

Mr. Glenn Merrill, Assistant Regional Administrator  
National Marine Fisheries Service, Alaska Regional Office  
P.O. Box 21668  
Juneau, AK 99802

Mr. Simon Kineen, Chairman  
North Pacific Fishery Management Council  
1007 West Third, Suite 400  
Anchorage, AK 99501

May 22, 2020

**Re: Request for Emergency Action to Increase the BSAI Herring Prohibited Species Catch Allowance**

Dear Mr. Merrill and Mr. Kineen,

**United Catcher Boats (UCB), Midwater Trawlers Cooperative (MTC) and Alaska Groundfish Data Bank (AGDB) respectfully request that National Marine Fisheries Service (NMFS) initiate an emergency rule that would increase the BSAI herring prohibited species catch (PSC) allowance from 1% of the Eastern Bering Sea herring biomass (2,532 mt) to 2% of the Eastern Bering Sea herring biomass (5,064 mt).** The result of this emergency action would be to temporarily amend the fishery specific herring PSC allowances (thereby alleviating triggered closure areas discussed below) found in Table 15 in the 2020 BSAI Final Specification Rule (published on March 9, 2020) to read as follows:

<b>Proposed Table 15 Herring PSC Allowance Revisions</b>	
Yellowfin Sole	220
Rock Sole/Flathead Sole/Alaska Plaice/Other Flatfish	108
Greenland Turbot/Arrowtooth Flounder/Kamchatka Flounder/Sablefish	14
Rockfish	14
Pacific Cod	26
Midwater Trawl Pollock	4,598
Pollock/Atka Mackerel/Other Species	84
Total Trawl PSC	5,064

For ease of reading, please note that this document has several parts:

1. Executive Summary
2. Background and Supporting Information (page 3)
3. Impacts to Eastern Bering Sea Herring Stock (page 18)
4. Conclusion (page 19)
5. Appendix (page 21)

**1. EXECUTIVE SUMMARY**

The AFA pollock fishery has encountered abnormally high herring bycatch rates during the 2020 A-season, exceeding the pollock fishery herring allowance and triggering the Herring Savings Area closures that would start this B-Season. This closure is anticipated to increase the length of the fishing B-season by weeks, increase bycatch of both Chinook and chum salmon, increase fishing and observer costs, and

reduce fish quality. Such record-high herring PSC encounters in the Bering Sea pollock trawl fishery were not previously envisioned or anticipated and the current herring savings closure area regulation will cause significant disruption and economic harm to the pollock fishery if emergency action is not taken. Fishery regulations related to the Sealion Conservation Area (SCA) and Chinook salmon PSC impede the pollock fishery's ability to avoid herring PSC under such high herring encounters (due to abundance) and these impacts were not accurately considered at the time of their adoption. If emergency action is not taken, the current regulations will move the fishery into areas of higher salmon abundance. This shift to areas of higher salmon abundance will result in more salmon closures thereby lowering daily production and potentially extending the fishing season late into the fall when Chinook salmon bycatch rates increase. In addition to the conservation concerns, the fishery disruption and economic harm faced by pollock fishery participants from a closure of the herring savings areas, particularly Herring Savings Area 2 (HSA 2), and likely extension in season length will disproportionately impact smaller shoreside vessels. Given these unforeseen circumstances, it is critical that the Agency take the requested emergency action for the benefit of the fishery participants and communities. While this situation is not attributable to the Covid-19 pandemic, the economic situation in Alaska and across the nation due to the pandemic compels action to prevent further negative economic impacts to participants and communities.

### **Standard for Emergency Relief**

Section 305(c) of the MSA allows the Secretary of Commerce to promulgate emergency regulations when the Secretary finds that an emergency exists involving any fishery. NMFS policy guidance defines an emergency as a situation that: 1) results from recent, unforeseen events or recently discovered circumstances; 2) presents serious conservation or management problems in the fishery; and 3) can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment, and deliberative consideration of the impacts on participants to the same extent as would be expected under the normal rulemaking process.

Using NMFS' Policy Guidelines for the Use of Emergency Rules, UCB, MTC, and AGDB believe retaining the annual PSC limit at 1% of the annual biomass of Eastern Bering Sea herring and implementing a closure of the HSA 2 creates an emergency situation for the midwater pollock fishery 2020 B season (start date June 10). All three standards that NMFS uses to define an emergency are met in this current situation.

#### **I. An Emergency Exists if a Situation Results from Recent, Unforeseen Events or Recently Discovered Circumstances**

In the three decades since the Council took final action on Amendment 16a, which set the initial PSC herring level, there have been multiple other regulatory actions taken that have had a cumulative effect on the way the BSAI midwater trawl pollock fishery is prosecuted. The two most relevant of these regulations are the Sea Lion Conservation Area and the Chinook salmon bycatch limits. Neither of these actions considered or analyzed their effects relative to the herring biomass level experienced during the pollock 2020 A Season. As a result, the combined impacts of these regulations with the record-high herring levels were completely unforeseen.

#### **II. An Emergency Exists if a Situation presents serious conservation or management problems in the fishery**

Under Amendments 91 and 110 to the BSAI Groundfish FMP, the Council and NMFS have placed a management priority on the avoidance/minimization of Chinook and chum salmon PSC taken in the pollock fishery. If HSA 2 is closed to the pollock fishery on July 1, the resulting reduction in fishing area options will likely cause an increase in July/August salmon bycatch numbers, which negatively impacts

the conservation of Chinook and chum salmon stocks as well as undermines the effective management of the pollock fishery.

**III. An Emergency Exists if a situation can be addressed through emergency regulations for which the immediate benefits outweigh the value of normal rulemaking**

The midwater trawl pollock fishery reached its annual herring PSC limit in April 2020. The normal process for addressing this type of action is not available in time for the 2020 pollock B season (June 10 start date) and any area closure under the existing regulations that would go into place (June 15 for HSA 1 and July 1 for HSA 2).

**Economic Justification for Emergency Action**

Emergency action is justified in this situation to prevent a significant direct economic loss and to preserve significant beneficial economic opportunity for the pollock fishery participants. Economic harm created by the closure of Summer HSA2 (July 1<sup>st</sup> through August 15<sup>th</sup>) will displace pollock catcher vessels from the most productive fishing grounds, thereby increasing harvest costs, lowering product quality, and decreasing ex-vessel prices and product value.

**Duration of Emergency Rule Requested**

We understand that an emergency rule is effective for 180 days and may be extended for an additional 186 days if conditions warrant. We are requesting an emergency rule without an extension. That will be sufficient to address the immediate need and will provide the Council and stakeholders with time to develop an analytical package that would amend the current herring PSC regulations through the normal Council and MSA rulemaking process to prevent this emergency situation from occurring again.

**2. BACKGROUND AND SUPPORTING INFORMATION**

Regulations promulgating federal management of herring PSC in BSAI groundfish fisheries are contained in Amendment 16a (effective 1991) to the BSAI Groundfish Fishery Management Plan (FMP). This amendment was designed to address management of herring (and other PSC species) in domestic trawl fisheries by establishing limits for Pacific herring taken as bycatch. The annual PSC limit is set at 1% of the annual biomass of Eastern Bering Sea herring and is apportioned among the various trawl fisheries. Attainment of any apportionment triggers closure of herring savings areas to that fishery. Further, Amendment 16a states that the Regional Director may promulgate an in-season closure of an area (up to 60 days) to reduce PSC rates.

In April 2020, the midwater trawl pollock fishery reached its allocated limit (2,299 mt) of herring PSC (as of May 16, the current catch estimate for herring in the pollock fishery is 2,819 mt). As a result, the following Herring Savings Areas closures will be triggered for the 2020 pollock B season and the 2021 pollock A season:

1. Summer Herring Savings Area 1 – The part of the Bering Sea subarea that is south of 57° N latitude and between 162° and 164° W longitude from June 15 through July 1 of that fishing year.
2. Summer Herring Savings Area 2 – The part of the Bering Sea subarea south of 56° 30' N latitude and between 164° and 167° W longitude from July 1 through August 15 of that fishing year.
3. Winter Savings Area – The part of the Bering Sea subarea that is between 58° and 60° N latitude and between 172° and 175° W longitude from September 1 through March 1 of the succeeding year.

### *Criteria for Emergency Action*

Using NMFS' Policy Guidelines for the Use of Emergency Rules, we believe retaining the annual PSC limit at 1% of the annual biomass of Eastern Bering Sea herring and implementing a closure of the Herring Savings Area 2 creates an emergency situation for the midwater pollock fishery 2020 B season which begins on June 10.

The situation being faced by the pollock fishery is the result of recent, unforeseen events and recently discovered circumstances. In the three decades since the Council took final action on Amendment 16a, there have been multiple other regulatory actions taken that have had a cumulative effect on the way the BSAI midwater trawl pollock fishery is prosecuted. The two most relevant of these regulations impacting consideration of this emergency request are: 1) the Sea Lion Conservation Area (SCA) harvest limitations established during the pollock A season (Amendment 70 passed in October 2001); and 2) the Chinook salmon bycatch limits established for the pollock fishery (Amendment 91 passed in April 2009).

