

Public Testimony Sign-Up Sheet

Agenda Item C-3(a) NBBTA / Walrus interactions

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8	Chuck McCallym	Lake and Pen Bar.
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10	Jon Swanson	Groundfish Forum
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NOTE to persons providing oral or written testimony to the Council: Section 307(1)(I) of the Magnuson-Stevens Fishery Conservation and Management Act prohibits any person "to knowingly and willfully submit to a Council, the Secretary, or the Governor of a State false information (including, but not limited to, false information regarding the capacity and extent to which a United State fish processor, on an annual basis, will process a portion of the optimum yield of a fishery that will be harvested by fishing vessels of the United States) regarding any matter that the Council, Secretary, or Governor is considering in the course of carrying out this Act.

Groundfish Trawl Fishery, Pacific Walrus, and Local Fishery Interactions in Northern Bristol Bay – A Discussion Paper

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1 Introduction

1.1 The Issues Brought to the Council

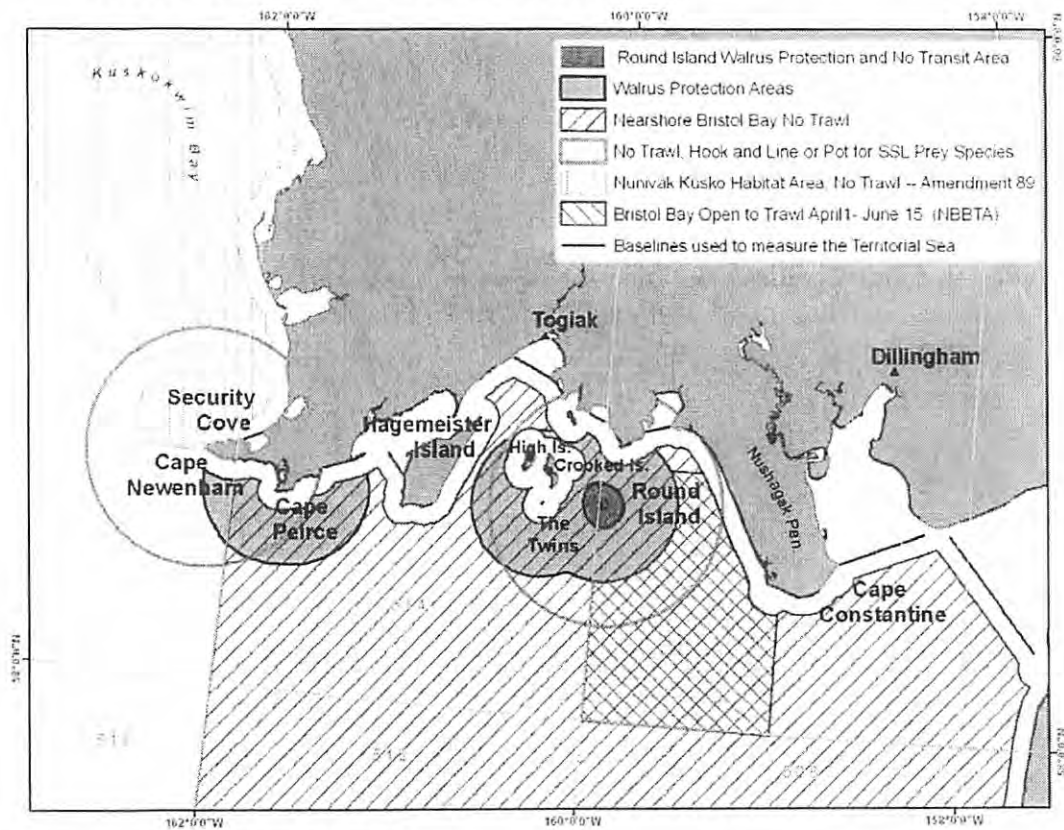
In February 2008, the Council received letters from the Qayassiq Walrus Commission and Bristol Bay residents outlining concerns over interactions between Pacific walrus and the groundfish trawl fishing activities in the Bristol Bay region (Figure 1). These letters are attached as Appendix A. The Qayassiq Walrus Commission requested regulatory changes to reduce trawling in the Nearshore Bristol Bay Trawl Area¹. The Council acknowledged receiving this information, and responded in a letter dated February 25, 2008 noting that their concerns are largely addressed under the existing walrus protection areas adopted by the Council under Amendment 17 to the BSAI groundfish FMP and the larger Bristol Bay closed area adopted by the Council under Amendment 37. This letter is part of Appendix A.

In late August 2008, the Council received a request from the Qayassiq Walrus Commission to consider several proposals to increase protection for walrus habitat in the Nearshore Bristol Bay Trawl Area. The Council also received a similar letter of concern from the Traditional Council of Togiak. These letters are in Appendix B. And at the October 2008 meeting, the Council received public comment on concerns over interactions between trawl fishing activities and Pacific walrus and their habitat in Bristol Bay. Specifically, some residents of this region testified to the Council their concerns over potential disturbance to walrus and adverse impacts on walrus feeding areas in the vicinity of the Nearshore Bristol Bay Trawl Area. One person testified about adverse interactions between the trawl fleet and halibut gear and one instance of potential physical contact between a trawl vessel and a local vessel. Letters from the public provided to the Council in October 2008 are in Appendix B.

Based on the materials sent to the Council from the Qayassiq Walrus Commission and other individuals in the Bristol Bay region, and testimony presented to the Council at the October 2008 meeting, the Council requested a discussion paper on the characteristics of the fishery in the Nearshore Bristol Bay Trawl Area including groundfish harvests, bycatch amounts, vessel participation, and levels of observer coverage. The Council also requested a review of information on the Pacific walrus population, and a description of conflicts that have occurred between fishing activities and walrus or their habitat during trawling, offloading, and any information on walrus takes in commercial fishing activity.

¹ While all of Bristol Bay federal waters are generally closed to trawling east of 162° W longitude, an exception is the trawl area defined above where trawling primarily for yellowfin sole occurs during the open period April 1 to June 15.

Figure 1 Map of northern Bristol Bay, showing the Northern Bristol Bay Trawl Area (NBBTA), walrus protection areas, and other area restrictions



And more recently, on February 17, 2009 the Council received another request from the Qayassiq Walrus Commission for regulatory changes in the Bristol Bay region to establish a marine mammal habitat protection zone as defined in the attached Resolution from the Commission (Appendix C). The concerns expressed in this resolution relate to protection of walrus feeding habitat offshore from walrus haulouts in the Bristol Bay region.

Finally, Council staff has been informed of several voluntary industry initiatives to explore some of the concerns raised by the Qayassiq Walrus Commission and residents of the northern Bristol Bay region (Dorothy Lowman, BUC, pers. comm.). Industry has also contacted the U.S. Fish & Wildlife Service (USFWS) to present information on the groundfish fishery and to seek information on any USFWS concerns over groundfish fishery interactions with walrus in northern Bristol Bay (Jason Anderson, BUC, pers. comm.). The stated goal of these meetings as reported to Council staff by industry is to define the issues, identify problems, and seek solutions outside the Council or regulatory process (Jason Anderson, BUC, pers. comm.). Council staff has been advised that industry will report on these initiatives at the time when this discussion paper is presented to the Council.

1.2 Summary of Concerns

In the above listed communications with the Council, residents and other groups in the northern Bristol Bay region are concerned over potential adverse interactions between Federal groundfish fisheries and

Pacific walrus inhabiting this region, interactions with other local fisheries, and possible impacts of groundfish fisheries on walrus habitat including prey items.

Cited in correspondence from the Qayassiq Walrus Commission are concerns over disturbance of walrus haulouts and feeding habitat by the yellowfin sole (YFS) fishery in northern Bristol Bay, and transmission of noise from fishing activities to Round Island, a traditional Yupik Eskimo hunting site. Letters also cite concerns over bycatch of salmon, herring, and halibut in groundfish fisheries in this area, potential trawl disturbance of walrus prey items such as clams, and walrus catch in trawls. Other groups included in correspondence include the Bristol Bay Native Association, the Bristol Bay Marine Mammal Council, the Traditional Council of Togiak, and several other groups.

Other concerns voiced in correspondence or testimony to the Council include alleged incidents of groundfish fishing in closed waters, adverse interactions among groundfish fishing vessels and local salmon, herring, and halibut fishing activities, and noise from offshore groundfish fishing activities disturbing local residents on shore. Some have expressed concerns over disturbance of walrus from fishing activities or from product offloading at roadsteads (see Section 3.3).

Several remedies have been suggested by these groups. These include extension of the 3 n mi closed areas around the islands of the State's Walrus Islands State Game Sanctuary to 10 n mi, a Walrus and Marine Species Protection Zone out to 25 n mi from Cape Newenham to Cape Constantine (Figure 2), and more recently a 0 to 50 n mi closure to groundfish fishing from Security Cove and Cape Newenham eastward throughout Bristol Bay and south to Port Moller (Figure 3).

Figure 2 Proposal to create a Walrus and Marine Species Protection Zone from Cape Newenham to Cape Constantine, 0 to 25 nm.

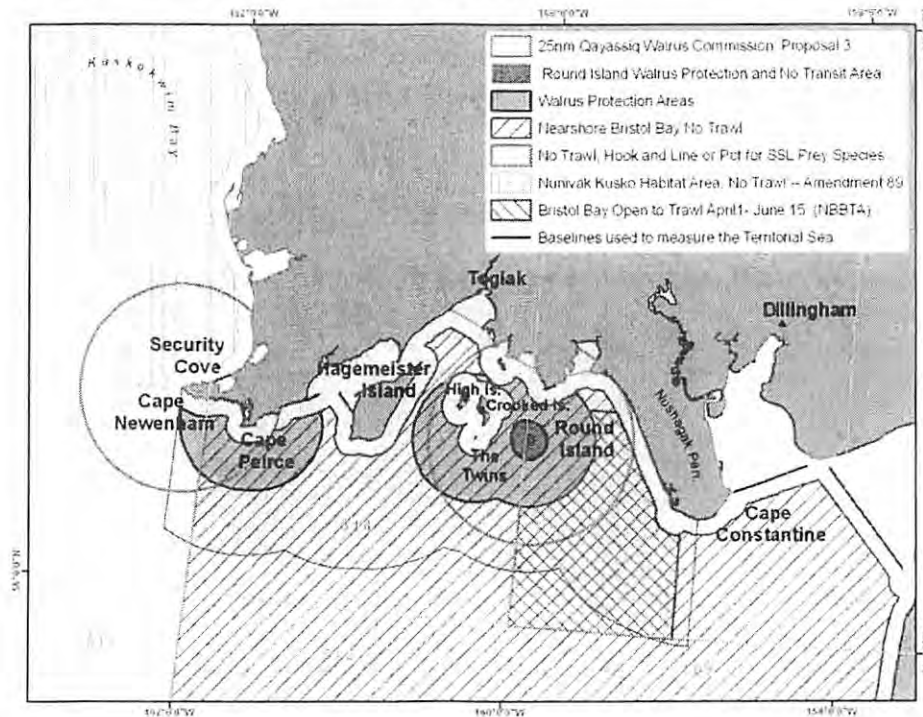
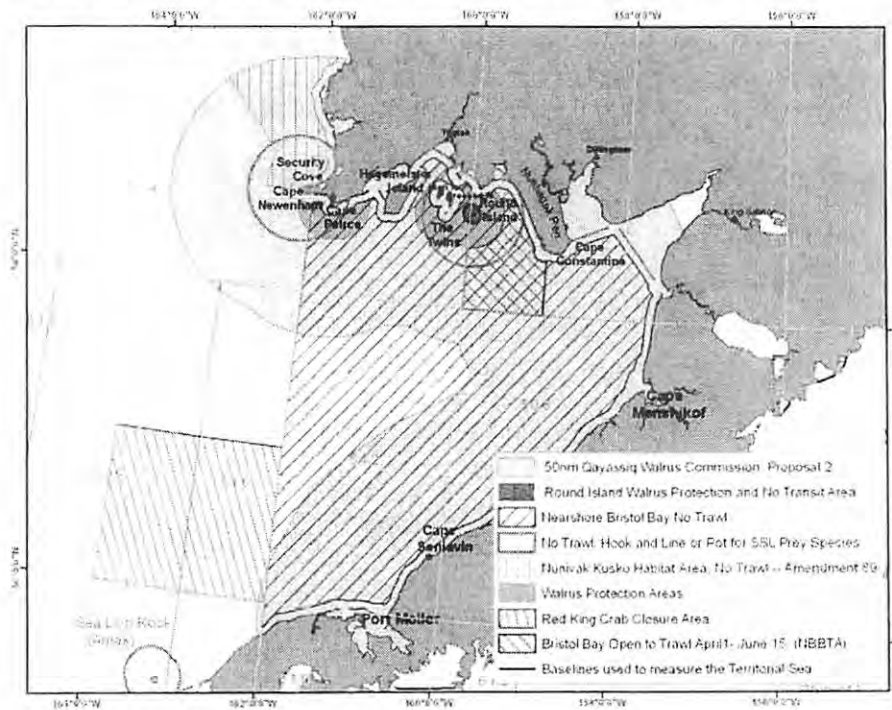


Figure 3 Proposal to prohibit groundfish fishing from Security Cove and Cape Newenham, throughout Bristol Bay, to Port Moller in the south, 0 to 50 nm.



The following provides background information on the State and Federal groundfish fisheries in the Bristol Bay area, the current trawl closures in Bristol Bay, a brief review of walrus life history and abundance in Alaskan waters, and information on fishery interactions with walrus in the Bristol Bay region.

2 Overview of Northern Bristol Bay Fishing Closures

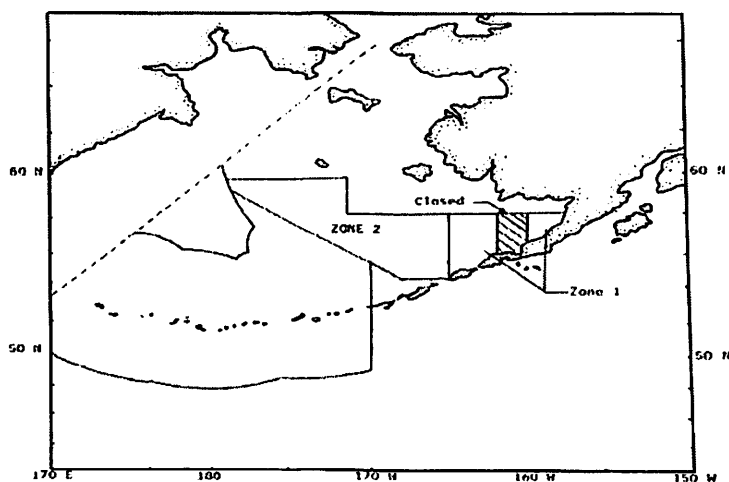
Concerned over bycatch of crab and halibut in the Bering Sea foreign fisheries of the 1960s and 1970s, the North Pacific Fishery Management Council adopted a series of regulatory changes under the new Magnuson Fishery Conservation and Management Act (now the MSA) to limit incidental mortality of these species in groundfish fisheries of offshore Alaska. Closed areas were a principal tool for regulating and limiting bycatch. Prior to U.S. management of offshore fisheries in the Bering Sea, foreign fleets often self-regulated to avoid bycatch or to reduce other fishery impacts. Japan instituted a no-trawl zone in Bristol Bay to limit interactions between trawl and pot fishing vessels (Witherell and Woodby 2005). With the passage of the MSA, regulations affecting foreign fisheries were initiated in 1976, and the Council increasingly limited bycatch in foreign and joint venture fisheries through the 1980s. Closed areas are also a tool for reducing fishery interactions with marine mammals. The following summarizes the regulatory changes implemented to reduce bycatch and fishery impacts on walrus in the Bristol Bay region.

2.1 Amendment 10 Crab and Halibut Protection Zone

Based on concerns over bycatch of red king crab, Tanner crab (*C. bairdi*), and halibut in foreign and domestic groundfish fisheries in the eastern Bering Sea, primarily the joint venture yellowfin sole fishery,

the Council approved Amendment 10 to the BSAI groundfish FMP in March 1987. This amendment closed a portion of the eastern Bering Sea to all trawling, set limits on incidental catch of *bairdi* Tanner crabs, red king crab, and halibut in BSAI foreign and domestic fisheries for YFS and other flatfish, and required these fisheries to close when PSC limits were reached. The closed area is cross-hatched on Figure 4.

Figure 4 Cross-hatched closed area for YFS and flatfish trawl under Amendment 10.



2.2 Amendment 12a Modify Bristol Bay Crab and Halibut Protection Zone

In September 1989, Amendment 12a replaced the bycatch controls of Amendment 10 and continued bycatch limits in BSAI trawl fisheries for *bairdi* Tanner crab, red king crab, and halibut. These provisions applied to the now nearly entirely domestic groundfish fishery. PSC limits were apportioned to four fisheries, each of which would close when a PSC limit was reached – DAP flatfish, DAP other (mostly pollock and cod), JVP flatfish, and JVP other². Amendment 12a also retained the Amendment 10 trawl closed area, but extended its western boundary to 163° W. during March 15 to June 15 for additional red king crab protection (Figure 5). Many additional amendments to the BSAI groundfish FMP ensued to refine the bycatch controls initiated under Amendment 12a.

² DAP = Domestic Annual Processing; JVP = Joint Venture Processing

Figure 5 Bycatch protection zones established under Amendment 12a.

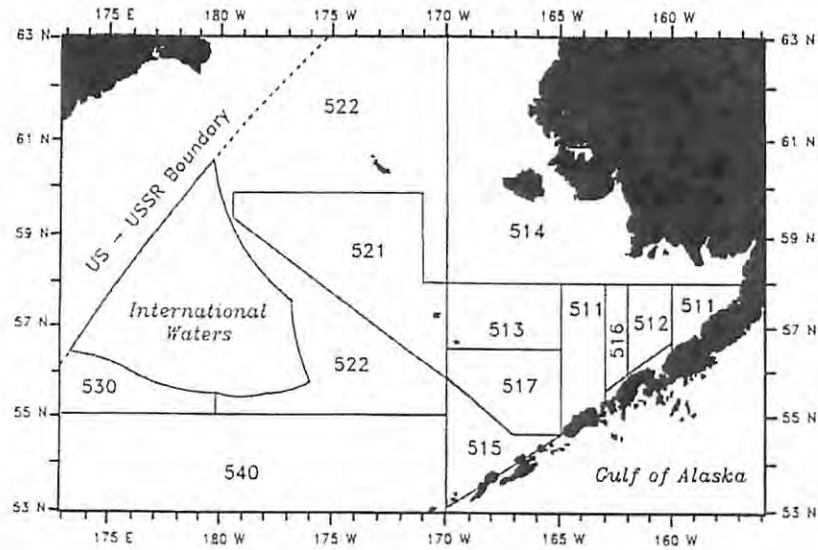
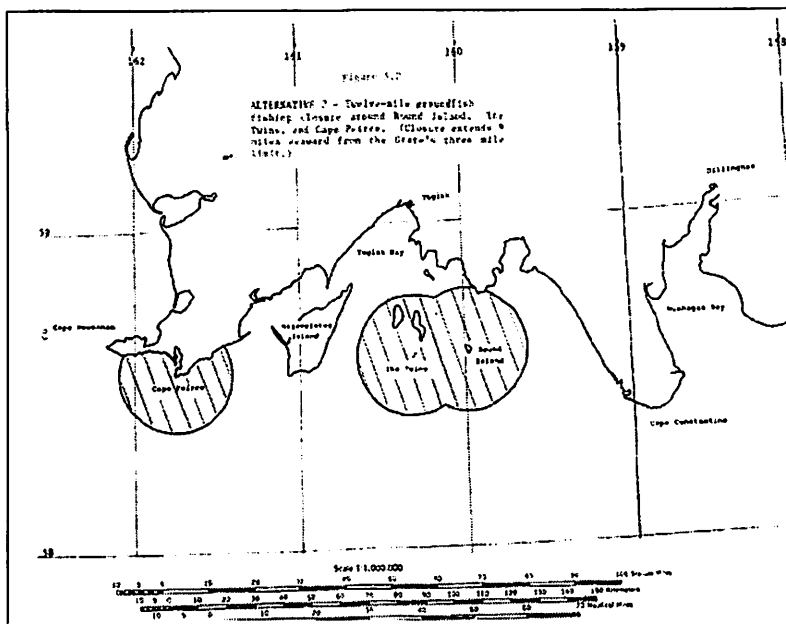


Figure 2. Statistical reporting areas in the BS/AI (Amendment 12A)
 Bycatch protection zones: Zone 1 = 511 + 512 + 516
 Zone 2 = 513 + 517 + 521
 Zone 2H = 517

2.3 Amendment 13 Walrus Islands closure

In January 1990, Amendment 13 was implemented with measures to prohibit groundfish fishing activities within 3 to 12 n mi closed areas around the Walrus Islands (Round Island and The Twins) and Cape Peirce in northern Bristol Bay April 1-September 30. Specific concerns were expressed by the public and the USFWS over noise emitted by fishing activities of the JVP yellowfin sole fishery and apparent correlations between increased noise and observed declines in numbers of walrus using haulouts in northern Bristol Bay. This measure was put into place to reduce disturbance to walrus that inhabited these haulout areas. Figure 6 shows the Amendment 13 closed areas in this region.

Figure 6 Walrus protection zones established under Amendment 13



2.4 Amendment 17 Renew Walrus Islands Closure

Amendment 17 was adopted in April 1992 to permanently close from April 1-September 30 the 3-12 n mi zones around Round Island, The Twins, and Cape Peirce to reduce disturbance to walrus. This measure prohibits all Federally-permitted vessels from entering or transiting these closed areas during the closure period, including fishing support vessels. The Council indicated its intent that the State should match these closures around Round Island and The Twins in State waters (see Section 2.6). The specific regulation at 679.22(a)(4) is:

(4) Walrus protection areas.

From April 1 through September 30 of any fishing year, vessels with a Federal fisheries permit under § 679.4 are prohibited in that part of the Bering Sea subarea between 3 and 12 nm seaward of the baseline used to measure the territorial sea around islands named Round Island and The Twins, as shown on National Ocean Survey Chart 16315, and around Cape Peirce (58° 33' N. lat., 161° 43' W. long.).

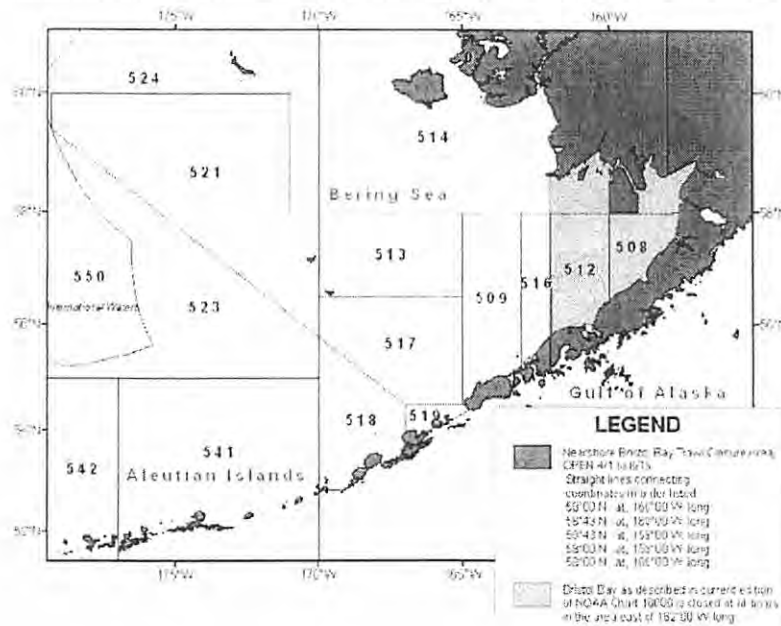
2.5 Amendment 37 Nearshore Bristol Bay Trawl Closure Area

Implemented January 1, 1997, Amendment 37 prohibits all trawling year round in the Nearshore Bristol Bay Trawl Closure (NBBTC) area, specifically all waters east of 162 ° W, with the exception of an area bounded by 159 ° to 160 ° W and 58 ° to 58 ° 43' N that remains open to trawling April 1 to June 15 (Nearshore Bristol Bay Trawl Area [NBBTA]). This closure is to protect juvenile red king crab habitat while at the same time allowing trawling in an area known to have high catches of flatfish and low bycatch of other species (Ackley and Witherell 1999). The area north of 58 ° 43' N was closed to reduce bycatch of herring. The April 1 – June 15 period was chosen to avoid bycatch of halibut which move into the nearshore areas in June. Amendment 37 also requires that any catcher vessel or catcher processor used to fish for groundfish in the trawl closure area must carry an observer during 100% of its fishing days in which the vessel uses trawl gear. Figure 7 illustrates the NBBTC area and the NBBTA. The specific regulation at 679.22(a)(9) is:

(9) Nearshore Bristol Bay Trawl Closure.

Directed fishing for groundfish by vessels using trawl gear in Bristol Bay, as described in the current edition of NOAA chart 16006, is closed at all times in the area east of 162° 00' W. long., except that the Nearshore Bristol Bay Trawl Area defined in Figure 12 to this part is open to trawling from 1200 hours A.l.t., April 1 to 1200 hours A.l.t., June 15 of each year.

Figure 7 Nearshore Bristol Bay Trawl Closure Area, Figure 12 to Part 679 (679.22(a)(9))



2.6 State of Alaska Closures

All State waters in Bristol Bay east of Cape Newenham to Cape Menchikof are closed to trawl fishing year round (5 AAC 39.165). Historically, the State of Alaska has mirrored the NBBTA trawl opening in adjacent State waters as defined under Amendment 37, allowing non-pelagic trawling to occur during the open period. Some confusion over whether the Alaska Board of Fisheries' intent that these waters be closed or open during the April 1 – June 15 period was discovered by NOAA's Office of Law Enforcement (OLE) (see email and report in Appendix D). It was noted by NOAA OLE that while State waters were open during the time period and area defined in Amendment 37, ironically the opening was for non-pelagic trawl gear and not to pelagic trawl gear (all of Bristol Bay State waters are closed to all trawl gear under 5 AAC 39.165 and 5 AAC 06.100 – only non-pelagic gear were allowed in the Amendment 37 area under 5 AAC 39.164(b)(7)). This confusion was addressed by recent Board of Fisheries action. The Board repealed 5 AAC 39.164(b)(7) at their December 31, 2008 teleconference meeting (Proposal 369), thereby prohibiting non-pelagic trawling in State waters in the Amendment 37 area (Kerri Tonkin, ADF&G, pers. comm.). State waters in Bristol Bay (defined at 5 AAC 06.100) are closed to all trawling throughout the entire year – no exemption is allowed during the Amendment 37 time period and area. Note also that outside the Amendment 37 area, Federal walrus protection closures under Amendment 17 are NOT mirrored in State waters. Figure 1 illustrates the combined effect of the closures described in the above sections (including closed areas described below in Sections 2.7 and 2.8.

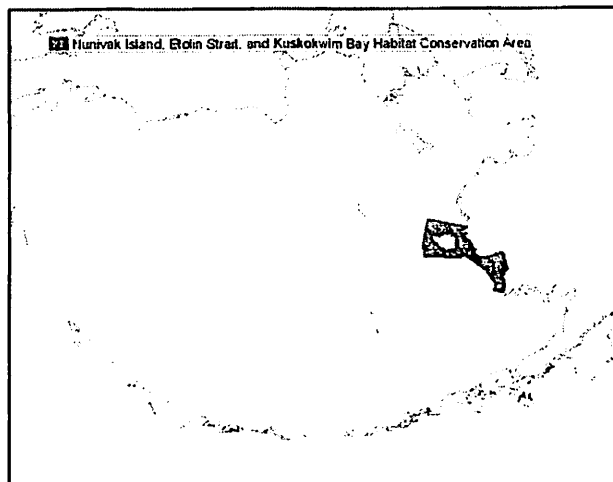
2.7 Steller Sea Lion Closures

Cape Newenham and Round Island are SSL haulouts, are designated SSL critical habitat, and have 20 n mi closures year round for pollock and Atka mackerel trawl and cod trawl and fixed gear fisheries. These closures overlap other closures in northern Bristol Bay (Figure 1). SSL closed areas are Federal groundfish fishery mitigation measures, and are mirrored in adjacent State waters through an annual Emergency Order issued by the State at the beginning of the calendar year (Appendix E). State waters within the 20 n mi SSL protection areas around Round Island and Cape Newenham are closed to fishing for SSL prey species.

2.8 Amendment 89 Nunivak Island, Etolin Strait, and Kuskokwim Bay Habitat Conservation Area

One of the proposed conservation measures submitted by the Qayassiq Walrus Commission included areas west of Cape Newenham and overlapping the Nunivak Island, Etolin Strait, and Kuskokwim Bay Habitat Conservation Area (Figure 8). In 2008, the Council adopted Amendment 89 to the BSAI groundfish FMP to establish Bering Sea habitat conservation measures. This amendment prohibits nonpelagic trawling in certain waters of the Bering Sea subarea to protect bottom habitat from the potential adverse effects of nonpelagic trawling. The amendment also established the Northern Bering Sea Research Area for studying the impacts of nonpelagic trawling on bottom habitat. The Council's action was deemed necessary to protect portions of the Bering Sea subarea bottom habitat from the potential adverse effects of nonpelagic trawling.

Figure 8 Nunivak Island, Etolin Strait, and Kuskokwim Bay Habitat Conservation Area (Figure 21 to Part 679)



3 Yellowfin sole trawl fishery in Bristol Bay

3.1 Harvest levels

Yellowfin sole is the only target fishery that is prosecuted in the Northern Bristol Bay Trawl Area (NBBTA). Table 1 illustrates the total amount of yellowfin sole that was harvested in the NBBTA, based on data from observed tows. The total includes catch attributable to both CDQ and non-CDQ operations. Table 1 compares observed catch from the NBBTA to the extrapolated catch of yellowfin sole for the

BSAI as a whole. From 2005 to 2008, the NBBTA yellowfin sole catch accounted for between 3% and 14% of the total BSAI yellowfin sole harvest. Fishing effort in the area varies on a periodic cycle (see also Section 3.6), and many factors influence whether the fleet will pursue the yellowfin sole fishery in the NBBTA. If there are opportunities in May and June for good yellowfin sole fishing in other areas that involve less travel time, but still yield high yellowfin sole catch rates and low halibut bycatch, these may be more desirable to the fleet. Additionally, the market for yellowfin sole varies on an annual basis, and may affect whether the fleet choose to fish for yellowfin sole in May and early June, or turn to different targets (for example, Pacific cod or other flatfish). The NBBTA fishery is generally considered by the fleet to be a good area for catching yellowfin sole with very low halibut bycatch (L. Swanson, Grndfsh. Forum, and J. Gauvin, BUC, pers. comm.). In 2006 to 2008, effort was notably higher in the NBBTA than it had been in the previous five years.

Table 1 Yellowfin sole catch, mt, in the Northern Bristol Bay Trawl Area (NBBTA) compared to catch in the BSAI as a whole

	2001	2002	2003	2004	2005	2006	2007	2008
NBBTA (observed catch)	**	**	0	**	2,906	9,345	16,946	10,434
BSAI (extrapolated catch)¹	63,577	74,971	79,815	75,509	94,385	99,108	121,029	148,860
NBBTA as proportion of BSAI	**	**	0	**	3%	9%	14%	7%

** Catch amounts are confidential

¹ To give some idea of the degree of extrapolation, NMFS catch accounting has prepared data for the Council in the past about the proportion of observed catch in each target fishery, although note that the above data is for all yellowfin catch, not just catch in the yellowfin sole target. The yellowfin sole catcher processor target fishery was 95% observed in 2004, 94% in 2005, 92% in 2006, and 95% observed in 2007 (J Hogan, NMFS catch accounting). In 2008, the majority of the fishery was prosecuted by Amendment 80 vessels, which are required to have 200% observer coverage (see below). Data from the catcher vessel fishery for yellowfin sole in the BSAI for 2004-2007 are confidential.

Source: NMFS observer database, March 2009, for observed catch; NMFS year-end catch reports for BSAI extrapolated catch, <http://www.fakr.noaa.gov/sustainablefisheries/catchstats.htm>.

Observer coverage

Amendment 37, which implemented the NBBTA in 1997, also required that any trawl catcher vessel (CV) or catcher processor (CP) used to fish groundfish in the area must carry an observer during 100% of its fishing days. Note, although an observer is onboard the vessel at all times, this does not necessarily mean that all tows are sampled. Since the implementation in 2008 of Amendment 80 (see Section 3.2), all CPs fishing in the Amendment 80 sector must have two observers onboard during their fishing operations, so that every tow is observed.

3.2 Vessels fishing in the NBBTA

The majority of vessels harvesting yellowfin sole in the NBBTA are now part of the Amendment 80 sector in the BSAI, originally known as the head and gut sector, or the non-AFA (American Fisheries Act) CP sector. BSAI Amendment 80 was implemented in 2008, and vessels which qualify for the Amendment 80 sector (and apply for quota) are allocated a portion of the total allowable catch for BSAI yellowfin sole, rock sole, flathead sole, Atka mackerel, and Pacific ocean perch, along with an allocation of prohibited species catch quota for halibut and crab. All of the allocations are managed as a hard cap. Since the implementation of the program, one cooperative has been formed, the Best Use Cooperative, in

which 16 vessels³ participate. Six of the seven remaining vessels that received initial quota share fish in the Amendment 80 limited access fishery⁴.

Only two CPs fished in the NBBTA in 2001-2002 and 2005. Beginning in 2006, the number of CPs fishing in the NBBTA increased, with 8 vessels fishing there in 2006, and 14 in 2007. In 2008, there were also 14 vessels fishing in the area, five of which are part of the Amendment 80 limited access fishery, and 9 vessels that are affiliated with the Best Use Cooperative. *all were part of co-op*

There are also five CVs which have fished in the NBBTA from 2004-2008, one regularly and the others each in a single year. Table 2 illustrates the relative proportion of CP versus CV catch in recent years.

