AGENDA B-7
DECEMBER 2009

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME
1 HOUR

DATE: November 30, 2009

SUBJECT: Protected Resources Report

ACTION REQUIRED

Receive report on Protected Resources issues and take action as necessary.

BACKGROUND

A. Ice Seals - Spotted Seal

In response to a petition filed by the Center for Biological Diversity in 2007, NMFS conducted a series of status reviews of the four species of ice seals that occur in Alaskan waters. Most occur primarily in Arctic waters, although some may occur in the northern Bering Sea. Previously, NMFS completed a status review for the ribbon seal and determined that the ribbon seal did not warrant listing under the Endangered Species Act (ESA). Another status review was conducted for the spotted seal, and NMFS recently determined that this species exists in three Distinct Population Segments (DPS) in the North Pacific, the Okhotsk, Bering, and Southern DPSs. On October 20, 2009, NMFS published in the Federal Register a proposed rule to list the Southern DPS as threatened under the ESA, but determined that the Bering and Okhotsk DPSs do not warrant listing. The FR notice was sent in a recent Council mailing. The Southern DPS does not occur in U.S. waters. A status review of the ringed and bearded seals is pending.

B. Green Sturgeon

At the October 2009 Council meeting, staff reported on the status of the ESA listing of the southern DPS of green sturgeon, indicating that a final rule on designation of critical habitat for this listed DPS was pending. On October 9, 2009, NMFS issued the Final Rule designating CH for this DPS, which omits any EEZ waters off Alaska.

C. Cook Inlet Beluga Whales

The most recent survey of the Cook Inlet beluga whale DPS indicates that the population has declined to an estimated 321 individuals from the 2007 and 2008 estimates of 375 in each of those years. The lowest estimate over the past 10 years was 278 in 2005, but since then annual population estimates were increasing until this year. A report on the 2009 survey and population trends was sent out in a Council mailing.

D. Polar Bear Critical Habitat

The US Fish & Wildlife Service announced on October 22, 2009 their proposal to designate critical habitat for the polar bear. As published in the Federal Register, the USFWS has designated as CH three "units" – the sea ice critical habitat, the denning critical habitat, and the barrier island critical habitat. Item B-7(a) is the maps showing CH for the polar bear as proposed by the USFWS. Note that sea ice CH covers the area of the Council's new Arctic FMP and also areas of the northern Bering Sea.

E. Pacific Walrus

The final results of the range-wide survey of Pacific walrus will soon be available in the form of a technical manuscript submitted for publication to a peer-reviewed journal. A press release on the results of the survey has yet to be released, but will be provided to the Council when available. From a review of the manuscript, Council staff can report that the survey results are a population of about 180,000 walrus with a 95% confidence interval of approximately 55,000 to 500,000. The estimate, therefore, is very tentative given the wide error bounds around that point estimate. Also confounding these results is the survey did not cover all of the habitat areas occupied by walrus and the technique for estimating abundance was different from any used previously, and thus comparisons with past population estimates are not possible. A brief overview of walrus life history and previous population abundance estimates is in the discussion paper under Agenda D-1(b).

[Reminder: Council staff will present two documents relating to walrus at this meeting. One is an updated discussion paper on groundfish trawl fishery interactions with walrus in northern Bristol Bay (Agenda D-1(b)), and a second is a discussion paper on a new emerging walrus haulout on Hagemeister Island and options for establishing a protection zone at that site (Agenda D-1(c)).]