Taken in combination with the unusually high herring PSC exhibited during the 2020 A season due to high abundance, the fishing restrictions imposed by these two management measures impacted pollock fishing operations in a way that was not anticipated or considered in either of the two analyses associated with those actions or the original Amendment 16a analysis.

### Herring Abundance

As described in the Amendment 16a analysis, there was an expectation that herring consistently migrated to wintering areas well northwest of the Pribilof Islands (identified as the Winter Herring Savings Area). As such, herring were not expected to be encountered by the winter pollock fishery near the Pribilof Islands. However, during the 2020 pollock A season, herring interactions and associated bycatch rates were at unprecedented levels in this area. This increase in herring PSC does not appear to be due to any change in fishing behavior. Figure 1 below shows the pollock A season fishing footprints from 2020-2012 overlaid with herring bycatch amounts where larger circles equate to greater amounts of herring. Figure 2 shows pollock A season fishing footprint overlaid with herring bycatch from each of the associated A seasons. These two figures demonstrate that there was nothing unusual about the 2020 A season pollock fishery and that there could have been other years with high herring bycatch if the distribution, abundance, and catchability had been similar in previous years to what occurred in 2020. Such an increase in herring abundance on the grounds was unforeseen as evidenced by the history of herring bycatch, by weight, since 1991 (Figure 3).

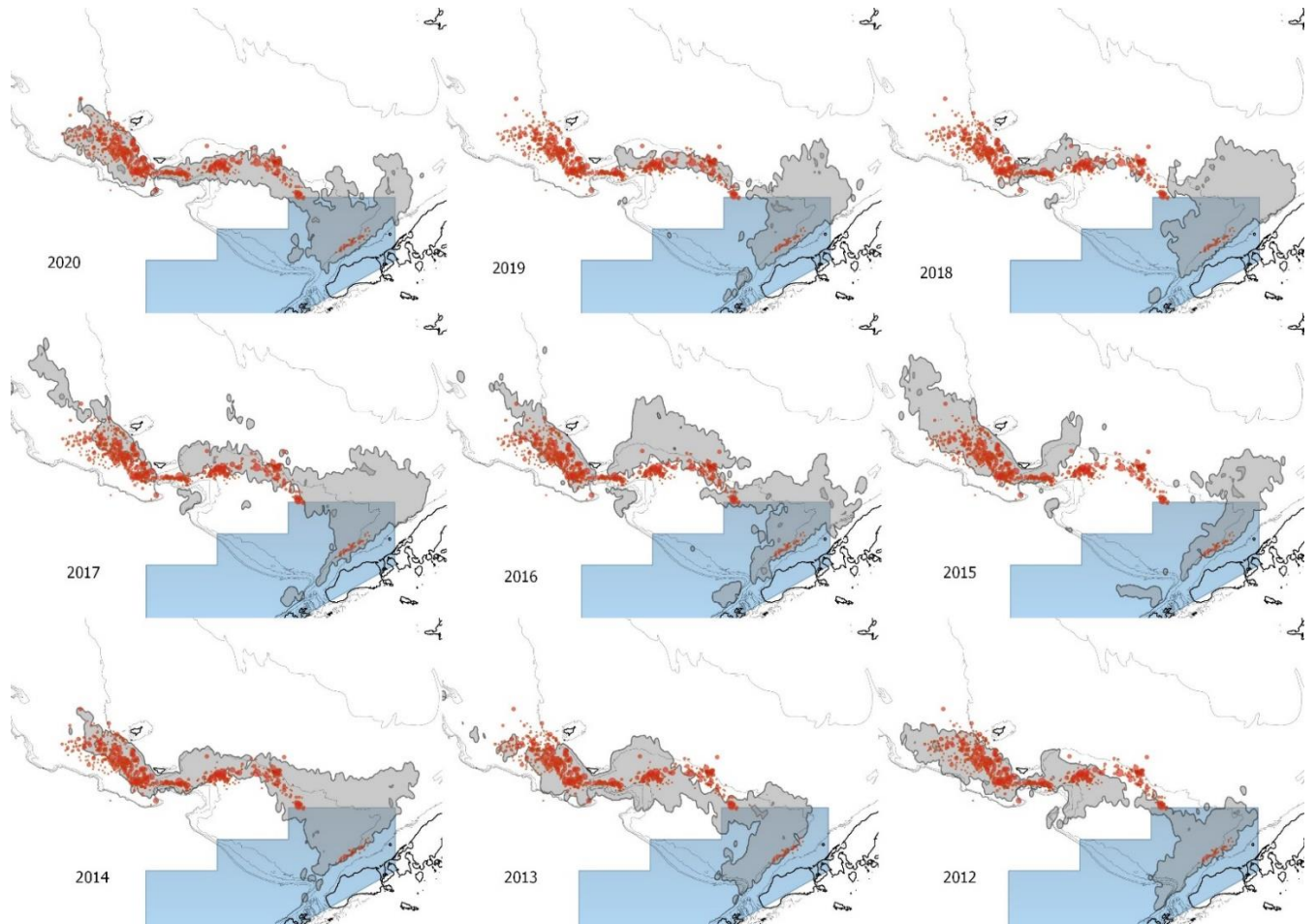


Figure 1. Pollock A season fishing footprint overlaid with herring bycatch from 2020 pollock A season. Size of the circles is related to the amount of herring bycatch in the hauls. Source: SeaState

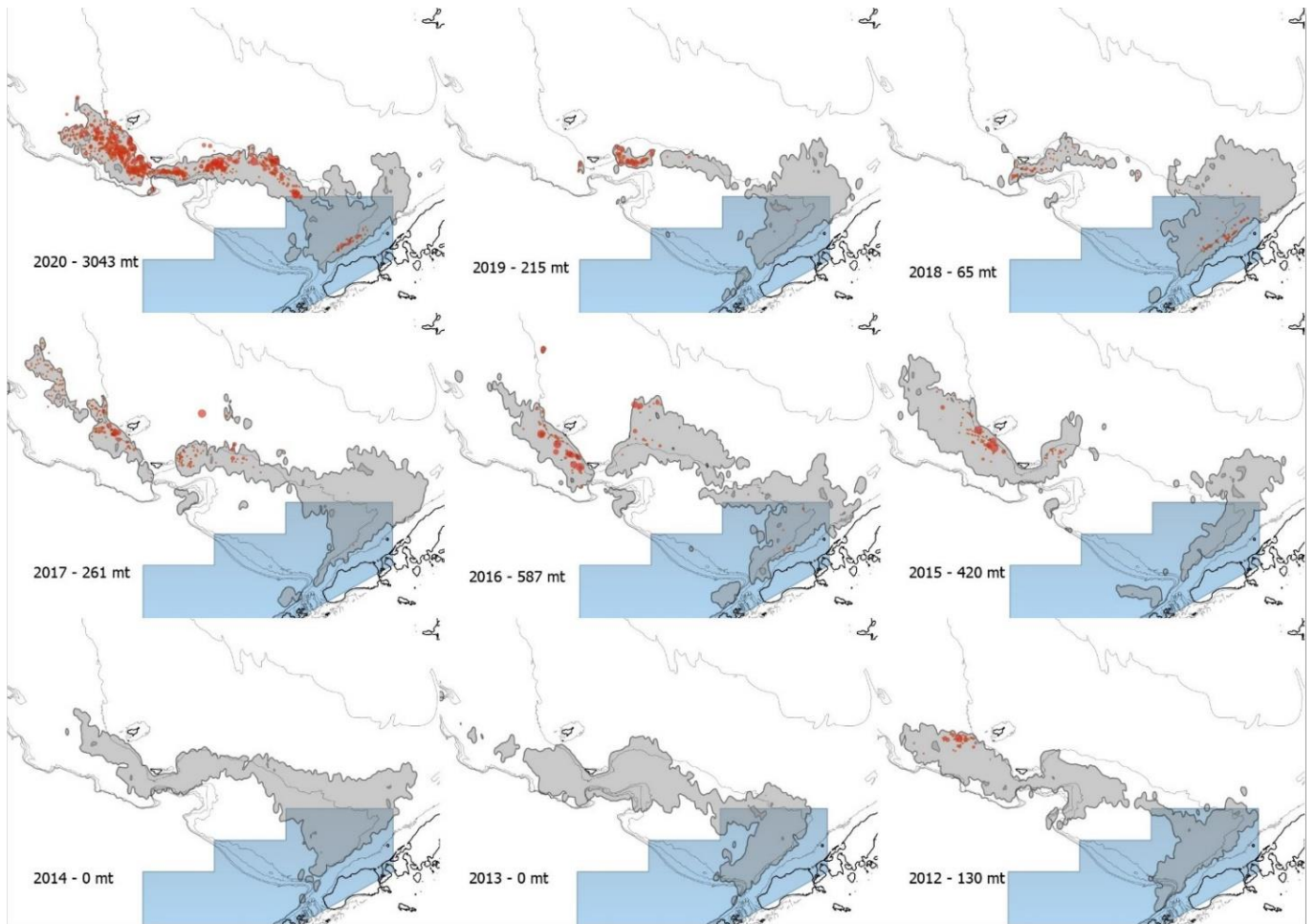


Figure 2. Pollock A season fishing footprint overlaid with herring bycatch from each of the associated A seasons. Size of the circles is related to the amount of herring bycatch in the hauls, and the scale (size of circle vs herring size) in all years is the same as that established for 2020. Hauls with < 100 kg herring omitted in all cases as hauls with trace amounts of herring can be very numerous (>1000) but have not summed to more than 32 mt of herring in this dataset. Source: SeaState.