Table 2 Relative proportion of trawl catch in the NBBTA that is attributable to the catcher processor and catcher vessel sectors

	2001	2002	2003	2004	2005	2006	2007	2008
CP catch as percentage of total	**	**	na	**	**	**	**	93%
Number of CP vessels	2	2	0	0	2	8	14	14
CV catch as percentage of total	**	**	na	**	**	**	**	7%
Number of CV vessels	0	0	0	1	1	1	1	3

Source: NMFS observer database, March 2009.

Note: Data for 2001, 2002, 2004, and 2005 are confidential (indicated by **). There was no trawl fishing in the NBBTA in 2003 (na = not applicable).

Some of the vessels harvesting yellowfin sole in the NBBTA from 2005 to 2008 have fished for CDQ groups, off the CDQ allocations. In 2005, the CDQ harvest represented 48% of the total yellowfin sole catch harvested in the NBBTA. Since that time, though, it has represented between 8 and 13% of the total yellowfin sole catch harvested in the NBBTA, and has been harvested by both CP and CV vessels.

3.3 Motherships and inshore floating processors

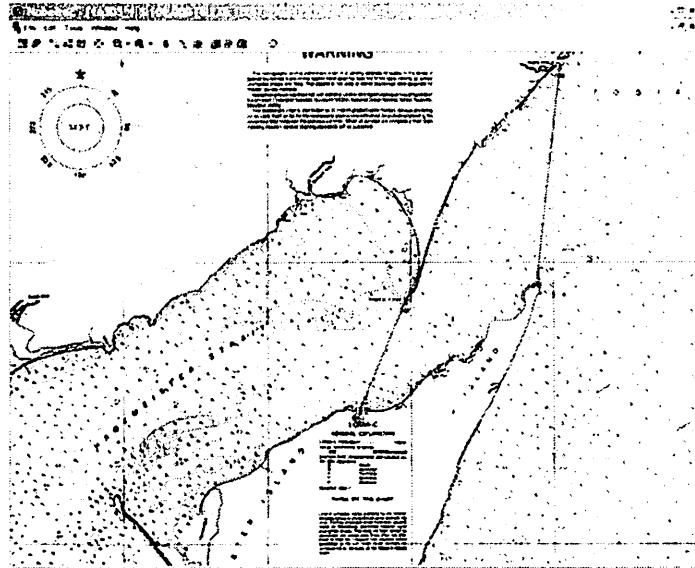
CV catch in the yellowfin sole fishery in the NBBTA from 2001 to 2008 was delivered either to a CP acting as a mothership, or to an inshore floating processor. Two floating processors have received catch offloads during the time series, but in the last three years, only one processor has participated each year. In addition, one CP has received delivery of offloads during the time series, occurring during the last four years.

The available data do not identify where a processor anchors to receive offloads from CVs fishing in the NBBTA. There are restrictions in place that require any offloads being delivered to foreign vessels to occur in designated locations or "roadsteads" which, in the NBBTA area, is a site located in Hagemeister Strait (Mike Adams, NOAA OLE, pers. comm.). These roadsteads must be used if offloading occurs onto a foreign vessel; offloading is considered "fishing" under the Magnuson-Stevens Act and thus must comply with Federal Law. Roadsteads are located in areas of historical usage, so it is likely that the area has good anchorage. Hagemeister Strait is also used by resident salmon, herring, and halibut fishermen.

³ One additional vessel has sunk, and the quota share earned by its catch history is fished on another of the cooperative's vessels.

⁴ One of the vessels that received initial quota share and fished in the limited access fishery has now sunk, and as noted above, its catch history is fished on another vessel in the limited access fishery.

Figure 9 Hagemeister Island Roadstead. Includes all waters within the maritime boundary of the State of Alaska in Hagemeister Strait which are west of a line extending from the northeast end of Hagemeister Island to the mouth of Quigmy River, and east of a line extending from the mouth of an unnamed river to the tip of Tongue Point (lines marked in red on map).



There do not appear to be any restrictions on where a domestic processor may receive delivery of CV offloads, however the walrus protection areas limit the opportunities for anchoring in many of the bays in the area. Anecdotal reports suggest that the floating processor has, in the past, received offloads just outside of Kulukuk Bay, which is directly north of the NBBTA, as well as at the mouth of Nushagak Bay and at Clarke's Point, in Nushagak Bay. The last two of these areas are outside of the NBBTA, and CVs must traverse around Cape Constantine to deliver product to the processor. It was noted that because yellowfin sole is a fish that bruises easily, lowering its market value, a processor will seek to minimize the distance travelled from the fishing grounds to the area of offload, particularly if the weather is rough and buffeting seas are likely to increase damage to the fish (R Hatton, pers. comm., 3/12/09). Nushagak Bay can sometimes be too rough for vessels to tie up and offload their catch.

3.4 Incidental catch in the yellowfin sole fishery

Groundfish incidental catch

Yellowfin sole comprised between 88 and 96% of the total groundfish catch in the NBBTA in the years 2005 to 2008, with the remaining groundfish consisting primarily of other flatfish species. The catch composition of groundfish harvested in the yellowfin sole fishery in the NBBTA is described in Table 3.

Table 3 Groundfish catch composition in the trawl fishery in the Northern Bristol Bay Trawl Area (NBBTA), in mt.

Species	2001	2002	2003	2004	2005	2006	2007	2008
Yellowfin sole			na		2,906	9,345	16,946	10,434
Starry flounder			na		66	242	1,458	774
Rock sole			na		70	72	389	112
Alaska plaice			na		34	52	206	156
Sculpins			na		1	40	261	345
Other groundfish			na		2	15	38	34
Yellowfin sole as a percentage of total groundfish catch			na		94%	96%	88%	88%

Source: NMFS observer database, March 2009.

Note: Data for 2001, 2002, and 2004 are confidential. There was no trawl fishing in the NBBTA in 2003.

Prohibited species bycatch

There is very little bycatch of prohibited species in the NBBTA. Table 4 provides the bycatch of halibut, herring, salmon, and crab species in the trawl fishery prosecuted in the area.

Table 4 Bycatch of halibut, herring, salmon, and crab in the trawl fishery in the Northern Bristol Bay Trawl Area (NBBTA).

Species		2001	2002	2003	2004	2005	2006	2007	2008
Halibut mortality	mt			na		3.4	12.5	15.9	7.3
	rate - mt halibut/mt yfs					0.001	0.001	0.001	0.001
Herring	mt			na		0.3	1.2	34.6	8.2
	rate - mt herring/ mt yfs					0.000	0.000	0.002	0.001
Chinook Salmon	number			na		-	-		-
Non-Chinook Salmon	number			na		-	-	-	-
Crab (all species)	number			na		-		520	165
	rate - #/mt yfs							0.03	0.02

Source: NMFS observer database, March 2009; halibut discard mortality rates, Williams 2008a,b.

Note: Shading = data are confidential. There was no trawl fishing in the NBBTA in 2003 (na = not applicable). yfs = yellowfin sole

It is generally considered by industry that the NBBTA has consistently lower halibut bycatch rates than other yellowfin sole fishing grounds in the BSAI. Table 5 compares the bycatch mortality rate of halibut in the NBBTA fishery to the halibut bycatch mortality rate in the BSAI yellowfin sole trawl fishery for the years 2005-2008. Additionally, the table looks at the proportion of the total BSAI yellowfin sole catch that comes out of the NBBTA, and compares it to the proportion of total halibut bycatch mortality in the yellowfin sole fishery that is attributable to the NBBTA. In both cases, the assertion is borne out that fishing in the NBBTA results in lower halibut bycatch mortality than yellowfin sole fishing in other areas of the BSAI.

Table 5 Halibut bycatch mortality in the Northern Bristol Bay Trawl Area (NBBTA) compared to the BSAI yellowfin sole trawl fishery, 2005-2008.

		2005	2006	2007	2008
NBBTA	mt halibut bycatch mortality in the trawl fishery	3.4	12.5	15.9	7.3
	rate - mt halibut mortality / mt yellowfin sole	0.001	0.001	0.001	0.001
BSAI	mt halibut bycatch mortality in the yellowfin sole target fishery	568	451	504	959
	rate - mt halibut mortality / mt yellowfin sole	0.006	0.005	0.004	0.006
yellowfin sole catch in the NBBTA as proportion of total yellowfin sole catch in the BSAI		3%	9%	14%	7%
halibut bycatch mortality in the NBBTA as proportion of total halibut bycatch mortality in the BSAI yellowfin sole fishery		1%	3%	3%	1%

Sources: NMFS observer database, March 2009 (NBBTA halibut catch); halibut discard mortality rates, Williams 2008a,b; NMFS PSC database (BSAI halibut mortality); NMFS catch accounting year-end reports (BSAI yellowfin sole catch).

Note: NBBTA halibut and yellowfin sole catch data derives from observer-sampled tows. While vessels fishing in the NBBTA are required to have 100% observer coverage, not all tows are sampled. BSAI catch data is based on observed tows which are extrapolated by NMFS catch accounting to represent all effort in the BSAI. See note in Table 1.

Walrus prey species bycatch

As discussed in Section 5.3, bivalves are the primary prey species of walrus. Using data from observer samples, Table 6 provides an estimate of the bycatch of walrus prey species in the trawl fishery in the NBBTA, including bivalves and other species. Unlike previous tables in this section, these values are presented in kilograms, not metric tons.

Table 6 Bycatch of walrus prey species in the trawl fishery in the Northern Bristol Bay Trawl Area (NBBTA).

Species		2001	2002	2003	2004	2005	2006	2007	2008
Mussels, Oysters, Scallops, Clams	kg			na		-		83	16
Ascidian, sea squirt, tunicate	kg			na		-		-	328
Polychaete, unidentified	kg			na					3
Sea cucumber, unidentified	kg			na		-	-	-	-
Snail, unidentified	kg			na		-	-		

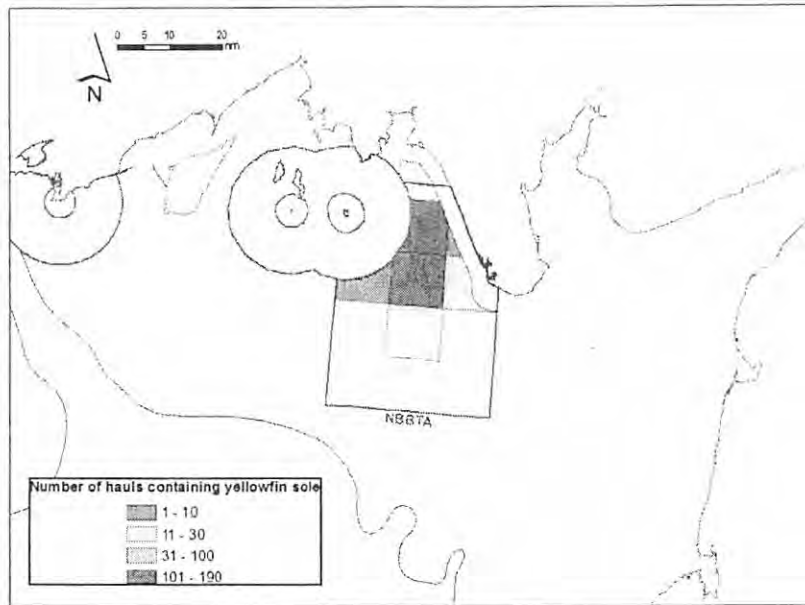
Source: NMFS observer database, March 2009.

Note: Shading = data are confidential. There was no trawl fishing in the NBBTA in 2003 (na = not applicable).

3.5 Distribution and timing of fishery

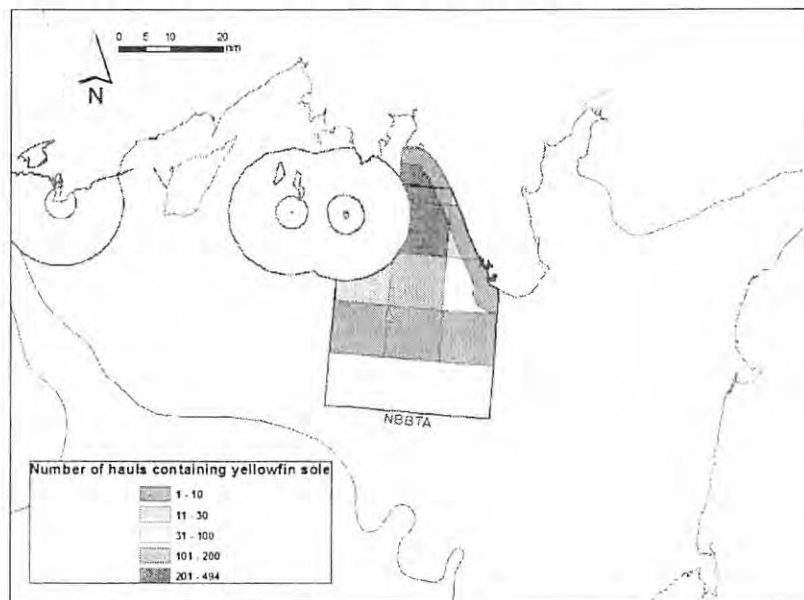
Fishing for yellowfin sole within the NBBTA tends to occur predominantly at the northern part of the open area. Figure 10 and Figure 11 show the distribution of fishing effort in the NBBTA. The figures show the number of hauls containing yellowfin sole that occur in each of the blocks of a 20 km² grid superimposed on the NBBTA. Note, although blocks in the grid may extend outside of the NBBTA, this does not necessarily mean that catch occurred outside of the area; it is an artifact of the mapping process. No observed hauls have occurred in the lower part of the NBBTA during the 2005 to 2008 time period.

Figure 10 Distribution of trawl hauls containing yellowfin sole in the Northern Bristol Bay Trawl Area (NBBTA), 2005-2006, number of hauls per 20 km² area. Note: although blocks of the grid may extend outside of the NBBTA, this does not necessarily mean that fishing occurred outside of the NBBTA. It is an artifact of the mapping process.



Source: NMFS observer database, March 2009

Figure 11 Distribution of trawl hauls containing yellowfin sole in the Northern Bristol Bay Trawl Area (NBBTA), 2007-2008, number of hauls per 20 km² area. Note: although blocks of the grid may extend outside of the NBBTA, this does not necessarily mean that fishing occurred outside of the NBBTA. It is an artifact of the mapping process.



Source: NMFS observer database, March 2009

4 Other fisheries occurring in the area

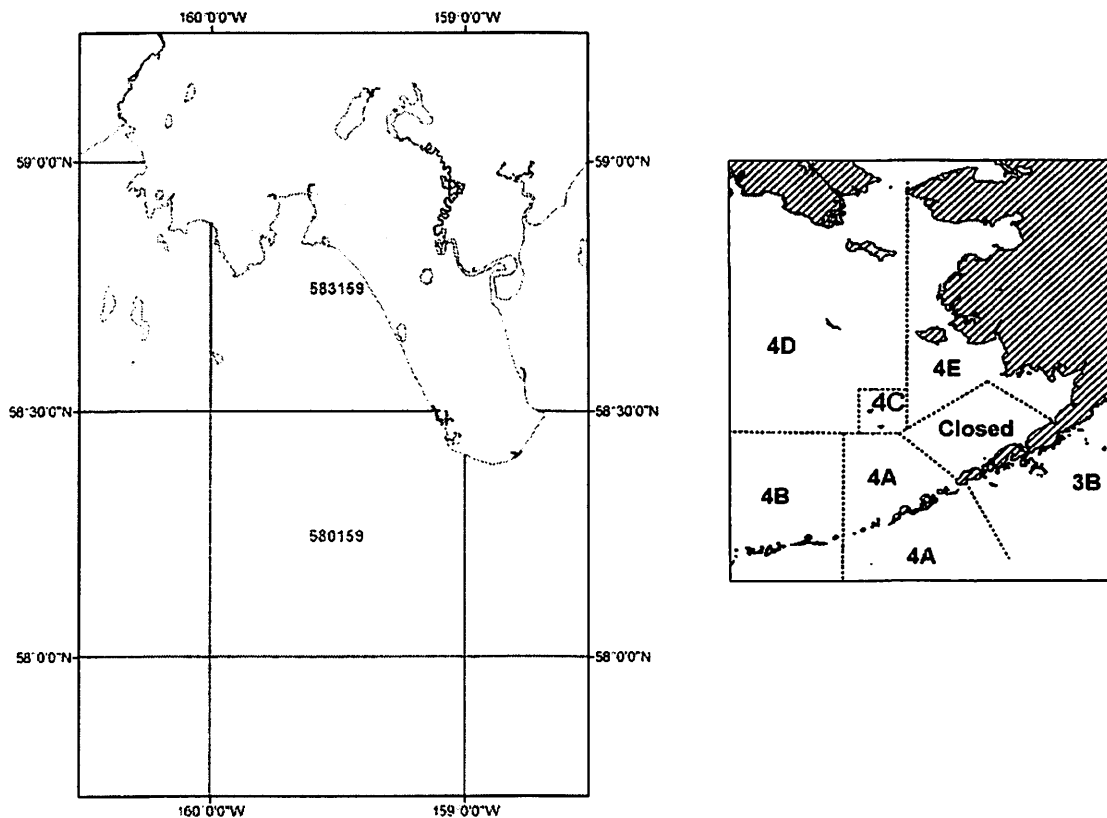
4.1 Halibut fishery

The International Pacific Halibut Commission (IPHC) areas that most closely coincide with the NBBTA are illustrated in Figure 14. According to the IPHC database, over a 10 year period (1998-2007), eight of the years had one to three vessels active in the area (580159 and 583159, combined). Landings by year ranged from less than 100 net lbs (head-off, dressed, ice and slime deducted) to 9,300 net lbs, or <1% to 4% of the Area 4E landings by weight (T. Kong, IPHC, pers. comm., 3/3/09).

Over the time period 1998 to 2007, eight distinct vessels fished in 580159/583159 and delivered 23,721 net pounds of halibut; 603 distinct vessels fished in Area 4E and delivered 3,877,011 net pounds. Much of the activity occurred in June, and all the vessels were local (T. Kong, IPHC, pers. comm., 3/3/09).

The trawl fishery's halibut bycatch mortality in the NBBTA is discussed in Section 3.4. By converting the weights to pounds, and deducting 12% for the weight of the head and for ice and slime (IPHC regulatory conversion factors), an approximation of comparable bycatch figures are as follows: 6,540 lbs in 2005, 24,203 lbs in 2006, 30,941 lbs in 2007, and 14,101 lbs in 2008.

Figure 14 IPHC statistical areas near the Northern Bristol Bay Trawl Area, and IPHC Area 4E.

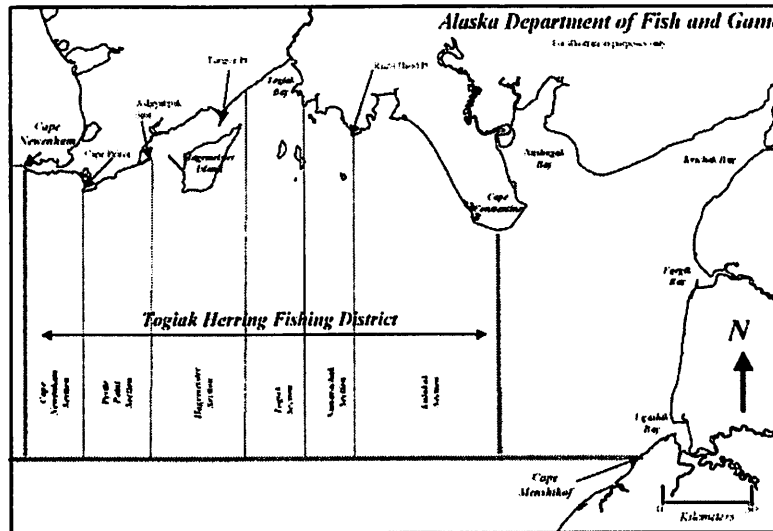


Source: T. Kong, IPHC

4.2 Herring fishery

Two herring fisheries occur in northern Bristol Bay: herring are harvested for sac roe using gillnets and purse seines, and herring spawn on wild kelp (*Fucus spp.*) is harvested by hand (Westing et al. 2005). A map of the management districts for Togiak herring is included as Figure 15.

Figure 15 Togiak Herring Fishing Districts



Source: Westing et al. 2005.

Effort levels in the Togiak sac roe fishery can vary substantially from year to year. The fishery occurs during the period from late-April through May, and lasts for a period varying from 8 to 16 days, based on the last ten years (Figure 16). Table 7 provides harvest information for the herring sac roe fishery for 2001 to 2008, compared with the amount of herring bycatch taken in the NBBTA by the groundfish trawl fishery. The herring fishery tends to be prosecuted close to shore, in State waters (T. Sands, ADF&G, pers. comm., 2/11/09). At least one of the floating processors that has been active in the yellowfin sole fishery will also process herring from the Togiak fishery (R. Hatton, pers. comm., 3/12/09).

Figure 16 Timing of the herring sac roe fishery in the Togiak District, Bristol Bay, 2001-2008

	April														May																																			
	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31								
2001																		X	X	X	X	X	X	X	X																									
2002																X	X	X	X	X	X	X	X	X	X	X																								
2003			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																									
2004						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																										
2005						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																										
2006																																																		
2007																																																		
2008																																																		

Source: Westing et al. 2005, ADFG in prep.

Table 7 Herring sac roe harvest in the Togiak District, Bristol Bay, and herring bycatch in the Northern Bristol Bay Trawl Area (NBBTA) yellowfin sole fishery, 2001-2008, in mt.

Year	Gillnet Harvest ^a	Purse Seine Harvest ^a	Total Harvest ^a	NBBTA bycatch ^b
2001	6,491	15,879	22,370	**
2002	5,216	11,833	17,049	**
2003	6,505	15,158	21,663	na
2004	4,980	13,888	18,868	**
2005	5,841	15,071	20,912	0.3
2006	7,132	16,821	23,953	1.2
2007	4,012	13,120	17,132	34.6
2008	4,832	15,533	20,365	8.2

Source: Westing et al. 2005, ADFG in prep.; NMFS observer database, March 2009.

^a Harvest total includes dead loss and test fish.

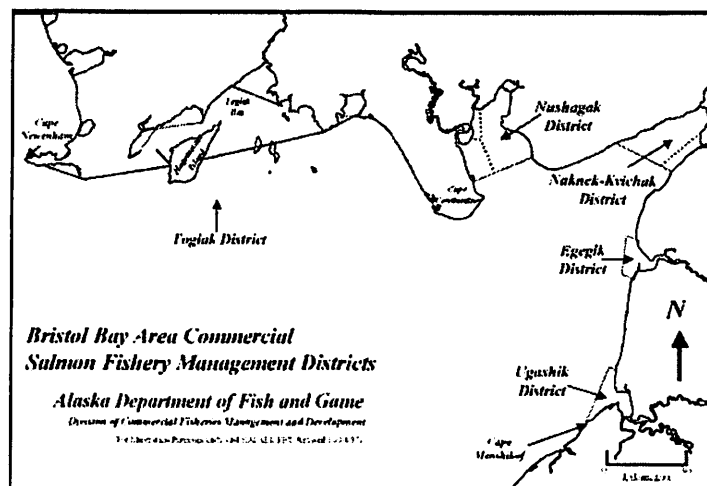
^b From observed tows only. Data are confidential (**) for 2001, 2002, and 2004, and there was no trawl fishery in 2003 (na = not applicable).

The herring spawn-on-kelp fishery has only occurred twice in the last 8 years, in 2002 and 2003. In 2002 the fishery was open on May 14th and in 2003 on May 3-4th. Data for the 2003 fishery are confidential, but the 2002 fishery harvested 67,793 lbs or the equivalent of 260 tons of herring.

4.3 Salmon fishery

A map of the commercial salmon fishery management districts is provided in Figure 17. The Togiak district opens to commercial salmon fishing on June 1, but typically no fishing occurs until about June 20th. In 2008, the commercial salmon fishery in the Togiak district made deliveries from June 19th to August 6th. Approximately 45 vessels participate in the Togiak salmon fishery, and 70 set net permit holders participate (T. Sands, ADF&G, pers. comm., 2/9/09).

Figure 17 Bristol Bay Area Commercial Salmon Fishery Management Districts



Source: Westing et al. 2005.

Table 8 illustrates the Chinook salmon harvest in the Togiak district, and compares it to observed Chinook salmon bycatch in the NBBTA. It does not include harvest from the Kulukak section of the Togiak district, but the vast majority of harvest and effort occurs in the Togiak River section (T. Sands, ADF&G, pers. comm., 2/9/09). There has been no observed bycatch of non-Chinook salmon in the NBBTA.

Table 8 Chinook salmon harvest in the Togiak District, Bristol Bay, and Chinook salmon bycatch in the Northern Bristol Bay Trawl Area (NBBTA) yellowfin sole fishery, in numbers of fish, 2001-2008.

Year	Harvests by Fishery				NBBTA bycatch ^b
	Commercial	Sport ^a	Subsistence	Total	
2001	9,937	1,006	1,612	12,555	**
2002	2,801	76	703	3,580	**
2003	3,231	706	1,208	5,145	na
2004	9,310	1,388	1,094	11,792	**
2005	10,605	1,734	1,528	13,867	-
2006	16,225	1,064	1,630	18,919	-
2007	7,755	1,501	1,234	10,490	120
2008	3,094	1,279 ^e	1,339 ^e	5,712	-

Source: Westing et al. 2005, ADFG in prep.; NMFS observer database, March 2009.

^a Sport fish harvest estimate only includes the Togiak River Section

^b From observed tows only. Data are confidential (**) for 2001, 2002, and 2004, and there was no trawl fishery in 2003 (na = not applicable).

^e Data not available at the time of publication. Five year average used.

4.4 Interactions between local vessels and the trawl fishery

The sac roe herring fishery occurs at the same time when trawl vessels are fishing in the NBBTA for yellowfin sole. In five of the last eight years there has been overlap of dates between the herring fishery and the yellowfin sole fishery, although the first half of June tends to be the time when the yellowfin sole fishery is most heavily prosecuted, at which point the herring fishery is over.

It is also possible that there is some overlap between the halibut fishery and the trawl fishery. In most years, one to three local vessels fish for halibut in the NBBTA. The commercial salmon fishery, although it opens on June 1st, is generally not prosecuted until after the NBBTA is closed to trawling.

The Council received a written complaint in early 2008 from the Qayassiq Walrus Commission (see explanation in Section 1.2). Additionally, the Council received public testimony in October 2008 reporting interactions between fishermen during the May/June period of 2008 (Appendices A, B, and C).

Staff contacted ADFG and NOAA Enforcement to see whether there were any additional reports of gear conflict or other conflicts reported in the area. NOAA Enforcement has been contacted about reports that trawl vessels have been fishing in closed waters, or have been involved in unlawful takes of marine mammals, but these claims have not been substantiated (K. Hansen, OLE, pers. comm., 2/9/09). In response to the concerns of the local community, a NOAA representative has made semi-annual visits to the communities of Dillingham, Togiak, and King Salmon over the last couple of years, as a form of outreach to the communities. ADF&G has not received any specific complaints other than the Qayassiq Walrus Commission letter from early 2008 (T. Sands, ADF&G, pers. comm., 2/11/09).

5 Pacific Walrus Life History and Other Information

The walrus family is represented by a single modern species *Odobenus rosmarus*. Two sub-species of walrus are generally recognized: the Atlantic walrus (*O. rosmarus rosmarus*) and the Pacific walrus (*O. rosmarus divergens*). These two sub-species occur in geographically isolated populations and have evolved into slightly different forms. Pacific walrus are somewhat larger in body size and skull dimensions than Atlantic walrus and have proportionally larger tusks.

Walruses have a discontinuous, although nearly circumpolar distribution around the perimeter of the Arctic Ocean and the contiguous sub-arctic seas. Their distribution appears to be constrained by water depth and by severe ice conditions. Walruses are usually found in waters of 100 m or less, probably because of the higher productivity of their benthic foods in these shallower regions. The Atlantic walrus ranges from the central Canadian arctic eastward to the Kara Sea. Several more or less discrete stocks of Atlantic walruses are recognized in Canada, Greenland, Norway and Russia. The Pacific subspecies is represented by a single stock of animals that inhabits the continental shelf waters of the Bering and Chukchi seas.

Walrus are managed by the U.S. Fish and Wildlife Service with scientific research support from the U.S. Geological Survey and the State of Alaska, and management cooperation from the Eskimo Walrus Commission (EWC). Created in 1978 by Kawerak, Inc., the EWC is the organization representing Alaska's coastal walrus hunting communities. Initially formed as a consortium of Native hunters, the EWC is a recognized statewide entity working on walrus co-management issues on behalf of Alaska Natives. Walrus are an important cultural and subsistence resource to the Alaskan coastal Yupik and Inupiaq communities. Walrus are a primary resource of food for Alaska Natives and are used to produce handicrafts and artwork from its ivory and bone (<http://www.kawerak.org/servicedivisions/nrd/ewc/index.html>).

The following review of information on walrus is abstracted primarily from USFWS (1994).

5.1 Seasonal Movements

In winter, virtually the entire population of Pacific walrus inhabits the Bering Sea using the pack ice for haulout habitat to facilitate foraging on the seafloor. Breeding occurs in January through March, and the fetus develops for about 15 months and calves are born in the following spring as the population moves northward from April to June. Wintering areas are primarily southwest of St. Lawrence Island and in outer Bristol Bay and Kuskokwim Bay. As the pack ice recedes, most walrus, and nearly all females and young, move northward and enter the Chukchi Sea in May and June, but also are distributed widely in the northern Bering Sea up to Bering Strait (Figure 18). Walrus migrate into the Chukchi Sea and follow the ice edge, using the ice as haulout habitat during their summer foraging throughout the Bering Strait area and eastern Siberia, around Wrangel Island, and the western Beaufort Sea near Point Barrow. Several thousand walrus, mostly adult males, remain in Alaskan waters in the Bristol Bay area throughout the summer. As winter encroaches, walrus in the Chukchi Sea follow the southward advancing ice edge back through Bering Strait, using haulouts on Big Diomedes, St. Lawrence, and King Islands. They continue to move to the south and by December inhabit their wintering grounds of the northern Bering Sea and outer Bristol and Kuskokwim Bays (Figure 19).

Figure 18 Summer distribution of Pacific walrus – from USGS (Undated)

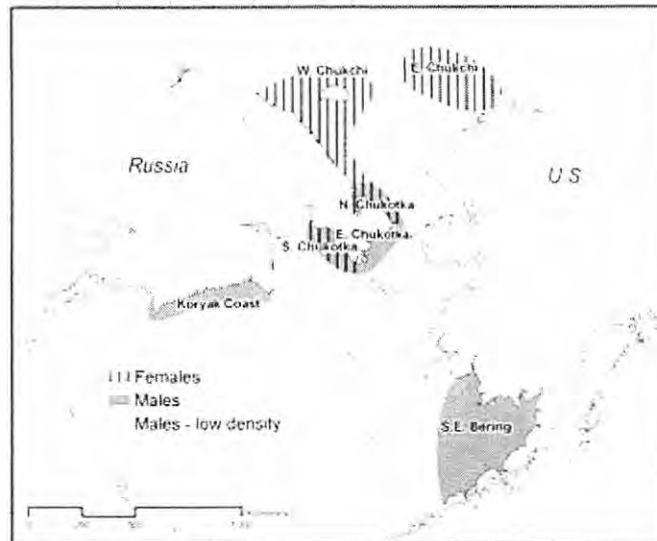
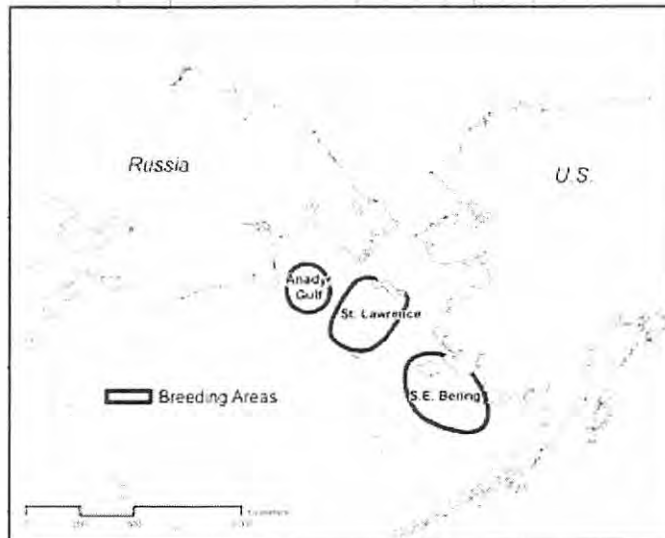


Figure 19 Winter distribution of Pacific walrus – from USGS (Undated)



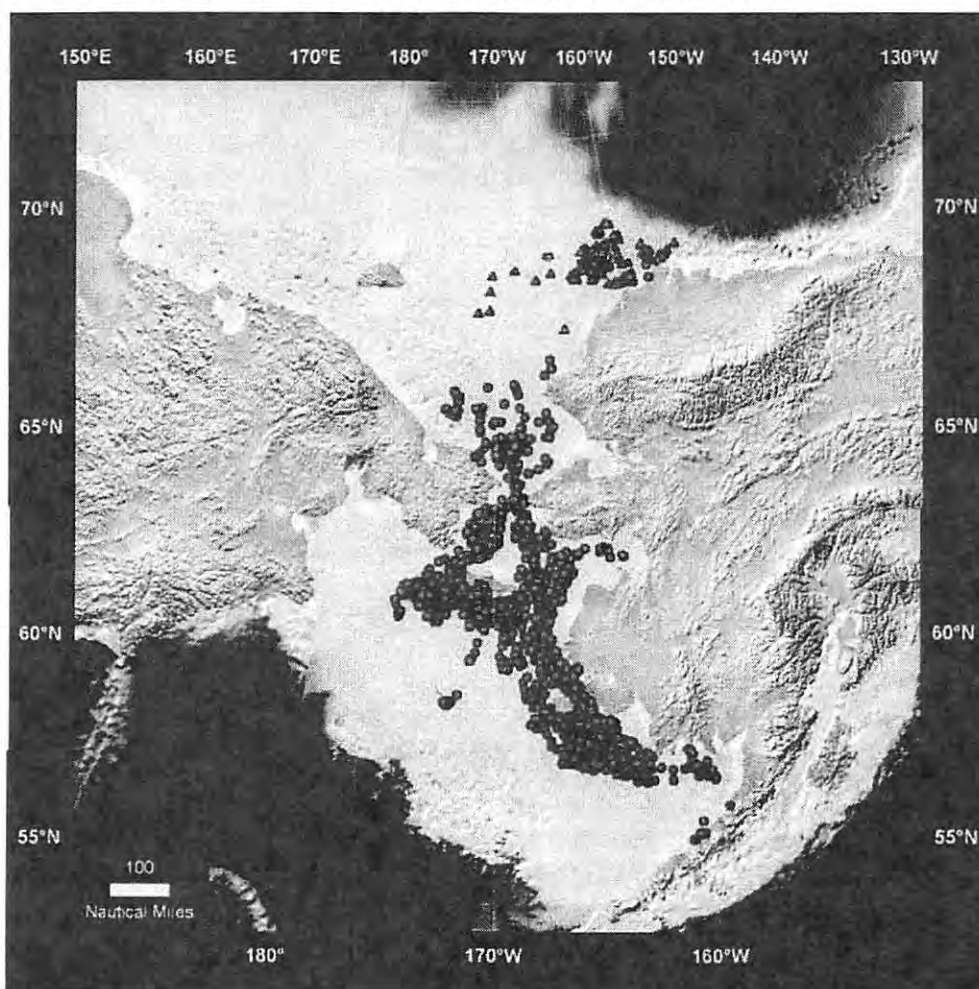
Major terrestrial haulout habitats in Alaska include Round Island, Cape Peirce, Cape Newenham, Cape Seniavin, and the Penuk Islands. Recently, Cape Seniavin and Hagemester Island have become significant haulout areas (Joel Garlich-Miller, USFWS, pers. comm.).