D. Steller Sea Lions and the Upcoming BiOp

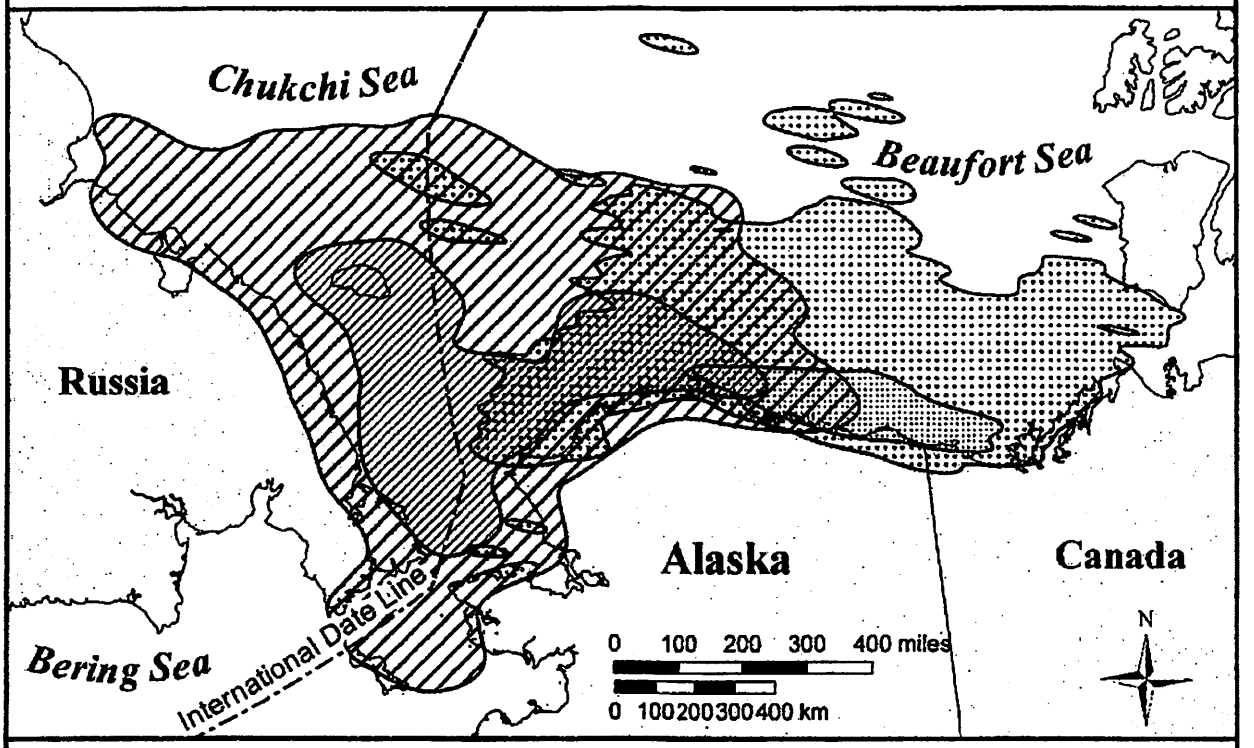
BiOp Update

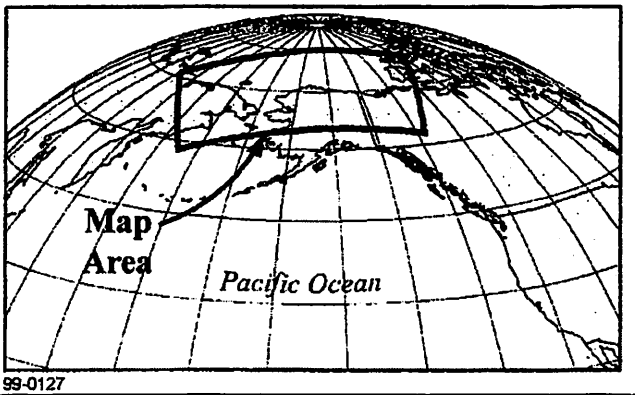
NMFS indicates that the draft *status quo* BiOp is still on schedule to be released in early March 2010. The Council's SSL Mitigation Committee will meet December 8, 2009 to prepare for the BiOp review. The SSLMC will review its data request (sent to agencies in November 2009), and select a tentative date for a meeting to review new data and to receive briefings on new science in preparation for reviewing the information contained in the BiOp. The Council will be given additional details at this meeting.

SSL Pup Survey

The National Marine Mammal Laboratory conducted a range-wide SSL pup survey in 2009. This is the first pup survey completed since 2005, and, including an adjustment for subareas not surveyed, the report indicates that since the 2005 survey, western Distinct population Segment pup numbers at major rookeries in the survey area have increased about 10%; pup numbers between 2001 and 2009 have increased about 14%. However, the NMML report also notes that pup numbers continue to decline in some sub areas of the western DPS. Lowell Fritz with NMML will give a presentation to the Council on the 2009 survey and the status of the SSL population across its range. A report on the survey is attached as Item B-7(b).