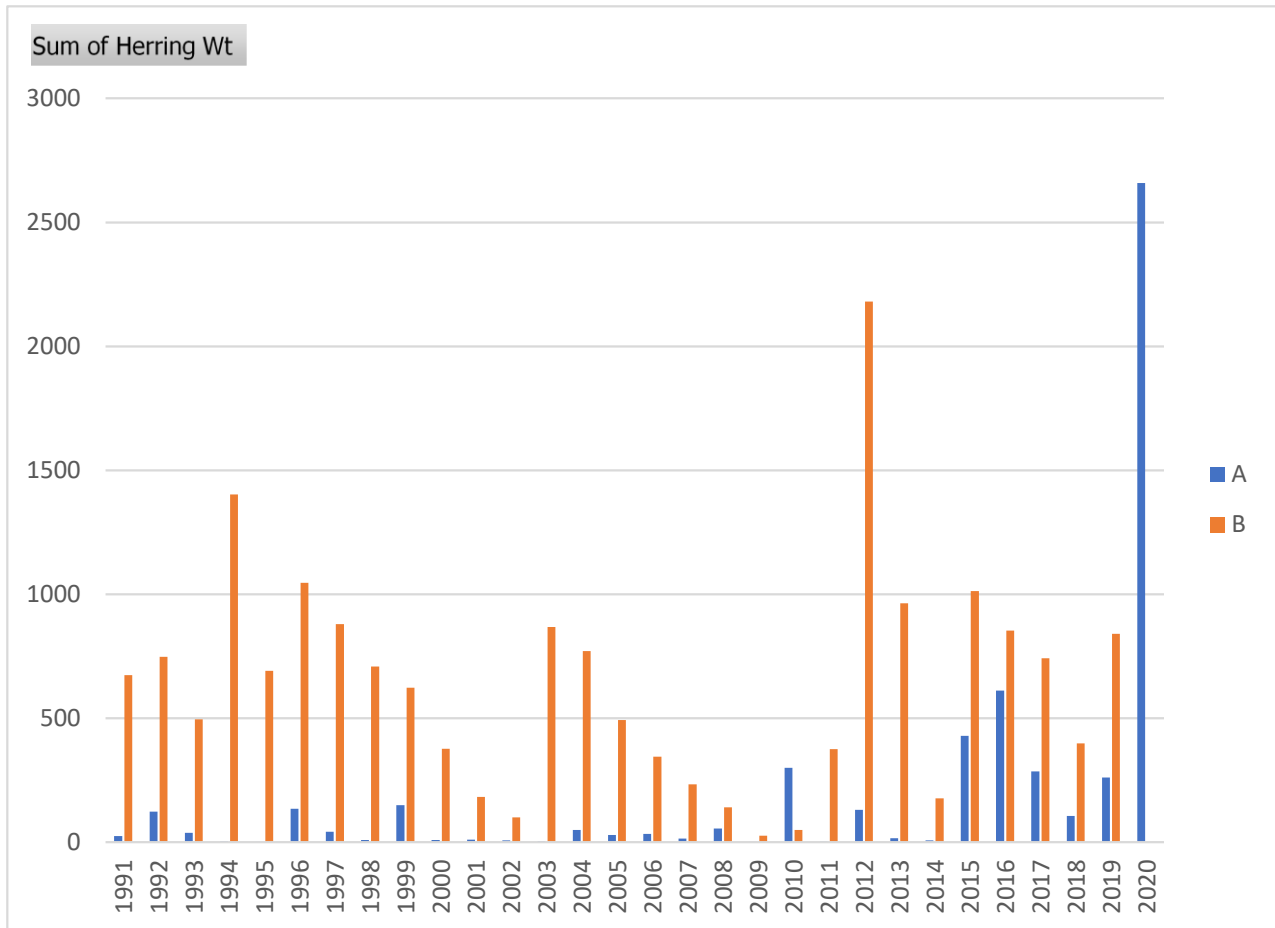


Figure 3. Herring weight based on NORPAC observer data (from J. Ianelli through 2019, Sea State data for 2020). Note that before 2011 catcher vessels were not required to have 100% observer coverage so approx. 15% of the catch of herring in the pollock fishery is not included in this figure. Source: SeaState.

Sea Lion Conservation Area (SCA)

At the time of final action, the Council chose Alternative 3 for a restricted and closed SCA. According to the SEIS (November 2001) for this action (page ES-5), the following effects on prohibited species bycatch were identified:

**In the Bering Sea, all alternatives are predicted to have insignificant effects (less than 50% reduction or no change in spatial/temporal concentration) for all species and issues, except for Alternative 2 (low and slow).** Alternative 2 is predicted to induce conditionally significant positive effects (50% to 99% reduction) on Chinook salmon and other salmon bycatch, but would induce conditionally significant negative effects (50% to 99% increase) on the bycatch of herring and king crabs other than red king crab.

Further, Section 4.5.1.3 of the SEIS specifies the following effects of Alternative 3 on prohibited species bycatch in the BSAI:

Alternative 3 would close portions of critical habitat to all fishing and would close a smaller area to trawling than Alternative 2. Similar to Alternative 2, **Alternative 3 would lead to predicted decreases in the bycatch of Pacific herring, Chinook salmon and other salmon (12%, 33%, and 26%, respectively)** in the pollock fishery. This is because the areas of high salmon and herring

bycatch are largely contained in closed areas under both alternatives, however, the area containing the chinook and chum salmon savings areas would be open under this alternative. Critical habitat catch restrictions within open critical habitat would move effort out of these high bycatch zones, resulting in some bycatch reductions.

It is clear that the assumptions and conclusions reached in the SCA analysis regarding the impacts on herring bycatch did not anticipate the increase in herring abundance and associated PSC seen in the 2020 pollock A season. In addition to the unprecedented levels of herring bycatch, the rate of herring bycatch in hauls taken outside the SCA were much higher than that of hauls taken inside (Figure 4 below). By regulation, only 62% of the A season pollock catch may be taken inside the SCA before April 1. As such, vessels generally search for pollock outside the SCA early in the season and often will take more of their pollock quota outside the SCA because those schools of pollock within the SCA can disperse forcing vessels to either stand down or fish in unproductive areas in order to live within SCA limits. As previously stated, fishing patterns for the 2020 A season were similar to that in other years, including the fact that that the outside-SCA fishery concentrated along the 50 fm line up to and around the Pribilof Islands, but typical fishing operations and patterns intended to meet the 62% pollock catch threshold resulted in the unprecedented high amount of herring PSC.