Jay et al. (2001) studied movements and dive behavior of walrus in Bristol Bay. Using time-depth recorders attached to individual walrus, Jay et al. (2001) noted that walrus dived deep (41 m) and long

(7.2 min) about half of the time when swimming offshore and these were likely related to feeding episodes. Other behavior included shorter duration dives exploring the sea floor, or short dives while traveling. This study observed that when offshore, walrus spent about 60 % of that time diving. New satellite radio-tags are being developed to record when walrus are feeding or not feeding during forays offshore to compare energy budgets of walrus using land in ice-free conditions or sea ice as a resting platform (Jay and Fischbach 2008).

Other tagging studies conducted from 2004 to 2007 show the broad distribution of walrus from Bristol Bay throughout the Bering and Chukchi Seas as far north as the western Beaufort Sea (Figure 20). These data show locations of over 90 walrus tagged in the Bering and Chukchi Seas but may not give a complete picture of habitat use in this region because of the uneven distribution of tagging effort (USGS Undated). Information on more recent tagging studies can be found at <http://alaska.usgs.gov/science/biology/walrus/tracking.html> and at <http://alaska.usgs.gov/science/biology/walrus/2008animation.html>.

Figure 20 Daily locations of over 90 walrus tagged in the Bering (circles) and Chukchi (triangles) Seas, from 2004-2007. Note that the absence of walrus locations in some areas can be due to an uneven distribution of tagging effort, and therefore, the distribution of locations depicted here should not be construed as preferred habitat.



Source: USGS (Undated)

5.2 Population Size

The population size of Pacific walrus is unknown, but previous speculation based on review of 18th and 19th Century harvests suggested a pre-exploitation population size of possibly several hundred thousand individuals (Fay 1982). Large scale commercial harvests reduced the population to an estimated 50,000 to 100,000 animals in the mid 1950s, but since then the population has rebounded to higher numbers. Kenyon (1972) reported a range-wide population size of 123,640 in 1972. By 1980, the population was estimated to be about 250,000 (USFWS 1994). The cooperative U.S./Russia survey in 1985 estimated a population size of about 230,000 animals. Another survey was completed in 1990, but unusual ice conditions may have affected the results (population estimate of 201,039 animals)(USFWS 1994). No surveys were conducted from 1990 through the mid 2000s.

In 2006, a range-wide survey was conducted as a joint effort between the U.S. and Russia. This survey utilized new technology that was thought to provide improved accuracy and greater reliability than visual observation (Burn et al. 2006). The study involved aerial surveys of walrus during spring when the entire population was likely present in the Bering Sea study area. This survey employed thermal imaging to detect walrus on ice throughout its range along strip transects which sampled a series of survey blocks. An estimate of the total walrus population size will also require an estimate of the number of walrus not hauled out on ice. Results are still pending but should be available later in 2009 (Suzann Speckman, USFWS, pers. comm.). However, a progress report summarizing the best available information on the walrus population was recently completed; this report estimates only the on-ice walrus population during the 2006 survey. Additional analysis of data is underway to estimate the proportion of walrus in the water and not available for detection by thermal imaging. The range-wide estimate of walrus detected hauled out on the sea ice within the surveyed area in 2006 was about 22,000 animals (Speckman et al. 2009). The 95 % confidence interval around this mean is 8,453 to 45,439 individuals. These data are not corrected for areas not surveyed (about half the available walrus habitat)(Suzann Speckman, USFWS, pers. comm.). An estimate of the total population size will be available when estimates of the number of walrus in the water and in areas not represented by survey blocks are completed.

Other data on walrus abundance include surveys conducted by the USFWS at the Togiak National Wildlife Refuge, and annual counts by ADF&G on Round Island. Overall, walrus use of haulouts in the general Bristol Bay region seems to be shifting; in some years, walrus abundance fluctuates up and down depending on geographic location. Some groups, such as at Cape Peirce, are declining, yet in other areas such as Cape Seniavin, walrus abundance is increasing (Joel Garlich-Miller, USFWS, pers. comm.). Consistent walrus counts in this region are only conducted at Round Island and at haulout sites within the Togiak National Wildlife Refuge.

5.2.1 Round Island

Round Island is the largest of a group of seven islands that comprise the Walrus Islands State Game Sanctuary. Annually, the State permits visitors to the island for wildlife viewing or research, and counts of walrus are completed annually by refuge staff. Peak summer walrus counts have varied from around 1,700 to over 8,000 animals over the past ten years. In 2007, the peak count was 5,245 animals (Okonek et al. Undated). Counts at Round Island vary considerably; an aerial survey in 1978 counted 15,000 animals, and the lowest peak count of 1,746 animals was made in 1998 (Okonek et al. Undated; Raymond 1998).

5.2.2 Togiak NWR

According to the Togiak National Wildlife Refuge, Cape Peirce is one of the two largest regularly used terrestrial haulouts for Pacific walrus in the United States. Other terrestrial haulouts in southwest Alaska include Cape Newenham, Cape Seniavin and Round Island. The Refuge summarizes walrus use in these areas as follows (<http://togiak.fws.gov/walrusmon.htm>).

Cape Peirce

Walrus on haulouts at Cape Peirce have been counted from the ground from May to September since 1981. The annual peak number of walrus hauled out during a single day has ranged from 284 to 12,500 walrus, with the peak numbers occurring between June 10 and October 6. The timing of peaks may be related to males migrating north in the fall to join females at the edge of the ice pack.

The number of walrus using the Cape Peirce haulout increased during the years 1981 to 1985, when the high count of 12,500 walrus was recorded. Walrus numbers at the haulouts at Cape Peirce generally declined from 1986-1990 and have been rising, but variable, in the ensuing years. Beginning with 1989, a pattern appears of alternating higher and lower peak counts from year to year.

Within individual years, strong fluctuations in numbers of walrus onshore occur during the census period at Cape Peirce. Telemetry studies suggest that these variations may be synchronous with resting and feeding cycles. Such differences in numbers may also be related to severity of storms and to human disturbances. During storms with strong onshore winds and heavy surf, hauling grounds are usually abandoned.

Cape Newenham

Walrus on haulouts at Cape Newenham have been counted from the ground from April to December since 1986. The annual peak number of walrus hauled out during a single day has ranged from 4 to 5,444 walrus, and peak abundance has occurred between June 30 and July 21.

Walrus haulouts at Cape Newenham were monitored daily throughout the summer season in 1991-1993, 1996, and 1997. From 1998-2003, the walrus haulouts were monitored only from late June to late July as part of a cooperative Bristol Bay walrus monitoring program. Beginning in 2004, the haulouts were monitored by aerial survey on a weekly or bi-weekly schedule.

The beaches at Cape Newenham have been used sporadically by walrus during the last 10 years. From 1978 to 1984, when observations were very irregular, walrus numbers ranged from a few individuals to several thousand animals. Between 1988 and 1990 few walrus were seen at Cape Newenham. In the 4 years of regular censusing (1991-1993 and 1996), annual peaks ranged from 870 to 5,444.

5.3 Feeding Habits

Walrus feed in waters generally 80 to 100 m in depth or less (Fay 1985), and forage in areas of soft sand and mud. They prefer bivalve mollusks, but will feed on many other organisms if bivalves are not abundant. Food preferences are clams (of the genus *Mya*, *Serripes*, *Hiatella*, *Macoma*) and secondarily annelids, echiuroids, gastropods, and some crustaceans. Walrus infrequently consume fish, and are known to prey on phocid seals, but rarely (Fay 1985). Walrus can consume more than 50 clams in a single dive and consume 35-50 kg of food per day (Jay and Fischbach 2008).

Walrus require ice as a platform for birthing and resting during foraging activities, primarily using seasonal ice. Walrus generally reside within areas of moving ice where its constant motion creates an abundance of leads and polynyas (Fay 1985). Females and young walrus move northward in spring and summer to follow the receding ice pack, but in recent years, the annual ice pack has receded so far northward that walrus were forced to use shoreline habitat in northern Alaska and Siberia for hauling out, limiting their foraging areas and making them susceptible to human or other terrestrial-related disturbances.

In 1976-1978, industry-government surveys in the southeast Bering Sea reported the presence of potential commercially-exploitable clam (surf clams – *Spisula polynyma*) populations on the north side of the Alaska Peninsula (Hughes et al. 1977; Hughes and Nelson 1979) which they termed the clam zone. In the early 1980s, prompted by the results of these surveys, the NPFMC funded a survey of walrus feeding on clam resources of Bristol Bay (Fay and Lowry 1981) to determine if a commercial clam fishery could adversely affect the walrus' food supply. Results indicated walrus were present in the clam zone and fed almost exclusively on bivalve mollusks, and that surf clams were an important component of their diet. Fay and Lowry (1981) calculated that in 1980, walrus using the clam zone could have consumed 17-33 % of the total biomass of harvestable surf clams and in 1981 about 5-11%; the decline from 1980 to 1981 was speculated to be the result of heavy foraging in 1980.

5.4 Walrus Mortality

Human-caused disturbance, injury, or mortality to Pacific walrus is prohibited by the Marine Mammal Protection Act (MMPA) unless specifically authorized. Alaska Natives are allowed to hunt walrus for traditional subsistence purposes, and some "take" may be authorized under the MMPA for commercial fisheries or scientific research activities. The following briefly summarizes sources of mortality and disturbance take in the Pacific walrus population.

5.4.1 Natural

Information on natural causes of walrus mortality is scant, and generally the only evidence of natural mortality events is from carcasses washed ashore. Walrus suffer disease and parasite infestations (reviewed in USFWS 1994), and also may be killed as a result of territorial fighting and occasional predation from killer whales or polar bears. Some pups may be abandoned and pups and juveniles may be trampled by larger individuals, and some walrus have been killed as a result of scientific research activity. Anecdotal reports of frightened groups of walrus fleeing beaches in Russia and northern Alaska in recent years due to ice recession far to the north indicated some injury and mortality to some individuals (Jay and Fischbach 2008). Walrus have been reported entrapped in heavy ice, with possible starvation as a result but this has not been well documented (USFWS 1994).

5.4.2 Fisheries

Walrus occasionally interact with trawl and longline fishing gear of U.S. groundfish fisheries with injury or mortality as a result, but no data are available from Russian waters. Until recently, the USFWS has used the average annual fishery mortality rate over the period 1996-2000 as a representative estimate of the current mortality rate (the most recent published walrus Stock Assessment Report was in 2002). More detailed information can be reviewed in Angliss and Outlaw (2008); using these data, the mortality to walrus from commercial fisheries in Alaska was estimated to be approximately 1.2 walrus per year, which is considered insignificant relative to other sources of human-caused mortality affecting this stock. The USFWS has recently updated the Stock Assessment Report for walrus, but it is under review by the Alaska Scientific Review Group and will not be available for public review until later this year (Suzann

Speckman, USFWS, pers. comm.). Based on information in the draft revised stock assessment, NMFS observer data from 2002 – 2006 indicate that only the BSAI flatfish fishery has recorded interactions with walrus that resulted in injury or mortality; NMFS estimates that the mean annual mortality to walrus in this fishery is 2.66 animals per year (Robyn Angliss, NMML, pers. comm.; Perez, 2006; Perez, Undated). The table below is from the draft walrus Stock Assessment Report. This level of mortality is considered insignificant relative to other sources of human-caused mortality.

Table 9 Summary of incidental mortality of Pacific walrus due to commercial fisheries from 2002-2006 and estimated mean annual mortality. All mortalities occurred in the Bering Sea/Aleutian Islands flatfish trawl fishery.

Fishery	Year	Data type	Observer coverage (%)	Observed mortality (in given years)	Estimated mortality (in given years)	95% CI
Bering Sea/Aleutian Islands flatfish trawl	2002	obs data	58.4	2	3.3	1.4 – 7.5
	2003		64.1	0	NE	NE
	2004		64.3	2	3.1	1.4 – 6.8
	2005		68.3	3	4.1	2.3 – 7.31
	2006		67.8	2	2.8	1.4 – 5.9
Mean	2002-2006	obs data	64.7	1.8	2.66	1.83 – 3.86 CV = 0.39

Fisheries observer data provided by NMFS. NE = no estimate made because no take was recorded.

5.4.3 Hunting

Commercial harvests occurred in the past, but have been prohibited in the U.S. and Russia since 1941 and 1957, respectively. Walrus were hunted throughout their range for tusks, skin, and oil (Fay et al. 1989). Large numbers of walrus were harvested commercially in the 1800s and early 1900s (10,000 to 20,000 animals per year); this level of harvest was thought to have caused major declines in the population (Fay et al. 1989). Fay et al. (1989) extensively review the history of population fluctuations from commercial exploitation of walrus. Sport and subsistence harvests in U.S. waters continued through Statehood and the 1960s (5,000 to 6,000 animals harvested per year), but under the MMPA in 1972, sport hunting was prohibited but subsistence harvests continued (see below).

Subsistence Harvest

Only Alaska Natives can participate in human harvests of walrus for subsistence and the creation and sale of authentic Native articles of handicraft and clothing, and similar subsistence harvests of walrus occur in Siberia (the Chukotka Region). Prior to the MMPA prohibition on hunting of marine mammals except by Alaska Natives, subsistence harvests were included in the overall harvest information presented above. In the mid 1980s, annual subsistence hunting harvest was estimated to be 10,000 to 15,000 animals (including those struck and lost) (Fay et al. 1989), but by the late 1980s harvests were considerably lower (USFWS 1994). In 1997, a Cooperative Agreement was developed between the USFWS and the Eskimo Walrus Commission to facilitate Native participation in walrus research and management and to develop local subsistence harvest regulations.

Limited hunting under a cooperative agreement between the USFWS, ADF&G, and the Qayassiq Walrus Commission with a set season and harvest quota occurs on Round Island. The only restrictions imposed on harvest outside the Round Island State Game Sanctuary are that the harvest not be wasteful, and that it be reported to the USFWS through the Marking, Tagging, and Reporting Program within 30 days of harvest. The bulk of the U.S. harvest occurs in the Bering Strait region, but some hunting occurs on Hagemeister Island and other locations throughout Bristol Bay (Jonathan Snyder, USFWS, pers. comm.).

Based on 1996-2000 harvest statistics, the USFWS estimated the combined U.S. and Russia subsistence harvest mortality level at 5,789 animals per year (Angliss and Outlaw 2008). These data are corrected using estimates for animals struck and lost (the USFWS estimates 42% of animals struck are not retrieved). In the period 2003 to 2007, the USFWS reports an average U.S. subsistence harvest of 1,638 to 1,926 walrus; combined with Russian data and corrected for animals struck and lost, the average total subsistence removals from the entire Pacific walrus population ranged from 4,974 – 5,470 animals in this period. A small portion of the subsistence walrus harvest occurs from hunting by residents of villages in the Bristol Bay region. In the last decade, annual hunter reported harvest data obtained through the USFWS Marking, Tagging, and Reporting Program indicate a harvest of 1 to 5 walrus/year in Dillingham, 1 to 2 walrus/year in Goodnews Bay, 1 to 10 walrus/year in Togiak, and very few animals, in some years none, from other villages (e.g. Manokotak, Egegik, Platinum, Twin Hills)(Jonathan Snyder, USFWS, pers. comm.). In 1995, the Qayassiq Walrus Commission was established to manage a small walrus hunt on Round Island; subsistence harvest limits have ranged from 10 to 20 animals annually during a fall hunt after the visitor season ends. This quota is often not filled, and in 2008 no walrus were harvested on Round Island (Jonathan Snyder, USFWS, pers. comm.).

5.5 Walrus Disturbance

In addition to hunting, walrus may be disturbed by other human activities. As noted above, some incidents of stampeding walrus have been reported, recently in relation to loss of seasonal ice in the northern Chukchi Sea area. When ice melts, and is not accessible to walrus, they may haul out on beaches, accessing nearby foraging habitat from land but without the refuge of offshore floating ice. In this situation, walrus are susceptible to disturbance from human activity, or predators, and may be induced to stampede into the water, possibly with injury and mortality to some individuals as a result. Jay and Fischbach (2008) note that as sea ice loss continues, more walrus may haul out on land, making them susceptible to increased predation and human disturbance and possibly changing their feeding behavior.

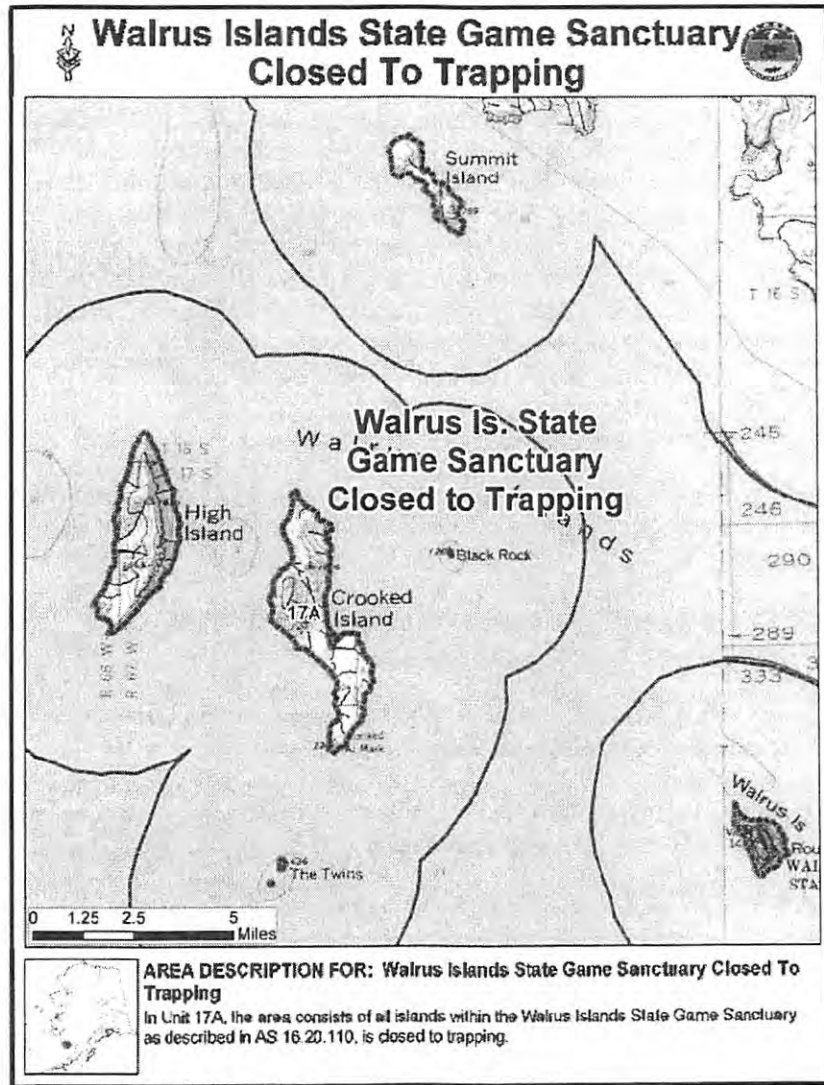
In the late 1980s, the Council responded to requests from Bristol Bay residents to limit fishing activities near some walrus haulouts. The Council was advised that noise from engines or propeller cavitation, net winches, other deck machinery, and other fishing activities disturbed walrus and made it more difficult to successfully hunt walrus for subsistence purposes. The Council adopted 3 to 12 n mi closures around the Walrus Islands (Round Island and The Twins) and Cape Peirce in northern Bristol Bay April 1-September 30 to reduce this disturbance.

And the State of Alaska established a 3 n mi year-round closure (vessel no transit zone) around Round Island within the Walrus Islands State Game Sanctuary⁵ (Figure 21) partly to protect this haulout from human access and disturbance (AS 16.20-090). Permits may be granted for small groups of individuals to visit the island for wildlife viewing, generally during the period May-August under stringent conditions that limit disturbance.

Anecdotal reports indicate potential disturbance interactions between the yellowfin sole fleet and walrus that inhabit the areas around northern Bristol Bay (see materials provided from the public in Appendices A, B, and C), and some indicate potential disturbance of walrus that haul out on Hagemester Island from seafood product offloading and onloading in the NOAA-permitted roadstead in this area.

⁵ The Walrus Islands State Game Sanctuary was created in 1960 by the Alaska Legislature to provide opportunity for wildlife viewing, scientific research, and to conserve a large population of Pacific walrus that hauls out on Round Island and 6 other small adjacent islands in the Sanctuary. Access permits are required and restrictions have been imposed on visitors (5 AAC 92.066).

Figure 21 Walrus Islands State Game Sanctuary includes the land area and adjacent State waters of Round, Crooked, High, and Summit Islands and The Twins and Black Rock (AS 16.20.092).



5.6 Mitigation of Walrus/Fishery Interactions

The USFWS (1994) Pacific Walrus Conservation Plan notes that historically some incidental take in fisheries, disturbance, and competition for prey resources were concerns for the Pacific walrus in Alaska. However, the Conservation Plan states that fishery impacts on feeding habitat and prey resources has not been an issue and could only be of concern if a commercial fishery occurs on clams on a large scale. Disturbance issues have largely been mitigated through several regulatory actions that minimize fishery activities close to walrus haulouts in northern Bristol Bay when walrus are present during spring and summer months. And incidental take in fishing gear has largely been of decomposed walrus, indicating those animals were already dead when captured in nets. Recent data on fisheries-related mortality were summarized above; fisheries interactions result in an estimated annual mortality of 2.66 walrus in Alaska commercial fisheries.

5.7 Petition to List Walrus under the ESA

On February 7, 2008 the Center for Biological Diversity (CBD) petitioned the USFWS to list the Pacific walrus as threatened or endangered under the Endangered Species Act (ESA), and to concurrently designate critical habitat. The CBD petition indicated concerns over the loss of walrus habitat, primarily seasonal sea ice, caused by climate warming from causes that include greenhouse gas emissions. Due to funding limitations, the Agency was unable to consider the petition in Fiscal Year 2008. On December 3, 2008 the CBD filed a lawsuit against the USFWS for failing to act on the listing petition. As part of settlement of this court case, the USFWS proposed the completion of a 90-day finding by September 2009. If the results of this finding are that the petition contains substantial information, the USFWS will undertake a more detailed 12-month finding to determine if ESA listing is either: 1) not warranted, 2) warranted, or 3) warranted but precluded by other priorities. If undertaken, the results of this 12-month finding will be completed by September 2010 (Douglas Burn, USFWS, pers. comm.).

6 References

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**Manokotak Village Council
P.O. Box 169
Manokotak, Ak 99628
PH: (907) 289-2067 or 1227
Fax: (907) 289-1235**

Resolution 09-04

A RESOLUTION URGING THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL TO ELIMINATE THE NEARSHORE BRISTOL BAY TRAWL AREA

WHEREAS: The NPFMC and the state of Alaska have long recognized the waters of Bristol Bay as a crab and halibut nursery and have closed most waters of Bristol Bay to trawl fishing; and

WHEREAS: An exception to the general ban is the Nearshore Bristol Bay Trawl Area (NBBTA), which is a seasonal yellow fin sole trawl fishery open from April 1 to June in a rectangular area off the Nushagak Peninsula, and including both state and federal waters; and

WHEREAS: The Manokotak Village Council is very concerned with the bycatch of halibut, herring and salmon along the Nushagak Peninsula where the yellow fin sole fishery takes place; in some years the halibut bycatch is more than the directed CDQ halibut fishery; and

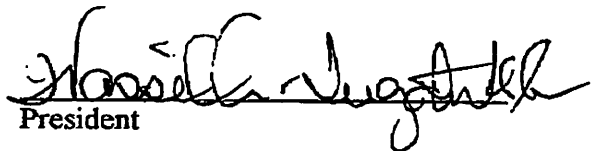
WHEREAS: Local residents have reported conflicts between the CDQ longline halibut fishermen and the yellow fin sole fishermen who operate in the area; and

WHEREAS: The Manokotak Village Council members have a heavy dependence of all near-shore marine mammals such as seals and walrus and the yellow fin sole trawl fishery takes place along the migratory path of these species; and

WHEREAS: The NBBTA is also along the migratory route of herring and of caplin, which is an important forage fish species for Stellar Sea Lions.

NOW, THEREFORE, BE IT RESOLVED that the Manokotak Village Council, urges the North Pacific Fishery Management Council to close the Nearshore Bristol Bay Trawl Area.

Signed:


President

CERTIFICATION:

I, the undersigned Recording Secretary of the Manokotak Village Council, hereby certify that the Council Members of the Manokotak Village Council passed the foregoing

resolution this 3rd day of April, 2009, at a duly called and noticed meeting, and that a quorum was present.

Signed:

Yvona Black
Secretary

City of Manokotak

P.O. Box 170
Manokotak, AK 99628
Phone 907-289-1027
Fax 907-289-1082

Resolution 09-10

A RESOLUTION URGING THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL TO ELIMINATE THE NEARSHORE BRISTOL BAY TRAWL AREA

- WHEREAS:** The NPFMC and the State of Alaska have long recognized the waters of Bristol Bay as a crab and halibut nursery and have closed most waters of Bristol Bay to trawl fishing; and
- WHEREAS:** An exception to the general ban is the Nearshore Bristol Bay Trawl Area (NBBTA), which is a seasonal yellow fin sole trawl fishery open from April 1 to June 15 in a rectangular area off the Nushagak Peninsula and including both state and federal waters; and
- WHEREAS:** The City of Manokotak is very concerned with the bycatch of halibut, herring and salmon along the Nushagak Peninsula where the yellow fin sole fishery takes place; in some years the halibut bycatch is more than the directed CDQ halibut fishery; and
- WHEREAS:** Local residents have reported conflicts between the CDQ longline halibut fisherman and the yellow fin sole fisherman who operate in the area; and
- WHEREAS:** The City of Manokotak members have a heavy dependence of all nearshore marine mammals such as seals and walrus and the yellow fin sole trawl fishery takes place along the migratory path of these species; and
- WHEREAS:** The NBBTA is also along the migratory route of herring and the caplin, which is an important forage fish species for Stellar Sea Lions.

NOW, THEREFORE, BE IT RESOLVED that the City of Manokotak urges the North Pacific Fishery Management Council to close the Northshore Bristol Bay Trawl Area.

Signed: 

Mayor

CERTIFICATION:

I, the undersigned Recording City Clerk of City of Manokotak of Manokotak, hereby certify that the Council Members of the City of Manokotak passed the foregoing resolution on this 2nd day of April, 2009, at a duly called and noticed meeting, and that a quorum was present.

Signed: 

City Clerk

May 26, 2008 Digital Photos
Taken by Bristol Bay herring fisherman
Of Trawl Fishing Boats

Here are digital photos, boat names and coordinates of trawlers operating west of Cape Constantine. The first photo is of the Enterprise pictured with it's net coming up the ramp.





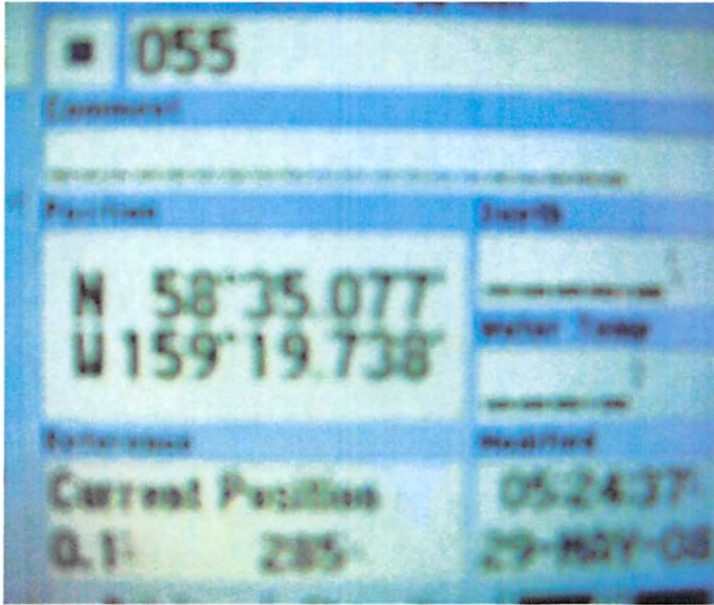
The skipper of the gillnetter estimates he was within 60 yards of the vessel when the photo was taken.



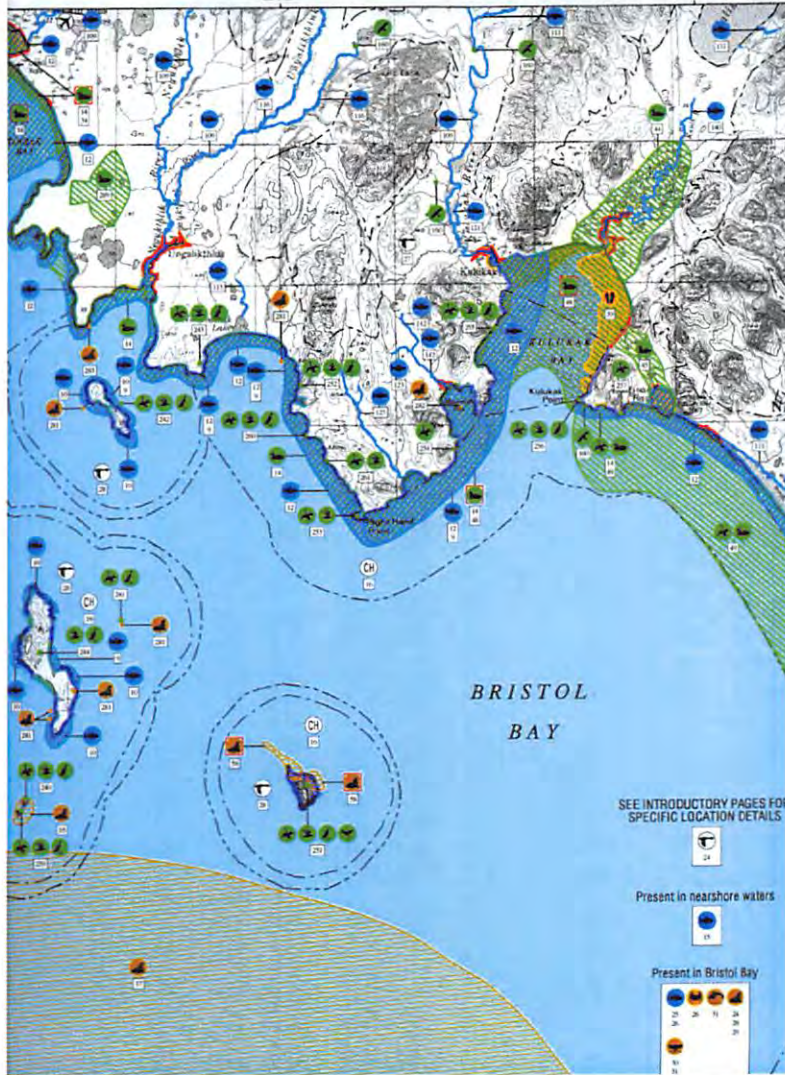
Photo of trawl fishing boat Tremont who threatened a Bristol Bay gillnet fisherman and crew.



Photo of threatened trawl fish boat GPS coordinates.