Ranges of the Chukchi/Bering Seas and Southern Beaufort Sea Polar Bear *(Ursus maritimus)* Populations



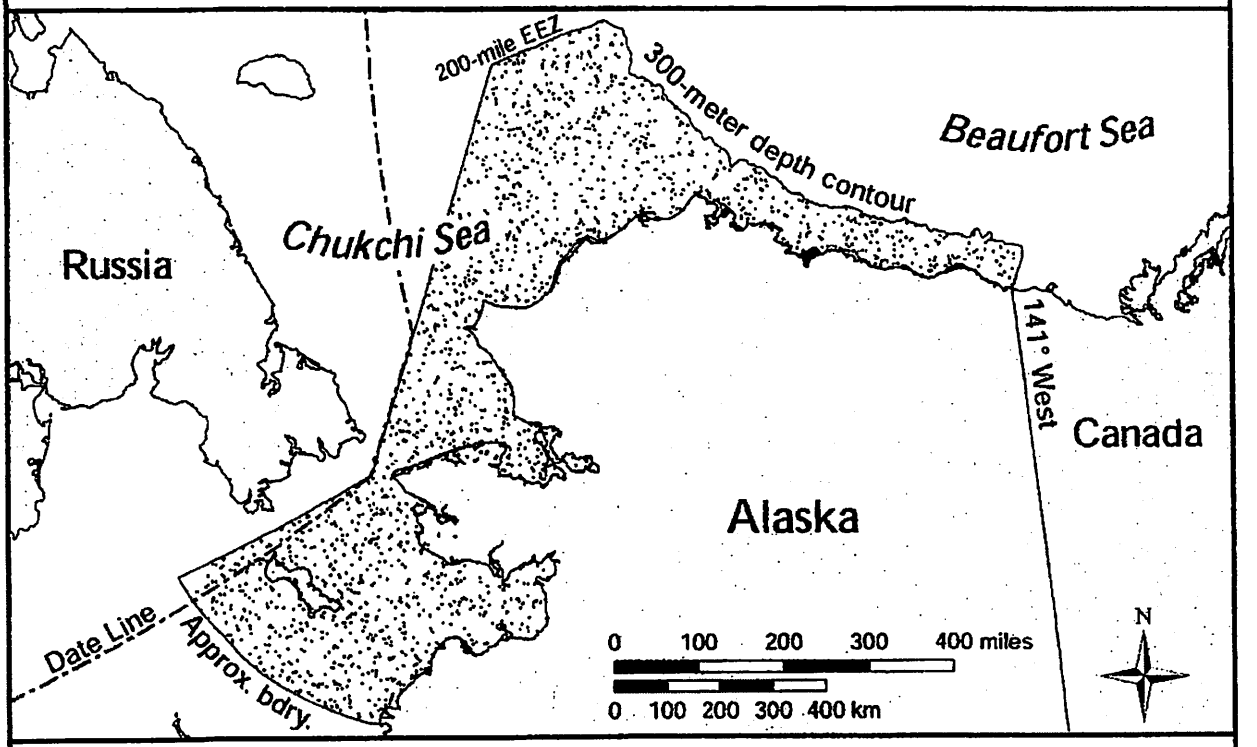


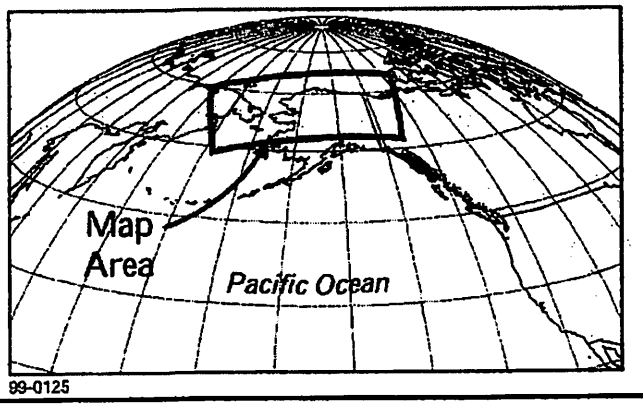
99-0127

Population Contours

- Chukchi/Bering Seas (50%)
- Chukchi/Bering Seas (95%)
- Southern Beaufort Sea (50%)
- Southern Beaufort Sea (95%)

