%	$36,092	$69,750	482	$84,167	12.1%
Halibut Cove	71	7.0%	7.0%	0.0%	$40,731	$72,969	25	$73,594	12.7%
Homer	5,607	9.5%	17.9%	0.7%	$34,176	$59,837	1,411	$79,960	8.9%
Kasilof	531	0.0%	0.0%	0.0%	$17,375	$49,946	74	$71,296	5.1%
Kenai	7,687	18.9%	28.2%	0.6%	$36,236	$61,007	1,719	$82,083	13.4%
Nikiski	4,575	17.5%	20.0%	0.1%	$28,018	$55,043	1,111	$74,464	16.5%
Nikolaevsk	261	4.2%	5.4%	0.0%	$22,561	$36,786	67	$54,375	8.4%
Ninilchik	749	19.2%	26.6%	0.0%	$31,010	$50,938	203	$74,375	11.5%
Port Graham	192	87.5%	87.5%	0.0%	$18,853	$29,375	45	$42,813	26.6%
Seldovia	229	16.6%	18.3%	0.0%	$32,409	$63,000	67	$78,125	7.6%
Seward	2,770	14.2%	39.1%	4.5%	$28,552	$76,410	489	$100,254	11.9%
Soldotna	4,589	6.8%	10.5%	0.3%	$36,626	$61,723	1,110	$72,391	6.9%
Sterling	5,321	7.0%	12.1%	0.1%	$39,122	$82,292	1,325	$100,924	8.8%
Anchorage and the State of Alaska									
Anchorage	296,112	12.8%	41.5%	0.9%	$39,839	$83,280	70,176	$119,992	9.2%
State of Alaska	738,516	19.7%	39.0%	1.8%	$35,874	$76,715	167,633	$108,301	10.8%

Notes: (1) Includes individuals self-identified in the census as American Indian or Alaska Native exclusively or in combination with some other category.
(2) Includes all individuals except those self-identified as both White and of non-Hispanic origin.
(3) Includes "Other Noninstitutional" group quarters only (e.g., the type of group housing facilites provided for employees at some seafood processing plants as well as group homes; this category excludes adult correctional facilities, such as the Spring Creek Correctional Center in Seward, nursing homes, and hospice facilities).
(4) Defined as those persons living below the poverty threshold by the U.S. Census Bureau in the 2014-2018 American Community Survey. As a point of reference, a family of four (two adults and two children) had a poverty threshold of $25,926 in 2019.
Source: US Census 2010; US Census 2019.

Table 10 Selected Institutional Indicators for Kenai Peninsula Borough Communities Engaged in the UCI Salmon Driftnet Fishery 2009-2018 and Anchorage.

Community	Traditional Community Name and Translation	Borough	Municipal Government (Incorporation Status, Date)	ANCSA Regional Corporation[1]	ANCSA Village Corporation	Federally Recognized Tribe and Tribal Government
Anchor Point	K'kaq' (Dena'ina) "River Mouth"	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Clam Gulch	information unavailable	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Fritz Creek	information unavailable	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Halibut Cove	information unavailable	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Homer	information unavailable	KPB	City of Homer (1st Class City, 1964)	--	None (not an ANCSA village)	None
Kasilof	Ggasilat (Dena'ina)	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Kenai	Shk'ituk't (Dena'ina) "Where We Slide Down"	KPB	City of Kenai (Home Rule City, 1960)	Cook Inlet Region, Inc.	Kenai Natives Association, Inc.	Kenaitze Indian Tribe Kenaitze Tribal Council
Nikiski	information unavailable	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Nikolaevsk	information unavailable	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Ninilchik	Niqnilchint (Dena'ina) "Lodge is Built Place"	KPB	None (Unincorporated CDP)	Cook Inlet Region, Inc.	Ninilchik Natives Association, Inc.	Ninilchik Village Tribe Ninilchik Traditional Council
Port Graham	Paluwik (Sugt'stun) "Place of Sadness"	KPB	None (Unincorporated CDP)	Chugach Alaska Corporation	Port Graham Corporation	Native Village of Port Graham Port Graham Tribal Council
Seldovia	Angagkitaqnuuq (Sugt'stun and Dena'ina)	KPB	City of Seldovia (1st Class City, 1945)[2]	Cook Inlet Region, Inc.	Seldovia Native Association, Inc.	Seldovia Village Tribe Seldovia Tribal Council
Seward	Qutalleq (Sugt'stun)	KPB	City of Seward (Home Rule City, 1912)	--	None (not an ANCSA village)	None
Soldotna	Ts'eldat'nu (Dena'ina) "Trickling Down Creek"	KPB	City of Soldotna (Home Rule City, 1967)	--	None (not an ANCSA village)	None
Sterling	information unavailable	KPB	None (Unincorporated CDP)	--	None (not an ANCSA village)	None
Anchorage	Dgheyaytnu; Dgheyay Kaq' (Dena'ina) "Needlefish River;" "Mouth of Needlefish River"	see next cell	Unified Home Rule Borough (Incorp.1920 [City], 1964 [Borough], 1975 [Unified Municipality]	Cook Inlet Region, Inc.[3]	Eklutna, Inc.[3]	Native Village of Eklutna[3] Eklutna Traditional Tribal Council[3]

Notes: (1) Regional ANCSA corporations are listed in this table only for those communities where they are affiliated with an ANCSA village corporation, but they also serve shareholders in other communities. All of the communities listed in this table as "not an ANCSA community" are within the regional boundaries of Cook Inlet Region, Inc., with the exception of Seward, which is within the regional boundaries of the Chugach Alaska Corporation.
(2) Seldovia Village, an unincorporated CDP first appearing in the US Census in 2000, is adjacent to, but outside of, the city limits of the City of Seldovia. (3) Eklutna is a small ANCSA village located within the much larger boundaries of the Unified Home Rule Municipality of Anchorage and is one of the villages within the Cook Inlet Region, Inc. family of villages; Anchorage itself is not an ANCSA village.
Souce: DCRA Community Database, https://dcra-cdo-dcced.opendata.arcgis.com/, accessed 2/8/2020; city, regional corporation, village corporation, and tribal websites.

Simplifying assumptions also needed to be made as to which communities to select for characterization, given the large number of communities participating in the fishery, the desire to focus on the communities most clearly substantially engaged in and/or substantially dependent on the fishery (and therefore most likely to be directly affected by proposed management actions), and a recognition that communities with multi-sector activity may be more or less vulnerable to potential adverse impacts related to the proposed fishery management changes based on the particular sectors present specific communities.[8] Table 11 provides information on recent year engagement (2009-2018) along with engagement level over the longer term (1991-2017), as determined by a principal components factor analysis (PCFA).[9]

[8] If multiple fishery sectors present in a community were all adversely affected by a proposed management action, then those combined impacts, at the community level, may be greater than the sum of individual sector impacts as, for example, direct fishery support sector businesses or municipal services are, in turn, adversely affected. Alternatively, if some locally present fishery sectors were adversely affected and some locally present fishery sectors were beneficially affected, then those combined impacts, when aggregated at the community level, may in whole or in part cancel one another out, with the beneficial impacts to some sector or sectors effectively minimizing or offsetting the adverse impacts to another sector or sectors.