2008 Qayassiq Walrus Commission Map Depicting Marine Food Resources Harvested in the Bristol Bay, Alaska-Walrus Islands-Round Island, Kulukak area. Source Bristol Bay Coastal Resource Area Maps 2004



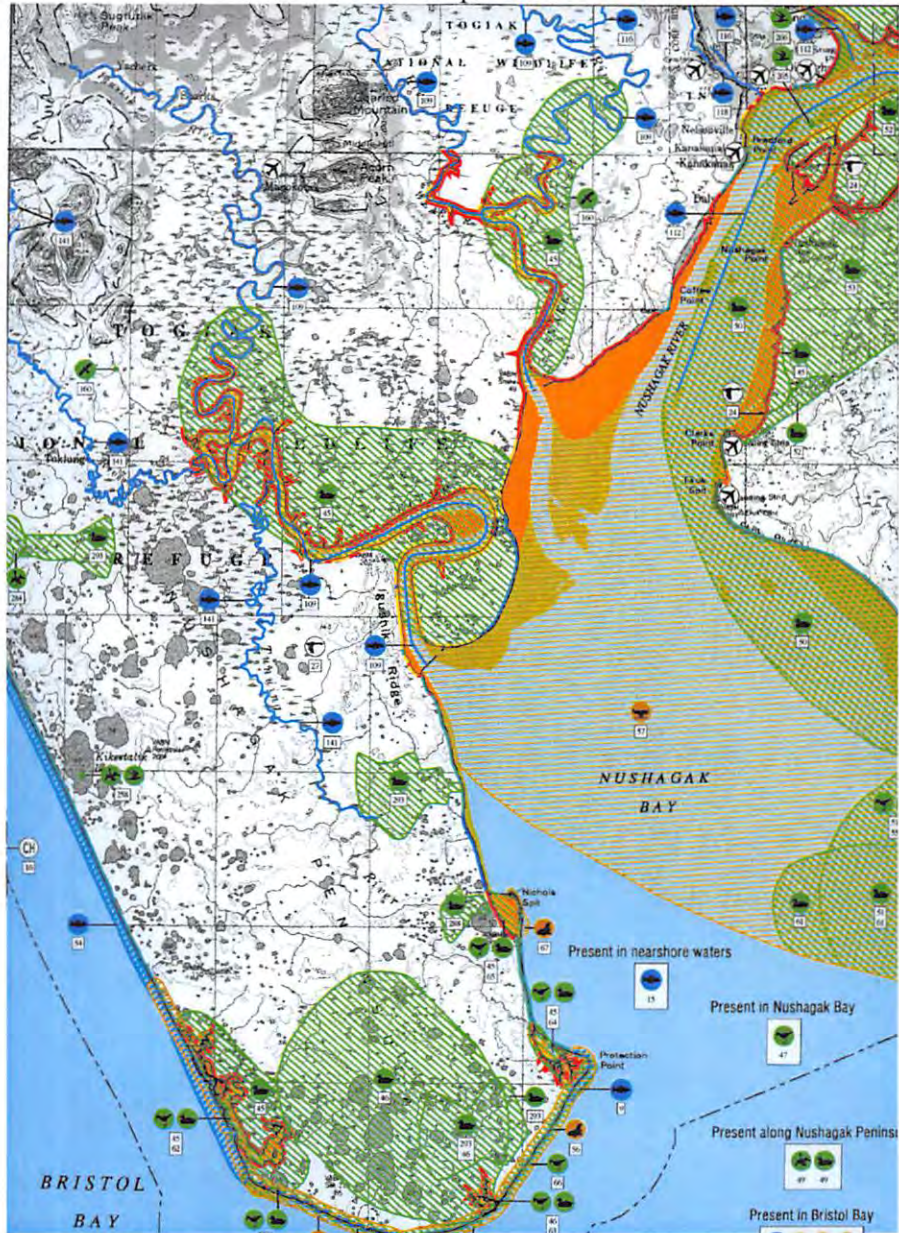
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 5/8 inch = 4 Kilometers

LEGENDS: MARINE FOOD RESOURCES IN BRISTOL BAY

BIRDS	MARINE MAMMALS
Diving Birds	Dolphins
Gulls and Terns	Pinnipeds
Raptors	Sea Otters
Seabirds	Whales
Shorebirds	FISH
Waterfowl	Fish
TERRESTRIAL MAMMALS	INVERTEBRATES
Bears	Bivalves
	Crabs
	Shrimp

Source: Bristol Bay Coastal Service Area Sub Area Atlas 2004

2008 Qayassiq Walrus Commission Map Depicting Marine Food Resources Harvested in the Bristol Bay, Alaska-Cape Constantine and Nushagak area. Source Bristol Bay Coastal Resource Area Maps 2004



Scale 1:250000
 1 inch = 4 miles
 5/8 inch = 4 Kilometers

LEGENDS: MARINE FOOD RESOURCES IN BRISTOL BAY

BIRDS	MARINE MAMMALS
Diving Birds	Dolphins
Gulls and Terns	Pinnipeds
Raptors	Sea Otters
Seabirds	Whales
Shorebirds	FISH
Waterfowl	Fish
TERRESTRIAL MAMMALS	INVERTEBRATES
Bears	Bivalves
	Crabs
	Shrimp

Source: Bristol Bay Coastal Service Area Sub Area Atlas 2004

March 17, 2009

Chris Oliver, Executive Director
North Pacific Fisheries Management Council
605 W. 4th Avenue, Suite 306
Anchorage, AK 99501-2252
Telephone (907) 271-2809 Fax (907) 271-2817

Re: Written comment to the NPFCM meeting March 30 - April 7, 2009

Dear Mr. Oliver.

I am the Frank Woods I work for Bristol Bay Native Association in the Natural Resources Department as the Subsistence Coordinator. BBNA is a Tribal Consortium, made up of 31 Tribes and is organized as a non-profit corporation to provide a variety of educational, social, economic and related services to the Native people of Bristol Bay region of Alaska. The Mission of BBNA is to promote self determination of Tribes of the Bristol Bay region, and the betterment, well-being, culture and interests of the Native People of the Bristol Bay Region.

We appeal to you to take conservatory action to reduce or limit halibut by-catch. Our subsistence users, sport fish industry, and commercial fishermen have been negatively impacted with reduced harvest.

First Point Reference your discussion paper. This fishery has changed to a highly industrialized efficient fishery that kills yellow fin.

Second This yellow fin fishery it wasn't developed into a huge number of operators in a small area.

Third your EIS has little reference to walrus

Fourth and final Point final point In the discussion paper you reference "Movements of Walrus Radio tagged in Bristol Bay, Alaska" by CHADWICK V JAY and SUE HILLS. I will reference this report and finding to page 199 in that report and the ITS my version I (Insurmountable) T (Trawling) S (Sound). This is glaring statistics to walrus staying out of the box in question. Again" Walrus foraging Marks on the sea floor in Bristol Bay , Alaska: a reconnaissance survey" Brain D. Bornhold ,Chadwick V. Jay, Robert McConnaughey, Glenda Rathwell, Karl Rhynas , William Collins.

We thank you for your considerations.

Frank Woods
BBNA Subsistence Coordinator
Dillingham, Alaska 99576

Official Copy -

*Kenny Wilson & John Gauvin
April 5 2009
11:30 a*

NBBTA Agreement April 5, 2009 Anchorage Hilton lobby

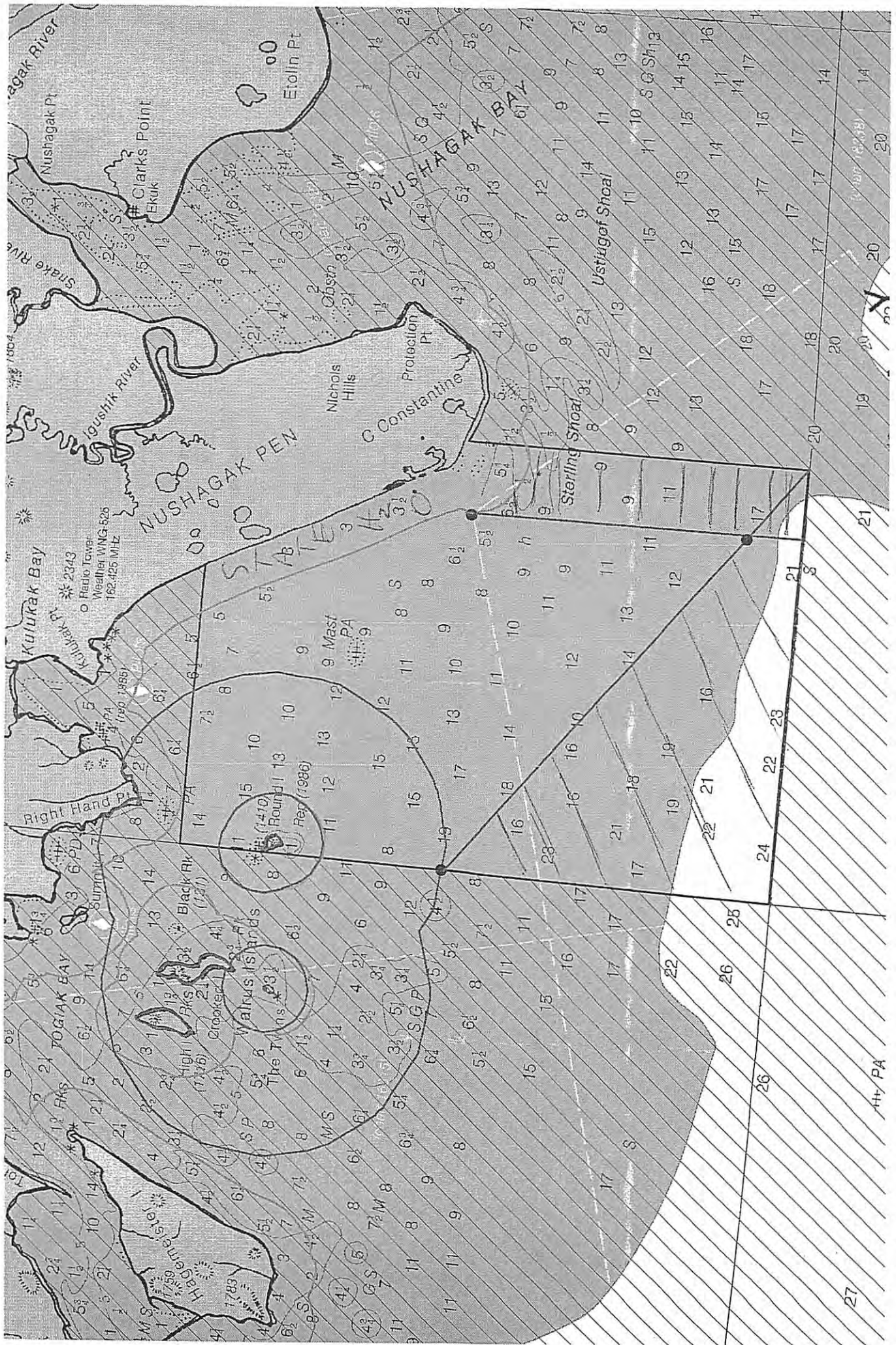
Concern about the effects of the yellowfin sole fishery in the vicinity of Togiak and Cape Constantine on local fisheries and walrus was presented to the North Pacific Fisheries Management Council (NPFMC) in October of 2008. Central to this was that local halibut fishermen believe that the decline in their halibut catches is due to halibut bycatch in the yellowfin sole fishery in the Northern Bristol Bay Trawl Area (NBBTA). The reason that halibut catches in the vicinity of Togiak and Cape Constantine have declined is unknown, but representatives of the Best Use Cooperative (BUC), a major participant in the NBBTA yellowfin fishery, decided to talk to local fishermen to discuss how these concerns could be addressed. In February of 2009, discussions were held between representatives of BUC, a BUC captain who fishes the NBBTA, and halibut fishermen, herring fishermen, and walrus hunters from Togiak and Dillingham who attended a meeting organized by the Bristol Bay Economic Development Corporation.

The February 2009 discussions, and continued discussions at the April 2009 NPFMC meeting in Anchorage, have identified measures that halibut fishermen think will address effects of the yellowfin sole fishery on their halibut fishery near Togiak and Cape Constantine. First, the area open to trawling would be modified to exclude trawling in the southern portion on the NBBTA. Additionally, an area on the east side of the "box" north to Sterling Shoals would be closed (see attached map). This new closed area encompasses the portion of the "box" that trawl fishermen believe tends to have relatively higher halibut bycatch rates (deeper portion of the area). Also, the northern extension of the closure to Sterling Shoals includes an important halibut fishing area identified by local fishermen.

Second, the NBBTA would be closed to yellowfin sole fishing at a time when halibut fishermen and other local fishermen are concerned about incoming migrations of halibut, salmon, and other species of importance to local fishermen and harvesters. To accommodate these concerns, trawling for flatfish and other groundfish in NBBTA would end on June 7 instead of the current June 15th.

Finally, BUC and local fishing and walrus hunting representatives have committed to ongoing communications during and after yellowfin sole fishing in the NBBTA. These communications are intended to reduce any remaining potential for gear conflicts in the reduced open area.

The Best Use Cooperative agrees to voluntarily implement the closed area and season changes described above for its member vessels in 2009 for any fishing inside the NBBTA. Additionally, BUC will also strongly encourage other trawlers who fish in the NBBTA to abide by the terms described above. Following the 2009 fishing season, BUC will continue via this agreement the above changes to trawl fishing in the NBBTA in the years following 2009 if discussions with local fishermen indicate that they believe the measures in this agreement have been successful and they would like us to keep them in place.



Nels G. Johnson
P.O. Box 197
Dillingham, Alaska 99576

Fax Cover Sheet
No: 13 pages

TO: North Pacific Fishery Management Council
Eric A. Olson, Chairman
Chris Oliver, Executive Director
605 W. 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

FROM: Nels G. Johnson

RE: Written comments and scientific data

DATE: March 25, 2009

Eric and Chris,

Enclosed is a copy of my written comments along with scientific data to support my comments.

Thank you.

My name is Nels G. Johnson.

I am here today representing the CDQ long liners in Bristol Bay.

We are very concerned about several issues:

**the disruption of the ecosystem caused by the near shore trawler fleet,
the halibut, herring and salmon by-catch,
the feeding grounds for the gray whale, walrus, and the endangered stellar sea lions.**

August 25, 2008 Anchorage Daily News stated large portions of the Bering Sea is off limits to bottom trawling. "It basically is taking nets and raking it over the bottom and anything that sticks up from the bottom gets bulldoze over. It is similar to forest clear cutting." Chris Krenz, Oceanic Arctic Project Manager.

If damages are that noticeable in the Bering Sea to make it off limits to bottom trawling in certain areas, Wouldn't this have the same effect on the near shore trawling area?

The near shore area is sensitive due to the herring entering and exiting the area. Chinook Salmon runs throughout the area heading to different spawning streams. Gray whales, walrus, and stellar sea lions enter to feed in shallow waters.

We are aware you closed the Arctic to save the ecosystem and its habitat that is important to the native residents as subsistence food. February 5, 2009 Anchorage Daily News.

We earnestly request that you will place a moratorium on all the near shore trawling areas until more documented data can be obtained on the disruption of our habitat and ecosystem.

North Pacific Fishery Management Council

Testimony from: Nels G. Johnson

My name is Nels G. Johnson, a member of Curyung Tribal. I have been commercial fishing for salmon and herring and am a halibut long-line fisherman and have been fishing since 1980. I have observed walrus, whales, sea lions, seals, herring, salmon, which are basically our subsistence food sources.

I am in support of the Qayassiq Walrus Commission and its resolution. I also support the Bristol Bay Marine Mammal Council and their resolution. Also I am in support of the tribes within Bristol Bay who have submitted supporting resolutions to strengthen the issues and concerns expressed by both the Qayassiq Walrus Commission and the Bristol Bay Marine Mammal Council.

I am also concerned about disturbances to walrus and grey whale feeding habitat caused by the trawl fishery in the Nearshore Bristol Bay Trawl Area. The endangered Stellar Sea Lion population's habitat is also being threatened and the noise from the trawl vessels is impacting all the feeding habitat areas of the above mentioned marine mammal species, which the trawl fishing fleet is literally destroying the ocean bottom.

Our main concern is the returning chinook salmon species, which have been seen by local herring fishermen swimming around the same area where the trawl fishing is taking place on their way to their spawning areas. Another local concern is the interception of halibut, which the local long-line fleet depend upon, and due to this the majority of local halibut fishermen are hanging up their hooks, because they can not compete with the amount of by-catch halibut being caught by the bottom trawl fleet.

“Bottom trawling is the most destructive of any actions that humans conduct in the ocean,” said zoologist Les Watling of the University of Hawaii. The impacts caused by bottom trawling is clearly visible from outer space. Another observation was made by Elliott Norse of the Marine Conservation Biology Institute along with Les, who quotes, “Ten years ago in working together we both calculated that each year, worldwide, bottom trawlers drag an area equivalent to twice the lower 48 states.”

In conclusion, I am not in support of the proposal submitted by representatives from Best Use Cooperative who was trying to convince us to support the bottom trawlers with less fishing time and smaller fishing area.



Species

- ▣ Marine Mammals
 - ▣ Cetaceans
 - ▣ Pinnipeds
- ▣ Marine Turtles
- ▣ Marine & Anadromous Fish
- ▣ Marine Invertebrates & Plants
- ▣ Species of Concern
- ▣ Threatened & Endangered Species
 - ▣ Critical Habitat Maps

Contact OPR
Glossary
OPR Site Map

Search OPR

Steller Sea Lion (*Eumetopias jubatus*)

Status | Taxonomy | Species Description | Habitat | Distribution | Population Trends | Threats | Conservation Efforts | Regulatory Overview | Key Documents | More Info

Status

ESA Endangered - Western Distinct Population Segment
ESA Threatened - Eastern Distinct Population Segment
MMPA Depleted - throughout its range

Taxonomy

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Otariidae
Genus: *Eumetopias*
Species: *jubatus*

Species Description

The Steller sea lion, also known as the northern sea lion, is the largest member of the Otariid (eared seal) family. Steller sea lions exhibit sexual dimorphism, in which adult males are noticeably larger than females and further distinguished by a thick mane of coarse hair. Adult males may be up to 10-11 ft (3-3.4 m) in length and can weigh up to 2,500 lbs (1,120 kg). Females are smaller than males, at 7.5-9.5 ft (2.5-3.0 m) in length and weigh up to 770 lbs (350 kg). The coats of adult males and females are light blonde to reddish brown and slightly darker on the chest and abdomen. The light coloration is still visible when the body is wet, which is different from many pinniped species. Like other pinnipeds, their coat of fur "molts" every year. Both sexes also have long whitish whiskers, or vibrissae, on their muzzle. The flippers and other hairless parts of the skin are black. The fore-flippers are broader and longer than the hind-flippers and are the primary means of locomotion in water. On land, sea lions, unlike "true" seals, can turn their hind flippers forward for walking.

Steller sea lions "forage" near shore and pelagic waters. They are capable of traveling long distances in a season and can dive to approximately 1300 ft (400 m) in depth. They also use terrestrial habitat as haul-out sites for periods of rest, molting, and as rookeries for mating and pupping during the breeding season. At sea, they are seen alone or in small groups, but may gather in large "rafts" at the surface near rookeries and haul outs. This species is capable of powerful vocalizations that are accompanied by a vertical head bobbing motion by males. Steller sea lions are opportunistic predators, foraging and feeding primarily at night on a wide variety of fishes (e.g., capelin, cod, herring, mackerel, pollock, rockfish, salmon, sand lance, etc.), bivalves, cephalopods (e.g., squid and octopus) and gastropods. Their diet may vary seasonally



Steller Sea Lion
(*Eumetopias jubatus*)
Photo: NOAA's National Marine Mammal Laboratory

Did You Know?

- Steller sea lions' impressive low-frequency vocalizations sound more like a "roar" when compared to California sea lions, which sound more like a "bark."
- The scientific name, *Eumetopias jubatus*, comes from the Greek words "eu" and "metopion" for "typical/well" and "broad forehead," and the Latin word jubatus for "having a mane."
- Steller sea lions are named for the German surgeon and naturalist George Wilhelm Steller. In 1742, he observed and described these large pinnipeds.
- Steller sea lions are the fourth largest pinniped in the world, behind the northern elephant seal, southern elephant seal, and walrus.

depending on the abundance and distribution of prey. They may disperse and range far distances to find prey, but are not known to migrate.

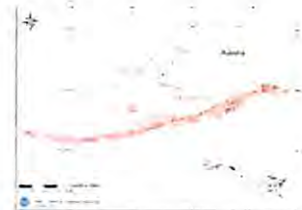


Steller Sea Lion
(*Eumetopias jubatus*)
Photo: NOAA's National Marine Mammal Laboratory

Steller sea lions are colonial breeders. Adult males, also known as bulls, establish and defend territories on rookeries to mate with females. Bulls become sexually mature between 3 and 8 years of age, but typically are not large enough to hold territory successfully until 9 or 10 years old. Mature males may go without eating for 1-2 months while they are aggressively defending their territory. Females typically reproduce for the first time at 4 to 6 years of age, usually giving birth to a single pup each year. At birth, pups are about 3.3 ft (1 m) in length and weigh 35-50 lbs (16-22.5 kg). Adult females, also known as cows, stay with their pups for a few days after birth before beginning a regular routine of alternating foraging trips at sea with nursing their pups on land. Female Steller sea lions use smell and distinct vocalizations to recognize and create strong social bonds with their newborn pups. Pups have a dark brown to black "lanugo" coat until 4 to 6 months old, when they molt to a lighter brown. By the end of their second year, pups are on the same color as adults. Females usually mate again with males within 2 weeks after giving birth. Males can live to be up to 20 years old, while females can live to be 30.

Habitat

Steller sea lions prefer the colder temperate to sub-arctic waters of the North Pacific Ocean. Haul outs and rookeries usually consist of beaches (gravel, rocky or sand), ledges, rocky reefs. In the Bering Sea and Okhotsk Sea, sea lions may also haul out on sea ice, but this is considered atypical behavior.



Steller Sea Lion Critical Habitat (AK)
(click for larger view PDF)

Critical habitat has been defined for Steller sea lions as a 20 nautical mile buffer around all major haul-outs and rookeries, as well as associated terrestrial, air and aquatic zones, and three large offshore foraging areas (50 CFR 226.202 on Aug. 27, 1993).

Distribution

Steller sea lions are distributed mainly around the coasts to the outer continental shelf along the North Pacific Ocean rim from northern Hokkaido, Japan through the Kuril Islands and Okhotsk Sea, Aleutian Islands and central Bering Sea, southern coast of Alaska and south to California. The population is divided into the Western and the Eastern "distinct population segments" (DPSs) at 144° West longitude (Cape Suckling, Alaska). The Western DPS includes Steller sea lions that reside in the central and western Gulf of Alaska, Aleutian Islands, as well as those that inhabit the coastal waters and breed in Asia (e.g., Japan and Russia). The Eastern DPS includes sea lions living in southeast Alaska, British Columbia, California, and Oregon.



Steller Sea Lion Critical Habitat (CA, OR)
(click for larger view PDF)

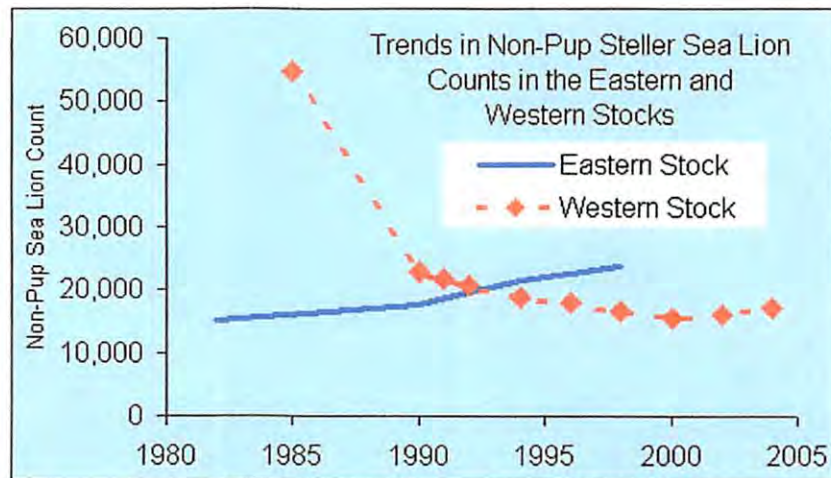
Population Trends

For management purposes, Steller sea lions inhabiting U.S. waters have been divided into two DPSs: the Western U.S. and the Eastern U.S. The differentiation is based primarily on genetic and physical differences, but also on differing population trends in the two regions. There are approximately 39,000-45,000 Steller sea lions in the Western U.S. and 44,500-48,000 in the Eastern U.S.

The Western DPS declined by 75% between 1976 and 1990, and decreased another 40% between 1991 and 2000 (the average annual decline during this period was 5.4%). Since the 1970s, the most significant drop in numbers occurred in the eastern Aleutian Islands and the western Gulf of Alaska. The extent of this decline led NMFS to list the Steller's sea lion as threatened range-wide under the

Endangered Species Act (ESA) in April 1990. In the 1990s, the decline continued in the Western portions of the range leading NMFS to divide the species into two distinct population segments (DPS), Western and Eastern, and list the Western DPS as endangered in 1997. Population surveys suggest that the Eastern U.S. DPS is stable or increasing in the northern part of its range (Southeast Alaskan and British Columbia), while the remainder of the Eastern DPS and all the Western DPS is declining.

More information on population trends can be found in NMFS' [marine mammal stock assessment reports](#).



Graph: NOAA's National Marine Mammal Laboratory

Threats

Anthropogenic (or human-induced) threats to Steller sea lions include boat strikes, contaminants/pollutants, habitat degradation, illegal hunting/shooting, offshore oil and gas exploration, direct and indirect interactions with fisheries, and subsistence harvests by natives in Alaska and Canada (150-300 taken a year). In the 1800s, they were targeted by hunters for their meat (food), fur hides (clothing), oil, and various other products. In the early 1900s, fishermen killed and placed bounties on this species, which they blamed for stealing fish from them. Some Steller sea lions were killed to limit their predation on fish in aquaculture facilities (fish farms), but intentional killing of Steller sea lions has not been permitted since they were protected under the Marine Mammal Protection Act (MMPA) and listed under the ESA.

Steller sea lions' direct and indirect interactions with fisheries is currently receiving significant attention and may possibly be an important factor in their decline. Direct fishing impacts are largely due to fishing gear (drift and set gillnets, longlines, trawls, etc.) that has the potential to entangle, hook, injure, or kill sea lions. These pinnipeds have been seen entangled in fishing equipment with what are considered "serious injuries." Steller sea lions are also indirectly threatened by fisheries because they have to compete for food resources and critical habitat may be modified by fishing activities.

Conservation Efforts

Protective zones, catch/harvest limits, various procedures and other measures have been implemented around major haul-outs and rookeries in order to safeguard their critical habitat. The [IUCN Red List of Threatened Species](#) considers this species to be "Endangered."

Regulatory Overview

The Steller sea lion was listed under the ESA as threatened throughout its range on December 4, 1990. This listing included animals from Alaska, California, Oregon and Washington in the U.S., as well as Canada, Japan, and Russia.

On June 4, 1997, the population west of 144° W longitude was listed as an endangered DPS (the Western DPS) under the ESA; the population east of 144° W

remained listed as threatened as the Eastern DPS.

Under the MMPA, all Steller sea lions are classified as "strategic stocks" and are considered "depleted".

Critical habitat has been designated (50 CFR 226.202 on Aug. 27, 1993) for Steller sea lions as a 20 nautical mile buffer around all major haul-outs and rookeries, as well as associated terrestrial, air, and aquatic zones, and three large offshore foraging areas. NMFS has also designated no-entry zones around rookeries (50 CFR 223.202). NMFS has implemented a complex suite of fishery management measures designed to minimize competition between fishing and the endangered population of Steller sea lions in critical habitat areas.

A recovery plan was developed for Steller sea lions in 1992. A revised recovery plan, which discusses separate recovery actions for the threatened and endangered populations, was issued in 2008.

Key Documents

(All documents are in PDF format.)

Title	Federal Register	Date
Recovery Plan (2008)	73 FR 11872	03/05/2008
▪ 1992 Recovery Plan	n/a	12/1992
Protection Measures for the Groundfish Fisheries Off Alaska	68 FR 204	01/02/2003
ESA Listing Rule - Endangered Status for Western population	62 FR 24345	05/05/1997
Critical Habitat Designation	58 FR 45269	08/27/1993
ESA Listing Rule - Threatened Status for Eastern and Western populations	55 FR 49204	11/26/1990
Stock Assessment Reports	n/a	various

More Information

- [NMFS Alaska Region and Science Center Information on Steller Sea Lions](#)
- [NMFS National Marine Mammal Laboratory Steller Sea Lion Information and Research](#)
- [NMFS Environmental Impact Statement \(EIS\) on Steller Sea Lion and Northern Fur Seal Research](#)
- [NMFS Southwest Regional Office: CA Pinniped Rookeries & Haul-out Sites](#)
- [Marine Mammal Commission Steller Sea Lion Species Information](#)
- [U.S. Fish & Wildlife Service Steller Sea Lion Species Profile](#)



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Devastation of Trawling Visible from Space

By **Andrea Thompson**, LiveScience Staff Writer

posted: **20 February 2008 ET**

Bottom trawling for fish stirs up billowing plumes of sediment that can be seen from space and destroys entire seafloor ecosystems, new imagery reveals.

The technique, used all over the world, is a way to catch fish in deeper parts of the ocean with huge, deep nets, now that many near-shore fish populations have been virtually wiped out from over-fishing. Several studies have shown the significant impact that trawling has on ecosystems, killing corals, sponges, fish and other animals.

New and previously released satellite images show the extent of the plumes of material kicked up. And a video of the seafloor reveals how trawling denudes an underwater world.

"Bottom trawling is the most destructive of any actions that humans conduct in the ocean," said zoologist Les Watling of the University of Hawaii. "Ten years ago, Elliott Norse [of the Marine Conservation Biology Institute] and I calculated that, each year, worldwide, bottom trawlers drag an area equivalent to twice the lower 48 states. Most of that trawling happens in deep waters, out of sight. But now we can more clearly envision what trawling impacts down there by looking at the sediment plumes that are shallow enough for us to see from satellites."

Watling presented his findings Friday at the annual meeting of the American Association for the Advancement of Science in Boston.

Persistent plumes

As nets are dragged across the seafloor, they can crush coral reefs, drag boulders across the bottom, and trap fish and animals not intended to be caught, called bycatch. All this activity stirs up sediments from the seafloor, which create the persistent plumes in the wake of the fishing ships.

Watling and his colleagues say that the plumes visible in satellite images are likely just the "tip of the iceberg" as most trawling is in waters that are deep enough that the plume remains hidden by the water above.

"Bottom trawling repeatedly plows up the seafloor over large areas of the ocean," said fellow

presenter John Amos of SkyTruth, a digital mapping non-profit group aimed at environment issues based in West Virginia. (Images of these plumes can be seen on the group's website.)

Bans and restrictions

Scientific studies showing the impacts that trawling has on ecosystems have led to increasing restrictions on the practice.

In 2005, the General Fisheries Commission for the Mediterranean banned trawling there below depths of 1,000 meters (3, 289 feet). The United States closed large deep-sea areas off the coast of Alaska to bottom trawling in 2006. Many South Pacific nations have also put a stop to the practice, and the United Nations began deliberations on a trawling moratorium in the high seas in 2006.

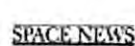
But there are still tens of thousands of trawlers operating in the Gulf of Mexico, off the coast of many Latin American countries, off the west coast of Africa, in Chinese waters, and the North Sea.

"We're a long way from protecting the ocean floor from bottom trawling," Norse told LiveScience.

- Video: Bottom Trawling — A Tale of Two Sites
- The Hand of Man: No Seas Remain Pristine
- Images: Life Under the Sea

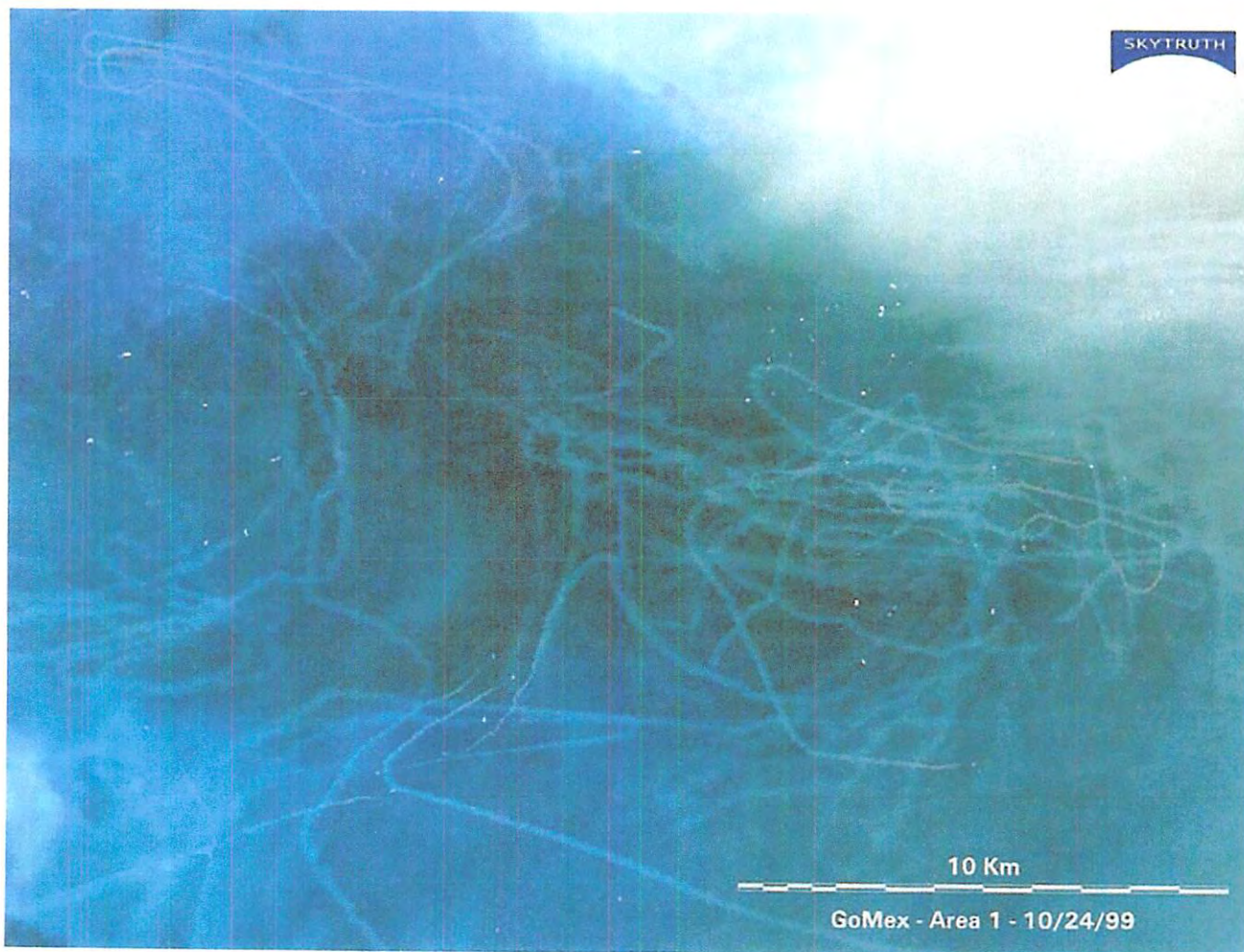
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Gray Whale (*Eschrichtius robustus*)

[Status](#) | [Taxonomy](#) | [Species Description](#) | [Habitat](#) | [Distribution](#) | [Population Trends](#) | [Threats](#) | [Conservation Efforts](#) | [Regulatory Overview](#) | [Key Documents](#) | [More Info](#)

Status

ESA Endangered - Western North Pacific population
MMPA Depleted - Western North Pacific population
Delisted from ESA - Eastern North Pacific population

Taxonomy

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Eschrichtiidae
Genus: *Eschrichtius*
Species: *robustus*

Species Description

Gray whales are mysticetes, or baleen whales. Gray whales are the only species in the family Eschrichtiidae. These large whales can grow to about 50 ft (15 m) long, and weigh approximately 80,000 lb (35,000 kg). Females are slightly larger than males. They have a mottled gray body, with small eyes located just above the corners of the mouth. Their "pectoral fins" (flippers) are broad, paddle-shaped, and pointed at the tips. Lacking a dorsal fin, they instead have a "dorsal hump" located about two-thirds of the way back on the body, and a series of 8-14 small bumps, known as "knuckles," between the dorsal hump and the tail flukes. The tail flukes are more than 15 ft (3 m) wide, have S-shaped trailing edges, and a deep median notch. Calves are born dark gray and lighten as they age to brownish-gray or light gray. All gray whales are mottled with lighter patches, and have barnacles and whale lice on their bodies, with higher concentrations found on the head and tail.