Unit 1: Sea Ice Critical Habitat of the Polar Bear *(Ursus maritimus)*





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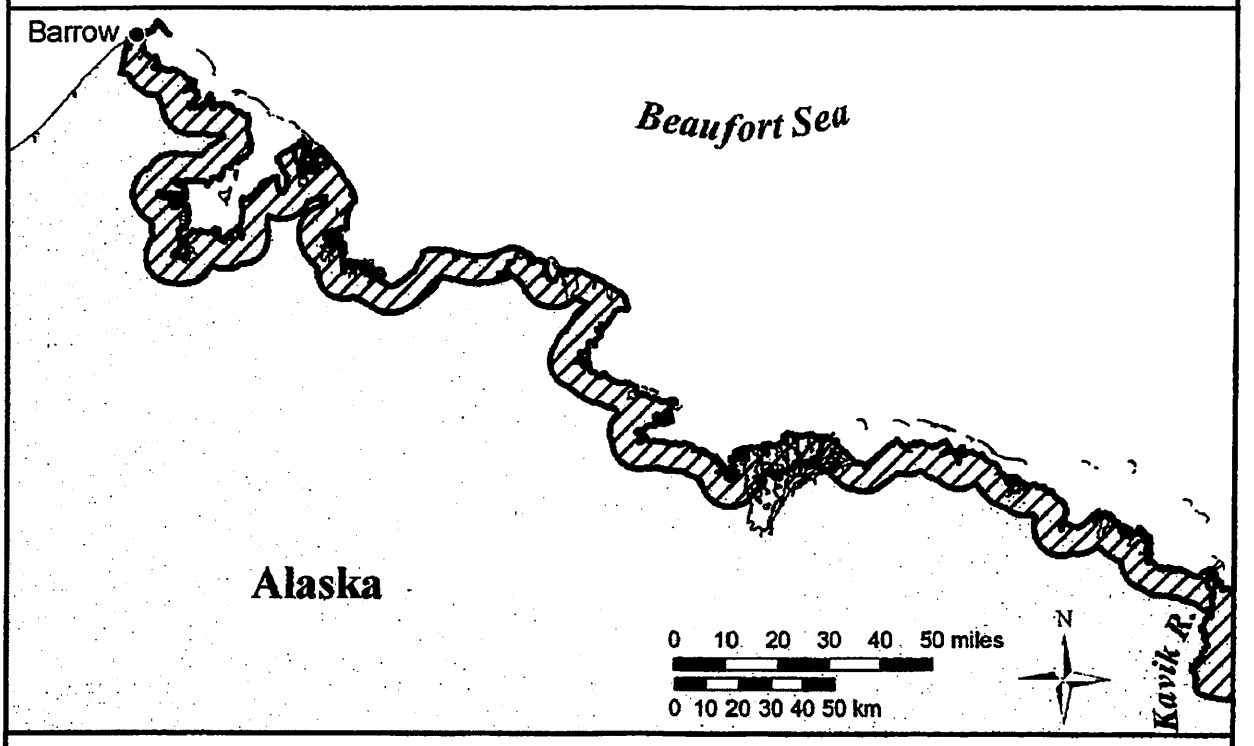
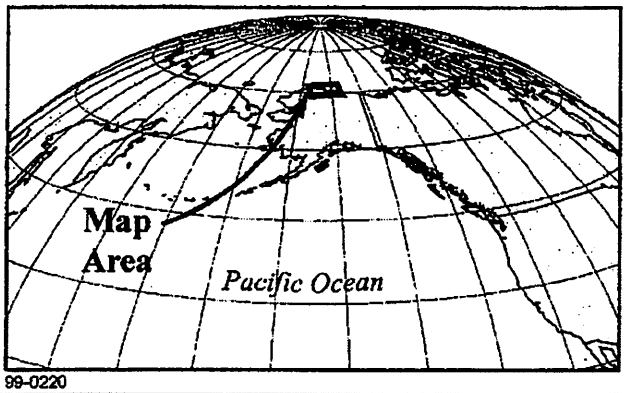
Legend

Unit 1 - Sea ice habitat

Unit 2 (west half): Designation of Denning Critical Habitat for the Polar Bear *(Ursus maritimus)*