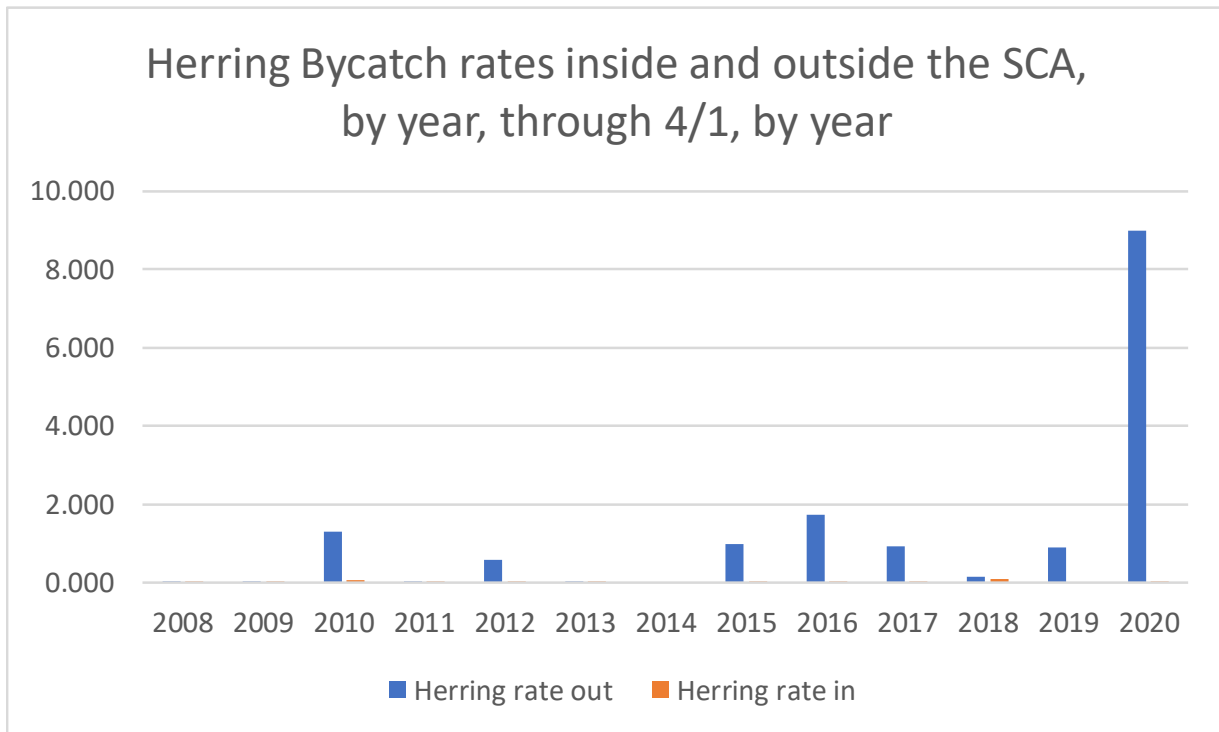


Figure 4. Herring bycatch rates inside and outside the SCA during the A season pollock fishery, 2008 – 2020. Source: SeaState.

#### Chinook Salmon PSC Limits

Section 7.3.5 of the Amendment 91 Final EIS (published December 2009) states the following regarding the impacts to Pacific herring from establishing Chinook salmon PSC:

The impacts of the PSC limits and the total Pacific herring bycatch in the groundfish fisheries were analyzed in the Alaska Groundfish Harvest Specifications EIS (NMFS 2007). The EIS examines the impacts of the fisheries on prohibited species mortality, genetic structure, reproductive success, prey availability, and habitat. The EIS concludes that the impacts of the



groundfish fisheries on prohibited species are reduced by existing management measures that mitigate adverse impacts to prohibited species. The amount of herring bycatch in the groundfish fisheries is so low that it would have minor impacts on the stocks of these species. The PSC limits for herring are never reached. When area PSC limits are reached, limits reduce adverse impacts to stocks by closing directed fishing in those areas.

Under Alternative 1, status quo, the pollock fishery's impacts will be less than those of all of the groundfish fisheries combined. In 2007, an estimated 341 mt of the 1,787 mt herring PSC limit was taken by the Bering Sea pollock fishery. Therefore, it is reasonable to assume that the amount of herring taken by the Bering Sea pollock fishery will remain very low and the impacts will remain minor. **Changes in the pollock fishery resulting from Alternatives 2 through 5 are not expected to change typical levels of herring bycatch. Thus, the alternatives would likely not change the pollock fishery in a manner that would increase bycatch of herring to the extent that bycatch would impact abundance of these species.**

The conclusions in the analysis above are underscored by the fact that the herring PSC limits have only been reached twice in the last three decades. In 1992 the HAS closures were triggered; however, the herring PSC limit was mis-specified (too low) so the area closures were never put in place. In 2012, the winter HSA 3 was closed from October 2012 to March 2013 but neither of the summer area closures were triggered.

Similar to that of the SCA analysis, it is clear that the assumptions and conclusions reached in the Chinook salmon PSC analysis regarding the impacts on herring bycatch did not anticipate the increase in herring PSC due to high herring abundance seen in the 2020 pollock A season. During the 2020 pollock A season, when increasing encounters of herring PSC were realized, vessels explored deeper waters but found high numbers of Chinook salmon, which forced them back into the band of higher herring bycatch (Figure 5 below). The higher rates of Chinook salmon have been seen in previous years, but in other years vessels could remain in shallower waters and not accumulate as much herring. Due to regulations implemented under Amendment 91 for the pollock fishery, Chinook salmon hard caps mean that encounters of Chinook salmon take priority over all other bycatch species; while avoiding Chinook salmon in the 2020 A season, pollock vessels accumulated herring due to abundance of herring on the grounds.

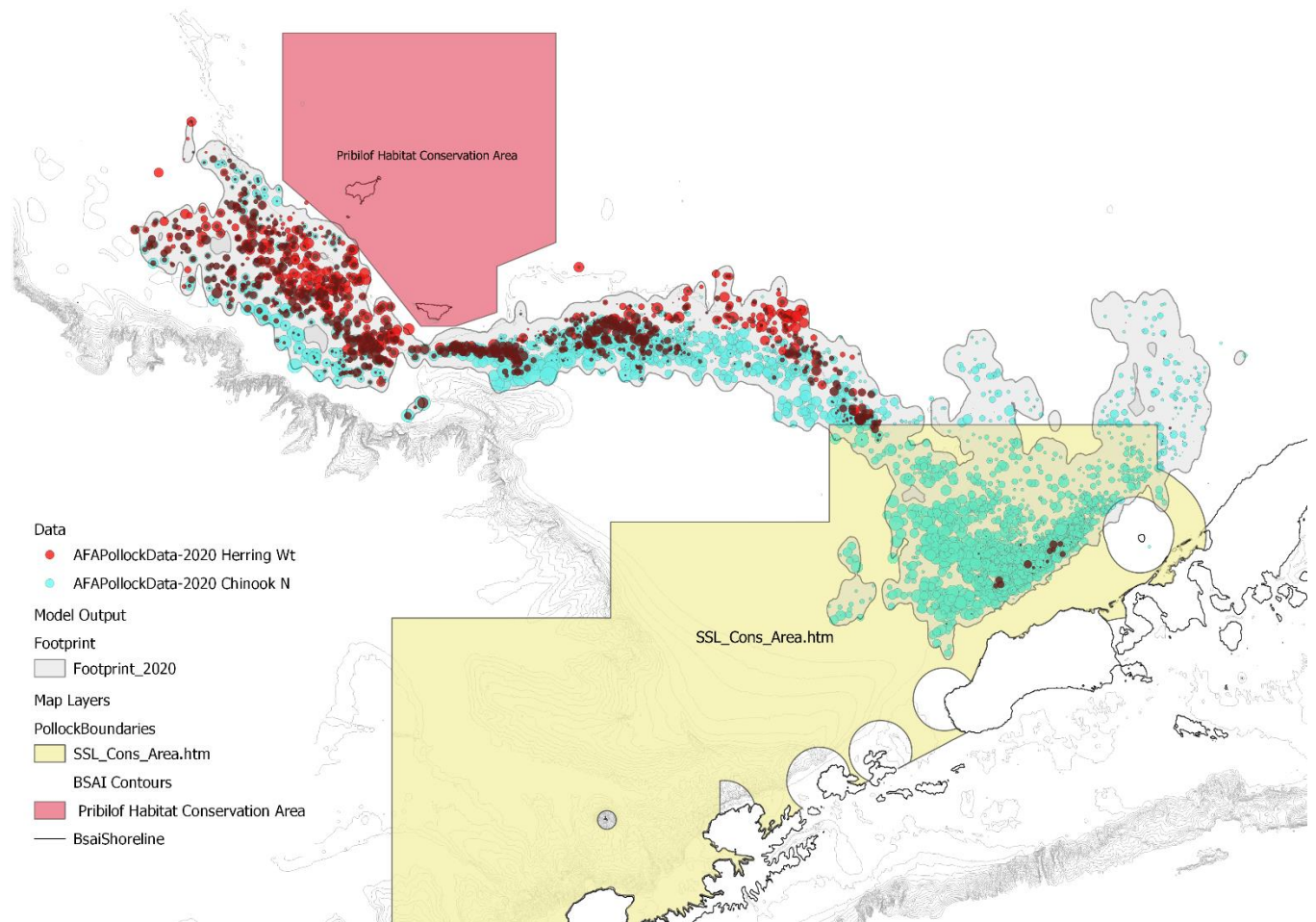


Figure 5. Chinook and Herring bycatch from hauls in the 2020 pollock A fishery. The gray outline is the pollock fishery “footprint” – it is an area encompassing 95% of the pollock catch. Points shown are those that include at least some herring or chinook bycatch (i.e. hauls with zeroes of each are omitted). Source: SeaState.

Taken in totality, it is the combination of unprecedented herring abundance near the Pribilof Islands (and everywhere outside of the SCA) during the winter pollock fishery and the analytical conclusions of two Council actions for management of the pollock fishery, neither of which anticipated impacts from high levels of herring biomass, that lead to the unanticipated event of the midwater pollock fishery reaching their allocated herring PSC amount, thus triggering HSA closures. These fishing conditions of 2020 cannot be considered independently of each other: regulations associated with the current SCA and Chinook salmon PSC caps impede a vessel operator’s ability to avoid and/or minimize herring PSC; simultaneously, analyses associated with the current SCA and Chinook salmon PSC caps concluded that there would be no harm to BSAI herring stocks from the management alternatives selected at the time of final action.