[9] The PCFA, described in the September 2019 "Economic and Community Impacts of Salmon Fishing" paper, is currently being updated to include 2018 data and will be included in subsequent versions of this EA/RIR.

Table 11 Selected UCI salmon drift gillnet fishery community harvesting and processing level engagement indicators for Kenai Peninsula Borough communities, 2009-2018 and 1991-2017.

	Catcher Vessel Engagement					Shore-Based Processor Engagement				
	Catcher Vessel Participation by Community of Ownership Address, 2009-2018		Number of Years 1991-2017 by Harvesting Engagement Level Greater than "Low" (as determined by PCFA)			Shore-Based Processor Participation by Community of Operation, 2009-2018		Number of Years 1991-2017 by Processing Engagement Level Greater than "Low" (as determined by PCFA)		
Community	Annual Average 2009-2018	Total Unique Vessels 2009-2018	Medium	Medium-High	High	Annual Average 2009-2018	Total Unique SBPRs 2009-2018	Medium	Medium-High	High
Anchor Point	8.2	23	16	9	0	0.0	0	0	0	0
Clam Gulch	1.3	3	0	0	0	0.0	0	0	0	0
Fritz Creek	5.6	10	1	0	0	0.0	0	0	0	0
Halibut Cove	2.1	3	0	0	0	0.0	0	0	0	0
Homer	104.9	197	0	0	27	3.1	7	1	10	9
Kasilof	24.8	48	0	4	23	0.0	0	9	9	4
Kenai	46.3	85	0	0	27	5.1	11	0	0	27
Nikiski	10.1	20	26	0	0	0.2	1	1	1	2
Nikolaevsk	9.5	16	7	0	0	0.0	0	0	0	0
Ninilchik	6.4	12	16	0	0	0.4	2	5	1	1
Port Graham	1.5	3	0	0	0	0.0	0	0	0	0
Seldovia	3.0	5	0	0	0	0.0	0	0	0	0
Seward	0.4	1	1	0	0	1.0	1	1	2	0
Soldotna	31.0	64	0	0	27	0.7	2	0	1	0
Sterling	11.4	21	15	0	0	0.0	0	0	0	0

These data were used to select communities to be carried forward for more detailed characterization.

- Communities listed with no level of engagement indicators in either the harvesting or processing category higher than the "low" category for any year 1991-2017 included Clam Gulch, Halibut Cove, Port Graham, and Seldovia; Fritz Creek had one year out of the 27 in the 1991-2017 period in the " medium" harvest engagement category. These five communities were not carried forward for further characterization. <<NOTE: Sketches of these five communities have been grayed out but retained in the text below for potential discussion at the salmon committee meetings of February 2020.>>
- A total of eight communities had multiple years of "medium-high" or "high" harvesting and/or processing engagement (Anchor Point, Homer, Kasilof, Kenai, Nikiski, Ninilchik, Seward, and Soldotna). These communities are further characterized below.
- Two other communities , Nikolaevsk and Sterling, had multiple years of "medium" level harvest engagement, but no "medium-high" or "high" engagement years (and no years with processing engagement above a "low" level). These communities are also carried forward for further characterization below as both averaged around 10 local ownership address vessels participating in the fishery over the period 2009-2018.

The communities selected for additional characterization of the community context of the UCI salmon drift gillnet fishery are all located with the Kenai Peninsula Borough.[10] According to archaeological evidence in the region, the earliest known inhabitants of the area were Riverine Kachemak peoples who were present from approximately 1000 B.C. to 1000 A.D. After 1000 A.D., archaeological materials

[10] Unless otherwise indicated, community background information is taken from NOAA 2013.

suggest that the Riverine Kachemak were replaced with Dena'ina Athabascan residents. Early Russian fur traders noted in the mid-1700s approximately 1,000 Dena'ina residents along the Kenai River in the vicinity of what would eventually become the community of Kenai. In 1791, Russian fur traders constructed a trading post at Kenai called Fort St. Nicholas. In 1797, hostilities between the Russian traders and Dena'ina led to an attack on the fort, resulting in 100 deaths. Throughout the 1800s and into the 1900s, the Dena'ina population dwindled due to disease, including a smallpox epidemic in 1838 and the flu epidemic of 1919. Many of the region's remaining residents consolidated in the Kenai area, participating in commercial fishing and other industries throughout the 20th century. Homesteading opportunities emerged in the 1940s, resulting in an increase in population for the region. The construction of the first road between Anchorage and Kenai occurred in 1951.

The contemporary economy of the region is dependent on a few key industries, including oil and gas, commercial fishing, tourism, and retail. As with other areas of Alaska outside of urban centers, government, utility, education, and health service sectors also provide employment opportunities for residents. The Kenai Peninsula can arguably lay claim to being the place of origin of the modern Alaska oil and gas industry, with the first commercially viable oil field discovered in 1957 in the Cook Inlet Basin. Oil production has waned in recent years, but natural gas extraction, timber, coal mining, and commercial ranching continue to be present in the region and provide employment opportunities for area residents.

The commercial harvest of salmon within Cook Inlet began in 1882 with the establishment of a cannery near the mouth of the Kasilof River. Commercial halibut and groundfish fishing began in the 1920s with this diversification fueled in part by the development of diesel-powered catcher vessels. The herring and crab fisheries developed in the 1920s and 1930s; however, these fisheries have experienced closures due to low biomass. The proximity of the region to some of the state's most productive commercial fisheries in combination with road connectivity to Anchorage and beyond has continued to make the region an important area for commercial catcher vessel fleets and seafood processing operations. The Kenai, Kasilof, Russian, Anchor, and Ninilchik rivers support Chinook and sockeye salmon runs, while other drainages in the Kenai Peninsula support coho, steelhead, and Dolly Varden. In recent decades, the tourism industry in the region has grown, with Seward and Whittier as cruise line transfer ports, as has the sport fishing industry. Recreational fishing and charter operations are located throughout the Kenai Peninsula Borough, with particular concentrations in Soldotna, Homer, and Kenai.

Anchor Point

Anchor Point is located approximately 14 miles northwest of Homer and 112 miles southwest of Anchorage. Archaeological evidence suggests that the area was originally settled at least 3,000 years ago by the Kachemak tradition of Tanaina Athabascans. Captain James cook documented the area and its people in 1778 and, according to legend, gave Anchor Point its name after losing a kedge anchor to tidal currents nearby. The goldrush of the late 1800s brought prospectors into the area and homesteaders began to settle more of Anchor Point throughout the 1900s. The community's current economy is focused on the commercial fishing industry and tourism, as its location provides easy access to saltwater and freshwater marine habitats. Commercial fisheries active in Anchor Point include salmon, halibut, groundfish, scallop, sablefish, cod, pollock, and other species. The community was once home to a more robust herring fishery but that has since been closed to allow for stock rebuilding. Anchor Point does not have highly developed fishery support service sector, with most services present in nearby Homer.