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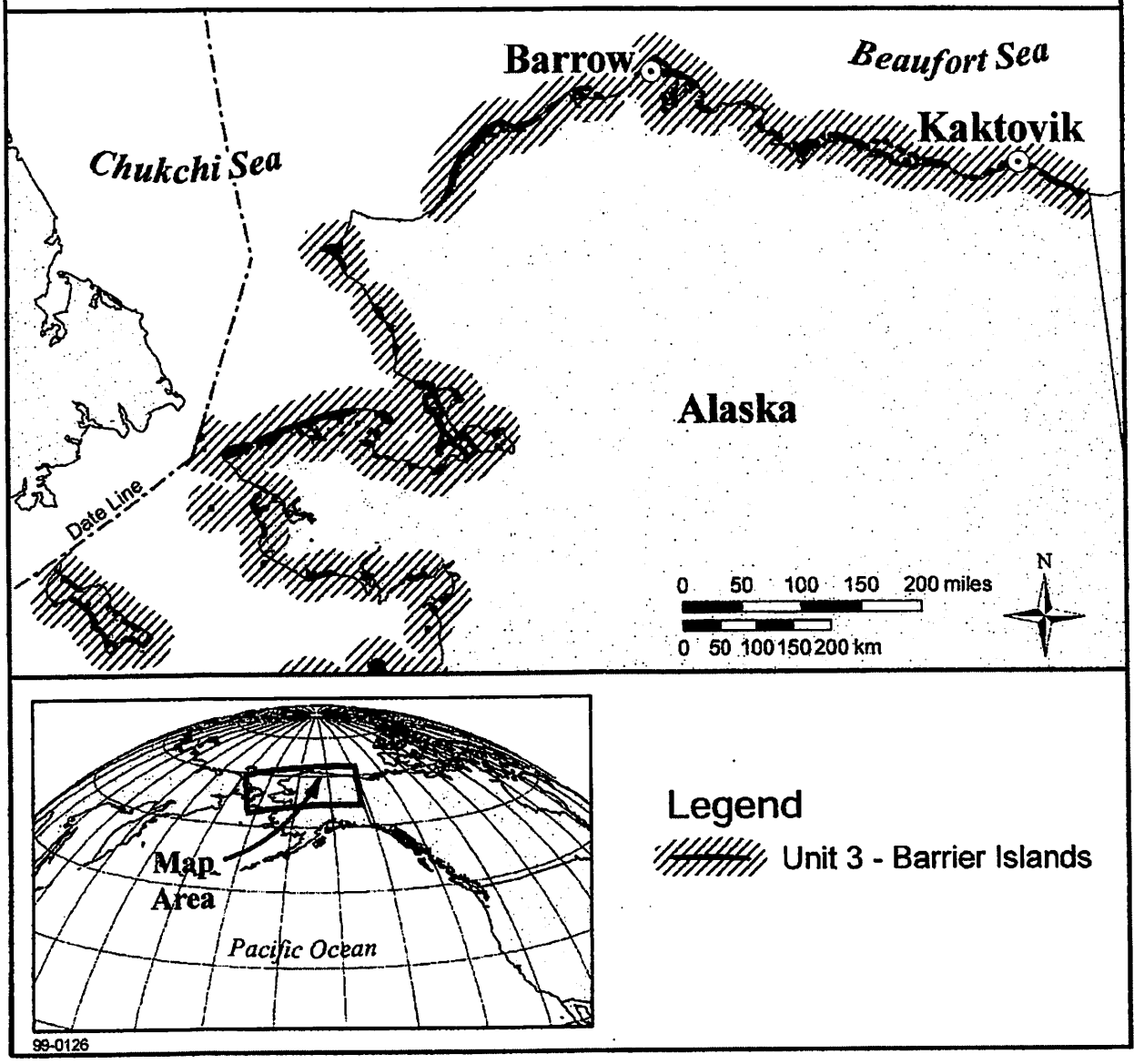
Legend

Unit 2 - Denning critical habitat

Unit 3: Barrier Island Critical Habitat of the Polar Bear *(Ursus maritimus)*



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2 December 2009 F/AKC3:lwf

Memorandum For: Douglas Mecum, Director, Alaska Region
Kaja Brix and Lisa Rotterman, Alaska Region Protected Resources

From: Douglas DeMaster, Director, Alaska Fisheries Science Center

Subject: Aerial Survey of Steller Sea Lions in Alaska, June-July 2009 and Update on the Status of the Western Stock in Alaska

Summary and Introduction: An aerial survey to assess Steller sea lion (*Eumetopias jubatus*) pup production in Alaska was conducted by the Alaska Fisheries Science Center (AFSC) from 24 June to 15 July 2009. A secondary objective was to survey adult and juvenile (non-pup) sea lions in southeast Alaska (part of the threatened eastern stock, or distinct population segment, DPS), and in the eastern and central Gulf of Alaska areas (part of the endangered western DPS) to further investigate seasonal movement of sea lions and ascertain its impact on determination of stock trends.