Gray whales are frequently observed traveling alone or in small, unstable groups, although large aggregations may be seen on feeding and breeding grounds. Similar to other baleen whales, long-term bonds between individuals are rare. Gray whales are bottom feeders, and suck sediment and the "benthic" amphipods that are their prey from the sea floor. To do this, they roll on their sides and swim slowly along, filtering their food through coarse baleen plates, of which they have 130-180 on each side of the upper jaw. In doing so, they often leave long trails of mud behind them, and "feeding pits" in the sea floor.

Gray whales become sexually mature between 6-12 years, at an average of 8 years old. After 12-13 months of gestation, females give birth to a single calf. Newborn calves are approximately 14-16 ft (4.5-5 m) long, and weigh about 2,000 lb (920 kg). The average and maximum life span of gray whales is unknown, although one female was estimated at 75-80 years old after death (Jones and Swartz, 2002). The age of large whales in family Balaenopteridae can be estimated by counting the layers present in waxy ear plugs, which are formed in the auditory canal (Hohn



Gray Whale
(Eschrichtius robustus)
 Photo: Merrill Goshko, NOAA

Did You Know?

- Gray whales make one of the longest annual migrations of any mammal, traveling about 10,000 miles (16,000 km) round trip.
- Gray whales were once called "devil fish" because of their violent reactions when harpooned by whalers.
- Currently, gray whales are known for their curiosity toward boats, and are the focus of whale watching and ecotourism along the southern portion of their migration.

2002).

Killer whales (*Orcinus orca*) are the only non-human predator of gray whales.

Habitat

Gray whales are found mainly in shallow coastal waters in the North Pacific Ocean.

Distribution

There are two isolated geographic distributions of gray whales in the North Pacific Ocean: the Eastern North Pacific stock, found along the west coast of North America, and the Western North Pacific or "Korean" stock, found along the coast of eastern Asia.

Most of the Eastern North Pacific stock spends the summer feeding in the northern Bering and Chukchi Seas, but gray whales have also been reported feeding along the Pacific coast during the summer, in waters off of southeast Alaska, British Columbia, Washington, Oregon, and California. In the fall, gray whales migrate from their summer feeding grounds, heading south along the coast of North America to spend the winter in their breeding and calving areas off the coast of Baja California, Mexico. Calves are born in shallow lagoons and bays from early January to mid-February. From mid-February to May, the Eastern North Pacific stock of gray whales can be seen migrating northward with newborn calves along the West Coast of the U.S.


Photo-identification studies indicate that gray whales in this stock move widely within and between areas on the Pacific coast, are not always observed in the same area each year, and may have several year gaps between re-sightings in studied areas (Calambokidis and Quan 1999, Quan 2000, Calambokidis et al. 2002).

Population Trends

Systematic counts of Eastern North Pacific gray whales migrating south along the central California coast have been conducted by shore-based observers at Granite Canyon most years since 1967. The most recent abundance estimates are based on counts made during the 1997/98, 2000/01, and 2001/02 southbound migrations, and range from about 18,000-30,000 animals. For more information, see the [Stock Assessment Reports](#).

In contrast, the Western North Pacific population remains highly depleted and its continued survival is questionable. This population is estimated to include fewer than 100 individuals.

Threats

Commercial whaling severely depleted both the eastern and western populations between the mid-1800s and early 1900s. Beginning in the mid-1930s, gray whales were protected under a ban on commercial hunting adopted by the League of Nations. This ban (which included [right whales](#)) was the first international agreement to protect a whale species from commercial whaling operations. The ban on commercial gray whale catches has continued since the late 1940s under the International Whaling Commission. Gray whales are still hunted by native people of Chukotka and Washington State and are subject to catch limits under the International Whaling Commission's  "aboriginal subsistence whaling" scheme.

Other current threats include [collisions with vessels](#), [entanglement in fishing gear](#), habitat degradation, disturbance from ecotourism and whale watching, disturbance from low-frequency noise, and the possibility that illegal whaling or resumed legal whaling will remove animals at biologically unsustainable rates. The eastern stock's annual migration along the highly populated coastline of the western United States, and their concentration in limited winter and summer areas, may make them particularly vulnerable to impacts from commercial or industrial development or local catastrophic events.

Conservation Efforts

The Eastern North Pacific stock of gray whales was removed from the U.S. List of Endangered and Threatened Wildlife in 1994, based on evidence that they had recovered to near their estimated original population size and were not in danger of

extinction throughout all or a significant portion of their range. In 1999, a NMFS review [pdf] of the status of the Eastern North Pacific stock of gray whales recommended the continuation of this stock's classification as non-threatened. This determination was based on the continued growth of the population (at that time, rising at 2.5% annually and estimated at 26,600 individuals) and the lack of evidence of any imminent threats to the stock. NMFS continues to monitor the abundance of the stock, especially as it approaches its carrying capacity.

The 2008 IUCN Red List of Threatened Species  lists gray whales as "least concern."

Regulatory Overview

All marine mammals, including gray whales, are protected under the Marine Mammal Protection Act of 1972, as amended. As of 1994, the Eastern North Pacific stock of gray whale is no longer listed as endangered under the Endangered Species Act of 1973.

The Western North Pacific stock of gray whales has not recovered. It is listed as "Endangered" under the ESA and "depleted" under the MMPA.

Key Documents

(All documents are in PDF format.)

Title	Federal Register	Date
U.S.-Russia Agreement on Monitoring the IWC's Aboriginal Subsistence Quota for Gray Whales 2008	n/a	2008
Status Review of the Eastern North Pacific Stock	n/a	08/1999
Final Rule to Delist the Eastern North Pacific Population	59 FR 31094	06/16/1994
Notice of Determination to Delist the Eastern North Pacific Stock of Gray Whales	58 FR 3121	01/07/1993
ESA Listing Rule	35 FR 18319	12/02/1970
Stock Assessment Reports	n/a	various

More Information

- [NMFS National Marine Mammal Laboratory Gray Whale Information and Research](#)
- [NMFS Southwest Fisheries Science Center Gray Whale Information](#)
- [Kids' Times: Gray Whale \[pdf\]](#)
- [NOAA's National Marine Sanctuaries](#)
 - [Channel Islands Sanctuary Gray Whale Species Card with video](#)
 - [Cordell Bank Sanctuary Gray Whale Species Card with video](#)
 - [Gulf of the Farallones Sanctuary Gray Whale Species Card](#)
 - [Monterey Bay Sanctuary Gray Whale Species Card with video](#)
- [Marine Mammal Commission Gray Whale Information](#)
- [Makah Tribe Gray Whale Hunt from NMFS Northwest Regional Office](#)
- [U.S. Fish & Wildlife Service Gray Whale Species Profile](#)

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**Written Testimony
By Carl Flensburg
Dillingham Commercial Halibut, Salmon Gillnet Seasonal Fisherman
To the North Pacific Fishery Management Council
March 25, 2009**

My name is Carl Flensburg of Dillingham, Alaska. I am speaking on behalf of the Curyung Tribal Council. I am a tribal member of the Curyung Tribal Council. The Curyung Tribal members have approximately 2,300 enrolled members in Dillingham, Alaska area. I am also a commercial fisherman and a part-time Native artist.

I have fished salmon in Bristol Bay since I was 9 years old, approximately forty years. I also have fished herring in the Togiak Herring Fishery as a gillnetter and a seiner for seventeen (17) years. I have fished in district 4E Halibut Bristol Bay for at least ten (10) years.

I have completed two Bristol Bay fishing surveys for our CDQ group, Bristol Bay Economic Development Corporation (BBEDC). I completed a fish survey in 1998 in the northern district from Cape Newenham to Cape Constantine setting test longline and test pots. In 1999, the second fish survey was done in the southern district of Bristol Bay. We set test pots from Port Heiden to Cape Constantine with a partner boat setting longline tests with us, inventorying halibut, cod, and shrimp stocks.

Our CDQ group advocated to allow local Bristol Bay residents to fish halibut in district 4E Bristol Bay in the late 1990s. This started out as a good thing as an alternative fishery from salmon. Now, the seasonal Bristol Bay halibut fishery is hardly worth the boat fuel and expenses to fish the few halibut that are left to catch after the trawlers are done.

For several years, I have worked hard to develop our Bristol Bay 4E halibut CDQ fishery. But, we now are witnessing a drastic decline in our halibut catches. For example, in 2002, our small fleet caught 208,411 pounds of halibut. In 2008, we caught 30,394 pounds of halibut which is 1/7th of the previous 2002 catch.

The Curyung Tribal Council and I believe that the yellowfin sole and the halibut migrate into the Bristol Bay in the spring in the same migration patterns. The Halibut follow the yellowfin sole to feed on them throughout the Bristol Bay area. There is a deep valley that comes in from the Bering Sea and wraps around Round Island which can be seen on nautical charts. I believe this is used as a corridor by the halibut and yellowfin sole to move into the shallower nearshore waters of Bristol Bay in the Spring season.

When I did the longline survey in Northern Bristol Bay in 1998, I encountered the highest halibut catch rates I have ever observed. I saw these in the East corner South of Round Island inside the Near Shore Bristol Bay Trawler Area (NSBBTA).

The Curyung Tribal Council believes yellowfin sole trawl fleet has a detrimental effect on our Bristol Bay ecosystem. The Bristol Bay walrus are moving from their traditional feeding, and haulout areas on Round Island. The yellowfin sole trawl fleet tow their nets back and forth over the clambeds until all the bottom sea life is scraped off the sea floor. If you look at the National Oceanic Atmospheric Administration (NOAA) Law Enforcement maps tracking trawlers in the NSBBTA you will see it turns black from so many lines. Yet, NOAA enforcement officers have told me not all trawlers in the NSBBTA have tracking devices. You can see from my example that nothing would survive this kind of fishing pressure. Kelp, clams, and sea life of this nature are unable to run away from the intrusion of the trawlers. Instead, they are quickly killed from the trawl nets. We have observed the debris fields behind these trawlers. Kelp and dead creatures floating to the surface in the dirty water trail left by the trawlers. This trail of dirty water extends for miles behind the trawl fish boat trails has been observed by Curyung tribal halibut and gillnet fishermen. Although some of the seasonal trawl fishermen have mentioned they have a clean fishery, the damage left behind says a lot. Yes, the trawlers have cleaned all forms of sea life off the bottom of nearshore waters in the nearshore Bristol Bay trawler area.

The Curyung Tribal Council's concern is also for the grey whale which migrates past Cape Constantine each Spring. The grey whale is also nature's bottom trawler. They feed on the bottom sifting through the sand and mud feeding on small underwater creatures. Every Spring, we observed these events occurring along Cape Constantine. Presently, the grey whale is in competition with the yellowfin sole trawl fleet. When the trawl fishery groups are present, the grey whale loses their feeding habitat areas. We don't know where the grey whales go when the trawlers are present.

The Curyung Tribal Council believes the walrus, Steller sea lion and grey whale are affected in a detrimental way by the NSBBTA trawl fishing fleet. We also believe the bycatch of halibut and Chinook salmon is harmful to our traditional subsistence harvest and economic development. We believe that the bottom seafloor marine habitats of the NSBBTA is already destroyed and the marine habitat beds must be given time for regrowth.

On February 19, 2009 a group of halibut fishermen and the Qayassiq Walrus Commission members were asked by BBEDC to meet with Best Use Cooperative (BUC) trawl group to work out a solution to Bristol Bay trawl fish issues discussed previously in this letter. There was a suggestion that the NSBBTA be reduced and trawl fishing time be moved back 15 days earlier. The Curyung Tribal Council does not agree with this.

The Curyung Tribal Council is in agreement with the Qayassiq Walrus Commission (QWC) and the Bristol Bay Native Association (BBNA) Resolution 09-01: Urging the North Pacific Fishery Management Council (NPFMC) to create a protection zone for walrus habitat in Bristol Bay. This fifty (50) nautical mile zone from Cape Newenham to Port Moller is the proposed QWC walrus and marine protection boundary zone area.

The Curyung Tribal Council is also gravely concerned about the Bering Sea/Aleutian Islands Pollock Fishery that intercepts Bristol Bay Chinook salmon. We recommend this be stopped.

In summary, why is this NSBBTA open when it used to be closed? The NSBBTA is of no benefit to the local Bristol Bay people. Every halibut fishermen I talked to last year in 2008 lost money, in other words, they didn't make any income from the 2008 halibut 4E fishery. We used to pay our fishing expenses and supplement our annual income with halibut, and Chinook salmon earnings. We can no longer make money from these fisheries. This is causing economic hardship for the Bristol Bay communities because this was our livelihood. Now, we have to pay our expenses for ALL fisheries from the seasonal sockeye (red) salmon earnings, leaving little or no financial support for our families during the long winter months.

Carl Flensburg
Halibut Fisherman
Salmon Fisherman
Curyung Tribal Member
P.O. Box 972
Dillingham, AK 99576
Phone: 907-842-4755
E-mail: carlflensburg@yahoo.com

Qayassiq Walrus Commission
c/o: Bristol Bay Native Association
P.O. Box 310
Dillingham, AK 99576
Phone: 907-842-5257
Fax: 907-842-5932
QWC Chair Phone: 907-493-5003

RECEIVED
FEB 1 2009
N.P.F.M.C.

Resolution 09-01

**A RESOLUTION URGING THE NORTH PACIFIC FISHERY MANAGEMENT
COUNCIL TO CREAT A PROTECTION ZONE FOR WALRUS HABITAT IN
BRISTOL BAY**

- WHEREAS: The Qayassiq Walrus Commission ("QWC") manages the annual Native walrus hunt on Round Island, within the Walrus Islands Game Sanctuary, and is composed of representatives of each of the Native villages participating in the hunt; and
- WHEREAS: As an established Native marine mammal commission functioning continuously since 1995, the QWC is a principle advocacy body in Bristol Bay regarding marine mammal subsistence use and the preservation of marine mammal habitat; and
- WHEREAS: The QWC is increasingly concerned about disturbance to walrus feeding habitat caused by the trawl fishery in the seasonal Nearshore Bristol Bay Trawl Area, and also of threats to the habitat from global warming and scheduled offshore oil leasing; and
- WHEREAS: Local anecdotal evidence as well as tagging studies by the U.S. Geological Service in 2004-2007 show that walrus forage from 30 to 55 miles offshore, and that environmental changes are forcing walrus further offshore as far as 75 miles; and
- WHEREAS: The QWC believes that in order to mitigate against a potential collapse of walrus use of the Round Island haulout and other walrus haulouts in the Bristol Bay region, a special 50-mile protection zone should be established to protect walrus feeding areas starting 50 miles offshore from Security Cove and Cape Newenham, east to 50 miles offshore of Cape Constantine, across to Cape Menshikof and down the Alaska Peninsula to Port Moller;

NOW, THEREFORE BE IT RESOLVED by the Qayassiq Walrus Commission that it urges the North Pacific Fishery Management Council, in coordination with other federal agencies, to establish a marine mammal habitat protection zone in Bristol Bay with boundaries extending 50 miles offshore from Security Cove and Cape Newenham, east 50 miles offshore of Cape Pierce, Hagemeister Island, Twin Islands, Round Island, to Cape Constantine, and 50 miles offshore the Alaska Peninsula from Cape Menshikof to Port Moller, such protection zone to include all federal waters within the 50 mile boundaries.



Frank Logusak, Chairman
Qayassiq Walrus Commission

Certification

This certifies that the foregoing resolution was adopted at a duly called and noticed meeting of the Qayassiq Walrus Commission on January 30, 2009, and that a quorum was present.

Daniel Chytheboole
Secretary

March 25, 2009

Mr. Eric Olson, Chair
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, Alaska 99501

Dear Chairman Olson,

Re: Nearshore Bristol Bay Trawl Area (NBBTA) Walrus Issues

The Best Use Cooperative (BUC) is a harvesting cooperative consisting of seven companies and sixteen catcher-processor vessels that target mainly flatfish in the Bering Sea. We are submitting this letter to supplement information in staff's discussion paper prepared for this agenda item to include some important information and correspondence that has been generated since the October 2008 Council meeting. This information is needed for balanced consideration of this issue, and to inform the Council of BUC's efforts to develop a workable solution to concerns raised over our Bristol Bay fishing activities.

Yellowfin sole is currently BUC's largest fishery and a large portion of most vessels' annual catch. Fishing for yellowfin sole and other Bering Sea flatfish has been constrained by strict limitations placed on halibut bycatch during the past 20 years. When the halibut prohibited species cap (PSC) is reached, directed flatfish fishing is immediately closed regardless of how much of the total allowable catch has been harvested.

With the implementation of Amendment 80 in 2008, BUC members were able to exit the race for fish and form harvesting cooperatives, thereby improving management of PSC species and fishery yields. BUC's PSC allocations are extremely limiting relative to historical usage. Additionally, a series of phased-in halibut PSC reductions totaling 200 mt will be implemented over the next few years.

Yellowfin sole are harvested across the Bering Sea shelf as they migrate towards shallow near-shore areas in the late winter and spring, where they aggregate prior to spawning. At certain times of the year, these are the only fishing grounds where yellowfin sole can be caught with low halibut bycatch rates. Access to near-shore waters where yellowfin sole can be fished with low halibut bycatch is therefore extremely important to the Amendment 80 sector.

The nearshore Bristol Bay yellowfin sole fishery has been historically important for BUC vessels and this dependence is even greater under Amendment 80 management. As noted in the discussion paper prepared for this agenda item, very little bycatch of other PSC species occurs in this area. If BUC vessels were displaced to other areas at this time of year, they would be forced to harvest yellowfin sole in areas with much higher halibut bycatch rates. The tradeoff in terms

of the Council's management objective of minimizing bycatch to the extent practicable would therefore be negative, as would the economic effect on our sector.

Unfortunately, these important yellowfin sole fishing areas sometimes overlap cultural, subsistence, and non-flatfish commercial user areas. Historically, BUC members have collaborated with these other interests to find workable solutions while maintaining access to these areas. The collaborations have resulted in the current buffer zone around Nunivak Island, Etolin Strait, and Kuskokwim Bay. We have been and remain committed to working with subsistence and commercial users of other resources to minimize the impacts of our fisheries on other fisheries and resource users to the extent practical while maintaining the viability of our fisheries.

At the October 2008 North Pacific Fishery Management Council (Council) meeting, a September 18, 2008, letter from Ms. Rosa Meehan of the United States Fish and Wildlife Service (USFWS) to Mr. Frank Logusak, Sr. of the Qayassiq Walrus Commission (QWC) was circulated to the Council. Public testimony pursuant to the letter also claimed that yellowfin sole fishing activities in the open area south of Togiak are having negative effects on halibut, salmon, crab, herring, and walrus populations. The letter states that the USFWS is "looking for ways in which the U.S. Fish and Wildlife Service (Service) can support the QWC on this issue." Further, based on the letter, it appears that Ms. Meehan directed USFWS staff to brief the Council USFWS representative to be ready to advocate for the QWC position.

In response, BUC sent the attached letter dated October 20, 2008 to USFWS staff (Appendix A). The letter and related email correspondence included much of the same information contained in this letter, and requested an opportunity to meet with USFWS walrus experts to better understand their yellowfin sole fishery concerns.

On December 16, 2008, BUC staff and representatives from several BUC companies met with USFWS and United States Geological Survey (USGS) walrus experts. These included Susan Sparkman (USFWS), Jonathan Snyder (USFWS), Joel Garlich-Miller (USFWS), Rosa Meehan (USFWS), and Chad Jay (USGS). Additionally, several USFWS Togiak National Wildlife Refuge staff participated by teleconference. An attached December 19, 2008 email to Bill Wilson (Council staff) provides a detailed description of the meeting, and is briefly summarized here (Appendix C).

BUC appreciated the opportunity to meet with USFWS staff to provide important information about PSC and bycatch management in the yellowfin sole fishery, Amendment 80 including its extensive monitoring requirements, BUC operations, and historic BUC catch in the NBBTA. Additionally, Dr. Craig Rose, who was in Anchorage at the same time for a scientific meeting, agreed to attend the USFWS meeting. He provided an overview of trawl sweep modifications, and research to determine the effectiveness of these modifications for reducing the effects of flatfish trawls on Bering Sea shelf sand and mud substrates, such as those found in Bristol Bay).

According to USFWS staff, walrus exhibit low levels of haulout fidelity relative to sea lions, and it is not uncommon for animals to use a haulout one year then move to a different haulout the

following year. As noted in the discussion paper, the Round Island walrus population has decreased over time, but experts do not know whether walrus are moving to other haulout areas.

USFWS and USGS staffs were interested in Amendment 80 and BUC's increased ability to reduce bycatch, and to monitor catch and fishing activities under increased Amendment 80 monitoring protocols. They also appreciated efforts to modernize trawl gear to reduce its effects on benthic habitat and sessile animals.

Finally, USFWS and USGS scientists indicated that Bristol Bay walrus food sources mostly include bivalves species embedded in the substrate. Based on Dr. Rose's assessment of effects of flatfish trawls on "infauna" such as clams, USFWS biologists stated that they are not concerned about trawls, particularly with modified sweep lines, affecting foraging walrus or their food sources. The USFWS indicated that overall, fishery interactions are not a concern in this fishery at this time. Furthermore, disturbance effects from yellowfin sole vessels operating in the NBBTA are not of concern because the yellowfin sole fishery operates outside the existing 12-mile closures around all walrus haulouts.

In sum, neither USFWS walrus experts nor the discussion paper indicates that yellowfin sole fishing activities result in a walrus conservation issue. The only assertion about fishery effects on walrus is found in materials submitted by BBNA. For example, the *Final Report on: Walrus Traditional Knowledge Regarding Walrus Project* (Appendix A to discussion paper) states "Another reason why the walrus population decrease may occur is from the seasonal commercial herring activity in the Walrus Island area."

On February 20, 2008, BUC staff and a vessel captain familiar with the NBBTA fishery met with representatives from the BBNA, Bristol Bay Economic Development Corporation, the Qayassiq Walrus Commission, and the local halibut and herring fleets. Much of the same information provided to the USFWS was provided to this group. Collectively, we formulated some ideas to address gear conflict and bycatch concerns in the Bristol Bay area.

The information included in and attached to this letter is intended to supplement the Council's discussion paper, and assist them in making informed decisions regarding the NBBTA. We look forward to working with the Council, communities, commercial fishermen, and subsistence hunters and fishermen to voluntarily implement provisions to protect continued access to yellowfin sole fishing areas while protecting cultural and subsistence activities.

Sincerely,



Jason Anderson
Best Use Cooperative, Manager

Enclosures (3)

Enclosure 1

4241 21st Ave W. Suite 302
Seattle, WA 98199

BEST USE
COOPERATIVE

(206) 462-7690
Fax: (206) 462-7691

October 20, 2008

Mr. H. Dale Hall
Director
United States Fish and Wildlife Service
1849 C St., NW
MailStop 3238 MIB
Washington, DC 20240

Dear Mr. Hall,

The Best Use Cooperative (BUC) is a harvesting cooperative consisting of seven companies and sixteen catcher-processor vessels that target mainly flatfish and cod in the Bering Sea. Yellowfin sole is currently BUC's largest fishery and a large portion of most vessels' annual catch. Fishing for yellowfin sole and other Bering Sea flatfish has been constrained by strict limitations placed on halibut bycatch during the past 20 years. When the halibut prohibited species cap (PSC) is reached, directed flatfish fishing is immediately closed regardless of how much of the total allowable catch has been harvested.

With the implementation of Amendment 80 in 2008, BUC members were able to exit the race for fish and form harvesting cooperatives, thereby improving management of PSC species and fishery yields. BUC's PSC allocations are extremely limiting relative to historical usage. Additionally, a series of phased-in halibut PSC reductions totaling 200 mt will be implemented over the next few years.

Yellowfin sole are harvested across the Bering Sea shelf as they migrate towards shallow near-shore areas in the late winter and spring, where they congregate to spawn. At certain times of the year, these are the only fishing grounds where yellowfin sole can be caught with low halibut bycatch rates. Access to near-shore waters where yellowfin sole can be fished with low halibut bycatch is therefore extremely important to the economic future of the Amendment 80 sector.

Bristol Bay is closed for non-pelagic trawling except for a small box south of Togiak, which is open annually from April 1 through June 15. This area has been historically important for BUC vessels and this dependence is even greater under Amendment 80 management. In 2008, BUC vessels harvested 8,250 mt of yellowfin sole, and only accrued 6 mt of halibut mortality. Very little bycatch of other PSC species occurs in this area. If BUC vessels were displaced to other areas at this time of year, they would be forced to harvest yellowfin sole in areas with much higher halibut bycatch rates. The economic tradeoff and biological impacts would be very negative.

Unfortunately, these important yellowfin sole fishing areas sometimes overlap cultural, subsistence, and non-flatfish commercial user areas. Historically, BUC members have collaborated with these other interests to find workable solutions while maintaining access to the

areas. For example, the current Togiak box was the product of flatfish industry negotiations with Alaska native representatives in the mid-1990s. Additionally, on August 25, 2008, we agreed to a buffer zone around Nunivak Island, Etolin Strait, and Kuskokwim Bay during discussions with representatives from the Association of Village Council Presidents. This agreement, now codified into regulations by the National Marine Fisheries Service, addresses the concerns of subsistence users as well as our need to access productive yellowfin fishing areas with low bycatch. We have been and remain committed to working with subsistence and small-scale fishermen to minimize the impacts of our fisheries on other fisheries and resource users to the extent practical.

At the October 2008 North Pacific Fishery Management Council (Council) meeting, a September 18, 2008, letter from Ms. Rosa Meehan of your staff to Mr. Frank Logusak, Sr. of the Qayassiq Walrus Commission (QWC) was circulated to the Council as part of public testimony. This testimony alleged that yellowfin sole fishing activities in the open area south of Togiak are having negative effects on halibut, salmon, crab, herring, and walrus populations. The letter states that the United States Fish and Wildlife Service (USFWS) is "looking for ways in which the U.S. Fish and Wildlife Service (Service) can support the QWC on this issue." Further, based on the letter, it appears that Ms. Meehan directed USFWS staff to brief the Council USFWS representative to be ready to advocate for the QWC position.

We are very concerned that the letter, and Ms. Meehan's direction to her staff, is not consistent with Council public and scientific process required under the Magnuson-Stevens Act, National Environmental Policy Act, Regulatory Flexibility Act, and Executive Order 12866. The Council's fisheries management decisions are required to be informed by analysis, scientific and legal review, and public testimony. Management programs are typically developed over time and may include several iterations before a reasonable and adequate solution is arrived at. Those solutions balance and consider multiple views and their effects. We are disappointed that the USFWS appears to have drawn conclusions without due diligence to consider all the information associated with this issue.

We hope that the USFWS is also willing to meet with BUC representatives on the Togiak yellowfin sole fishery issue. Such a meeting would give your agency a chance to examine our data, particularly with respect to halibut, salmon, crab, and herring catch, and hear how we conduct our fisheries. It would also provide us an opportunity to explain our ongoing efforts to work with Togiak and Dillingham subsistence and small scale fishermen to minimize effects on commercial and subsistence resources. We are also interested in showing your agency the work we are doing with Alaska Fisheries Science Center's Dr. Craig Rose to modify flatfish trawls to reduce sea floor contact. These trawl gear modifications are currently under consideration by the Council. We feel it is important that you and your Council representative consider the effects of our trawl fisheries on walrus in the context of available science on the effects of modern otter trawls used in high natural disturbance areas (such as the shallow sand/mud substrates in Bristol Bay), in addition to the effects of the soon-to-be implemented gear modifications. These are expected to further reduce the potential for impacts on in-fauna such as clams.

We therefore respectfully request that USFWS address the Togiak issue objectively, and provide our group an equal opportunity to represent our activities. We look forward to hearing from you on this important matter.

Sincerely,



Jason Anderson
Best Use Cooperative, Manager

Attachment

**Cc: Geoff Haskett, Director, USFWS Alaska Region
Rosa Mechan, Chief, Marine Mammals Management, USFWS Alaska Region
Greg Balogh, USFWS Alaska Region
Eric Olson, Chairman, NPFMC**

[Faint, illegible text]



United States Department of the Interior

FISH AND WILDLIFE SERVICE

1011 E. Tudor Road
Anchorage, Alaska 99503-6199



UN REPLY SEPEN FO:

AFES/MMM

SEP 18 2008

Mr. Frank Logusak, Sr.
Chairman, Qayassiq Walrus Commission
P.O. Box 278
Togiak, Alaska 99678

Dear Mr. Logusak:

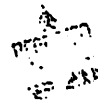
I received a copy of your August 28, 2008, letter to Mr. Chris Oliver, Executive Director of the North Pacific Fisheries Management Council (NPFMC), concerning the Bristol Bay trawl fishery. I understand Qayassiq Walrus Commission's (QWC) concerns as they relate to walrus conservation and management, and I have shared a copy of your letter with our representative to NPFMC. I will ask my staff to fully brief him on this important issue prior to the September 29 meeting of the council. In the meantime, I will also look for ways in which the U.S. Fish and Wildlife Service (Service) can support the QWC on this issue. We will work directly with Helen Chythlook.

I regret that I was unable to attend your most recent QWC meeting, but Jonathan Snyder has briefed me on the issues which were discussed. I trust that he has adequately represented the Service at your recent meetings, and he is always available to assist the QWC, so please do not hesitate to contact him. I hope to attend the next Eskimo Walrus Commission meeting, and I look forward to seeing you there. I hope that you folks have a safe hunting season at Qayassiq this fall. You may contact me or Jonathan, at 1-800-362-5148 if you would like to discuss this further.

Sincerely,

Rosa Meehan
Chief, Marine Mammals Management

cc: Helen Chythlook, Director QWC
Vera Metcalf, Director EWC



TAKE PRIDE
IN AMERICA

Enclosure 2

Jason Anderson

Sent: Wednesday, October 29, 2008 12:17 PM
To: Rosa_Meehan@fws.gov
Cc: cjay@usgs.gov; Douglas_Burn@fws.gov; jasonanderson@seanet.com; Joel_GarlichMiller@fws.gov; Jonathan_Snyder@fws.gov; LaVerne_Smith@fws.gov
Subject: Re: fisheries and Bristol Bay

Hi Rosa et al,

Might I suggest including in the discussion someone (perhaps Russ Holder or Pete Probasco or one of their staff) who knows a thing or two about commercial fishing gear and the actual effect the gear may have on substrate and benthos. I find that sometimes industry reps tend to paint a rosy picture of their (lack of) impact on the environment. It would be good to have someone there who would know what questions to ask about the gear that is being used.

Greg Balogh
Endangered Species Program
US Fish and Wildlife Service
Anchorage Fish and Wildlife Field Office
605 W. 4th Ave. Rm G-61
Anchorage, AK 99501

907-271-2778 Phone
907-271-2786 FAX

Rosa
Meehan/R7/FWS/DOI

10/29/2008 09:33
AM

To
Joel GarlichMiller/R7/FWS/DOI@FWS,
Jonathan Snyder/R7/FWS/DOI@FWS,
Chadwick V Jay/BRD/USGS/DOI@USGS

cc
jasonanderson@seanet.com, Greg
Balogh/R7/FWS/DOI@FWS, Laverne
Smith/R7/FWS/DOI@FWS, Douglas
Burn/R7/FWS/DOI@FWS

Subject
fisheries and Bristol Bay

Greetings -

As you know, the issue of the trawl fishery in Bristol Bay and relationship to walrus conservation and management is currently a topic of discussion at the North Pacific Fishery Management Council.

I was contacted by Jason Anderson (representing Best Use Cooperative, a fishing cooperative with fishing interests in the trawl fishery south of Togiak). They are interested in working with the various interest groups to resolve conflicts related to the fishery. As part of this effort, he offered to meet with walrus biologists to do two things - explain their fishery and measures they take to minimize impacts to the bottom substrate and to learn about/understand walrus conservation and management concerns.

My understanding is that Jason and other representatives from this group will be in town in December and this would be a good opportunity to share information. Jonathan - would you take the lead for our office to coordinate this - Chad, you are quite welcome to participate and please extend the invitation to others that may also be interested.