The situation presents serious conservation concerns for BSAI Chinook and chum salmon and management problems in the pollock fishery. Under Amendments 91 and 110 to the BSAI Groundfish FMP, the Council and NMFS have placed a management priority on the avoidance/minimization of Chinook and chum salmon PSC taken in the pollock fishery. If HSA 2 is closed to the pollock fishery on July 1, the resulting reduction in fishing area options will likely cause an increase in salmon bycatch numbers, which negatively impacts the conservation of Chinook and chum salmon stocks as well as effective management of the pollock fishery. With the closure of HSA 2, herring PSC becomes a



Table 1. Expected bycatch difference for chum salmon in past years based on bycatch rates inside and outside Herring Savings Area 2. Bycatch rates inside and outside Herring Savings Area 2 are computed, based on observer data for each year, during the period that HSA2 would be closed (7/1 – 8/15). The expected change in bycatch, based on those conditions, is the difference in bycatch rate inside vs outside the HSA2, multiplied by the amount of pollock catch that would have been moved outside the area. Green cells indicate a “savings” in the PSC species under a closure of HSA 2 while red cells indicate an increase in PSC species. Source: SeaState.

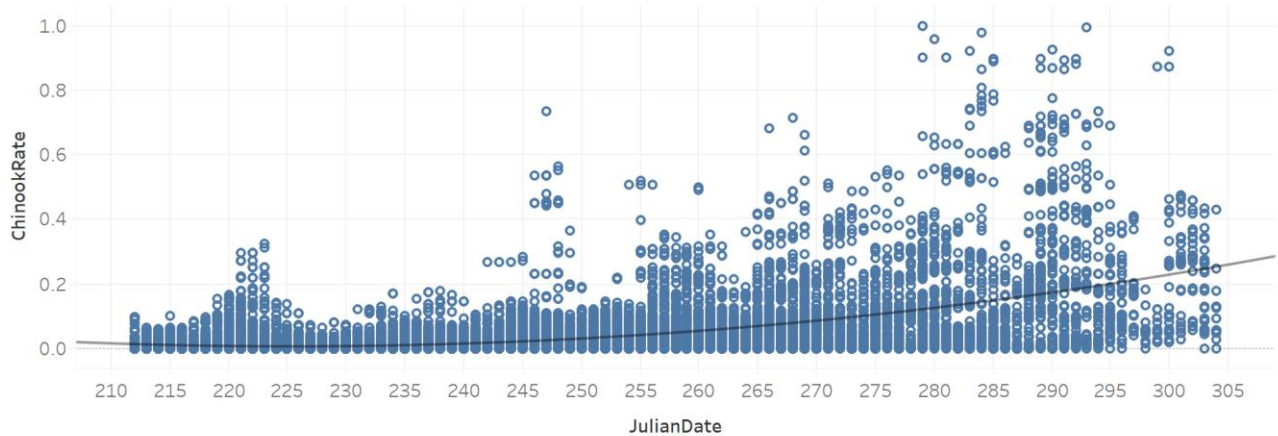
Year	Chum rate outside HSA2, 7/1-8/15 (N/mt)	Chum rate inside HSA2, 7/1-8/15 (N/mt)	Rate difference (outside - inside)	Pollock catch inside HSA2, 7/1-8/15 (mt)	Bycatch difference (rate difference x pollock caught inside)
2008	0.005	0.145	-0.141	8,471	-1,192
2009	0.026	0.876	-0.850	13,615	-11,571
2010	0.022	0.179	-0.158	13,672	-2,155
2011	0.180	0.719	-0.539	42,451	-22,879
2012	0.008	0.055	-0.047	71,106	-3,310
2013	0.087	0.652	-0.564	82,524	-46,578
2014	0.430	0.446	-0.016	93,610	-1,459
2015	0.295	0.481	-0.186	149,572	-27,809
2016	0.571	0.456	0.115	219,453	25,213
2017	1.195	0.502	0.692	186,840	129,369
2018	0.542	0.097	0.445	117,671	52,351
2019	0.390	0.226	0.164	150,175	24,573

Table 2. Expected bycatch difference for herring in past years based on bycatch rates inside and outside Herring Savings Area 2. Bycatch rates inside and outside Herring Savings Area 2 are computed, based on observer data for each year, during the period that HSA2 would be closed (7/1 – 8/15). The expected change in bycatch, based on those conditions, is the difference in bycatch rate inside vs outside the HSA2, multiplied by the amount of pollock catch that would have been moved outside the area. Green cells indicate a “savings” in the PSC species under a closure of HSA 2 while red cells indicate an increase in PSC species. Source: SeaState.

Year	Herring rate outside HSA2, 7/1-8/15 (N/mt)	Herring rate inside HSA2, 7/1-8/15 (N/mt)	Rate difference (outside - inside)	Pollock catch inside HSA2, 7/1-8/15 (mt)	Bycatch difference (rate difference x pollock caught inside)
2008	0.019	6.627	-6.608	8,471	-56
2009	0.001	7.052	-7.051	13,615	-96
2010	0.000	2.643	-2.642	13,672	-36
2011	0.034	2.392	-2.357	42,451	-100
2012	0.514	2.643	-2.129	71,106	-151
2013	0.023	0.210	-0.186	82,524	-15
2014	0.012	0.600	-0.588	93,610	-55
2015	0.034	5.321	-5.287	149,572	-791
2016	0.270	2.205	-1.935	219,453	-425
2017	0.007	3.230	-3.223	186,840	-602
2018	0.019	2.690	-2.672	117,671	-314
2019	0.005	1.927	-1.922	150,175	-289

Any extension of catcher vessel pollock fishing later into the fall will increase the risk of higher Chinook salmon encounters. While for most years Chinook salmon PSC would be expected to decline when pollock harvest is displaced from HSA 2 for the six week closure period, however, the largest differences in Chinook salmon bycatch that are expected from the herring savings area closure are not due to spatial displacement during the closure period. The larger effects are expected to arise from the 1 to 3-week season extension (discussed in more detail below), and the fact that Chinook salmon bycatch rates begin to increase any time after August 1. An analysis of this effect is shown in Figure 7 and Table 3 below (a description of the analysis can be found in Appendix 1). Results from this hypothetical season extension are shown Table 3. The rightmost columns in Table 3 show the net result of Chinook salmon bycatch change due to area change and to season extension. In all years but one, Chinook salmon PSC would be expected to increase substantially if fishing outside HSA 2 led vessels to return to port with loads 25% less than average.

August 1 start series (poly)



August 1 start series (linear)

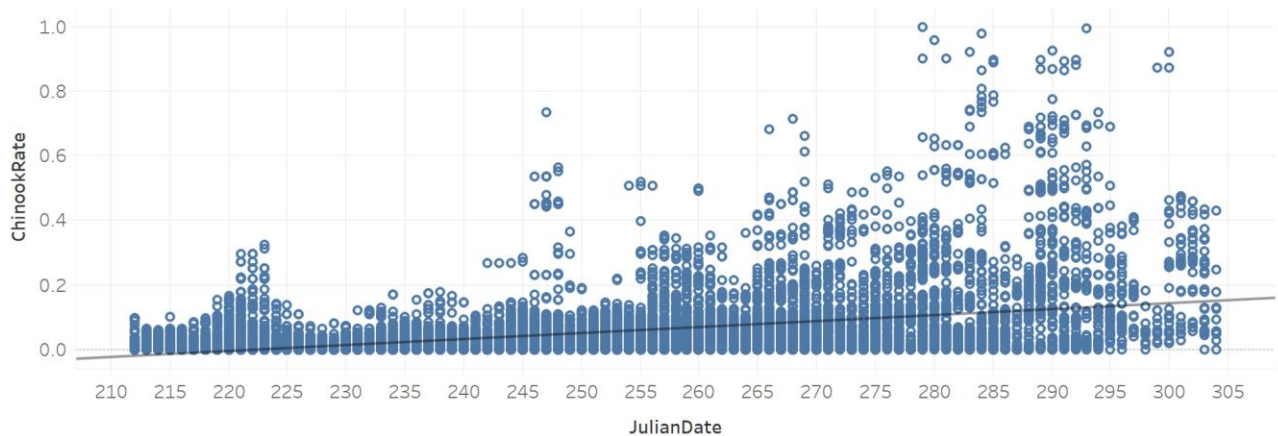


Figure 7. Increase in Chinook salmon PSC in the Bering Sea pollock fishery due to increase in season length. Source: SeaState.

Table 3. Chinook salmon bycatch change in the Bering Sea pollock fishery due to area change and increase in season length.  
Source: SeaState.