We counted 10,792 Steller sea lion pups within the range of the western DPS in AK on rookeries and major haul-outs in 2009. However, we were unable to survey sites in the western Aleutian or Pribilof Islands in 2009, two regions with declining pup production. To estimate total western DPS pup production in 2009, we included counts obtained in 2005 and 2008 at 5 rookeries and 1 haul-out in these two regions to obtain a total of 11,120, an increase of 1,170 from the 9,950 pups counted in 2005. Pup production at major rookeries (N=31) increased by 921 pups between 2005 and 2009 (+10%), or by approximately 7 pups per rookery per year. By region, rookery pup production declined in the western (-64) and central Aleutian Islands (-120), but increased in the eastern Aleutian Islands, (+378), and in the western (+355), central (+169) and eastern (+203) Gulf of Alaska between 2005 and 2009. Pup production on all major western DPS rookeries increased at a statistically non-significant rates of 0.6% (P=0.43) per year between 1998 and 2009 (N=4 counts), and 1.7% (P=0.17) between 2001/02 and 2009 (N=3 counts). Between 2001/02 and 2009, rookery pup production declined 43% in the western and 7% in the central Aleutian Islands, but increased 47% in the eastern Aleutian Islands, and 23%, 6%, and 57% in the western, central, and eastern Gulf of Alaska, respectively, for an overall western DPS change of +14%. This is equivalent to an increase of approximately 5 pups per rookery per year from 2001/02 through 2009.

Steller sea lion pup production in SE Alaska (eastern DPS) totaled 7,462 pups in 2009, with 7,443 counted at the 5 major rookeries where 5,510 were counted in 2005. The increase of 1,933 in rookery pup production since 2005 equates to approximately 97 more pups per year at each of the SE Alaska rookeries. Pup production in SE Alaska increased at the rates of +5.0% per year (P<0.001) since 1996 and +3.6% per year (P<0.001) since the late 1970s. Between 2001/02 and 2009, rookery pup production increased 50% (from 4969 to 7443) in SE Alaska, which is equivalent to an increase of approximately 62 pups per rookery per year.

Results of the non-pup survey from late June 2009 in SE Alaska, and in the eastern and central Gulf of Alaska support the hypothesis that movement of sea lions into the eastern Gulf of Alaska, primarily from SE Alaska, affected sub-area and western DPS counts obtained during the early June 2008 survey. Total non-pup counts in the eastern Gulf of Alaska were 812 lower in the 'late' 2009 than in the 'early' 2008 survey, while they were greater by 2,642 in SE Alaska. An additional 404 non-pups were also counted at trend sites in the central Gulf of Alaska in 2009 compared to 2008. Using the data collected in 2009 and calculating trends in each sub-area since 2000, we estimate that seasonal movement from SE Alaska may have contributed a minimum of 570 additional sea lions to the 2008 western DPS trend site counts. If these are subtracted from the 2008 western DPS total, the percent difference in non-pup counts between 2004 and 2008 is reduced from 3% to 1%.

Methods

Aerial surveys to assess Steller sea lion (SSL) pup production in Alaska are conducted in late June through mid-July, starting at least 10 days after the mean birth dates of pups in the survey area (4-14 June; Pitcher et al. 2001). The primary objective in 2009 was to survey all terrestrial rookery and major haul-out sites within the Alaskan SSL range. A secondary objective was to conduct a non-pup survey in SE Alaska, and in the eastern and central Gulf of Alaska approximately 2.5 weeks later than the 2008 survey (Fritz et al. 2008) to further investigate seasonal movement of SSLs in the stock boundary area.

A total of 172 of 178 known rookery and haul-out sites were successfully surveyed between 24 June-15 July 2009 in Alaska from Forrester Island in SE Alaska to Kiska Island in the central Aleutian Islands (Figure 1). We were unable to survey sites in the western Aleutian Islands region because of the limited access granted to us by the US Air Force to Eareckson Air Station on Shemya Island. Fortunately, for four (Alaid, Buldir, Agattu-Gillon Point, and Agattu-Cape Sabak) of the five rookeries and major haulouts in the western Aleutians, we were able to count pups in photographs taken during the proper time window in 2008. However, the most recent pup count available from Attu-Cape Wrangell was from 2005. We were also unable to survey Walrus Island in 2009 because of poor weather and low ceilings in the Pribilof Islands; the most recent pup count available from this site is from 2005.