Clam Gulch

Clam Gulch is located approximately 24 miles south of Kenai and 85 miles southwest of Anchorage, along the Sterling Highway. The site of the community does not appear to have been a pre-contact

settlement location for Athabascans in the region. The contemporary community traces its origin to the arrival of homesteaders in the middle 20th century and the population of the community was not reported by the U.S. Census until 1970. The current economy of the community is of relatively modest scale, with most residents working in nearby Kasilof or engaging in recreational services and commercial fishing. Due to its recent settlement, Clam Gulch does not have a long history of engagement with the commercial fisheries in the region. However, residents who are involved in the commercial fishery are engaged in Cook Inlet salmon fisheries and nearby processors in Kasilof and Kenai provide markets for local Clam Gulch catch.

Fritz Creek

Fritz Creek is located approximately 7 miles northeast of Homer, along the Sterling Highway, on the north shore of Kachemak Bay. Archaeological evidence suggests that the area around Kachemak Bay, including the area that would eventually become Fritz Creek, was an important gathering site for Dena'ina Athabascans and may have also been an important settlement for Alutiiq peoples as long as 4,500 years ago. The contemporary community was originally settled to support coal extraction in the late 1800s, but that endeavor was ultimately unsuccessful. Fritz Creek has gained some notoriety as being the "End of the Road" in a popular series of books and the community, along with nearby Halibut Cove, attracts artists and outdoor enthusiasts as residents. Fritz Creek also has a relationship to the neighboring community of Voznesenka, which is home to families of "Russian Old Believers."[11] Most residents of Fritz Creek find employment in nearby Homer, which has a relatively diverse economy dominated by its involvement in the commercial fishing industry. Fritz Creek does not have highly developed fishery support service sector, with most services present in nearby Homer.

Halibut Cove

Halibut Cove is located 12 miles across the inlet from Homer Spit, on the south shore of Kachemak Bay, within Kachemak Bay State Park. Evidence suggests that the area around Kachemak Bay, including the area that would eventually become Halibut Cove, was an important gathering site for Dena'ina Athabascans and may have also been an important settlement for Alutiiq peoples as long as 4,500 years ago. Large midden sites suggest that Halibut Cove may have been a primary settlement site in the region during pre-contact times and that the people during this time harvested all five salmon species using dip nets, weirs, dams, and fish traps. The contemporary community of Halibut Cove began as a settlement supporting the herring fishery in the early 1900s, with the community hosting more than half of the canneries along the Cook Inlet prior to the herring fishery closures in the 1920s. Attempts to revive the herring fishery in the 1960s also failed due to low biomass. The current economy of Halibut Cove is focused on the tourism industry, with the community being home to a large artist colony and seasonal residents. Those residents of Halibut Cove who are involved in the commercial fishery are engaged in the salmon, halibut, sablefish, and groundfish fisheries. Halibut Cove does not have a highly developed fishery support service sector, with most services present in nearby Homer.

Homer

Homer is located 227 road miles south of Anchorage, at the end of the Sterling Highway, on the north shore of Kachemak Bay. Archaeological evidence suggests that the area around Kachemak Bay, including the area that would eventually become Homer, was an important gathering site for Dena'ina Athabascans and may have also been an important settlement for Alutiiq peoples as long as 4,500 years ago. Archaeological sites near what is now Homer suggest that the area was inhabited for many centuries before European contact. The community of Homer in its contemporary form traces its roots to 1896

[11] For more information on Russian Old Believer settlements, see the discussion of Nikolaevsk.

when Homer Pennock arrived with 50 miners in a search for coal and gold. Coal mining remained the primary economic driver for the community into the early 20th century. Other industries, including fur farming and commercial fishing, increased as a result of early homesteaders settling in or near the community. Before the 1960s, however, the commercial fishing industry in communities around Kachemak Bay was centered on Seldovia, with Homer playing a relatively small, supporting role within the region. However, the Good Friday Earthquake in 1964 destroyed much of Seldovia's fishing infrastructure and Homer filled the vacuum of a local fishing center. Currently, commercial fishing underpins much of Homer's economy, although tourism, sportfishing, and hunting are also large components. Homer is a major regional hub for fishery landing and processing activities, with residents involved in the salmon, halibut, crab, groundfish, herring, and other fisheries. As a key community for the commercial fleet in the region, Homer has a wide array of supporting infrastructure and support service businesses that draw business from many nearby communities.

Kasilof

Kasilof is located approximately 15 miles south of Kenai, 13 miles southwest of Soldotna, and 70 miles southwest of Anchorage, along the Sterling Highway. European explorers documented a Dena'ina settlement in what would become Kasilof and other seasonal camps located along the Kasilof River. Russian fur traders established a trading station at the mouth of the Kasilof River in the late 1700s. Commercial fisheries began in the area when a salmon cannery was established at the mouth of Kasilof River in 1882. Fox farming was a large component of the Kasilof economy in the early 20th century, but that sector waned in importance through the 1930s, leaving commercial salmon fishing as the key component of the community economy. Currently, the economy of Kasilof is focused on oil and gas processing, commercial and sportfishing, government services, healthcare, retail, and tourism. Those residents of Kasilof who are involved in the commercial fishery are engaged in the salmon, herring, halibut, groundfish, sablefish, crab, and other fisheries. Kasilof is home to a few small-scale fish processing and/or buying facilities and the community's relatively diverse economy includes some fishery support service businesses including fabrication and an icehouse (DCCED 2020[12]).

Kenai

Kenai is located approximately 65 miles southwest of Anchorage and 11 miles off the Sterling Highway, on the eastern shore of Cook Inlet at the mouth of the Kenai River. When Russian fur traders arrived in the area, they documented approximately 1,000 Dena'ina people in a village of *Shk'itk't*, which was located on the same site as the contemporary community of Kenai is now. Following the population losses to epidemics of the late 19th and early 20th centuries described above, the remaining Dena'ina maintained ties to their historic village camps through the 1930s and 1940s. The overall population of the community continued to grow in the following decades with the discovery of oil 20 miles northeast of Kenai, in 1957, and the discovery of offshore oil in 1965. Kenai's contemporary economy is focused on the oil and gas industry, with many of the support businesses in town providing services to Cook Inlet's oil and gas drilling platforms. Kenai's economy also includes substantial tourism, commercial fishing, and fish processing sectors. Those residents of Kenai involved in the commercial fishery are generally engaged in the salmon and halibut fisheries, with others involved in the herring, groundfish, sablefish, crab, and other fisheries. The City of Kenai operates a dock and boat ramp and there are other moorage opportunities present along the Kenai River. Other commercial fishery support service businesses are also present in Kenai and nearby communities.