Rosa

Rosa H. Meehan
Division Chief
Marine Mammals Management
Anchorage, Alaska 99503

Ph: 907 786-3349
Fax: 907 786-3816

Enclosure 3

Jason Anderson

From: Jason Anderson [jasonanderson@seanet.com]

Sent: Friday, December 19, 2008 2:23 PM

To: 'bill.wilson@noaa.gov'

Cc: 'John Gauvin'

Subject: USFWS meeting summary

Attachments: USFWS to QWC letter 9-18-2008.pdf; USFWS walrus letter 10-20-2008.pdf; Greg Balogh email.pdf

Hi Bill,

The following is a summary of our meeting with the USFWS, as well as some contact information for their scientists.

At the October Council meeting, several local Togiak halibut fishermen and walrus hunters testified during Staff Tasking that H&G trawl vessels were affecting Bristol Bay halibut fisheries and walrus populations. As part of his testimony, Frank Logusak of the Qayassiq Walrus Commission (QWC) circulated a 9-18-2008 letter from the USFWS to the QWC. The letter stated that the USFWS is "looking for ways in which the U.S. Fish and Wildlife Service (Service) can support the QWC on this issue." Based on the content of the letter, it appeared that the USFWS directed briefed the Council USFWS rep to be ready for the QWC position.

John Gauvin and Lori Swanson also provided testimony to the Council on behalf of BUC and GFF about our activities and catch in the Togiak yellowfin sole fishery. Greg Balogh, the USFWS's Council rep, directed several leading questions to John about the effects of non-pelagic trawling on the benthic environment and, specifically, on walrus food sources.

On 10-20-2008, we sent a letter to the USFWS that briefly described the Best Use Cooperative, our operations in the Togiak yellowfin sole fishery, and our concern that the USFWS had already predetermined a position without all available information. We pointed out to the USFWS that the Council process and several statutes are designed to provide a public process for decision makers to implement management programs based on the record and information available. Finally, we requested a meeting with the USFWS, so that we may provide additional information and learn more specifically about their concerns.

During the course of planning for a meeting with the USFWS, we received an email from Greg Balogh expressing his concern that we may inaccurately characterize the effects of our activities. The USFWS, our letter to the USFWS, and Greg's email are all attached.

We met with USFWS staff on 12-16. We began by highlighting all of our previous correspondence with the USFWS on this issue. Next we provided a Powerpoint presentation that included the following information:

- the basics of non-American Fisheries Act trawl catcher processors;
- fisheries management off Alaska, including how limited species typically constrain our ability to fully utilize yellowfin sole resources;

- Amendment 80 regulations allowing the formation of harvesting cooperatives, and the value of harvesting cooperatives in helping vessel captains avoid bycatch;
- intensive monitoring regulations to ensure accurate catch accounting;
- the importance of the high volume, low bycatch Togiak yellowfin sole fishery; and
- historic BUC catch information in the Togiak yellowfin sole fishery.

Finally, we followed up with a summary of cooperative research with the NMFS to modify trawl gear to reduce its effects to benthic habitat. Dr. Craig Rose of the AFSC provided additional information about the methods and results of this research.

We received some information from the Togiak National Wildlife Refuge staff about Bristol Bay walrus haulouts. Apparently, walrus don't exhibit haulout fidelity, and it's not uncommon for animals to visit a haulout one year and move to another the next year. The number of walrus using the Round Island haulout has decreased over time. However, a new haulout location is being established on the south west end of Hagemeister Island.

USFWS scientists indicated that walrus food sources mostly include bivalves deeply embedded in the substrate. They also said that Bristol Bay walrus populations have decreased over time, but very little is actually known about walrus populations and staff aren't sure whether the decrease is due to an overall decrease in the entire population or if it's just a local decrease in the population.

They applauded our efforts to modernize our trawl gear, and reduce its effects on the benthic habitat. They also thought that Am 80 and its associated monitoring provisions would help to reduce the negative effects of a race-for-fish fishery, and help to accurately quantify catch amounts.

However, it was interesting because despite Greg Balogh's concerns, the scientists present at the meeting said that actually never had any concern about our vessels affecting foraging walrus or their food sources. Instead, most of their concerns associated with changes in Bristol Bay walrus populations are related to disturbance events, and our vessels don't operate close enough to Round Island to effect hauled out walrus. Apparently, these disturbance events can cause walrus to stampede, which can result in trampling and falling from cliffs.

USFWS staff were actually more concerned with the effects of vessels transiting within the 12-mile Federal fishery closure, aircraft, and the local herring fishery. They highlighted that herring fishery can fish to within three miles of round island, but frequently skiffs from those boats operate within the three miles and sometimes land on the beach. Also, herring spotter planes create significant disturbance. It sounded like they were going to focus their efforts on aircraft disturbance.

The following people attended the meeting:

- Todd Loomis, Cascade Fishing
- Jim Hamilton, Ocean Peace.
- John Gauvin, representing BUC
- Jason Anderson, BUC
- Craig Rose, AFSC

- Susan Sparkman, USFWS
- Jonathan Snyder, USFWS
- Joel Garlich-Miller, USFWS
- Chad Jay, USGS

And from the Togiak NWR (spellings may be wrong)

- Paul Leipburg
- Tevis Underwood
- Pat (not sure of last name, maybe John can fill in)

Rosa Meehan, who wrote the original USFWS letter, also showed up for a bit. However, she didn't hear the bulk of our presentation. She spoke about the petition to list walrus under the ESA, and the process/timeline.

Jonathan Snyder was our contact for setting up this meeting. His information is below. Also, I got Joel's business card, but it's sitting in my desk at work and I'm at home due to snowy weather.

Jonathan A. Snyder
Wildlife Biologist
U.S. Fish & Wildlife Service
Marine Mammals Management MS 341
1011 East Tudor Road Anchorage, AK 99503 907-786-3819 Voice 1-800-362-5148 Toll Free 907-786-3816 FAX

Hope this helps. Let me know if you need any additional information

Jason Anderson
Best Use Cooperative, Manager
(206) 462-7682
(206) 499-7244 (c)

Written Testimony
By Carl Flensburg
Dillingham Commercial Halibut, Salmon Gillnet Seasonal Fisherman
To the North Pacific Fishery Management Council
March 25, 2009

My name is Carl Flensburg of Dillingham, Alaska. I am speaking on behalf of the Curyung Tribal Council. I am a tribal member of the Curyung Tribal Council. The Curyung Tribal members have approximately 2,300 enrolled members in Dillingham, Alaska area. I am also a commercial fisherman and a part-time Native artist.

I have fished salmon in Bristol Bay since I was 9 years old, approximately forty years. I also have fished herring in the Togiak Herring Fishery as a gillnetter and a seiner for seventeen (17) years. I have fished in district 4E Halibut Bristol Bay for at least ten (10) years.

I have completed two Bristol Bay fishing surveys for our CDQ group, Bristol Bay Economic Development Corporation (BBEDC). I completed a fish survey in 1998 in the northern district from Cape Newenham to Cape Constantine setting test longline and test pots. In 1999, the second fish survey was done in the southern district of Bristol Bay. We set test pots from Port Heiden to Cape Constantine with a partner boat setting longline tests with us, inventorying halibut, cod, and shrimp stocks.

Our CDQ group advocated to allow local Bristol Bay residents to fish halibut in district 4E Bristol Bay in the late 1990s. This started out as a good thing as an alternative fishery from salmon. Now, the seasonal Bristol Bay halibut fishery is hardly worth the boat fuel and expenses to fish the few halibut that are left to catch after the trawlers are done.

For several years, I have worked hard to develop our Bristol Bay 4E halibut CDQ fishery. But, we now are witnessing a drastic decline in our halibut catches. For example, in 2002, our small fleet caught 208,411 pounds of halibut. In 2008, we caught 30,394 pounds of halibut which is 1/7th of the previous 2002 catch.

The Curyung Tribal Council and I believe that the yellowfin sole and the halibut migrate into the Bristol Bay in the spring in the same migration patterns. The Halibut follow the yellowfin sole to feed on them throughout the Bristol Bay area. There is a deep valley that comes in from the Bering Sea and wraps around Round Island which can be seen on nautical charts. I believe this is used as a corridor by the halibut and yellowfin sole to move into the shallower nearshore waters of Bristol Bay in the Spring season.

When I did the longline survey in Northern Bristol Bay in 1998, I encountered the highest halibut catch rates I have ever observed. I saw these in the East corner South of Round Island inside the Near Shore Bristol Bay Trawler Area (NSBBTA).

The Curyung Tribal Council believes yellowfin sole trawl fleet has a detrimental effect on our Bristol Bay ecosystem. The Bristol Bay walrus are moving from their traditional feeding, and haulout areas on Round Island. The yellowfin sole trawl fleet tow their nets back and forth over the clambeds until all the bottom sea life is scraped off the sea floor. If you look at the National Oceanic Atmospheric Administration (NOAA) Law Enforcement maps tracking trawlers in the NSBBTA you will see it turns black from so many lines. Yet, NOAA enforcement officers have told me not all trawlers in the NSBBTA have tracking devices. You can see from my example that nothing would survive this kind of fishing pressure. Kelp, clams, and sea life of this nature are unable to run away from the intrusion of the trawlers. Instead, they are quickly killed from the trawl nets. We have observed the debris fields behind these trawlers. Kelp and dead creatures floating to the surface in the dirty water trail left by the trawlers. This trail of dirty water extends for miles behind the trawl fish boat trails has been observed by Curyung tribal halibut and gillnet fishermen. Although some of the seasonal trawl fishermen have mentioned they have a clean fishery, the damage left behind says a lot. Yes, the trawlers have cleaned all forms of sea life off the bottom of nearshore waters in the nearshore Bristol Bay trawler area.

The Curyung Tribal Council's concern is also for the grey whale which migrates past Cape Constantine each Spring. The grey whale is also nature's bottom trawler. They feed on the bottom sifting through the sand and mud feeding on small underwater creatures. Every Spring, we observed these events occurring along Cape Constantine. Presently, the grey whale is in competition with the yellowfin sole trawl fleet. When the trawl fishery groups are present, the grey whale loses their feeding habitat areas. We don't know where the grey whales go when the trawlers are present.

The Curyung Tribal Council believes the walrus, Steller sea lion and grey whale are affected in a detrimental way by the NSBBTA trawl fishing fleet. We also believe the bycatch of halibut and Chinook salmon is harmful to our traditional subsistence harvest and economic development. We believe that the bottom seafloor marine habitats of the NSBBTA is already destroyed and the marine habitat beds must be given time for regrowth.

On February 19, 2009 a group of halibut fishermen and the Qayassiq Walrus Commission members were asked by BBEDC to meet with Best Use Cooperative (BUC) trawl group to work out a solution to Bristol Bay trawl fish issues discussed previously in this letter. There was a suggestion that the NSBBTA be reduced and trawl fishing time be moved back 15 days earlier. The Curyung Tribal Council does not agree with this.

The Curyung Tribal Council is in agreement with the Qayassiq Walrus Commission (QWC) and the Bristol Bay Native Association (BBNA) Resolution 09-01: Urging the North Pacific Fishery Management Council (NPFMC) to create a protection zone for walrus habitat in Bristol Bay. This fifty (50) nautical mile zone from Cape Newenham to Port Moller is the proposed QWC walrus and marine protection boundary zone area.

The Curyung Tribal Council is also gravely concerned about the Bering Sea/Aleutian Islands Pollock Fishery that intercepts Bristol Bay Chinook salmon. We recommend this be stopped.

In summary, why is this NSBBTA open when it used to be closed? The NSBBTA is of no benefit to the local Bristol Bay people. Every halibut fishermen I talked to last year in 2008 lost money, in other words, they didn't make any income from the 2008 halibut 4E fishery. We used to pay our fishing expenses and supplement our annual income with halibut, and Chinook salmon earnings. We can no longer make money from these fisheries. This is causing economic hardship for the Bristol Bay communities because this was our livelihood. Now, we have to pay our expenses for ALL fisheries from the seasonal sockeye (red) salmon earnings, leaving little or no financial support for our families during the long winter months.

Carl Flensburg
Halibut Fisherman
Salmon Fisherman
Curyung Tribal Member
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BRISTOL BAY NATIVE ASSOCIATION

PO Box 310

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Tel: (907) 842-5257

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Written Testimony to

The North Pacific Fishery Management Council

By Helen M. Chythlook, Marine Mammal Coordinator, Bristol Bay Native Association,
Executive Director, Qayassiq Walrus Commission, Bristol Bay Marine Mammal Council

March 25, 2009

It is an honor to be testifying before the North Pacific Fishery Management Council (NPFMC). I thank you for the opportunity to testify before your board. I grew with my late parent's, Tom and Naomi Chythlook who lived a Yup'ik Eskimo traditional way of life. My late parent's originated from old Togiak, Alaska where I was born where new Togiak village is located. My late mom grew up in the traditional Alaska Native sod house, known as a *qasgiq* and was taught about our traditional way of life as a child. My late father also grew up learning, living the Yup'ik Eskimo traditional way of life. As young Alaska Yup'ik Eskimo boys, the elders, who were the traditional advisors used to gather in a big community hall type sod facility also known as a *qasgiq* to give them oral traditional advice or *allerg'quaraq*. Back then, the Alaska Native's were taught never to interrupt an elder who was giving traditional advice and let them talk until they were done. This is the way I am going to present my testimony to the North Pacific Fishery Management Council Board of Directors.

Our Yup'ik Eskimo ancestors or *ciurliaqs* traditional way of life or subsistence way of life has been documented by anthropologists of their nomadic historical traditional hunting, fishing, gathering, or harvesting settlement areas of marine food resources in Qayassiq (Round Island), other Walrus Islands including Hagemeister, Crooked, Summit, Kulukak Bay, and Metervik, old Togiak (Tuyugyarq), all of Togiak Bay, Security Cove, Cape Newhenham, Cape Peirce, Cape Constantine and the Nushagak Bay area in Bristol Bay, Alaska. The Qayassiq area has been documented by Dr. Jeanne Schaaf, National Park Service Anthropologist as follows: "The Round Island archeological site is significant as the oldest dated coastal site by over 3,000 years, in Alaska north of the Alaska Peninsula. The site has clear evidence of island-based walrus hunting about 5,700 years ago (3790 BC) and again 3,600 years ago (1630 BC). Over 100 mapped prehistoric surface depressions on Round Island represent semi-subterranean houses, cold storage pits and other activity areas from settlements...spanning the last 2,500 years before contact in the late 18th century." ("Round Island Site Walrus Islands State Game Sanctuary, Bristol Bay, Western Alaska," by Jeanne Schaaf in *Archaeology in America: An Greenwood Press, Westport, Connecticut, 2009:300-304*). These were confirmed by radiocarbon dating back to over 5,000 years of Alaska Native people inhabiting at Qayassiq area. Robert Shaw documented five sites located within the Walrus Island Sanctuary including Summit Island. "Summit Island was

occupied intermittently beginning 2,500 years ago...[as] the result of a population increase and innovations in net fishing and possibly food storage technologies. Several other Norton sites have been studied in this region, in Chagvan Bay just northeast of Security Cove, on nearby Hagemeister Island...The Norton tradition in this region spans about 1,500 years and traits include thin, well-made ceramics,...square or rectangular houses...The Norton culture on Round Island is represented by several of these artifact types, diagnostic chipped stone points and many well-defined single-roomed square houses...These houses, associated with cache pits for food storage, occur in at least two distinct clusters that may represent temporally distinct settlements. Two radio carbon dates from the Norton culture occupations on Round Island are 10 BC and AD 50 and it follows the preceding occupation by about 1,600 years." (Schaaf, 2009).

As far as the eye can see, was the traditional Alaska Native's lands which includes the navigable waters where marine mammals, seabirds, salmon, halibut, herring eggs, herring, clams, mussel, whales and other marine foods were harvested. There weren't any tribal, state or federal boundaries, because the traditional lands and traditional waters of the Alaska Natives were cooperatively shared by them. The information was passed on through oral traditional advice by the Yup'ik Eskimo ancestors of the lands and marine navigable waters traditional subsistence sites. The marine nearshore land, waters, marine islands, marine nearshore coastal areas are the traditional Alaska Native Yup'ik Eskimo settlements which were occupied during year-round traditional harvest activities of marine mammals. Walrus were hunted both in the early spring and late Fall after the flies were gone and Round Island has been one of the prime traditional hunting sites. In the fall Yup'ik Eskimo ancestors from old Togiak came in groups by *qayaqs* (skin boats) to hunt walrus to Qayassiq. If walrus populations were low at Qayassiq, the hunters harvested walrus at Hagemeister Island or the other Walrus Islands. Although, Togiak elders have said that travel to Round Island was done only for hunting, "out of respect for the animals." The walrus were used for food as well as myriad other purposes, and represented an important part of Yup'ik culture, with highly organized rules "written only in the minds of hunters." (State of Alaska v. Arnariak, Case No. S-7097, Brief of Respondent Marie Arnariak, pp. 2,3. Quoting People of Togiak v. United States, 470 F. Supp. 423, 427 N8 (D.D.C. 1979). Other traditional foods harvested in the Togiak Bay, Cape Newenham, Cape Peirce, Kulukak Bay, Metervik Bay, Walrus Islands, to Cape Constantine area include: seabirds (murre, king eider ducks, harlequin ducks, and others); *issuriq* (spotted seal or harbor seals-*nayiq*); beluga (*cetuaq*), bearded seals (*maklaks*), ringed seals, clams, sea urchins, mussels, all salmon species, flounders, herring, and herring-roe-on-kelp, murre egg gathering is done on some of the Walrus Islands including Shaiak Island, Black Island, and Twin Islands, and other traditional harvest activities.

The current seasonal Bristol Bay trawl fishery open season April 1 to June 15 and the nearshore trawl fishing area is drastically affecting the decline or shallow water marine resources which are traditionally harvested by local Bristol Bay Alaska Native residents from Togiak, Twin Hills, Manokotak, Dillingham, Clarks Point, Aleknagik, Egegik, Naknek, King Salmon, and Nushagak River inland communities. During mid-April through May of each year, the Nushagak area residents and the Togiak Bay residents travel to Kulukak Bay, and Metervik Bay area to seasonal fish for herring and herring roe-on-kelp. Moreover, the local Alaska Native Bristol Bay residents harvest herring, and herring-roe-on-kelp from the Togiak Bay, Kulukak Bay and Metervik Bay

area nearshore and shorelines. If there is little or no herring and herring-roe-on kelp, the Bristol Bay harvesters travel to Security Cove to harvest herring and herring-roe-on-kelp. Besides harvesting the herring and herring eggs, the Nushagak area and Togiak Bay area residents harvest seals, beluga whales, walrus, and clams when they are done commercial fishing for herring and herring-roe-on kelp usually by end of May of each year. Right after the herring fishing season ends, in early June the Togiak Bay residents consisting of Togiak and Twin Hills gather murre and duck eggs in the nearby Walrus Islands or Cape Peirce island areas. Sea ducks and other marine ducks, waterfowl are harvested in early spring as well. From mid-May to mid-June of each year, the Bristol Bay resident's subsistence harvest Chinook (king) salmon from the Nushagak Bay waters, mouth of Wood River, Togiak Bay, Kvichak/Naknek, Egegik all the way down to the Port Moller area. From early June to end of July of each year, the Bristol Bay subsistence harvest sockeye (red) salmon from the Nushagak, Wood River, inland Wood River systems, Iliamna Lake and its tributaries, Naknek/Kvichak Bay, Egegik, all the way down to the Port Moller area. Then in mid-July through end of August sometimes to late September, the Bristol Bay, Togiak Bay, Kvichak/Naknek, Egegik all the way down to the Port Moller area harvest silver salmon for the winter. In early Spring and late Fall, as well as if there is open ice in the Togiak Bay, Nushagak Bay, Naknek/Kvichak, Egegik, Port Heiden all the way below Port Moller area spotted, and harbor seals are harvested for traditional foods. Other marine food resources are traditionally harvested in early Spring through late Fall.

The draft map done by Peter Abraham, Refuge Information Technician (RIT) and elder of Togiak shows some of the Togiak Marine Life habitats (seaducks, habitat migrations, herring spawning areas, herring migration areas, harbor seal areas, murre egg gathering areas on the islands in the area). Togiak Traditional Council in collaboration with the Bristol Bay Native Association completed a Walrus TEK map in 2006. These maps will be on display during the April 6, 2009 NPFMC groundfish issues meeting in Anchorage.

The current seasonal Bristol Bay trawl fishery is affecting the halibut nurseries by sweeping along their habitat areas in the Togiak Bay, Cape Constantine, Kulukak Bay, Cape Newenham, Cape Peirce area, all along the nearshore areas extending to the Port Moller area. The Current seasonal Bristol Bay trawl fishery is affecting the clambed habitats in the Walrus Islands, primarily Round Island where the walrus haulout and where this is currently the prime traditional hunting site of the Togiak, Twin Hills, and Nushagak residents. Due to a decline of walrus in Round Island where the Qayassiq Walrus Commission hunters hunt walrus, there is a concern that the Bristol Bay trawl fishing is in conflict with the spring walrus migration from the Alaska Peninsula and Northern Bering Sea walrus haulouts. There is a concern from the Qayassiq Walrus Commission the Walrus Island walrus haulouts, primarily Round Island walrus haulout is being disturbed from the sixteen (16) Bristol Bay trawl fishboat noise. Each trawl boat is the size of freight barges which are occasionally seen during the traditional QWC Fall walrus monitor hunt season (September 10 to October 20). From the Round Island walrus haulout, I can hear the one fuel barge travelling through the Kulukak and Metervik Bay area. I can imagine the sounds of 16 Bristol Bay trawl fish boats disturbing the walrus foraging and spring migrating into the Walrus Islands. There needs to be further research on the Round Island, Walrus Islands, Cape Peirce, Cape Seniavin walrus haulout sites of their exact clambed foraging habitat areas to make sure the Bristol Bay trawlers are not travelling along the current walrus foraging clambed habitat

areas.

The Qayassiq Walrus Commission (QWC) is composed of nine (9) village council's within the Bristol Bay area of the State of Alaska. The Qayassiq Walrus Commission passed Resolution 09-01: A Resolution Urging the North Pacific Fishery Management Council to Create A Protection Zone for Walrus Habitat in Bristol Bay. Also, the Bristol Bay Marine Mammal Council comprised of seven (7) sub-regional representatives from five (5) federally recognized sub-regional tribal council's passed Resolution 2008-5: A Resolution urging the North Pacific Fishery Management Council (NPFMC) to Eliminate the Nearshore Bristol Bay Trawl Area. Both work together as the Alaska Native's traditional harvest food resources include walrus, seals, beluga whales, all salmon species, herring and herring roe kelp, halibut, smelts, clams, waterfowl, seabirds, seabird eggs, and other marine food resources within the Bristol Bay area including the Walrus Islands, Togiak Bay, Cape Newenham, Cape Peirce, Cape Constantine, Nushagak Bay, Kvichak and Naknek, Egegik, all the way down to Cape Seniavin walrus haulout area. (Both Resolutions enclosed).

The Qayassiq Walrus Commission's Resolution 09-01 is asking the North Pacific Fishery Management Council to close all near-shore water's, within a 50 nautical mile limit from shore, to all bottom fish trawling within those limits. Presently, there is a near-shore bottom trawling area in Bristol Bay for yellowfin sole open from April 1 to June 15 annually.

Although the Qayassiq Walrus Commission has not met due to lack of funds, they have not come to a decision of the Best Use Cooperative (BUC) and the Bristol Bay Economic Development Corporation (BBEDC) options from a February 16, 2009 BBEDC meeting with some local Dillingham, and BBEDC folks. At the February 16th meeting, the recommendation was to follow BBEDC's proposed option as shown on the attached map. The attached is a map with two lines, the Best Use Cooperative (BUC) proposed to cut (reduction in area) the existing seasonal Bristol Bay trawl fishery window on the lower section of the map (red/black lines), not the nearshore upper area. The other option is to change the BB trawl opening dates from April 1 to June 1 of each year so trawlers won't intercept the Chinook (king salmon) fishery commercial and subsistence harvest season. The current trawl fishing is from April 1 to June 15. The other option is to resolve the halibut bycatch from trawlers gear conflict. In the SW corner, propose to stop halibut bycatch. The cuts would be below the red or white lines as shown in the attached map in the halibut fishery area. I cannot speak on behalf of the Qayassiq Walrus Commission (QWC) but one acceptable option may be to set boundaries where the Bristol Bay trawlers cannot fish, we do not support the current upper diagonal half nearshore trawl fish boundaries because that's the area in Cape Constantine where the spring halibut and halibut nurseries exist as well as the spring herring migration and spring herring spawning areas start. The current trawl opening April 1 to June 15 conflicts with the traditional herring, halibut, and herring-roe-on-kelp spawning season as well as the current Chinook salmon spring migrations and spring clam harvests of the Togiak Bay and Nushagak Bay residents. I can tentatively recommend the North Pacific Fishery Management Council close the current trawl fish by May 31 of each year. These negotiations will need to be done with the nine (9) Qayassiq Walrus Commissioners from Aleknagik, Dillingham, Clarks, Ekuk, Ekwok, Manokotak, New Stuyahok, Togiak, and Twin

Hills. I can tentatively recommend the North Pacific Fishery Management Council move the upper nearshore Bristol Bay trawl fishery boundaries further offshore so it wouldn't conflict with current spring halibut, Chinook, walrus, and herring migrations. But, again, I recommend a full meeting of the Qayassiq Walrus Commission in determining final decisions of issues of serious nature that will have a drastic effect of our way of life and seasonal gillnet salmon, herring, and local longline halibut fishery.

Although the Qayassiq Walrus Commission's main priority is to continue the cultural preservation of traditional annual fall walrus hunt at Qayassiq, there is a need for further western, scientific, traditional ecological research from the affected local tribal communities who have traditionally harvested other marine species including walrus, seals, marine foods-herring, herring roe, all salmon species, halibut, waterfowl, seabirds, eggs, clams all from the Togiak Bay, Security Cove, Cape Newenham, Cape Peirce, Kulukak and Metervik Bay, Walrus Islands (Round Island, Hagemeister Island, Crooked Island, Summit Islands, Twin Islands) and the surrounding marine sea habitat. Moreover, there is a need for federal and state agencies, marine mammal organizations, local Alaska Native organizations (Qayassiq Walrus Commission, Bristol Bay Marine Mammal Council, Bristol Bay Native Association), tribal councils (Curyung Tribal Council, Togiak Traditional Council, Twin Hills Village Council, Clarks Point Village Council, Manokotak Village Council, Aleknagik Traditional Council, Egegik Village Council, and Nushagak upriver tribal councils) collaboratively utilize local expertise in conducting these research projects on walrus foraging habitat areas, salmon smolt habitat areas, clambed habitat areas in the Walrus Islands, Togiak Bay, Nushagak Bay, Alaska Peninsula, Security Cove, Cape Newenham, Cape Peirce, Cape Seniavian, and other walrus haulout areas in Bristol Bay and the Alaska Peninsula.

These are serious issues of concerns that on behalf of the Qayassiq Walrus Commission, the Bristol Bay Marine Mammal Council that we hope the North Pacific Fishery Management Council will work together with us in acceptable alternatives to the Qayassiq Walrus Commission and the Bristol Bay Marine Mammal Council. The QWC has a fall face-to-face meeting in late August to early September of each year and a winter meeting between December and January of each year. Quyana!

Helen Chythlook, Marine Mammal Coordinator, Bristol Bay Native Association, P.O. Box 310, Dillingham, AK 99576. Work Phone: 907-842-5932; Work e-mail: hchythlook@bbna.com.

Enclosures:

BRISTOL BAY MARINE MAMMAL COUNCIL
P.O. BOX 310
DILLINGHAM, ALASKA 99576
(907) 842-5257

Resolution 2008- 05

**A RESOLUTION URGING THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL
TO ELIMINATE THE NEARSHORE BRISTOL BAY TRAWL AREA**

- WHEREAS:** The NPFMC and the State of Alaska have long recognized the waters of Bristol Bay as a crab and halibut nursery and have closed most waters of Bristol Bay to trawl fishing; and
- WHEREAS:** An exception to the general ban is the Nearshore Bristol Bay Trawl Area (NBBTA), which is a seasonal yellow fin sole trawl fishery open from April 1 to June 15 in a rectangular area off the Nushagak Peninsula, and including both state and federal waters; and
- WHEREAS:** The Bristol Bay Marine Mammal Council (BBMMC) is very concerned with the bycatch of halibut, herring and salmon along the Nushagak Peninsula where the yellow fin sole fishery takes place; in some years the halibut bycatch is more than the directed CDQ halibut fishery; and
- WHEREAS:** Local residents have reported conflicts between the CDQ longline halibut fishermen and the yellow fin sole fishermen who operate in the area; and
- WHEREAS:** Bristol Bay tribal members have a heavy dependence of all near-shore marine mammals such as seals and walrus and the yellow fin sole trawl fishery takes place along the migratory path of these species; and
- WHEREAS:** The NBBTA is also along the migratory route of herring and of caplin, which is an important forage fish species for Stellar Sea lions.

NOW, THEREFORE, BE IT RESOLVED that the Bristol Bay Marine Mammal Council Board Members urges the North Pacific Fishery Management Council to close the Nearshore Bristol Bay Trawl Area.

Signed:

Myra D. Olsen
Myra Olsen, Chairman of BBMMC

CERTIFICATION:

I, the undersigned Recording Secretary of the Bristol Bay Marine Mammal Council, hereby certify that the Board of Directors of the Bristol Bay Native Association passed the foregoing resolution on this 30th day of October, 2008, at a duly called and noticed meeting, and that a quorum was present.

Signed:

Moses Toyukak Sr. / Home
Moses Toyukak, Sr., BBMMC Secretary

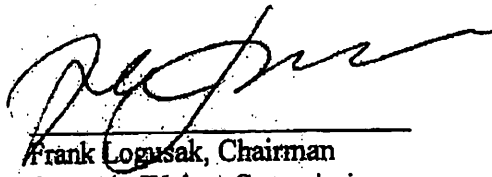
Qayassiq Walrus Commission
c/o: Bristol Bay Native Association
P.O. Box 310
Dillingham, AK 99576
Phone: 907-842-5257
Fax: 907-842-5932
QWC Chair Phone: 907-493-5003

Resolution 09-01

**A RESOLUTION URGING THE NORTH PACIFIC FISHERY MANAGEMENT
COUNCIL TO CREAT A PROTECTION ZONE FOR WALRUS HABITAT IN
BRISTOL BAY**

- WHEREAS:** The Qayassiq Walrus Commission ("QWC") manages the annual Native walrus hunt on Round Island, within the Walrus Islands Game Sanctuary, and is composed of representatives of each of the Native villages participating in the hunt; and
- WHEREAS:** As an established Native marine mammal commission functioning continuously since 1995, the QWC is a principle advocacy body in Bristol Bay regarding marine mammal subsistence use and the preservation of marine mammal habitat; and
- WHEREAS:** The QWC is increasingly concerned about disturbance to walrus feeding habitat caused by the trawl fishery in the seasonal Nearshore Bristol Bay Trawl Area, and also of threats to the habitat from global warming and scheduled offshore oil leasing; and
- WHEREAS:** Local anecdotal evidence as well as tagging studies by the U.S. Geological Service in 2004-2007 show that walrus forage from 30 to 55 miles offshore, and that environmental changes are forcing walrus further offshore as far as 75 miles; and
- WHEREAS:** The QWC believes that in order to mitigate against a potential collapse of walrus use of the Round Island haulout and other walrus haulouts in the Bristol Bay region, a special 50-mile protection zone should be established to protect walrus feeding areas starting 50 miles offshore from Security Cove and Cape Newenham, east to 50 miles offshore of Cape-Constantine, across to Cape Menshikof and down the Alaska Peninsula to Port Moller;

NOW, THEREFORE BE IT RESOLVED by the Qayassiq Walrus Commission that it urges the North Pacific Fishery Management Council, in coordination with other federal agencies, to establish a marine mammal habitat protection zone in Bristol Bay with boundaries extending 50 miles offshore from Security Cove and Cape Newenham, east 50 miles offshore of Cape Pierce, Hagemester Island, Twin Islands, Round Island, to Cape-Constantine, and 50 miles offshore the Alaska Peninsula from Cape Menshikof to Port Moller, such protection zone to include all federal waters within the 50 mile boundaries.



Frank Logasak, Chairman
Qayassiq Walrus Commission

Certification

This certifies that the foregoing resolution was adopted at a duly called and noticed meeting of the Qayassiq Walrus Commission on January 30, 2009, and that a quorum was present.

Daniel Chytleboke
Secretary

April 6, 2009

Mr. Eric Olson, Chair
North Pacific Fishery Management Council
605 W. Fourth Avenue, Suite 306
Anchorage, AK 99501-2252

Mr. Doug Mecum, Regional Administrator
NOAA Fisheries, Alaska Region
709 West Ninth Street
Juneau, AK 99802-1668

RE: Agenda Item C-3 Trawling in Bristol Bay

Dear Chairman Olson, Mr. Mecum, and Council members:

You must take action to address the impacts of trawling in Bristol Bay.

Bristol Bay has long been recognized as a vitally important habitat area. Some of the earliest conservation measures enacted by the North Pacific Fishery Management Council were centered in Bristol Bay. The North Pacific Council rightfully closed most of Bristol Bay to trawling in order to reduce crab bycatch and protect some crab habitat. However, concessions to allow trawling for spawning aggregations of yellowfin sole resulted in the formation of an area open to trawling between Cape Constantine and the Walrus Islands. This habitat area in the heart of Bristol Bay came to be known as the Nearshore Bristol Bay Trawl Area (NBBTA), but as you will discover, the area has many more vitally important uses.

Bristol Bay is crucial habitat for the Pacific walrus. It is the site of major terrestrial haulouts that are close to preferred feeding habitat. Walrus migration and feeding routes also interweave and cross Bristol Bay, including the area open to trawling. This is a key issue, because the impacts to walrus, including disturbance to their feeding habitat and migration routes, were not assessed in the Environmental Assessment for Amendment 37 that established the NBBTA. In the last several years, the number of factory trawlers dragging through this area has increased from 2 vessels in 2001 to 14 in 2008.