We used a NOAA Twin Otter aircraft (N56RF) to conduct the survey. Sites with ten or more non-pups hauled out were photographed using three Canon EOS-1Ds Mark III digital cameras equipped with 85 mm telephoto lenses mounted in the belly of the plane. The center camera was mounted vertically while the port and starboard cameras were mounted obliquely at a 21° angle, pointing inward towards the center camera. The cameras were mounted in a forward motion compensator (FMC) to minimize blur. The desired survey altitude was 750 ft (which provided an approximate 1000 ft wide swath width with the three cameras), but due to low ceilings, wind speeds, and topography some sites were photographed at altitudes ranging from 500-1500 ft. The desired ground speed was 90 kts, but ranged from 85-110 kts depending on wind speed and direction. Cameras were set to aperture priority (f5.6) and ISO to 800. Lenses were focused manually and set to near infinity.

Four researchers working independently counted all SSLs at each terrestrial site photographed during the 2009 survey. One researcher analyzed all photographs, while the remaining three

researchers divided the sites to insure two independent counts per site. Sea lions were counted off digital photographs using high resolution monitors and Adobe Photoshop software (mention of specific products does not serve as an endorsement). A script within the software tallied the number of pups, juveniles, adult females, sub-adult males and adult males that were marked on the image. Initial total counts of pups and non-pups (juveniles, adult females, sub-adult males and adult males) at each site by each researcher were compared. If the difference in total pup or non-pup counts at a site was greater than 5% or greater than 20, then the photographs (with counted animals) were compared to reconcile the discrepancies. If sea lions were disturbed into the water by the survey aircraft, then every effort was made to count them, but animals that were in the water away from shore near undisturbed sites were not counted. Total counts of pups at all photographed sites differed by 70 (0.6%) for western DPS sites and 184 (2.4%) for SE Alaska sites between replicates. Total counts of non-pups at all photographed sites differed by 136 (0.5%) for western DPS sites and 69 (0.4%) for SE Alaska sites between replicates. Counts reported here are means of the replicate counts for the 106 photographed sites, or the visual count of non-pups recorded by the observer for the 66 sites with few or no sea lions.

To estimate the effect that seasonal movement of adult and juvenile sea lions may have had on regional and western DPS trends in the 2008 'early' survey, we compared the 2008 data to the predicted 2008 count based on the 2000-2009 regression calculated without using the 2008 data. Log-transformed trend site count totals in the eastern and central Gulf of Alaska and in SE Alaska from 2000 through 2009 were regressed against year to determine the overall trend in each region without considering the 2008 data. Trend site counts analyzed from the central Gulf of Alaska from 2000 through 2009 included only those trend sites surveyed in 2009 (28 of 33), and did not include Kodiak/Steep Cape, Shakun Rocks, Takli, Puale Bay, and Ugaiushak. These 5 trend sites, located on the Alaskan Peninsula west of Cook Inlet, accounted for only 4% of all non-pups counted on central Gulf trend sites in 2008. Non-pup SSL surveys conducted prior to 2004 used oblique 35 mm photography. Differences in resolution between oblique 35 mm and vertical high resolution photographs requires an adjustment factor of -3.64% be applied to all non-pup counts from vertical photographs in order to properly analyze regional time series that include counts from years prior to 2004 (Fritz and Stinchcomb 2005). To estimate the effect that seasonal movement may have had on the 2008 western DPS survey totals, we determined the differences between actual and predicted 2008 non-pup counts in the eastern and central Gulf of Alaska. The new eastern and central Gulf of Alaska totals were used to calculate a movement-adjusted total western DPS trend site non-pup count for 2008.

Results and Discussion

Pup production in the western DPS

Steller sea lion pup production within the range of the western DPS in AK is estimated at 11,120 on all rookeries and major haulouts in 2009, an increase of 1,170 from the 9,950 pups counted in 2005 (Tables 1 and 2; Figure 2). The 2009 total includes

- 92 pups counted on 13 sites that were not surveyed in 2005
- 252 pups counted on 4 western Aleutian sites most recently surveyed in 2008, and
- 76 pups counted on 2 sites (Walrus Island and Attu/Cape Wrangell) most recently surveyed in 2005.