[12] DCCED 2020. Alaska Community Database Online. https://dcra-cdo-dcced.opendata.arcgis.com/ Accessed February 9, 2020.

Nikiski

Nikiski is located approximately 9 miles north of Kenai, along the Sterling Highway. The modern contemporary community of Nikiski was originally established to support the first cannery in the area, which was established in 1888. As was the case with Kenai, the area experienced an increase in population as a result of homesteading in the 1940s and additional settlement in support of the oil and gas discoveries of the 1950s and 1960s. Due to its proximity to Kenai, the economy of Nikiski is closely linked with that of its larger neighbor and is focused primarily on supporting the oil and gas sector with a large proportion of residents also involved in commercial fishing. Those residents of Nikiski involved in the commercial fishery are generally engaged in the salmon fishery, particularly drift and set gillnet fisheries. The docks in Nikiski are utilized by the oil and gas sector exclusively and Nikiski does not have a highly developed fishery support service sector, with most services present in nearby Kenai.

Nikolaevsk

Nikolaevsk is located approximately 115 miles southwest of Anchorage and 10 miles north of Homer, several miles inland from Anchor Point. Nikolaevsk is unique among the communities included in this analysis because it is a settlement of *Staroveri*, or "Russian Old Believers" who fled religious persecution in Russia and ultimately settled on the Kenai Peninsula. Russian Old Believers are originally from a remote part of Siberia and left when the head of the Russian Orthodox Church changed a number of prayer books and traditions in 1666. A small sect within the Church resisted these changes and the conflict eventually became violent, with many imprisoned or burned at the stake due to their adherence to the older customs. Many fled Russia and found refuge in China; however, after World War II, the Chinese government forced the Russian Old Believers out and the various families found refuge in other countries around the world, including Turkey, Argentina, Australia, and Brazil. During the Cold War, then-Attorney General Robert F. Kennedy offered the Russian Old Believers asylum and many families settled in New Jersey and Oregon. While the families in Oregon generally found economic success, elders of the community believed that the younger generation was becoming too Americanized in Oregon and five families migrated to the current community of Nikolaevsk (Jonassen and Laughlin, 2013[13]). Ultimately, Nikolaevsk was one of four villages established in the 1960s in the area for Russian families who were eager to maintain their traditional way of life.[14]

Upon arrival to the region, many Nikolaevsk residents became engaged in the commercial fishery and it is not uncommon for Russian Old Believer fishermen to be engaged in commercial fishing throughout the year, in contrast to a substantial portion of other salmon drift gillnet fishers in Cook Inlet (Loring and Harrison 2013[15]). The Russian families in Nikolaevsk generally lead a family-oriented, self-sufficient lifestyle of small-scale farming, gardening, fishing, and hunting. Nikolaevsk has a small tourism sector but is generally not engaged in any other major industry in the region aside from commercial fishing; no commercial fishery support service sector exists in the community, with needed services present in nearby Homer.

Ninilchik

Ninilchik is located approximately 38 miles southwest of Kenai and 188 road miles from Anchorage, along the Sterling Highway. The Ninilchick area was once used as a fishing and fur-farming location for

[13] Jonassen, Wendi and Ryan Loughlin. 2013. "A 17th Century Russian Community Living in 21st-Century Alaska." *The Atlantic*. May 1. Available online: https://www.theatlantic.com/national/archive/2013/05/a-17th-century-russian-community-living-in-21st-century-alaska/275440/ Accessed Feb 7, 2020.
[14] The other communities include Voznesenka, Razdolna, and Kachemak Selo.
[15] Loring, Philip and Hanna Harrison. "'That's what opening day is for:' social and cultural dimensions of (not) fishing for salmon in Cook Inlet, Alaska. *Maritime Studies* 12, 12 (2013). https://doi.org/10.1186/2212-9790-12-12

Dena'ina Athabascan peoples. During the days of early Russian settlement (when Alaska was still a part of Russian America), Ninilchik was established as a retirement community for pensioners of the Russian American Company and became the permanent home for those too sick or infirm to travel back to Russia after their retirement. The original Russian residents of Ninilchik came from five families and through the early 1900s the community retained a largely Russian-speaking population with a Russian village school and a Russian Orthodox church. Non-Russian homesteaders began to arrive in Ninilchik in the 1930s and 1940s and the Sterling Highway was constructed through the community in 1950. The first commercial fishing cannery was established in the community in 1949. The contemporary economy of Ninilchik is based primarily on fishing, retail businesses, and tourism. Those residents of Ninilchik involved in the commercial fishery are engaged in the salmon, halibut, groundfish, herring, and crab fisheries. The harbor in Ninilchik is oriented toward smaller boats and the community does not have a highly developed fishery support service sector, with more services present in nearby Kenai and Homer.

Port Graham

Port Graham is located approximately 7.5 miles southwest of Seldovia, 28 miles from Homer, and on the southern end of the Kenai Peninsula. The area was the location of an Alutiiq village during pre-contact times where Native peoples engaged in a fishing and subsistence lifestyle, with archaeological evidence suggesting that marine mammals were the primary food source for centuries before a transition to shellfish and finfish. The area was documented in 1786 by Captain Portlock of the Cook Party as a seasonal hunting and food gathering site. The modern community of Port Graham was settled in 1850 by Russians attempting to establish a coal mine. A salmon saltery was established in Port Graham Bay in 1883, the first cannery was established in 1909, and a second cannery established in 1912. A fire destroyed one cannery in 1960 and another salmon processing facility in 1998. Throughout the 20th century, the canneries were the main economic drivers of the community and many Alaska Native residents worked in the canneries as line crew, salmon trap attendants, and setnet fishers. Today, the economy of Port Graham is still influenced by commercial fishing and is home to the Port Graham Hatchery, which has a capacity for 84 million pink salmon eggs (Cook Inlet Aquaculture Association 2020[16]). The dock in Port Graham is oriented toward smaller vessels and the community does not have a highly developed fishery support service sector, with more services present in nearby Homer.