Year	Chinook change due to season extension (linear)	Chinook change due to season extension (poly)	Chinook change due to area change	Net change (season extension + area change) linear	Net change (season extension + area change) poly
2008	2,113	2,501	-16	2,097	2,485
2009	980	807	-85	895	722
2010	1,136	1,022	-26	1,110	996
2011	3,331	5,107	-167	3,164	4,940
2012	3,239	4,409	-70	3,169	4,339
2013	2,938	3,277	-332	2,606	2,945
2014	2,491	2,098	-75	2,416	2,023
2015	2,481	2,308	566	3,047	2,874
2016	2,520	2,167	785	3,305	2,952
2017	1,651	1,190	-1,487	164	-297
2018	2,465	2,070	-203	2,262	1,867
2019	2,314	2,284	-1,825	489	459
Average	2,305	2,437	-245	2,060	2,192

Any increase in both chum salmon and Chinook salmon PSC in the Bering Sea pollock fishery is counter to the Chinook salmon PSC reductions and avoidance incentives under Amendments 91 and 110 adopted by the Council.

The situation being faced by the pollock fishery can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment, and deliberative consideration of the impacts to the same extent as would be expected under the normal rulemaking process. As previously stated, it wasn't until April 2020 that the midwater trawl pollock fishery reached its annual herring PSC limit. While herring PSC management in the BSAI groundfish fisheries is best addressed through the normal Council meeting process, this typical analytical process is not available for action/implementation ahead of the 2020 pollock B season on June 10 and closure of HSA 2 on July 1.

The certainty provided by emergency relief outweighs the value of advance notice, public comment, and deliberative consideration of impacts to the same extent as would be expected under the normal rulemaking process. The scope of the emergency relief being sought (increasing the BSAI herring PSC allowance from 1% of the Eastern Bering Sea herring biomass (2,532 mt) to 2% of the Eastern Bering Sea herring biomass (5,064 mt)) in order to prevent closure of HSA 2 is a relatively limited change that would only be in place for the remainder of 2020 and would not alter any of the other existing herring, SCA, or salmon PSC regulations.

#### *Emergency Justification*

Emergency action is justified in this situation to prevent significant direct economic loss and to preserve a significant economic opportunity that otherwise might be foregone. Economic issues created by the closure of Summer Herring Savings Area 2 (July 1<sup>st</sup> through August 15<sup>th</sup>) center on the displacement of pollock catcher vessels from the most productive fishing grounds, thereby increasing harvest costs,

lowering product quality, and decreasing ex-vessel prices and product value. This economic harm has the potential to be significantly amplified by impacts from the current COVID-19 pandemic.

Table 4 below shows both the absolute tonnage and percentage for pollock B season catch inside each Herring Savings Area (HSA 1 and HSA 2) for the shoreside pollock fishery. The rightmost three columns indicate the percent of effort that would have been displaced in previous years had the HSAs been closed. This number increases from a low of 10% back in 2008 to over 90% for HSA 2 since 2015. The low percentage of catch taken in HSA 2 during previous years corresponds to a time when the pollock TACs were lower (800K – 1.2mmt), which is indicative of a much lower ABC and weaker pollock resource. The overall shoreside catch during the HSA closures is presented graphically in Figure 8 below. With the interval during which HSA 2 would be closed indicated by a gray bar, Figure 8 shows that in all years the highest amount of shoreside catch occurs during the time that HSA 2 would be closed; approximately 58% of the B season shoreside catch has come during the time that the Summer HSA 2 would be closed (7/1 – 8/15). Figure 9 below is a map showing the shoreside pollock fleet distribution relative to the HSAs during the time HSA 2 would be closed. It is understood that, in general, younger pollock are found further north and while there also may be a northward shift in pollock distribution overall, this is not documented in the stock assessment. This year the bulk of the pollock stock is expected to be of age-6 or older for the 2020 B season catch and at this time the catcher vessel fleet anticipates that this portion of the pollock population will be distributed to the south, as it has been for the last five years. Under this anticipated distribution in larger, older fish, the shoreside pollock catcher vessel fleet will be forced to forgo usual fishing grounds for those further north or west. This redistribution will have negative effects on run duration, fish quality, overall season duration, observer deployment timeframes, and both vessel and processor profitability (in addition to Chinook and chum salmon bycatch as discussed in the preceding section). These negative effects will be especially impactful for smaller pollock catcher vessels.

Table 4. Catch inside of each HSA, CV catch during individual HSA closures, and percent of pollock catch in the period that would have been relocated had the closure been in effect. Source: SeaState.

Year	Catch inside HSA 1	Catch inside HSA 2	Catch inside HSA 3	Total shoreside CV pollock catch in periods when an HSA would be closed			Percent of CV pollock catch in a closed HAS		
	6/15 - 7/1	6/15 - 7/1	7/1 - 8/15	6/15 - 7/1	7/1 - 8/15	after 9/1	6/15 - 7/1	7/1 - 8/15	> 9/1
2008	393	8,458	4,134	34,537	83,731	32,747	1%	10%	13%
2009	2,312	12,746		36,956	75,392	10,733	6%	17%	0%
2010	211	8,834	27	34,723	83,594	10,902	1%	11%	0%
2011	8,212	39,439		55,865	126,279	73,080	15%	31%	0%
2012	329	51,014		52,708	145,418	61,479	1%	35%	0%
2013	2,156	78,911	260	58,800	166,048	53,661	4%	48%	0%
2014	490	88,133		61,129	160,939	45,484	1%	55%	0%
2015	140	142,784		53,866	153,317	74,633	0%	93%	0%
2016	11,809	168,612		59,571	170,527	52,315	20%	99%	0%
2017	475	161,512		62,658	166,204	42,702	1%	97%	0%
2018	128	112,737		54,295	163,669	55,241	0%	69%	0%
2019	1,676	148,184		44,994	161,265	74,070	4%	92%	0%

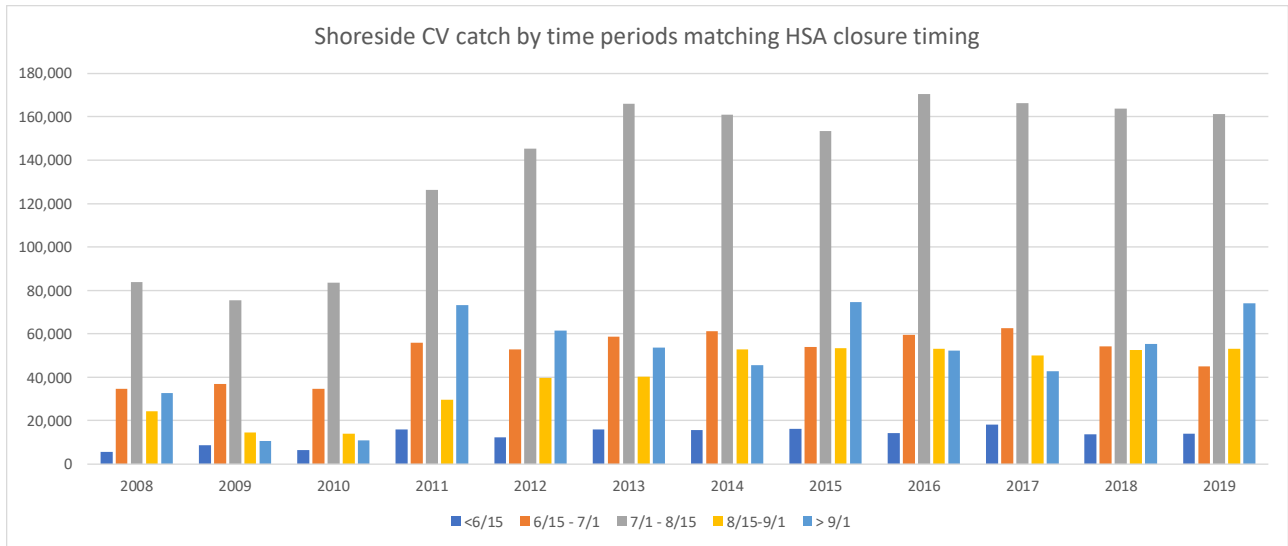


Figure 8. Distribution of overall shoreside catch relative to timing of the herring savings area closures. Source: SeaState.