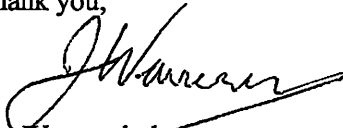
Residents of the area also continue to express concerns over the trawl bycatch occurring in the area. The localized impacts of this bycatch need to be fully addressed.

The Council must undertake a thorough evaluation that fully assesses the impacts of trawling in Bristol Bay and evaluates management alternatives; including:

1. A year-round 25 nm trawl closure from Cape Newenham to Cape Constantine
2. A year-round 50 nm trawl closure from Security Cove to Port Moller
3. Year-round closure of the Nearshore Bristol Bay Trawl Area

We appreciate your consideration of this issue. We look forward in helping you address the problems associated with trawling in Bristol Bay.

Thank you,


Jon Warrenchuk,
Ocean Scientist, Oceana

Nels G. Johnson
P.O. Box 197
Dillingham, Alaska 99576

Fax Cover Sheet
No: 13 pages

TO: North Pacific Fishery Management Council
Eric A. Olson, Chairman
Chris Oliver, Executive Director
605 W. 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

FROM: Nels G. Johnson

RE: Written comments and scientific data

DATE: March 25, 2009

Eric and Chris,

Enclosed is a copy of my written comments along with scientific data to support my comments.

Thank you.

My name is Nels G. Johnson.

I am here today representing the CDQ long liners in Bristol Bay.

We are very concerned about several issues:

the disruption of the ecosystem caused by the near shore trawler fleet,
the halibut, herring and salmon by-catch,
the feeding grounds for the gray whale, walrus, and the endangered stellar sea lions.

August 25, 2008 Anchorage Daily News stated large portions of the Bering Sea is off limits to bottom trawling. "It basically is taking nets and raking it over the bottom and anything that sticks up from the bottom gets bulldoze over. It is similar to forest clear cutting." Chris Krenz, Oceanic Arctic Project Manager.

If damages are that noticeable in the Bering Sea to make it off limits to bottom trawling in certain areas, Wouldn't this have the same effect on the near shore trawling area?

The near shore area is sensitive due to the herring entering and exiting the area. Chinook Salmon runs throughout the area heading to different spawning streams. Gray whales, walrus, and stellar sea lions enter to feed in shallow waters.

We are aware you closed the Arctic to save the ecosystem and its habitat that is important to the native residents as subsistence food. February 5, 2009 Anchorage Daily News.

We earnestly request that you will place a moratorium on all the near shore trawling areas until more documented data can be obtained on the disruption of our habitat and ecosystem.

North Pacific Fishery Management Council

Testimony from: Nels G. Johnson

My name is Nels G. Johnson, a member of Curyung Tribal. I have been commercial fishing for salmon and herring and am a halibut long-line fisherman and have been fishing since 1980. I have observed walrus, whales, sea lions, seals, herring, salmon, which are basically our subsistence food sources.

I am in support of the Qayassiq Walrus Commission and its resolution. I also support the Bristol Bay Marine Mammal Council and their resolution. Also I am in support of the tribes within Bristol Bay who have submitted supporting resolutions to strengthen the issues and concerns expressed by both the Qayassiq Walrus Commission and the Bristol Bay Marine Mammal Council.

I am also concerned about disturbances to walrus and grey whale feeding habitat caused by the trawl fishery in the Nearshore Bristol Bay Trawl Area. The endangered Stellar Sea Lion population's habitat is also being threatened and the noise from the trawl vessels is impacting all the feeding habitat areas of the above mentioned marine mammal species, which the trawl fishing fleet is literally destroying the ocean bottom.

Our main concern is the returning chinook salmon species, which have been seen by local herring fishermen swimming around the same area where the trawl fishing is taking place on their way to their spawning areas. Another local concern is the interception of halibut, which the local long-line fleet depend upon, and due to this the majority of local halibut fishermen are hanging up their hooks, because they can not compete with the amount of by-catch halibut being caught by the bottom trawl fleet.

"Bottom trawling is the most destructive of any actions that humans conduct in the ocean," said zoologist Les Watling of the University of Hawaii. The impacts caused by bottom trawling is clearly visible from outer space. Another observation was made by Elliott Norse of the Marine Conservation Biology Institute along with Les, who quotes, "Ten years ago in working together we both calculated that each year, worldwide, bottom trawlers drag an area equivalent to twice the lower 48 states."

In conclusion, I am not in support of the proposal submitted by representatives from Best Use Cooperative who was trying to convince us to support the bottom trawlers with less fishing time and smaller fishing area.



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Steller Sea Lion (*Eumetopias jubatus*)

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Status

ESA Endangered - Western Distinct Population Segment
ESA Threatened - Eastern Distinct Population Segment
MMPA Depleted - throughout its range

Taxonomy

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Otariidae
Genus: *Eumetopias*
Species: *jubatus*

Species Description

The Steller sea lion, also known as the northern sea lion, is the largest member of the Otariid (eared seal) family. Steller sea lions exhibit sexual dimorphism, in which adult males are noticeably larger than females and further distinguished by a thick mane of coarse hair. Adult males may be up to 10-11 ft (3-3.4 m) in length and can weigh up to 2,500 lbs (1,120 kg). Females are smaller than males, at 7.5-9.5 ft (2.5-3.0 m) in length and weigh up to 770 lbs (350 kg). The coats of adult males and females are light blonde to reddish brown and slightly darker on the chest and abdomen. The light coloration is still visible when the body is wet, which is different from many pinniped species. Like other pinnipeds, their coat of fur "molts" every year. Both sexes also have long whitish whiskers, or vibrissae, on their muzzle. The flippers and other hairless parts of the skin are black. The fore-flippers are broader and longer than the hind-flippers and are the primary means of locomotion in water. On land, sea lions, unlike "true" seals, can turn their hind flippers forward for walking.

Steller sea lions "forage" near shore and pelagic waters. They are capable of traveling long distances in a season and can dive to approximately 1300 ft (400 m) in depth. They also use terrestrial habitat as haul-out sites for periods of rest, molting, and as rookeries for mating and pupping during the breeding season. At sea, they are seen alone or in small groups, but may gather in large "rafts" at the surface near rookeries and haul outs. This species is capable of powerful vocalizations that are accompanied by a vertical head bobbing motion by males. Steller sea lions are opportunistic predators, foraging and feeding primarily at night on a wide variety of fishes (e.g., capelin, cod, herring, mackerel, pollock, rockfish, salmon, sand lance, etc.), bivalves, cephalopods (e.g., squid and octopus) and gastropods. Their diet may vary seasonally



Steller Sea Lion
(*Eumetopias jubatus*)
Photo: NOAA's National Marine Mammal Laboratory

Did You Know?

- Steller sea lions' impressive low-frequency vocalizations sound more like a "roar" when compared to California sea lions, which sound more like a "bark."
- The scientific name, *Eumetopias jubatus*, comes from the Greek words "eu" and "metopion" for "typical/well" and "broad forehead," and the Latin word jubatus for "having a mane."
- Steller sea lions are named for the German surgeon and naturalist George Wilhelm Steller. In 1742, he observed and described these large pinnipeds.
- Steller sea lions are the fourth largest pinniped in the world, behind the northern elephant seal, southern elephant seal, and walrus.

depending on the abundance and distribution of prey. They may disperse and range far distances to find prey, but are not known to migrate.

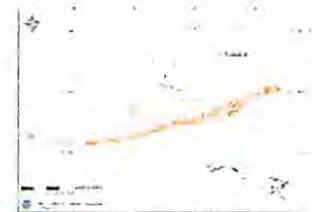


Steller Sea Lion
(*Eumetopias jubatus*)
Photo: NOAA's National Marine Mammal Laboratory

Steller sea lions are colonial breeders. Adult males, also known as bulls, establish and defend territories on rookeries to mate with females. Bulls become sexually mature between 3 and 8 years of age, but typically are not large enough to hold territory successfully until 9 or 10 years old. Mature males may go without eating for 1-2 months while they are aggressively defending their territory. Females typically reproduce for the first time at 4 to 6 years of age, usually giving birth to a single pup each year. At birth, pups are about 3.3 ft (1 m) in length and weigh 35-50 lbs (16-22.5 kg). Adult females, also known as cows, stay with their pups for a few days after birth before beginning a regular routine of alternating foraging trips at sea with nursing their pups on land. Female Steller sea lions use smell and distinct vocalizations to recognize and create strong social bonds with their newborn pups. Pups have a dark brown to black "lanugo" coat until 4 to 6 months old, when they molt to a lighter brown. By the end of their second year, pups are on the same color as adults. Females usually mate again with males within 2 weeks after giving birth. Males can live to be up to 20 years old, while females can live to be 30.

Habitat

Steller sea lions prefer the colder temperate to sub-arctic waters of the North Pacific Ocean. Haul outs and rookeries usually consist of beaches (gravel, rocky or sand), ledges, rocky reefs. In the Bering Sea and Okhotsk Sea, sea lions may also haul out on sea ice, but this is considered atypical behavior.



Steller Sea Lion Critical Habitat (AK)
(click for larger view PDF)

Critical habitat has been defined for Steller sea lions as a 20 nautical mile buffer around all major haul-outs and rookeries, as well as associated terrestrial, air and aquatic zones, and three large offshore foraging areas (50 CFR 226.202 on Aug. 27, 1993).

Distribution

Steller sea lions are distributed mainly around the coasts to the outer continental shelf along the North Pacific Ocean rim from northern Hokkaido, Japan through the Kuril Islands and Okhotsk Sea, Aleutian Islands and central Bering Sea, southern coast of Alaska and south to California. The population is divided into the Western and the Eastern "distinct population segments" (DPSs) at 144° West longitude (Cape Suckling, Alaska). The Western DPS includes Steller sea lions that reside in the central and western Gulf of Alaska, Aleutian Islands, as well as those that inhabit the coastal waters and breed in Asia (e.g., Japan and Russia). The Eastern DPS includes sea lions living in southeast Alaska, British Columbia, California, and Oregon.



Steller Sea Lion Critical Habitat (CA, OR)
(click for larger view PDF)

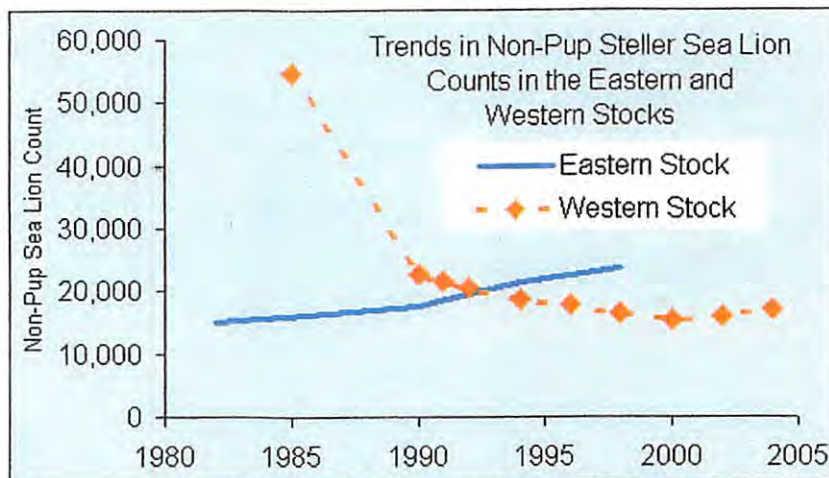
Population Trends

For management purposes, Steller sea lions inhabiting U.S. waters have been divided into two DPSs: the Western U.S. and the Eastern U.S. The differentiation is based primarily on genetic and physical differences, but also on differing population trends in the two regions. There are approximately 39,000-45,000 Steller sea lions in the Western U.S. and 44,500-48,000 in the Eastern U.S.

The Western DPS declined by 75% between 1976 and 1990, and decreased another 40% between 1991 and 2000 (the average annual decline during this period was 5.4%). Since the 1970s, the most significant drop in numbers occurred in the eastern Aleutian Islands and the western Gulf of Alaska. The extent of this decline led NMFS to list the Steller's sea lion as threatened range-wide under the

Endangered Species Act (ESA) in April 1990. In the 1990s, the decline continued in the Western portions of the range leading NMFS to divide the species into two distinct population segments (DPS), Western and Eastern, and list the Western DPS as endangered in 1997. Population surveys suggest that the Eastern U.S. DPS is stable or increasing in the northern part of its range (Southeast Alaskan and British Columbia), while the remainder of the Eastern DPS and all the Western DPS is declining.

More information on population trends can be found in NMFS' [marine mammal stock assessment reports](#).



Graph: NOAA's National Marine Mammal Laboratory

Threats

Anthropogenic (or human-induced) threats to Steller sea lions include boat strikes, contaminants/pollutants, habitat degradation, illegal hunting/shooting, offshore oil and gas exploration, direct and indirect interactions with fisheries, and subsistence harvests by natives in Alaska and Canada (150-300 taken a year). In the 1800s, they were targeted by hunters for their meat (food), fur hides (clothing), oil, and various other products. In the early 1900s, fishermen killed and placed bounties on this species, which they blamed for stealing fish from them. Some Steller sea lions were killed to limit their predation on fish in aquaculture facilities (fish farms), but intentional killing of Steller sea lions has not been permitted since they were protected under the Marine Mammal Protection Act (MMPA) and listed under the ESA.

Steller sea lions' direct and indirect interactions with fisheries is currently receiving significant attention and may possibly be an important factor in their decline. Direct fishing impacts are largely due to fishing gear (drift and set gillnets, longlines, trawls, etc.) that has the potential to entangle, hook, injure, or kill sea lions. These pinnipeds have been seen entangled in fishing equipment with what are considered "serious injuries." Steller sea lions are also indirectly threatened by fisheries because they have to compete for food resources and critical habitat may be modified by fishing activities.

Conservation Efforts

Protective zones, catch/harvest limits, various procedures and other measures have been implemented around major haul-outs and rookeries in order to safeguard their critical habitat. The [IUCN Red List of Threatened Species](#) considers this species to be "Endangered."

Regulatory Overview

The Steller sea lion was listed under the ESA as threatened throughout its range on December 4, 1990. This listing included animals from Alaska, California, Oregon and Washington in the U.S., as well as Canada, Japan, and Russia.

On June 4, 1997, the population west of 144° W longitude was listed as an endangered DPS (the Western DPS) under the ESA; the population east of 144° W

remained listed as threatened as the Eastern DPS.

Under the MMPA, all Steller sea lions are classified as "strategic stocks" and are considered "depleted".

Critical habitat has been designated (50 CFR 226.202 on Aug. 27, 1993) for Steller sea lions as a 20 nautical mile buffer around all major haul-outs and rookeries, as well as associated terrestrial, air, and aquatic zones, and three large offshore foraging areas. NMFS has also designated no-entry zones around rookeries (50 CFR 223.202). NMFS has implemented a complex suite of fishery management measures designed to minimize competition between fishing and the endangered population of Steller sea lions in critical habitat areas.

A recovery plan was developed for Steller sea lions in 1992. A revised recovery plan, which discusses separate recovery actions for the threatened and endangered populations, was issued in 2008.

Key Documents

(All documents are in PDF format.)

Title	Federal Register	Date
Recovery Plan (2008)	73 FR 11872	03/05/2008
▪ 1992 Recovery Plan	n/a	12/1992
Protection Measures for the Groundfish Fisheries Off Alaska	68 FR 204	01/02/2003
ESA Listing Rule - Endangered Status for Western population	62 FR 24345	05/05/1997
Critical Habitat Designation	58 FR 45269	08/27/1993
ESA Listing Rule - Threatened Status for Eastern and Western populations	55 FR 49204	11/26/1990
Stock Assessment Reports	n/a	various

More Information

- [NMFS Alaska Region and Science Center Information on Steller Sea Lions](#)
- [NMFS National Marine Mammal Laboratory Steller Sea Lion Information and Research](#)
- [NMFS Environmental Impact Statement \(EIS\) on Steller Sea Lion and Northern Fur Seal Research](#)
- [NMFS Southwest Regional Office: CA Pinniped Rookeries & Haul-out Sites](#)
- [Marine Mammal Commission Steller Sea Lion Species Information](#)
- [U.S. Fish & Wildlife Service Steller Sea Lion Species Profile](#)



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Devastation of Trawling Visible from Space

By **Andrea Thompson**, LiveScience Staff Writer

posted: **20 February 2008 ET**

Bottom trawling for fish stirs up billowing plumes of sediment that can be seen from space and destroys entire seafloor ecosystems, new imagery reveals.

The technique, used all over the world, is a way to catch fish in deeper parts of the ocean with huge, deep nets, now that many near-shore fish populations have been virtually wiped out from over-fishing. Several studies have shown the significant impact that trawling has on ecosystems, killing corals, sponges, fish and other animals.

New and previously released satellite images show the extent of the plumes of material kicked up. And a video of the seafloor reveals how trawling denudes an underwater world.

"Bottom trawling is the most destructive of any actions that humans conduct in the ocean," said zoologist Les Watling of the University of Hawaii. "Ten years ago, Elliott Norse [of the Marine Conservation Biology Institute] and I calculated that, each year, worldwide, bottom trawlers drag an area equivalent to twice the lower 48 states. Most of that trawling happens in deep waters, out of sight. But now we can more clearly envision what trawling impacts down there by looking at the sediment plumes that are shallow enough for us to see from satellites."

Watling presented his findings Friday at the annual meeting of the American Association for the Advancement of Science in Boston.

Persistent plumes

As nets are dragged across the seafloor, they can crush coral reefs, drag boulders across the bottom, and trap fish and animals not intended to be caught, called bycatch. All this activity stirs up sediments from the seafloor, which create the persistent plumes in the wake of the fishing ships.

Watling and his colleagues say that the plumes visible in satellite images are likely just the "tip of the iceberg" as most trawling is in waters that are deep enough that the plume remains hidden by the water above.

"Bottom trawling repeatedly plows up the seafloor over large areas of the ocean," said fellow

presenter John Amos of SkyTruth, a digital mapping non-profit group aimed at environment issues based in West Virginia. (Images of these plumes can be seen on the group's website.)

Bans and restrictions

Scientific studies showing the impacts that trawling has on ecosystems have led to increasing restrictions on the practice.

In 2005, the General Fisheries Commission for the Mediterranean banned trawling there below depths of 1,000 meters (3, 289 feet). The United States closed large deep-sea areas off the coast of Alaska to bottom trawling in 2006. Many South Pacific nations have also put a stop to the practice, and the United Nations began deliberations on a trawling moratorium in the high seas in 2006.

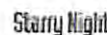
But there are still tens of thousands of trawlers operating in the Gulf of Mexico, off the coast of many Latin American countries, off the west coast of Africa, in Chinese waters, and the North Sea.

"We're a long way from protecting the ocean floor from bottom trawling," Norse told LiveScience.

- Video: Bottom Trawling — A Tale of Two Sites
- The Hand of Man: No Seas Remain Pristine
- Images: Life Under the Sea

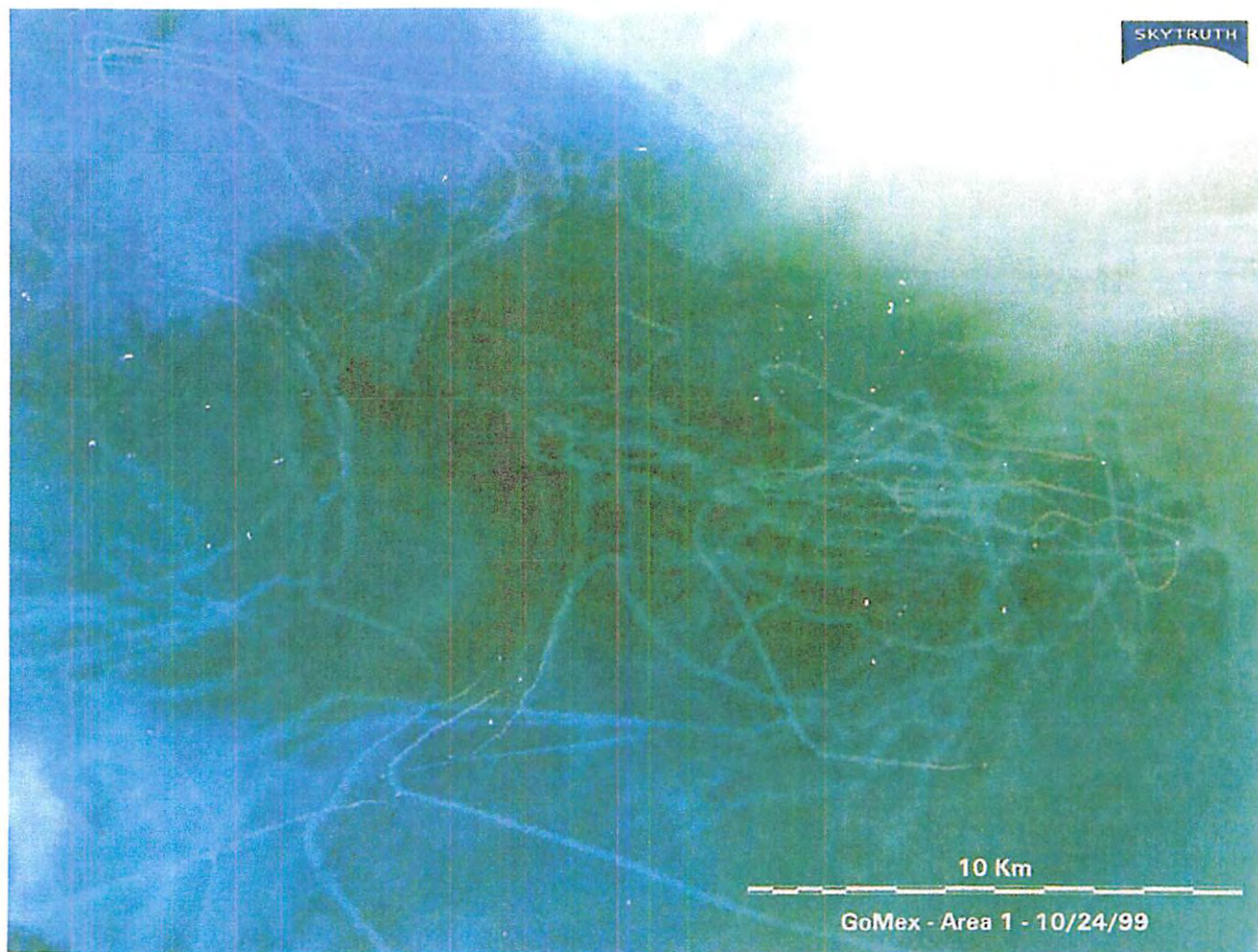
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Gray Whale (*Eschrichtius robustus*)

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Status

ESA Endangered - Western North Pacific population
MMPA Depleted - Western North Pacific population
Delisted from ESA - Eastern North Pacific population

Taxonomy

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Eschrichtiidae
Genus: *Eschrichtius*
Species: *robustus*

Species Description

Gray whales are mysticetes, or baleen whales. Gray whales are the only species in the family Eschrichtiidae. These large whales can grow to about 50 ft (15 m) long, and weigh approximately 80,000 lb (35,000 kg). Females are slightly larger than males. They have a mottled gray body, with small eyes located just above the corners of the mouth. Their "pectoral fins" (flippers) are broad, paddle-shaped, and pointed at the tips. Lacking a dorsal fin, they instead have a "dorsal hump" located about two-thirds of the way back on the body, and a series of 8-14 small bumps, known as "knuckles," between the dorsal hump and the tail flukes. The tail flukes are more than 15 ft (3 m) wide, have S-shaped trailing edges, and a deep median notch. Calves are born dark gray and lighten as they age to brownish-gray or light gray. All gray whales are mottled with lighter patches, and have barnacles and whale lice on their bodies, with higher concentrations found on the head and tail.

Gray whales are frequently observed traveling alone or in small, unstable groups, although large aggregations may be seen on feeding and breeding grounds. Similar to other baleen whales, long-term bonds between individuals are rare. Gray whales are bottom feeders, and suck sediment and the "benthic" amphipods that are their prey from the sea floor. To do this, they roll on their sides and swim slowly along, filtering their food through coarse baleen plates, of which they have 130-180 on each side of the upper jaw. In doing so, they often leave long trails of mud behind them, and "feeding pits" in the sea floor.

Gray whales become sexually mature between 6-12 years, at an average of 8 years old. After 12-13 months of gestation, females give birth to a single calf. Newborn calves are approximately 14-16 ft (4.5-5 m) long, and weigh about 2,000 lb (920 kg). The average and maximum life span of gray whales is unknown, although one female was estimated at 75-80 years old after death (Jones and Swartz, 2002). The age of large whales in family Balaenopteridae can be estimated by counting the layers present in waxy ear plugs, which are formed in the auditory canal (Hohn



Gray Whale
(Eschrichtius robustus)
 Photo: Merrill Gosho, NOAA

Did You Know?

- Gray whales make one of the longest annual migrations of any mammal, traveling about 10,000 miles (16,000 km) round trip.
- Gray whales were once called "devil fish" because of their violent reactions when harpooned by whalers.
- Currently, gray whales are known for their curiosity toward boats, and are the focus of whale watching and ecotourism along the southern portion of their migration.

2002).

Killer whales (*Orcinus orca*) are the only non-human predator of gray whales.

Habitat

Gray whales are found mainly in shallow coastal waters in the North Pacific Ocean.

Distribution

There are two isolated geographic distributions of gray whales in the North Pacific Ocean: the Eastern North Pacific stock, found along the west coast of North America, and the Western North Pacific or "Korean" stock, found along the coast of eastern Asia.

Most of the Eastern North Pacific stock spends the summer feeding in the northern Bering and Chukchi Seas, but gray whales have also been reported feeding along the Pacific coast during the summer, in waters off of southeast Alaska, British Columbia, Washington, Oregon, and California. In the fall, gray whales migrate from their summer feeding grounds, heading south along the coast of North America to spend the winter in their breeding and calving areas off the coast of Baja California, Mexico. Calves are born in shallow lagoons and bays from early January to mid-February. From mid-February to May, the Eastern North Pacific stock of gray whales can be seen migrating northward with newborn calves along the West Coast of the U.S.


Photo-identification studies indicate that gray whales in this stock move widely within and between areas on the Pacific coast, are not always observed in the same area each year, and may have several year gaps between re-sightings in studied areas (Calambokidis and Quan 1999, Quan 2000, Calambokidis et al. 2002).

Population Trends

Systematic counts of Eastern North Pacific gray whales migrating south along the central California coast have been conducted by shore-based observers at Granite Canyon most years since 1967. The most recent abundance estimates are based on counts made during the 1997/98, 2000/01, and 2001/02 southbound migrations, and range from about 18,000-30,000 animals. For more information, see the [Stock Assessment Reports](#).

In contrast, the Western North Pacific population remains highly depleted and its continued survival is questionable. This population is estimated to include fewer than 100 individuals.

Threats

Commercial whaling severely depleted both the eastern and western populations between the mid-1800s and early 1900s. Beginning in the mid-1930s, gray whales were protected under a ban on commercial hunting adopted by the League of Nations. This ban (which included [right whales](#)) was the first international agreement to protect a whale species from commercial whaling operations. The ban on commercial gray whale catches has continued since the late 1940s under the International Whaling Commission. Gray whales are still hunted by native people of Chukotka and Washington State and are subject to catch limits under the International Whaling Commission's  "aboriginal subsistence whaling" scheme.

Other current threats include [collisions with vessels](#), [entanglement in fishing gear](#), habitat degradation, disturbance from ecotourism and whale watching, disturbance from low-frequency noise, and the possibility that illegal whaling or resumed legal whaling will remove animals at biologically unsustainable rates. The eastern stock's annual migration along the highly populated coastline of the western United States, and their concentration in limited winter and summer areas, may make them particularly vulnerable to impacts from commercial or industrial development or local catastrophic events.

Conservation Efforts

The Eastern North Pacific stock of gray whales was removed from the U.S. List of Endangered and Threatened Wildlife in 1994, based on evidence that they had recovered to near their estimated original population size and were not in danger of

extinction throughout all or a significant portion of their range. In 1999, a NMFS review [pdf] of the status of the Eastern North Pacific stock of gray whales recommended the continuation of this stock's classification as non-threatened. This determination was based on the continued growth of the population (at that time, rising at 2.5% annually and estimated at 26,600 individuals) and the lack of evidence of any imminent threats to the stock. NMFS continues to monitor the abundance of the stock, especially as it approaches its carrying capacity.

The 2008 [IUCN Red List of Threatened Species](#)  lists gray whales as "least concern."

Regulatory Overview

All marine mammals, including gray whales, are protected under the Marine Mammal Protection Act of 1972, as amended. As of 1994, the Eastern North Pacific stock of gray whale is no longer listed as endangered under the Endangered Species Act of 1973.

The Western North Pacific stock of gray whales has not recovered. It is listed as "Endangered" under the ESA and "depleted" under the MMPA.

Key Documents

(All documents are in PDF format.)

Title	Federal Register	Date
U.S.-Russia Agreement on Monitoring the IWC's Aboriginal Subsistence Quota for Gray Whales 2008	n/a	2008
Status Review of the Eastern North Pacific Stock	n/a	08/1999
Final Rule to Delist the Eastern North Pacific Population	59 FR 31094	06/16/1994
Notice of Determination to Delist the Eastern North Pacific Stock of Gray Whales	58 FR 3121	01/07/1993
ESA Listing Rule	35 FR 18319	12/02/1970
Stock Assessment Reports	n/a	various

More Information

- [NMFS National Marine Mammal Laboratory Gray Whale Information and Research](#)
- [NMFS Southwest Fisheries Science Center Gray Whale Information](#)
- [Kids' Times: Gray Whale \[pdf\]](#)
- [NOAA's National Marine Sanctuaries](#)
 - [Channel Islands Sanctuary Gray Whale Species Card with video](#)
 - [Cordell Bank Sanctuary Gray Whale Species Card with video](#)
 - [Gulf of the Farallones Sanctuary Gray Whale Species Card](#)
 - [Monterey Bay Sanctuary Gray Whale Species Card with video](#)
- [Marine Mammal Commission Gray Whale Information](#)
- [Makah Tribe Gray Whale Hunt from NMFS Northwest Regional Office](#)
- [U.S. Fish & Wildlife Service Gray Whale Species Profile](#)

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Long criticized, bottom trawling off-limits in parts of Bering Sea

FISHING: Conservation groups say it's harmful; industry group worries.

By MARY PEMBERTON
The Associated Press
Published: August 25th, 2008 01:09 AM
Last Modified: August 25th, 2008 01:38 AM

Large portions of the Bering Sea off Alaska's coast will soon be off-limits to bottom trawling, in which fishing vessels drag huge, weighted nets across the ocean floor.

As of today, nearly 180,000 square miles of the Bering Sea are closed to bottom trawling, bringing the total in the Pacific Ocean to 830,000 square miles -- an area more than five times the size of California.

Other newly restricted areas are off Washington, Oregon and California.

Conservation groups have long fought the practice of bottom trawling, saying it is an outdated form of fishing that pulverizes delicate corals and sponges living on the sea floor. Scientists say once bottom trawlers move through an area, it can take centuries for the slow-growing corals and sponges to recover.

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"It basically is taking a net and raking it on the bottom and anything that sticks up from the bottom gets bulldozed over. It is similar to forest clear-cutting," Chris Krenz, Oceana's arctic project manager, said Friday.

In the northern Bering Sea, many animals, including the endangered spectacled eider, rely on the crabs and clams that grow on the ocean floor for food, Krenz said.

The North Pacific Fishery Management Council, which advises the federal government on fisheries, unanimously voted in favor of the northern Bering Sea regulation.

In Alaska, bottom trawlers will be allowed to continue to work in about 150,000 square miles where they now fish, mostly around the Aleutian and Pribilof islands.

The industry favored a temporary restriction in order to assess what areas needed protection, leaving the non-sensitive areas open to bottom trawling.

The Groundfish Forum, a trade association of six trawl companies that fish for rock sole, yellowfin sole, flathead sole, Atka mackerel and Pacific cod in the Bering Sea and Gulf of Alaska, said the regulation, while OK for now, could end up harming the industry.

"Should the concentrations of fish move to the north it actually could be harmful to keep us from going where the fish are," said Lori Swanson, the forum's executive director.

It could mean fishing longer, keeping the nets on the bottom more, using more fuel and potentially

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Council closes Arctic to fishing for now

Posted by The Highliner
Posted: February 5, 2009 - 1:21 pm

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Federal fishery regulators today approved an unprecedented plan to ban U.S. commercial fishing in the Arctic Ocean.

The Anchorage-based North Pacific Fishery Management Council spent two years developing the Arctic plan in response to climate change and the rapid retreat of sea ice in the Chukchi and Beaufort seas along Alaska's northern coast.

Some scientists and fishing industry players say it's conceivable that commercially valuable seafood species such as pollock or crab populations could expand in the Arctic, which could draw fishing fleets.

So far, no fishing of any major scale occurs in the Arctic, and the few surveys of fish stocks there don't show large populations.

Still, the council, meeting in Seattle this week, decided to write an Arctic Fishery Management Plan to control commercial fisheries should they develop.

The council, made up of mostly government and industry representatives from Alaska, Oregon and Washington, oversees the state's major offshore fisheries in the Bering Sea and Gulf of Alaska. It voted 11-0 in favor of the Arctic plan.

The plan essentially bans commercial fishing across the entire Arctic region from the Canadian border down to the Bering Strait.

The area could be opened in the future, however, based on research showing that fisheries could be conducted sustainably and without harm to an ecosystem populated with sea birds, seals, whales and other species important to Native residents as subsistence food.

Fishing industry groups and environmentalists alike hailed the council's action to impose strong management measures before any large-scale fisheries begin.

"Climate change is having a significant effect on the Arctic, opening previously ice-covered waters and drawing cold-water species farther north," said Dave Benton of the Juneau-based Marine Conservation Alliance, which represents fishing companies, processors and ports. "The council's action to close these waters as a precautionary measure gives us the opportunity to conduct the scientific review necessary to develop a plan for how sustainable fisheries might be conducted in the Arctic in the future."