Seldovia

Seldovia is located on the south shore of Kachemak Bay, across the bay from Homer. As noted above, Kachemak Bay was an active settlement area during pre-contact times, with the Seldovia area being a historic meeting area and trading place for a range of Alaska Native peoples, including Koniags from Kodiak, Aleuts from the Aleutians, the Chugach from Prince William Sound, and the Kenaitze people of the Cook Inlet. Russian settlers arrived in the late 1700s and established a nearby coal mine. By the mid- and late-1800s, Seldovia had become a major trading hub for furs, timber, and fish. The community had also become a major entryway for gold prospectors due to its ice-free harbor. The first commercial fishing cannery was established in 1911 along with multiple herring salting facilities, becoming an early hub of commercial fishing in the region. As previously noted, however, the Good Friday Earthquake of 1964 destroyed much of Seldovia's commercial fishing infrastructure. Despite that setback, Seldovia remains active in the current commercial fishing sector and has well-developed commercial and charter fleets. The contemporary economy of Seldovia is reliant on commercial fishing, ecotourism, sport hunting, and sport fishing. Those residents of Seldovia involved in commercial fishing are engaged in the salmon, groundfish, halibut, sablefish, herring, and crab fisheries, among others. Seldovia has a large dock capable

[16] Cook Inlet Aquaculture Association. 2020. Hatcheries. https://www.ciaanet.org/about/hatcheries/ Accessed Feb 8, 2020.

of handling vessels 150 ft in length and a range of other services supporting the commercial fishing industry, including a cleaning station and haul-out facilities.

Seward

Seward is located approximately 125 highway miles south of Anchorage, along Resurrection Bay on the east coast of the Kenai Peninsula. The original inhabitants of the area were the Unegkurmiut, who are a subgroup of the Chugach who lived elsewhere on the Kenai Peninsula. Russian explorer Alexander Baranof traveled into the bay on his way from Kodiak to Yakutat on the "Sunday of Resurrection" in the Russian Orthodox church and established a camp close to the site of the contemporary community of Seward. The contemporary city of Seward traces its origins to the late 1800s when it was founded as a railroad terminus following the discovery of gold. Construction of the railroad completed in 1923 and the community became a major rail link from the lower 48 to the interior of the state. The Good Friday Earthquake of 1964 destroyed an estimated 90% of the town's infrastructure. However, Seward was able to rebuild and has remained a major hub for trade and transportation. The contemporary economy of the community is focused on commercial fishing, fishing support service industries, coal transportation, education and research, and tourism, and also benefits from the local presence of a correctional facility. Seward is broadly engaged in the commercial fishery as a base of operations for numerous vessels and home to a local fleet and multiple locally operating processors. Those residents of Seward involved in the commercial fishery are engaged in the crab, halibut, herring, sablefish, groundfish, and salmon fisheries. The commercial fishing support service industry is highly developed in Seward and the infrastructure present includes ample dock space, fuel, haul-out services, and emergency response services, among others.

Soldotna

Soldotna is located approximately 150 highway miles south of Anchorage and 10 miles inland from Cook Inlet along the Kenai River. The area was and remains home to the Kenaitze people. The community is relatively young for the region and was established by homesteaders in the years immediately following World War II. The community became a stopping point along the Sterling Highway as it is the location of the highway bridge crossing for the Kenai River, with the retail sector forming the cornerstone of its early economy. The oil and gas discoveries of the late 1950s brought additional services and families to the community. The contemporary economy of Soldotna is focused on providing services to the oil and gas industry with other important sectors including commercial fishing, fish processing, government, agriculture, transportation, construction, and retail trade. Historically, residents of Soldotna have been involved in the primary commercial fisheries of the region, including salmon and herring throughout the 20th century. Those current residents of Soldotna involved in the commercial fishery are engaged in the salmon, halibut, herring, sablefish, groundfish, shellfish, and other fisheries. As Soldotna is not adjacent to the coast, the community does not have a highly developed fishery support service sector, with more services present in nearby Kenai.

Sterling

Sterling is located approximately 18 miles east of Kenai along the Sterling Highway, near the junction of the Moose and Kenai rivers. Sterling is close to Soldtona and was (and remains) home to the Kenaitze people, who as previously noted, had summer fish camps along many of the rivers and along the shores of Cook Inlet, harvesting all five salmon species through a variety of means. Sterling developed in similar manner to Soldotna, with the settlement of homesteaders marking the origin of the community in its contemporary form in the years immediately following World War II. The community also became involved in providing services and support to the oil and gas sector in that time, with other residents involved in the predominant commercial fisheries in the area, including salmon and herring. The

contemporary economy of Sterling is focused on oil and gas processing, timber, commercial fishing, government, retail and tourism. Those current residents of Soldotna involved in the commercial fishery are engaged in halibut, herring, and salmon. As Sterling is not adjacent to the coast, the community does not have a highly developed fishery support service sector, with more services present in nearby Kenai.

4.5.5.3. Fishery Tax Related Revenues

4.5.5.3.1. Tax Revenues Generated by the UCI Salmon Drift Gillnet Fishery

Salmon harvested in the UCI salmon drift gillnet fishery are subject to three fisheries taxes. The descriptions of these taxes are taken from the Alaska Department of Revenue (DOR) Tax Division website, which provides additional information about resource taxes in Alaska. The first two taxes are levied as a percentage of ex-vessel value, and the third is based on first wholesale value. The three fisheries taxes levied on salmon harvested in the UCI salmon drift gillnet fishery are as follows:

- **Fisheries Business Tax**: The fisheries business tax is generally paid by the first processor of processed fish, or the exporter of unprocessed fish, based on the ex-vessel price of unprocessed fish. The rates vary depending on the type of processor, and on whether or not the species of fish is considered a "developing" species. Salmon species are considered established species. The key applicable rates for the species of salmon considered here are those for shore-based processors and direct marketers (3 percent), floating processors (5 percent), or salmon canneries (4.5 percent).

- **Seafood Marketing Assessment**: Any person processing or exporting more than $50,000 of seafood products in a calendar year is responsible for paying 0.5 percent of the ex-vessel value of the fish to support marketing efforts.

- **Salmon Enhancement Tax**. Salmon harvesters in a region may vote to assess themselves to support salmon enhancement programs in their regions. Assessments may vary from program to program. Assessments are collected by licensed fish buyers from CFEC permit holders when they sell their salmon. CFEC permit holders who sell to unlicensed buyers or export their fish from the aquaculture region where they were caught must pay the assessment themselves. These revenues support salmon enhancement activity in the regions within which they are collected.

Unlike multiple communities in the Western GOA and the Aleutians that are substantially engaged in and/or dependent on federally managed commercial fisheries, none of the communities in the Kenai Peninsula Borough have municipal fishery landing taxes in addition to the shared state fishery taxes, nor does the Kenai Peninsula Borough itself.

Although not a tax, harvesters also pay 2.0 percent of the ex-vessel value of the fish to support the Cook Inlet Aquaculture Association, a non-profit organization based in Kenai, and one of eight regional aquaculture associations in Alaska (Cook Inlet Aquaculture Association 2020). The Association's programs include hatcheries that produce salmon fry, which are released in streams and lakes; construction and maintenance of salmon migration routes, referred to as "fishways"; and scientific research into salmon breeding and behavior patterns.[17]

[17] Currently, there is a single private hatchery that is fully operational in Upper Cook Inlet, the Trail Lakes facility operated by Cook Inlet Aquaculture Association. The Trail Lakes hatchery is in the upper Kenai River drainage near Moose Pass (Marston and Frothingham 2019).