### AFA CV HSA usage

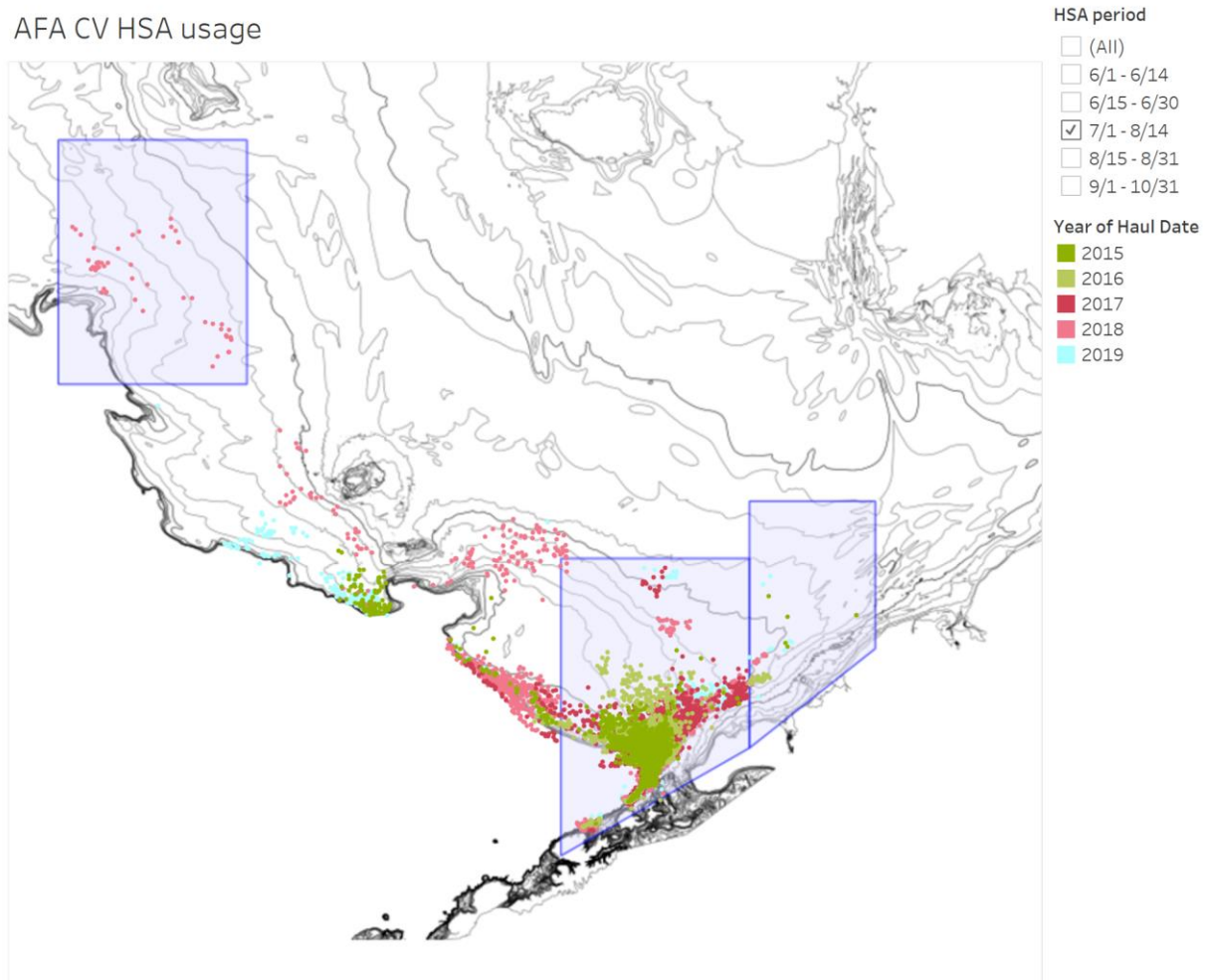


Figure 9. Shoreside pollock fleet distribution relative to the HSAs during the time HSA 2 would be closed. Note: HSA 2 is the center box encompassing the majority of pollock fishing effort. Source: SeaState.



Shoreside catcher vessel trips made outside of the HSA 2 area were uniformly longer than those inside the area, as indicated in Table 5 below. The grand average of 18.5 hours per trip would be multiplied by an average of 8 trips for the typical pollock vessel during the period, which leads to an estimated season extension of approximately 6 days per vessel based only the trip lengths noted below. It should be noted that all of the trips made outside of HSA 2 during the time period noted were made at the captain's discretion (voluntarily) and were not forced by a management action. Vessel captains do not make trips of greater distances without knowing that higher pollock CPUEs can be found by traveling those greater distances. As such, the trip time differences in Table 5 represent minimum estimates. If pollock vessels are mandated to fish outside HSA 2 due to the regulatory closure of the area, there is no guarantee that a high CPUE can be achieved. If high CPUE fishing cannot be found consistently outside HSA 2 over the course of the 45 day closure, vessels may well have to return to port without full loads (during the 2004 B season when vessels were closed out of chum salmon savings areas, they came back at 84% of their pre-closure delivery sizes) or even stand down to wait for HSA 2 to reopen. The high-CPUE requirement is extremely important to shoreside catcher vessels since processors will only allow fish to be delivered that have been caught within a short time window, typically less than three days, and the more distant grounds require two or more days travel time from Dutch Harbor (Figure 10 below). Regulatory closure of HSA 2 will result in another week to two weeks (at an average of 4 days per trip) being added to a vessel's season if vessels come in even 25% short of full loads for 8 trips. However, if fishing conditions outside HSA 2 are incredibly poor (low CPUE), the extended length of the B season could be beyond three weeks.

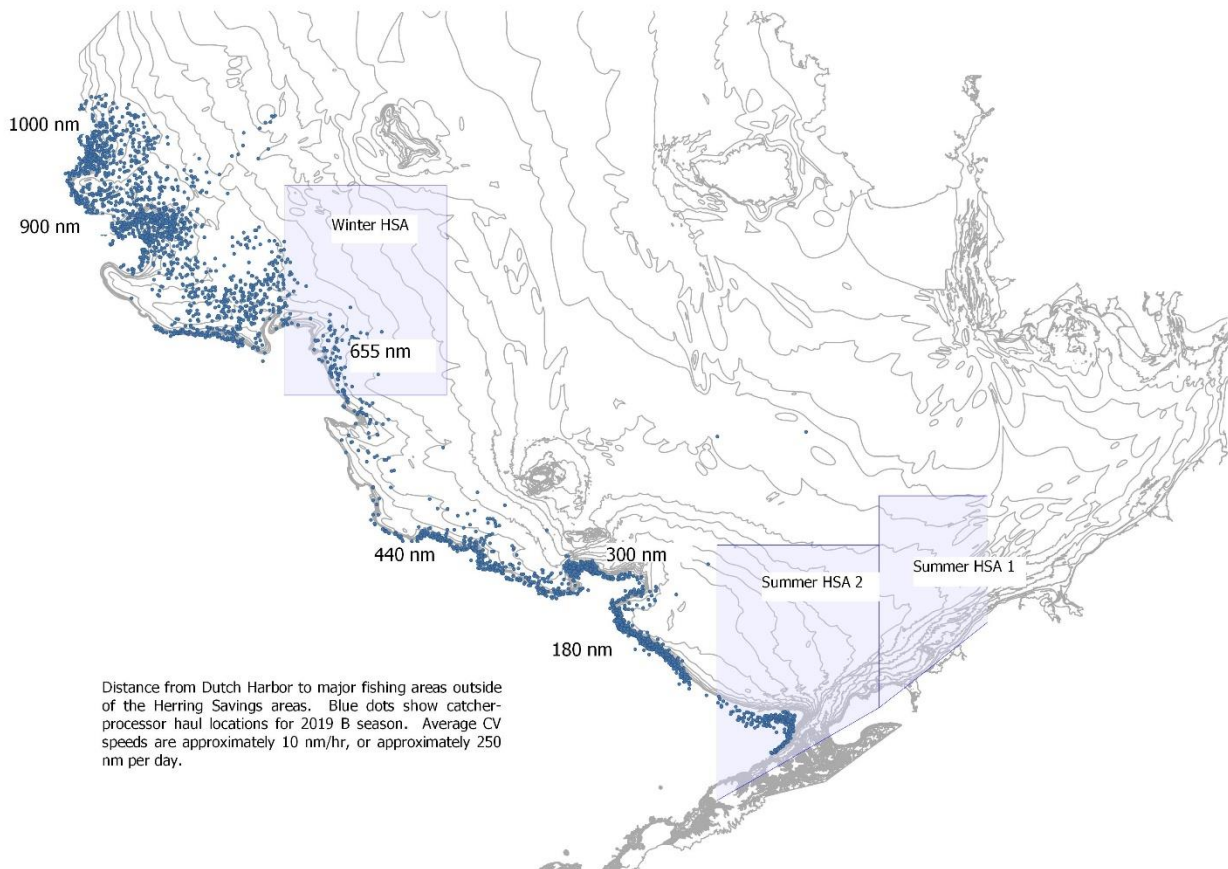


Figure 10. Distance from Dutch Harbor to major Bering Sea pollock fishing areas. Source: SeaState.

Table 5. Difference in hours between trips made by shoreside catcher vessels inside Herring Savings Area 2, between July 1 and August 15 of the years noted. A combination of observer data detailing haul dates and times and vessel VMS data was used to calculate trip lengths. Trip lengths were determined by finding the last in-port VMS position prior to the first haul of each trip and comparing that with the first in-port VMS location after the last haul in each trip. Source: SeaState.