Chris Krenz, a marine scientists with the conservation group Oceana, said the council deserves praise for getting out in front of commercial fisheries with a management plan.

"Really, this is a great example for other nations to look at in terms of how they manage their fisheries as well as other industries such as shipping," Krenz said. "It's planning for the future rather than waiting for problems to occur."

Commercial harvest of common polar species such as the small Arctic cod could hurt the many sea birds, seals and other species that feed heavily on these fish and that in turn

The Highliner



Commercial fishing is a bedrock industry in Alaska, and has been for more than a century. Every year scores of fishermen net millions of migrating salmon, challenge the icy Bering Sea to trap king crabs, lay miles and miles of baited hooks for halibut, and scoop up enough pollock for a zillion fish sticks. And when fishermen aren't out fishing, they're usually talking about fishing. That's what this blog is all about. Cast your net here for commercial fishing news and notes. And if you've got a bone to pick, post a comment.

About me: I've pounded the commercial fishing beat for the Anchorage Daily News since 1999. I hail originally from Tennessee. I've never fished commercially, but I've spent much time as a journalist aboard boats and inside fish-processing plants. Of course, I'm a big consumer of Alaska seafood. One of my favorites: canned sockeye.

Contact Wesley Loy at wloy@adn.com.

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are important for subsistence, he said.

How the Arctic Ocean is to be used as global warming continues is the subject of intense international debate. The retreat of sea ice has spawned interest in the Arctic's potential not only for fisheries but for shipping and energy development.

Last year Congress passed a resolution calling on the United States, Canada, Russia, Norway and other nations to negotiate how to manage migratory and transboundary fish stocks in the Arctic Ocean.

The North Pacific Council's action today is subject to final approval by the U.S. commerce secretary.

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ANGRYCRABBER

wrote on 02/21/2009 00:23:19 AM:

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codfather

wrote on 02/10/2009 03:39:42 PM:

and lots of baby snow crab around Kotz

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codfather

“What is amazing is the level of damage these types of animals have suffered, after the poof fishery in Canada was closed. We immediately started trawling deeper with no restrictions, and continue to do so,” she said. “There are ways to catch fish that are less harmful to the world’s vanishing marine life. We need to start protecting the seafloor by using fishing gear, besides bottom trawls, especially in the deep sea. It’s the only thing left,” she said.

“For years marine scientists have been telling the world that fishing has harmed marine biodiversity more than anything else,” said Dr. Norse. “And it’s clear that trawling causes more damage to marine ecosystems than any other kind of fishing. Now, as the threats of ocean acidification and melting sea ice are adding insult to injury, we have to reduce harm from trawling to have any hope of saving marine ecosystems,” Dr. Norse said.

Scientific findings about trawling impacts have led to increasing restrictions on this industrial fishing method. In 2005, the General Fisheries Commission for the Mediterranean banned trawling in the Mediterranean Sea below depths of 1,000 meters, and the United States closed vast deep-sea areas off Alaska to bottom trawling to give the United Nations General

“Bottom trawling is the most destructive of any actions that humans conduct in the ocean,” said Dr. Welling. “Ten years ago, Elliott Norse and I calculated that, each year, worldwide bottom trawlers drag an area equivalent to twice the lower 48 states. Most of that trawling happens in deep waters, out of sight. But now we can more clearly envision what trawling impacts down there by looking at the sediment plumes that are shallow enough for us to see from satellites,” he said.

“Bottom-trawling repeatedly plows up the seafloor over large areas of the ocean,” said Mr. Amos. “Until recently, the impact was basically hidden from view. But new tools – especially satellite-based image sites, like Google Earth – allow everyone to see for themselves what’s happening. In shallow waters with muddy bottoms, trawlers leave long, persistent trails of sediment in their wake.”

Susanna Fuller studies impacts of trawling on sponges in the Northwest Atlantic Ocean. “Seafloor animals such as glass sponges are particularly vulnerable to bottom trawling,” said Ms. Fuller, a graduate student of Professor Ransom Myers. Dr. Myers, who died last year, had published a series of papers showing that overfishing has eliminated 90 percent of the world’s large predatory fishes and its devastating marine ecosystems.

Ph.D. Candidate in Biology at Dalhousie University, Halifax NS. Meeting February 15. Speakers at the session include Dr. Elliott Norse, President of Marine Conservation Biology Institute in Bellevue WA, John Amos, President of SkyTruth in Shepherdstown WV, Dr. Les Welling, Professor of Zoology at the University of Hawaii in Manoa HI, and Susanna Fuller, Ph.D. Candidate in Biology at Dalhousie University, Halifax NS.

Severe and Extensive Seafloor Disturbance at the American Association for the Advancement of Science 2008 Annual Meeting February 15. Speakers at the session include Dr. Elliott Norse, President of Marine Conservation Biology Institute in Bellevue WA, John Amos, President of SkyTruth in Shepherdstown WV, Dr. Les Welling, Professor of Zoology at the University of Hawaii in Manoa HI, and Susanna Fuller, Ph.D. Candidate in Biology at Dalhousie University, Halifax NS.

As a result of scientific studies showing that bottom trawling kills vast numbers of corals, sponges, fishes and other animals, bottom trawling has been banned in a growing number of places in recent years. Now satellite images show that spreading clouds of mud remain suspended in the sea long after the trawler has passed.

But what satellites can see is only the sediment trails. Other bright spots are fixed oil and gas production platforms. One sediment trail can be traced for 27 km. Assuming a standard trawling speed of 2.5 knots, sediment from this trawl is visibly persistent for nearly 6 hours. Water depth >20m. Large, indistinct bright blue patches at lower left and upper right are cloudtrazee. (Credit: Landsat)

Bottom Trawling Impacts On Ocean, Clearly Visible From Space

ScienceDaily (Feb. 20, 2008) — Bottom trawling, an industrial fishing method that drags large, heavy nets across the seafloor sits up huge, billowing plumes of sediment on shallow seafloors that can be seen from space.

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Bottom Trawling Destroys Deep Sea Life: UN Review Shows Need To Halt Destructive Fishing Practice (July 17, 2006) — A long-awaited report by the United Nations shows the need for an international moratorium on bottom-trawling and other destructive fishing practices that damage deep sea ... > read more

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Written Testimony
By Carl Flensburg
Dillingham Commercial Halibut, Salmon Gillnet Seasonal Fisherman
To the North Pacific Fishery Management Council
March 25, 2009

My name is Carl Flensburg of Dillingham, Alaska. I am speaking on behalf of the Curyung Tribal Council. I am a tribal member of the Curyung Tribal Council. The Curyung Tribal members have approximately 2,300 enrolled members in Dillingham, Alaska area. I am also a commercial fisherman and a part-time Native artist.

I have fished salmon in Bristol Bay since I was 9 years old, approximately forty years. I also have fished herring in the Togiak Herring Fishery as a gillnetter and a seiner for seventeen (17) years. I have fished in district 4E Halibut Bristol Bay for at least ten (10) years.

I have completed two Bristol Bay fishing surveys for our CDQ group, Bristol Bay Economic Development Corporation (BBEDC). I completed a fish survey in 1998 in the northern district from Cape Newenham to Cape Constantine setting test longline and test pots. In 1999, the second fish survey was done in the southern district of Bristol Bay. We set test pots from Port Heiden to Cape Constantine with a partner boat setting longline tests with us, inventorying halibut, cod, and shrimp stocks.

Our CDQ group advocated to allow local Bristol Bay residents to fish halibut in district 4E Bristol Bay in the late 1990s. This started out as a good thing as an alternative fishery from salmon. Now, the seasonal Bristol Bay halibut fishery is hardly worth the boat fuel and expenses to fish the few halibut that are left to catch after the trawlers are done.

For several years, I have worked hard to develop our Bristol Bay 4E halibut CDQ fishery. But, we now are witnessing a drastic decline in our halibut catches. For example, in 2002, our small fleet caught 208,411 pounds of halibut. In 2008, we caught 30,394 pounds of halibut which is 1/7th of the previous 2002 catch.

The Curyung Tribal Council and I believe that the yellowfin sole and the halibut migrate into the Bristol Bay in the spring in the same migration patterns. The Halibut follow the yellowfin sole to feed on them throughout the Bristol Bay area. There is a deep valley that comes in from the Bering Sea and wraps around Round Island which can be seen on nautical charts. I believe this is used as a corridor by the halibut and yellowfin sole to move into the shallower nearshore waters of Bristol Bay in the Spring season.

When I did the longline survey in Northern Bristol Bay in 1998, I encountered the highest halibut catch rates I have ever observed. I saw these in the East corner South of Round Island inside the Near Shore Bristol Bay Trawler Area (NSBBTA).

The Curyung Tribal Council believes yellowfin sole trawl fleet has a detrimental effect on our Bristol Bay ecosystem. The Bristol Bay walrus are moving from their traditional feeding, and haulout areas on Round Island. The yellowfin sole trawl fleet tow their nets back and forth over the clambeds until all the bottom sea life is scraped off the sea floor. If you look at the National Oceanic Atmospheric Administration (NOAA) Law Enforcement maps tracking trawlers in the NSBBTA you will see it turns black from so many lines. Yet, NOAA enforcement officers have told me not all trawlers in the NSBBTA have tracking devices. You can see from my example that nothing would survive this kind of fishing pressure. Kelp, clams, and sea life of this nature are unable to run away from the intrusion of the trawlers. Instead, they are quickly killed from the trawl nets. We have observed the debris fields behind these trawlers. Kelp and dead creatures floating to the surface in the dirty water trail left by the trawlers. This trail of dirty water extends for miles behind the trawl fish boat trails has been observed by Curyung tribal halibut and gillnet fishermen. Although some of the seasonal trawl fishermen have mentioned they have a clean fishery, the damage left behind says a lot. Yes, the trawlers have cleaned all forms of sea life off the bottom of nearshore waters in the nearshore Bristol Bay trawler area.

The Curyung Tribal Council's concern is also for the grey whale which migrates past Cape Constantine each Spring. The grey whale is also nature's bottom trawler. They feed on the bottom sifting through the sand and mud feeding on small underwater creatures. Every Spring, we observed these events occurring along Cape Constantine. Presently, the grey whale is in competition with the yellowfin sole trawl fleet. When the trawl fishery groups are present, the grey whale loses their feeding habitat areas. We don't know where the grey whales go when the trawlers are present.

The Curyung Tribal Council believes the walrus, Steller sea lion and grey whale are affected in a detrimental way by the NSBBTA trawl fishing fleet. We also believe the bycatch of halibut and Chinook salmon is harmful to our traditional subsistence harvest and economic development. We believe that the bottom seafloor marine habitats of the NSBBTA is already destroyed and the marine habitat beds must be given time for regrowth.

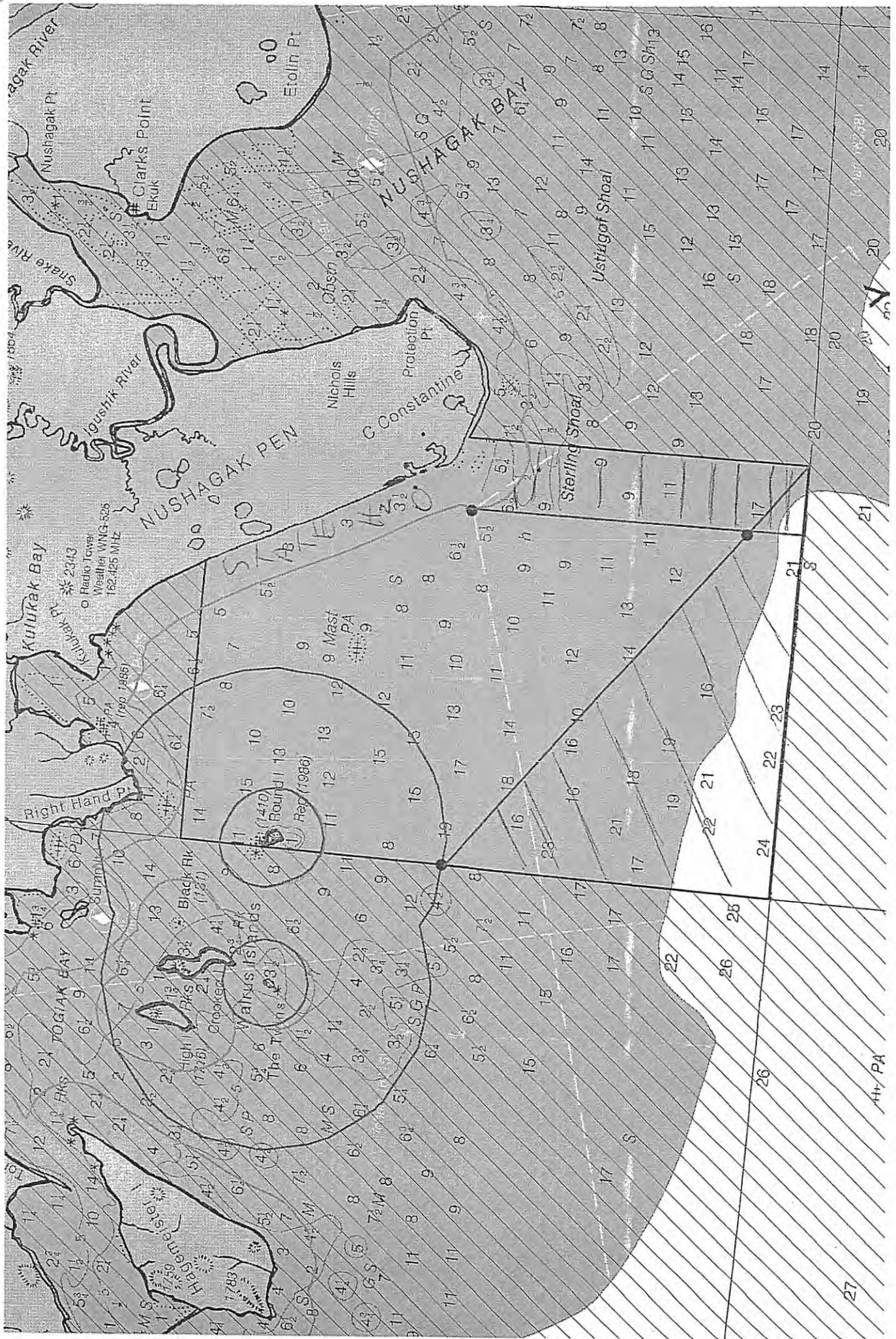
On February 19, 2009 a group of halibut fishermen and the Qayassiq Walrus Commission members were asked by BBEDC to meet with Best Use Cooperative (BUC) trawl group to work out a solution to Bristol Bay trawl fish issues discussed previously in this letter. There was a suggestion that the NSBBTA be reduced and trawl fishing time be moved back 15 days earlier. The Curyung Tribal Council does not agree with this.

The Curyung Tribal Council is in agreement with the Qayassiq Walrus Commission (QWC) and the Bristol Bay Native Association (BBNA) Resolution 09-01: Urging the North Pacific Fishery Management Council (NPFMC) to create a protection zone for walrus habitat in Bristol Bay. This fifty (50) nautical mile zone from Cape Newenham to Port Moller is the proposed QWC walrus and marine protection boundary zone area.

The Curyung Tribal Council is also gravely concerned about the Bering Sea/Aleutian Islands Pollock Fishery that intercepts Bristol Bay Chinook salmon. We recommend this be stopped.

In summary, why is this NSBBTA open when it used to be closed? The NSBBTA is of no benefit to the local Bristol Bay people. Every halibut fishermen I talked to last year in 2008 lost money, in other words, they didn't make any income from the 2008 halibut 4E fishery. We used to pay our fishing expenses and supplement our annual income with halibut, and Chinook salmon earnings. We can no longer make money from these fisheries. This is causing economic hardship for the Bristol Bay communities because this was our livelihood. Now, we have to pay our expenses for ALL fisheries from the seasonal sockeye (red) salmon earnings, leaving little or no financial support for our families during the long winter months.

Carl Flensburg
Halibut Fisherman
Salmon Fisherman
Curyung Tribal Member
P.O. Box 972
Dillingham, AK 99576
Phone: 907-842-4755
E-mail: carlflensburg@yahoo.com



Official Copy -

Kenny Wilson + John Gauvin
April 5 2009
11:30 a

NBBTA Agreement April 5, 2009 Anchorage Hilton lobby

Concern about the effects of the yellowfin sole fishery in the vicinity of Togiak and Cape Constantine on local fisheries and walrus was presented to the North Pacific Fisheries Management Council (NPFMC) in October of 2008. Central to this was that local halibut fishermen believe that the decline in their halibut catches is due to halibut bycatch in the yellowfin sole fishery in the Northern Bristol Bay Trawl Area (NBBTA). The reason that halibut catches in the vicinity of Togiak and Cape Constantine have declined is unknown, but representatives of the Best Use Cooperative (BUC), a major participant in the NBBTA yellowfin fishery, decided to talk to local fishermen to discuss how these concerns could be addressed. In February of 2009, discussions were held between representatives of BUC, a BUC captain who fishes the NBBTA, and halibut fishermen, herring fishermen, and walrus hunters from Togiak and Dillingham who attended a meeting organized by the Bristol Bay Economic Development Corporation.

The February 2009 discussions, and continued discussions at the April 2009 NPFMC meeting in Anchorage, have identified measures that halibut fishermen think will address effects of the yellowfin sole fishery on their halibut fishery near Togiak and Cape Constantine. First, the area open to trawling would be modified to exclude trawling in the southern portion on the NBBTA. Additionally, an area on the east side of the "box" north to Sterling Shoals would be closed (see attached map). This new closed area encompasses the portion of the "box" that trawl fishermen believe tends to have relatively higher halibut bycatch rates (deeper portion of the area). Also, the northern extension of the closure to Sterling Shoals includes an important halibut fishing area identified by local fishermen.

Second, the NBBTA would be closed to yellowfin sole fishing at a time when halibut fishermen and other local fishermen are concerned about incoming migrations of halibut, salmon, and other species of importance to local fishermen and harvesters. To accommodate these concerns, trawling for flatfish and other groundfish in NBBTA would end on June 7 instead of the current June 15th.

Finally, BUC and local fishing and walrus hunting representatives have committed to ongoing communications during and after yellowfin sole fishing in the NBBTA. These communications are intended to reduce any remaining potential for gear conflicts in the reduced open area.

The Best Use Cooperative agrees to voluntarily implement the closed area and season changes described above for its member vessels in 2009 for any fishing inside the NBBTA. Additionally, BUC will also strongly encourage other trawlers who fish in the NBBTA to abide by the terms described above. Following the 2009 fishing season, BUC will continue via this agreement the above changes to trawl fishing in the NBBTA in the years following 2009 if discussions with local fishermen indicate that they believe the measures in this agreement have been successful and they would like us to keep them in place.

April 6, 2009

Mr. Eric Olson, Chair
North Pacific Fishery Management Council
605 W. Fourth Avenue, Suite 306
Anchorage, AK 99501-2252

Mr. Doug Mecum, Regional Administrator
NOAA Fisheries, Alaska Region
709 West Ninth Street
Juneau, AK 99802-1668

RE: Agenda Item C-3 Trawling in Bristol Bay

Dear Chairman Olson, Mr. Mecum, and Council members:

You must take action to address the impacts of trawling in Bristol Bay.

Bristol Bay has long been recognized as a vitally important habitat area. Some of the earliest conservation measures enacted by the North Pacific Fishery Management Council were centered in Bristol Bay. The North Pacific Council rightfully closed most of Bristol Bay to trawling in order to reduce crab bycatch and protect some crab habitat. However, concessions to allow trawling for spawning aggregations of yellowfin sole resulted in the formation of an area open to trawling between Cape Constantine and the Walrus Islands. This habitat area in the heart of Bristol Bay came to be known as the Nearshore Bristol Bay Trawl Area (NBBTA), but as you will discover, the area has many more vitally important uses.

Bristol Bay is crucial habitat for the Pacific walrus. It is the site of major terrestrial haulouts that are close to preferred feeding habitat. Walrus migration and feeding routes also interweave and cross Bristol Bay, including the area open to trawling. This is a key issue, because the impacts to walrus, including disturbance to their feeding habitat and migration routes, were not assessed in the Environmental Assessment for Amendment 37 that established the NBBTA. In the last several years, the number of factory trawlers dragging through this area has increased from 2 vessels in 2001 to 14 in 2008.

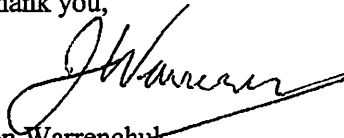
Residents of the area also continue to express concerns over the trawl bycatch occurring in the area. The localized impacts of this bycatch need to be fully addressed.

The Council must undertake a thorough evaluation that fully assesses the impacts of trawling in Bristol Bay and evaluates management alternatives; including:

1. A year-round 25 nm trawl closure from Cape Newenham to Cape Constantine
2. A year-round 50 nm trawl closure from Security Cove to Port Moller
3. Year-round closure of the Nearshore Bristol Bay Trawl Area

We appreciate your consideration of this issue. We look forward in helping you address the problems associated with trawling in Bristol Bay.

Thank you,


Jon Warrenchuk,
Ocean Scientist, Oceana

March 17, 2009

Chris Oliver, Executive Director
North Pacific Fisheries Management Council
605 W. 4th Avenue, Suite 306
Anchorage, AK 99501-2252
Telephone (907) 271-2809 Fax (907) 271-2817

Re: Written comment to the NPFCM meeting March 30 - April 7, 2009

Dear Mr. Oliver.

I am the Frank Woods I work for Bristol Bay Native Association in the Natural Resources Department as the Subsistence Coordinator. BBNA is a Tribal Consortium, made up of 31 Tribes and is organized as a non-profit corporation to provide a variety of educational, social, economic and related services to the Native people of Bristol Bay region of Alaska. The Mission of BBNA is to promote self determination of Tribes of the Bristol Bay region, and the betterment, well-being, culture and interests of the Native People of the Bristol Bay Region.

We appeal to you to take conservatory action to reduce or limit halibut by-catch. Our subsistence users, sport fish industry, and commercial fishermen have been negatively impacted with reduced harvest.

First Point Reference your discussion paper. This fishery has changed to a highly industrialized efficient fishery that kills yellow fin.

Second This yellow fin fishery it wasn't developed into a huge number of operators in a small area.

Third your EIS has little reference to walrus

Fourth and final Point final point In the discussion paper you reference "Movements of Walrus Radio tagged in Bristol Bay, Alaska" by CHADWICK V JAY and SUE HILLS. I will reference this report and finding to page 199 in that report and the ITS my version I (Insurmountable) T (Trawling) S (Sound). This is glaring statistics to walrus staying out of the box in question. Again" Walrus foraging Marks on the sea floor in Bristol Bay , Alaska: a reconnaissance survey" Brain D. Bornhold ,Chadwick V. Jay, Robert McConnaughey, Glenda Rathwell, Karl Rhynas , William Collins.

We thank you for your considerations.

Frank Woods
BBNA Subsistence Coordinator
Dillingham, Alaska 99576

**Manokotak Village Council
P.O. Box 169
Manokotak, Ak 99628
PH: (907) 289-2067 or 1227
Fax: (907) 289-1235**

Resolution 09-04

A RESOLUTION URGING THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL TO ELIMINATE THE NEARSHORE BRISTOL BAY TRAWL AREA

WHEREAS: The NPFMC and the state of Alaska have long recognized the waters of Bristol Bay as a crab and halibut nursery and have closed most waters of Bristol Bay to trawl fishing; and

WHEREAS: An exception to the general ban is the Nearshore Bristol Bay Trawl Area (NBBTA), which is a seasonal yellow fin sole trawl fishery open from April 1 to June in a rectangular area off the Nushagak Peninsula, and including both state and federal waters; and

WHEREAS: The Manokotak Village Council is very concerned with the bycatch of halibut, herring and salmon along the Nushagak Peninsula where the yellow fin sole fishery takes place; in some years the halibut bycatch is more than the directed CDQ halibut fishery; and

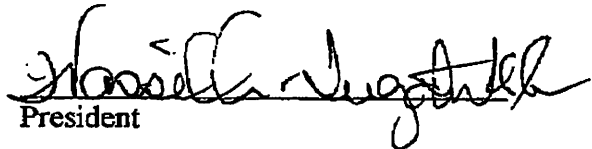
WHEREAS: Local residents have reported conflicts between the CDQ longline halibut fishermen and the yellow fin sole fishermen who operate in the area; and

WHEREAS: The Manokotak Village Council members have a heavy dependence of all near-shore marine mammals such as seals and walrus and the yellow fin sole trawl fishery takes place along the migratory path of these species; and

WHEREAS: The NBBTA is also along the migratory route of herring and of caplin, which is an important forage fish species for Stellar Sea Lions.

NOW, THEREFORE, BE IT RESOLVED that the Manokotak Village Council, urges the North Pacific Fishery Management Council to close the Nearshore Bristol Bay Trawl Area.

Signed:


President

CERTIFICATION:

I, the undersigned Recording Secretary of the Manokotak Village Council, hereby certify that the Council Members of the Manokotak Village Council passed the foregoing

resolution this 3rd day of April, 2009, at a duly called and noticed meeting, and that a quorum was present.

Signed:

Luona Black
Secretary

City of Manokotak


P.O. Box 170
Manokotak, AK 99628
Phone 907-289-1027
Fax 907-289-1082

Resolution 09-10

A RESOLUTION URGING THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL TO ELIMINATE THE NEARSHORE BRISTOL BAY TRAWL AREA

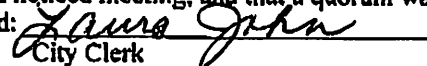
- WHEREAS:** The NPFMC and the State of Alaska have long recognized the waters of Bristol Bay as a crab and halibut nursery and have closed most waters of Bristol Bay to trawl fishing; and
- WHEREAS:** An exception to be general ban is the Nearshore Bristol Bay Trawl Area (NBTA), which is a seasonal yellow fin sole trawl fishery open from April 1 to June 15 in a rectangular area off the Nushagak Peninsula and including both state federal waters; and
- WHEREAS:** The City of Manokotak is very concerned with the bycatch of halibut, herring and salmon along the Nushagak Peninsula where the yellow fin sole fishery takes place; in some years the halibut bycatch is more than the directed CDQ halibut fishery; and
- WHEREAS:** Local residents have reported conflicts between the CDQ longline halibut fisherman and the yellow fin sole fisherman who operate in the area; and
- WHEREAS:** The City of Manokotak members have a heavy dependence of all nearshore marine mammals such as seals and walrus and the yellow fin sole trawl fishery takes place along the migratory path of these species; and
- WHEREAS:** The NBTA is also along the migratory route of herring and the caplin, which is an important forage fish species for Stellar Sea Lions.

NOW, THEREFORE, BE IT RESOLVED that the City of Manokotak urges the North Pacific Fishery Management Council to close the Northshore Bristol Bay Trawl Area.

Signed: 
Mayor

CERTIFICATION:

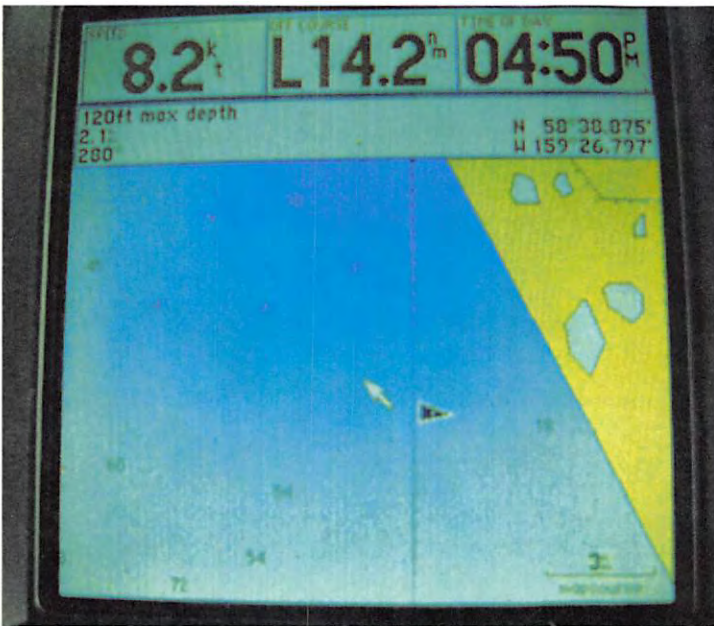
I, the undersigned Recording City Clerk of City of Manokotak of Manokotak, hereby certify that the Council Members of the City of Manokotak passed the foregoing resolution on this 2nd day of April, 2009, at a duly called and noticed meeting, and that a quorum was present.

Signed: 
City Clerk

May 26, 2008 Digital Photos
Taken by Bristol Bay herring fisherman
Of Trawl Fishing Boats

Here are digital photos, boat names and coordinates of trawlers operating west of Cape Constantine. The first photo is of the Enterprise pictured with it's net coming up the ramp.





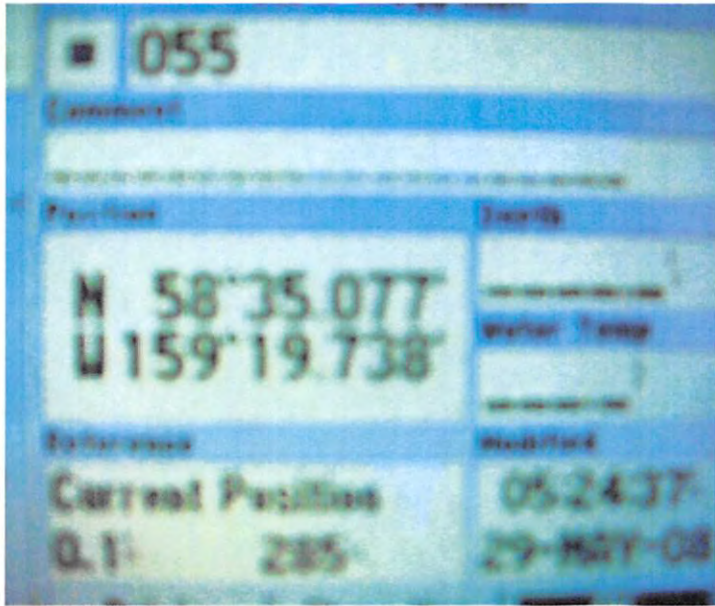
The skipper of the gillnetter estimates he was within 60 yards of the vessel when the photo was taken.



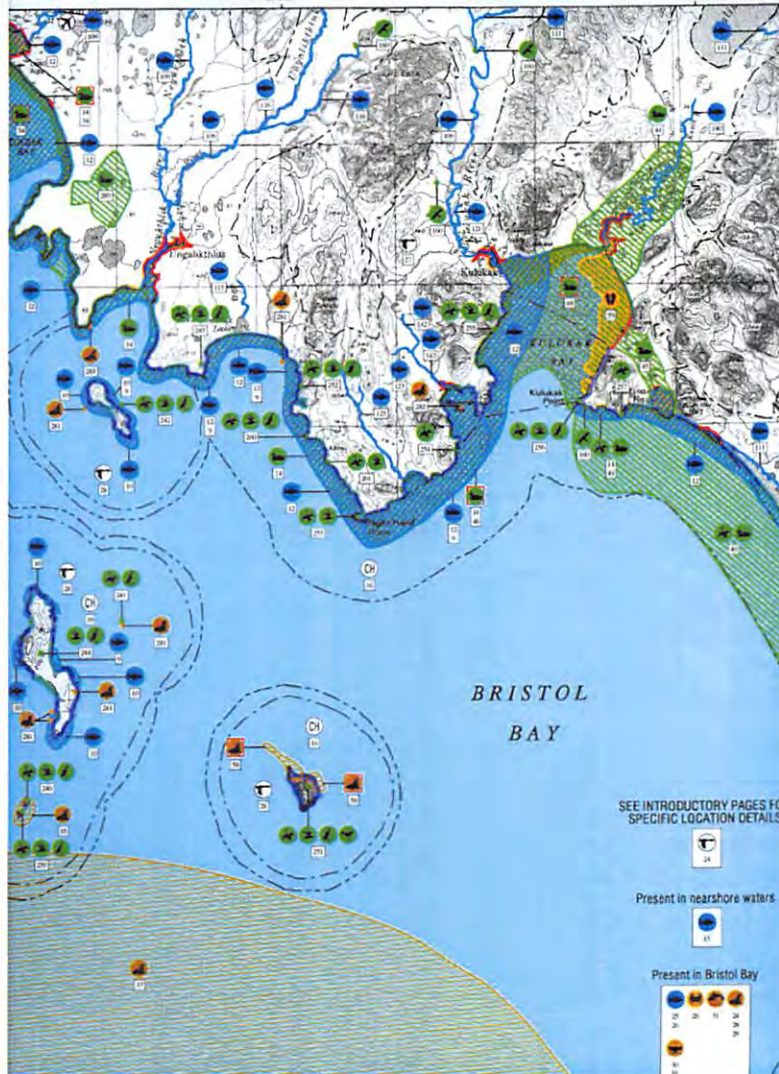
Photo of trawl fishing boat Tremont who threatened a Bristol Bay gillnet fisherman and crew.



Photo of threatened trawl fish boat GPS coordinates.



2008 Qayassiq Walrus Commission Map Depicting Marine Food Resources Harvested in the Bristol Bay, Alaska-Walrus Islands-Round Island, Kulukak area. Source Bristol Bay Coastal Resource Area Maps 2004



Scale 1:250000
 1 inch = 4 miles
 5/8 inch = 4 Kilometers

LEGENDS: MARINE FOOD RESOURCES IN BRISTOL BAY

BIRDS	MARINE MAMMALS
Diving Birds	Dolphins
Gulls and Terns	Pinnipeds
Raptors	Sea Otters
Seabirds	Whales
Shorebirds	FISH
Waterfowl	Fish
TERRESTRIAL MAMMALS	INVERTEBRATES
Bears	Bivalves
	Crabs
	Shrimp

Source: Bristol Bay Coastal Service Area Sub Area Atlas 2004