4.5.5.3.2. Fishery Tax Revenues Received by Communities Engaged in the UCI Salmon Drift Gillnet Fishery

Table 12 provides an overview of the DOR fishery tax revenue sharing program and, in item 4 in the Fisheries Business tax program row, provides an overview of Alaska Department of Commerce, Community, and Economic Development (DCCED) fishery tax revenue sharing program. As noted, the shared revenues that derive from both the state Fisheries Business Tax (applied to ex-vessel value of landings from catcher vessels to processors) and the state Fishery Resource Landing Tax (applied to processed products from catcher/processors and motherships, as calculated on the estimated ex-vessel value of the resources that were input for the processed products, at the point of landing/transfer) are directly proportional to the total revenues generated from landings in a given community or borough.

Table 13 provides information on the DCCED fishery tax revenue sharing program.[18] As noted, the revenues received from the DCCED program by any given community are not directly proportion to commercial fishing landings made in that community. Revenues received under either the DOR or DCCED administered programs are not differentiated by fishery, so it is not possible from existing data to determine the tax revenues generated specifically from the UCI salmon drift gillnet fishery. Further, aggregate tax contributions from all fisheries include salmon caught in both Federal and State waters.

Table 12 Types of Shared State Fishery Tax Revenues Received from the Alaska Department of Revenue by Kenai Peninsula Borough Communities Engaged in the UCI Salmon Driftnet Fishery 2009-2018 and Anchorage.

Tax Program	Share Provision	Share Cycle	
		Disbursal Date	Period
Fisheries Business *AS 43.75.130*	50% of fisheries business taxes are shared with the municipalities where fishery resources were processed. Taxes are shared as follows: 1) If processing occurred within and incorporated city, which is not located within an organized borough, 50% of the tax collected is shared with the city. 2) If processing occurred within an incorporated city, which is located within an organized borough, 25% of the tax collected is shared with the city and 25% of the tax is shared with the borough. 3) If processing occurred at a locaton within an organized borough but not within an incorporated city, 50% of the tax is shared with the borough. 4) If processing occurred in the unorganized borough, 50% of the tax is shared with municipalities statewide through an allocation program administered by DCCED.	August (FY2009) September (FY2010-2014) December (FY2015-2016) October (FY2017-2018)	Preceding Fiscal Year
Fishery Resource Landing *AS 43.77.060*	50% of fishery resource landing taxes are shared with the municipality where fishery resources were landed. The mechanics for sharing landing taxes are the same as fisheries business taxes, except that the proration applies to boroughs incorporated after January 1, 1994.	September (FY2009-2014) December (FY2015-2016) October (FY2017-2018)	Preceding Fiscal Year

Source: Alaska Dept of Revenue, Shared Taxes and Fees Annual Reports, FY 2009-2018.
http://tax.alaska.gov/programs/documentviewer/viewer.aspx?1499r accessed 2/16/2020.

[18] As with the DOR program, there is a lag time between collection of the taxes and the distribution of revenue to the municipalities. For example, the funding for the taxes collected in the 2018 calendar year will be distributed in March 2020.

Table 13 Department of Commerce Community and Economic Development Administered Shared State Fishery Tax Revenues Program Description, Eligibility, and Funding Specifications.

Program Description	The purpose of the Shared Fisheries Business Tax Program is to provide for an annual sharing of fish tax collected outside municipal boundaries to municipalities that can demonstrate they suffered significant effects from fisheries business activities. This program is administered separately from the state fish tax sharing program administered by the Department of Revenue which shares fish tax revenues collected inside municipal boundaries.
Program Eligibility	To be eligible for an allocation under this program, applicants must: 1. Be a municipality (city or borough); and 2. Demonstrate the municipality suffered significant effects as a result of fisheries business activity that occurred within its respective fisheries management area(s).
Program Funding	The funding available for the program this year is equal to half the amount of state fisheries business tax revenues collected outside of municipal boundaries during calendar year 2018. Program funding is allocated in two stages:
	1st Stage: Nineteen Fisheries Management Areas (FMAs) were established using existing commercial fishing area boundaries. The available funding is allocated among these 19 FMAs based on the pounds of fish and shellfish processed in the whole state during the 2018 calendar year. For example, if an area processed 10% of all the fish and shellfish processed in the whole state during 2018, then that area would receive 10% of the funding available for the program this year. These allocations are calculated based on Fisheries Business Tax Return information for calendar year 2018.
	2nd Stage: The funding available within each FMA will be allocated among themunicipalities in that area based on the level of fishing industry significant effects suffered by each municipality compared to the level of effects experienced by the other municipalities in that FMA.
	Some boroughs, because of their extensive area, are included in more than one fisheries management area. In these cases, the borough must submit a separate program application for each area.

Source: DCCED supplied text, 10/14/2019.

Table 14 provides information on the DOR administered shared state Fishery Business Tax program revenues received by Kenai Peninsula Borough communities engaged in the UCI salmon drift gillnet fishery during the period FY 2009-FY 2018, along with analogous information for the Kenai Peninsula Borough itself and for Anchorage. Table 15 provides parallel information for the DCCED administered Fishery Business Tax program. As shown, among the Kenai Peninsula Borough communities, revenues from the DOR administered program range widely, while the revenues from the DCCED administered program are relatively flat across those communities.

Table 14 Shared State Fishery Business Tax Revenues Received from the Alaska Department of Revenue by Kenai Peninsula Borough Communities Engaged in the UCI Salmon Driftnet Fishery FY 2009-FY 2018 and Anchorage.

Geography	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2009-2018
Homer	$93,132	$73,801	$117,556	$64,617	$37,136	$54,283	$21,004	$20,456	$43,242	$59,449	$58,468
Kenai	$208,989	$148,581	$276,547	$291,597	$197,541	$289,411	$195,703	$161,515	$115,821	$126,185	$201,189
Seldovia	$845	$5,249	$2,367	$150	$0	$0	$0	$0	$0	$0	$861
Seward	$417,356	$298,316	$596,097	$519,689	$480,290	$482,543	$334,691	$280,935	$440,958	$456,144	$430,702
Soldotna	$1,151	$1,049	$2,020	$1,594	$685	$1,969	$2,841	$586	$1,765	$2,775	$1,644
Kenai Peninsula Borough	$740,339	$621,786	$1,004,361	$952,078	$774,646	$919,123	$629,725	$541,757	$771,171	$860,097	$781,508
Anchorage	$157,650	$143,049	$119,063	$170,617	$221,337	$181,607	$202,096	$122,012	$92,250	$53,269	$146,295

Source: Alaska Dept of Revenue, Shared Taxes and Fees Annual Reports, FY 2009-2018. http://tax.alaska.gov/programs/documentviewer/viewer.aspx?1499r accessed 2/16/2020.