Year	Inside	Outside	Difference
2012	68.0	94.7	26.6
2013	57.8	75.2	17.4
2014	57.0	78.7	21.7
2015	41.0	67.0	26.0
2016	33.7	36.2	2.6
2017	41.3	49.7	8.4
2018	45.6	66.1	20.5
2019	51.7	76.3	24.6
Averages	49.5	68.0	18.5

Finally, economic concerns associated with potential impacts from the Covid-19 pandemic (which itself was an unforeseen circumstance) cannot be ignored such that the likely economic losses from HSA closures may be further exacerbated by consequences related to the coronavirus. Currently, one of the reasons herring bycatch has continued to accumulate throughout the A season is because one of the major processing plants in the Bering Sea made the active decision to extend (slow deliveries) their A season processing schedule in order to retain all healthy (known coronavirus-free) crew members and shoreside observers into the B season. This decision has not only resulted in prolonged accumulation of herring PSC as active catcher vessels continue to place priority on Chinook salmon avoidance, but it has also resulted in a significant financial impact from both an increase in vessel time on the water and a decrease in processing efficiency.

Looking forward to the upcoming pollock B season, losing a portion of the pollock fleet or processing capacity, even for a short time, due to a failure to keep the virus away from vessel and/or processing crews could easily lead to an inability to harvest the B season pollock allocation, even without the extra obstacles associated with of the HSA closures as detailed above. As stated, estimates for lengthening the B season are one week (minimum) and greater under the requirement for vessels to fish outside HSA 2. Any lengthening of the pollock B season increases the likelihood of a coronavirus outbreak in both the vessels and the processing plants due to the increased opportunity of exposure and outbreak. Combining this with the potential loss of fishing and/or harvesting capacity due to the coronavirus will likely result in the pollock fleet’s inability to harvest their entire allocation due to a significant lengthening of the season. An outbreak of Covid-19, depending on the severity, could create a processing shutdown lasting anywhere from two weeks (14-day quarantine period) all the way through to the end of B season. Given that the American Fisheries Act (AFA) requires the members of an inshore cooperative to deliver a minimum of 90% of the cooperative’s allocation to their associated processor, such an outbreak could prevent a significant amount of pollock from being harvested as those vessels would not have other delivery options. It is prudent to support any and all actions that promote a quick pace of the 2020 pollock B season fishery, including providing the inshore catcher vessel fleet with access to HSA 2.

### **3. IMPACTS to EASTERN BERING SEA HERRING STOCK**

This request for emergency action will not negatively impact the eastern Bering Sea herring biomass or stock status. The 2020 eastern Bering Sea herring biomass is 253,207 mt. The 2020 Togiak District herring biomass, a subset of the eastern Bering Sea biomass, is 215,826 tons. The 2020 *Bristol Bay*

*Herring Management Plan* established a 20% maximum exploitation rate for the Togiak District, which results in an available harvest of 43,166 tons for 2020. After subtracting 4,417 tons for the spawn-on-kelp and Dutch Harbor food and bait fisheries, the Togiak seine and gillnet fisheries share a combined GHL of 38,749 tons.

By regulation, the Togiak seine and gillnet fisheries open on April 15<sup>th</sup> and close on June 1<sup>st</sup> of each year. The commercial harvest of eastern Bering Sea herring stocks has declined in recent years, but when the 1% cap was chosen the Amendment 16a analysis expected the Bering Sea directed herring fisheries to be fully utilized. For 2020, the Togiak herring fishery had only a single processor buying herring from the seine and gillnet fleets. That processor completed their Togiak operations by May 18<sup>th</sup> with less than half of the Togiak seine and gillnet allocations harvested, leaving more than 19,400 tons of exploitable herring left in the water. As such, increasing the BSAI herring PSC allowance from 1% to 2% will have a de minimis impact on the eastern Bering Sea herring biomass and will not result in any conservation concerns for the stock.

#### **4. CONCLUSION**

Per NMFS policy guidance defining an emergency situation, UCB, MTC, and AGDB believe that an emergency situation is facing the Bering Sea pollock fishery in the 2020 B season and that relief is warranted via an emergency rule. As previously stated, current management of herring PSC in the BSAI groundfish fisheries was established in 1991 and neither the herring PSC allowance nor triggered closure areas have been revisited since. At the time of adoption, the Council's analysis for Amendment 16a simultaneously addressed crab and halibut PSC management stating that "*...the effects of alternatives to control herring bycatch depend on the crab and halibut alternative that is in place, just as the effects of a crab and halibut alternatives depend on what herring alternative is in effect.*" The analysis recognized that augmenting halibut and crab bycatch management measures in the BSAI were distinct from implementing herring bycatch management measures, but stated "*While these are distinct topics, they cannot be treated independently in the analyses because closure of an area due to bycatch of one species will necessarily shift fishing effort to other areas and will have implications for the bycatch of other species.*"

Just like Council actions taken today, under Amendment 16a it was recognized and acknowledged that management of one species will naturally have impacts upon the management of other species and as such, all impacts must be considered and analyzed together. Unfortunately, current regulations for the management of herring PSC were only analyzed in conjunction with crab and halibut and not with harvest limitations associated with Sea Lion Conservation Areas or hard caps associated with Chinook salmon PSC. The need for such a comprehensive analysis of herring PSC management is further emphasized by apparent changes in the BSAI herring stock and conclusions reached in both the SCA and Chinook salmon PSC analysis regarding the impacts to herring bycatch, which did not anticipate the increase in herring PSC seen in the 2020 pollock A season. **As a result, UCB, MTC, and AGDB respectfully ask NMFS to alleviate the limitations and associated negative impacts from closure of the herring savings areas by temporarily increasing the BSAI herring PSC allowance from 1% of the Eastern Bering Sea herring biomass (2,532 mt) to 2% of the Eastern Bering Sea herring biomass (5,064 mt).**

Thank you for your time and consideration of this Emergency Request.

Sincerely,



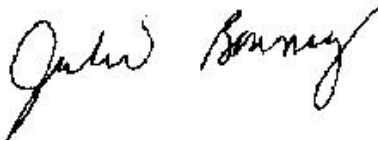
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Brent Paine, United Catcher Boats



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Heather Mann, Midwater Trawlers Cooperative



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Julie Bonney, Alaska Groundfish Data Bank

Cc:  
Dave Witherell  
Chris Oliver  
Jim Balsiger  
Doug Vincent-Lang  
Rachel Baker  
Karla Bush

## APPENDIX 1 – Chinook Salmon PSC Model Description

The analysis used data from the pollock shoreside pollock fishery, for all vessels with at least 6 trips during the July 1 – August 15 period of each year, and at least one delivery after August 15 in a given year. The analysis assumes that fishing conditions from July 1 – August 15 (outside HSA 2) were such that vessels returned to port only 75% full thereby requiring extra trips after their normal year end. Each vessel concluded their season at a different point in each of the past years (2008-2019), so the increase in Chinook bycatch rates later in the season affects each vessel differently. Chinook salmon bycatch estimation for each vessel's extra trips was modelled as follows:

- 1) The number of extra trips required was set to the number of trips a particular vessel made from 7/1 – 8/15 each year, multiplied by 0.25. Thus, for a vessel with 8 trips, 2 more trips were required.
- 2) The start date for the extra trips was set to be each vessel's last delivery date + 6. The extra 6 days corresponds to the demonstrated trip extension seen in vessels fishing outside HSA 2 in previous years.
- 3) The midpoint of the time interval for all of each vessel's extra trips was set assumed to be the start date + (number of trips x 2). The factor of 2 follows from the assumption that extra trips will each require 4 days.
- 4) Chinook salmon bycatch rate estimates for that midpoint were drawn from a bycatch rate profile over time constructed by combining all catcher vessel data from 2008 – 2019. It was necessary to combine all years to provide a reasonable number of points to characterize bycatch rates later in the year, as Chinook salmon bycatch concerns have led to fleets attempting to complete B season fishing early in September.
- 5) The bycatch rate estimate for the midpoint of the extra-trip interval for each boat was applied to the vessel's average delivery weights multiplied by the number of extra trips. Thus, a single bycatch rate estimate for the midpoint of all extra fishing was used to estimate Chinook bycatch for all fish that would be harvested in all of the extra trips.
- 6) The process described above led to an estimate of extra Chinook salmon that would be taken as bycatch by all vessels in the fleet that met the screening criteria. That amount was then adjusted downward by 25% of the Chinook salmon actually taken by those vessel when fishing between 7/1-8/15, since the assumption being investigated is that boats will be returning to port 25% "light", and that shortfall means that fewer Chinook salmon would be caught as well.

Chinook salmon bycatch rates associated with those extra trips were estimated using both linear and polynomial fits to observer Chinook bycatch rates over time, from 2008 – 2019.