Table 15 Shared State Fishery Business Tax Revenues Received from the Alaska Department of Commerce Community and Economic Development by Kenai Peninsula Borough Communities Engaged in the UCI Salmon Driftnet Fishery FY 2010-FY 2018 and Anchorage.

Geography	2009*	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average 2010-2018
Homer	not available	$2,144	$3,547	$5,791	$4,206	$4,016	$3,086	$2,800	$3,450	$2,454	$3,499
Kenai	not available	$4,199	$3,655	$6,029	$4,374	$4,169	$3,211	$2,910	$3,572	$2,549	$3,852
Seldovia	not available	$3,645	$3,180	$5,250	$3,814	$3,638	$2,798	$2,539	$0	$2,193	$3,006
Seward	not available	$3,834	$3,342	$5,528	$4,017	$3,831	$2,930	$2,675	$3,309	$2,320	$3,532
Soldotna	not available	$3,950	$3,440	$5,695	$4,143	$3,950	$3,036	$2,757	$3,402	$2,409	$3,643
Kenai Peninsula Borough	not available	$7,913	$6,883	$11,528	$8,388	$7,993	$6,135	$5,588	$6,530	$5,188	$7,349
Anchorage	not available	$26,689	$23,340	$38,442	$27,934	$26,651	$20,531	$18,607	$20,644	$17,663	$24,500

*Note: Information for FY2009 was entered prior to the institution of DCCED's current database program and the previous database program is no longer accessible (K. Phillips, pers comm 2/18/20).

Table 16 provides information on annual average revenues received over the period FY 2009-FY 2018 from shared Fishery Business Tax and shared Fishery Resource Landing Tax sources. As shown, revenue from Fishery Resource Landing Tax sources are modest, and ranged from less than one percent of the grand total of Fishery Business Tax and Fishery Resource Landing Tax revenues for Homer, Kenai, the Kenai Peninsula Borough, and Anchorage, to roughly one, two, and three percent for Seward, Soldotna, and Seldovia, respectively.

Table 16 FY 2010-FY 2018 Average Annual Shared Fisheries Tax Revenues Received by Kenai Peninsula Borough Communities Engaged in the UCI Salmon Driftnet Fishery and Anchorage.

	Fisheries Business Tax			Fishery Resource Landing Tax			Grand
Geography	DOR	DCCED*	Subtotal	DOR	DCCED*	Subtotal	Total
Homer	$58,468	$3,499	**$61,967**	$110	$112	**$222**	**$62,188**
Kenai	$201,189	$3,852	**$205,041**	$0	$130	**$130**	**$205,171**
Seldovia	$861	$3,006	**$3,867**	$0	$113	**$113**	**$3,980**
Seward	$430,702	$3,532	**$434,234**	$6,204	$119	**$6,323**	**$440,556**
Soldotna	$1,644	$3,643	**$5,286**	$0	$123	**$123**	**$5,409**
Kenai Peninsula Borough	$781,508	$7,349	**$788,858**	$6,752	$250	**$7,003**	**$795,860**
Anchorage	$146,295	$24,500	**$170,795**	$0	$839	**$839**	**$171,634**

*Note: DCCED data represent the annual average for 2010-2018; data from 2009 are not available (see note on previous table).
Source: DOR Shared Taxes and Fees Annual Reports, FY 2009-2018, accessed 2/16/2020 and DCCED spreadsheet supplied 10/8/2019.

Table 17 provides a relative order-of-magnitude snapshot comparison of average annual FY 2009-FY 2018 shared state fishery tax revenues to all general fund revenues for FY 2018. As shown, the contribution of direct fisheries revenues is relatively modest (in contrast to, for example, sales and use taxes, property taxes, and/or charges for services, depending on the community), but it is important to note that the fisheries taxes shared with municipalities or local enhancement operations contribute to the economies of communities engaged in the UCI salmon drift gillnet fishery. "Fish tax" receipts shared with a community may be associated with increased community spending on goods and services within the community, smaller community sales tax or property tax assessments, purchases of goods and services outside the community, or some combination of these. Costs recovered for salmon aquaculture may also be a source of local employment and income.

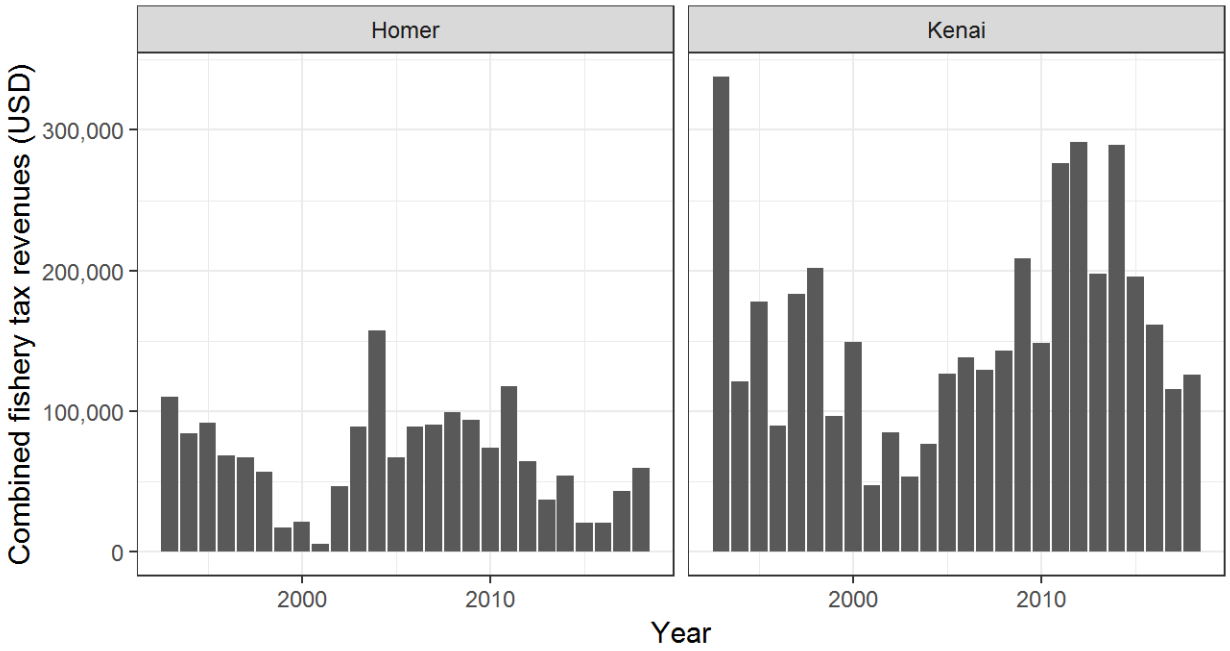
Table 17 FY 2009-FY 2018 Average Annual Shared Fisheries Tax Revenues Received by Kenai Peninsula Borough Communities Engaged in the UCI Salmon Driftnet Fishery and Anchorage as a percentage of Total FY 2018 General Fund Revenues.

Geography	2009-2018 Annual Average Shared Fishery Tax Revenue	2018 General Fund Revenue	2009-2018 Annual Average Shared Fishery Tax Revenue as a Pecent of 2018 General Fund Revenue
Homer	$62,188	$12,493,713	0.5%
Kenai	$205,171	$14,122,805	1.5%
Seldovia	$3,980	$668,707	0.6%
Seward	$440,556	$12,382,548	3.6%
Soldotna	$5,409	$9,945,730	0.1%
Kenai Peninsula Borough	$795,860	$80,819,298	1.0%
Anchorage	$171,634	$679,333,530	0.03%

Source: Fishery revenues from previous tables; 2018 general fund revenues from audited comprehensive financial reports, https://www.commerce.alaska.gov/dcra/dcrarepoext/Pages/FinancialDocumentsLibrary.aspx accessed 2/15/2020.

Look back at the data from 1993-2018, Figure 7 illustrates a longer term pattern of shared fishery tax revenues in the communities of Homer and Kenai.

Figure 7 Combined (all species) Shared Fishery Business Tax Revenues for Homer and Kenai, 1993-2018.



Source: Economic and Community Impacts of Salmon Fishing

4.5.5.4. Community Engagement in Subsistence and Personal Use Salmon Fisheries in or near Upper Cook Inlet

Most of the waters of the State of Alaska's Cook Inlet Management Area are within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Use Area as established by the Alaska Joint Board of Fisheries

and Game. [5 AAC 99.015 (3)]. Because subsistence fisheries are not permitted within nonsubsistence use areas, noncommercial harvesting opportunities occur under state sport, personal use, and educational fishing regulations (as well as limited opportunity under federal regulations). Commercial harvesters may retain finfish from their lawfully taken commercial catch for home use ("home pack"). These fish are required to be reported on the commercial fish ticket, not on the subsistence salmon permit or personal use permit (ADFG 2019).

Figure 8 shows the location of the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Use Area relative to the location of the proposed federal UCI drift gillnet salmon management area. As shown, the proposed federal UCI drift gillnet salmon management area is outside of, but adjacent to, the nonsubsistence use area. Also shown on the figure are the communities in the vicinity identified as engaged in and/or dependent on the commercial UCI salmon drift gillnet fishery, as are communities otherwise in or near subsistence salmon fishery permit areas and/or personal use fishery areas, along with those communities where federal subsistence salmon permits are available to residents.

In two instances (Seldovia and Port Graham), communities identified as engaged in and/or dependent on the commercial UCI salmon drift gillnet fishery over the period 2009-2018 are immediately adjacent to state subsistence salmon fishery permit areas.[19] Both of these communities are located to the southeast of the proposed federal UCI drift gillnet salmon management area near the southwestern tip of the Kenai Peninsula and outside of the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Use Area.[20] Additional subsistence salmon fishery permit areas shown on Figure 8 (but farther removed from the proposed federal UCI draft gillnet salmon management area) include Tyonek permit area, which is located in waters adjacent to lands owned by the Native Village of Tyonek, and the Yentna fish wheel fishery permit area, located on the Yentna River upstream of the nonsubsistence use area boundary in the vicinity of the community of Skwentna.[21] Neither Tyonek nor Skwentna were identified as communities engaged in and/or dependent on the commercial UCI salmon drift gillnet fishery in any year 2009-2018. Additional information on state permitted subsistence fisheries in the region (as well as educational fisheries in the region, which include permits held by Alaska Native entities in the Upper Cook Inlet, such as those held by Kenaitze Tribal Group, Ninilchik Traditional Council, and Ninilchik Native Descendants) is provided in Section <<4.6.4.1>>.

In one instance (Ninilchik), federal subsistence salmon permits are available to the residents of a community identified as engaged in and/or dependent on the commercial UCI salmon drift gillnet fishery 2009-2018 that is located within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Use Area. Federal subsistence fishery permits are also available to residents of two other communities located within the same nonsubsistence use area (Hope and Cooper Landing), but neither were identified as engaged in and/or dependent on the UCI salmon drift gillnet fishery during the period 2009-2018.[22]

[19] The predominantly Alaska Native community of Nanwalek, which was not identified as engaged in and/or dependent on the UCI salmon drift gillnet fishery during the period 2009-2018, is in the Port Graham subdistrict subsistence permit area along the with the community of Port Graham, which is also predominately Alaska Native.
[20] There are three other subdistrict subsistence fishery permit areas near the southwestern tip of the Kenai Peninsula, outside of the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Use Area. The Koyuktolik (Dogfish) Bay, Port Chatham, and Windy Bay subsistence permit areas, unlike the Port Graham subsistence permit area, are not adjacent to contemporary communities. The fisheries for the Port Graham, Koyuktolik Bay, Port Chatham, and Windy Bay subdistricts are all under one permit issued by the Division of Commercial Fisheries; the fishery in the Seldovia area is under a separate permit also issued by the Division of Commercial Fisheries.
[21] Specifically, it is located in the mainstem of the Yentna River from its confluence with Martin Creek upstream to its confluence with the Skwentna River. The subsistence fish wheel fishery began in 1996 as a personal use fishery and was reclassified as a subsistence fishery by the Board of Fish in 1998 (ADFG 2019).
[22] Since 2007, federal regulations allow for the harvest of salmon, trout, and Dolly Varden by residents of Cooper Landing, Hope, and Ninilchik in the Kenai National Wildlife Refuge and Chugach National Forest (ADFG 2019).

Additional information on federal permit subsistence fisheries in the region is provided in Section <<4.6.4.2>>.

Two other communities (Kenai and Kasilof) identified as engaged in and/or dependent on the commercial UCI salmon drift gillnet fishery during the period 2009-2018 are adjacent to personal use salmon fishery areas encompassing three personal use fisheries (the Kenai River dip net fishery, the Kasilof River dip net fishery, and the Kasilof River set gillnet fishery) A fourth personal use salmon fishery area in the region, at Fish Creek on the northwestern shore of Knik Arm (the Fish Creek dip net fishery), is located roughly equidistant (approximately 15 miles) from two communities (Anchorage and Wasilla) identified as engaged in and/or dependent on the commercial UCI salmon drift gillnet fishery. All four of these communities are located within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Use Area.[23] Additional information on personal use fisheries is provided in Section <<4.6.3>>.

[23] A fifth personal use fishery, the Beluga River Personal Use Salmon Fishery, occurs within the Beluga River upstream from the northwestern shore of Cook Inlet, roughly 10 miles northeast of the community of Tyonek. As it is limited to Alaska residents 60 years or older, it is not further considered in this section.

Figure 8 Subsistence and Personal Use Salmon Fishery Areas in or Near Upper Cook Inlet