Most of the increase (921 of 1170) observed between 2005 and 2009 occurred at the 31 major rookeries, and is equivalent to an increase of approximately 7 pups per rookery per year. By

region, rookery pup production declined in the western (-64) and central Aleutian Islands (-120), but increased in the eastern Aleutian Islands, (+378), and in the western (+355), central (+169) and eastern (+203) Gulf of Alaska between 2005 and 2009 (Tables 1-3; Figure 2). Between 2001/02 and 2009, rookery pup production declined 43% in the western and 7% in the central Aleutian Islands, but increased 47% in the eastern Aleutian Islands, and 23%, 6%, and 57% in the western, central, and eastern Gulf of Alaska, respectively, for an overall western DPS change of +14% (Table 3; Figure 3). This is equivalent to an increase of approximately 5 pups per rookery per year during the period 2001/02 through 2009.

Analysis of recent regional and overall trends (Table 3; Figure 4) within the western DPS in AK indicates that pup production:

- In the eastern Aleutian Islands and western Gulf of Alaska increased at rates of +4.2% (P=0.004) and +2.6% (P=0.046) per year from 1998 through 2009, respectively;
- In the western Aleutian Islands decreased at a rate of -10.4% (P=0.001) per year from 1997 through 2008; this includes the 2005 count from Attu/Cape Wrangell;
- In the central Aleutian Islands decreased at a rate of -1.6% (P=0.006) per year from 1994 through 2009;
- In the eastern and central Gulf of Alaska increased at non-significant rates of 5.5% (P=0.052) and 1.0% (P=0.393) per year from 2001/02 through 2009, and
- In the western DPS in AK overall increased at a non-significant rate of 0.6% per year (P=0.429) from 1998 through 2009 (4 data points). If only the last three data points are used (since 2001/02), pup production increased at a non-significant rate of 1.7% per year (P=0.172).

The western DPS of Steller sea lion continues to show significant improvement in pup production only in the core of its former range, the eastern Aleutian Islands and western Gulf of Alaska. For instance, at both Clubbing Rocks and Ugamak Island, pup counts in 2009 were the greatest in over 20 years. In addition, South Rocks produced 60 pups in 2009, for the first time surpassing the 50 pup threshold traditionally used for rookery designation. There were increases in pup production between 2005 and 2009 at all rookeries in the central Gulf of Alaska except Chowiet Island, but since 2001/02, the number of pups has increased only 6% in this area (Figure 3). While the number of pups produced on Chowiet decreased by 72 between 2005 and 2009, pup production in 2009 was similar to production in 2001-2004 (Table 2). Pup counts in the eastern Gulf of Alaska were virtually unchanged between 2003 and 2005, but between 2005 and 2009, increased by over 200 (+28%; Tables 1-3). This increase occurred almost entirely at one rookery, Seal Rocks, which is the easternmost rookery in the range of the western DPS. NMML and the Alaska Department of Fish and Game have proposed to obtain genetic samples from pups born on Seal Rocks and other rookeries at the eastern edge of the western DPS (as well as samples from pups born at northern rookeries in SE Alaska) to investigate potential recent developments in stock structure.

Pup production continues to decline in the western and central Aleutian Islands. Pup counts at four rookeries in these two sub-areas (Attu/Cape Wrangell and Buldir in the western, and Ayugadak and Amchitka/Column Rocks in the central) in 2005-2009 declined to less than 50. Buldir, with only 7 pups produced in 2008, may have ceased to function as a rookery. There is a boundary within the central Aleutian Islands at approximately 178°W (Tanaga Island) that separates declining rookeries to the west in the Near, Delarof and Rat Islands from stable or slightly increasing rookeries to the east in the Andreanof and Fox Islands (Figures 1 and 2). This

latter group includes the rookery on Kasatochi Island, which produced almost 400 pups in 2009 despite the volcanic eruption that occurred in August 2008. The 11 rookeries west of 178°W produced 268 fewer pups in 2009 than in 2005 (-17%) and now account for only 13% of rookery pup production within the AK western DPS, half the percentage that this region contributed in 1998.

Because we were unable to survey any sites in the western Aleutian or Pribilof Islands in 2009, the best available information on pup production in these areas was collected in 2005 and 2008 (Table 1). Consequently, the total pup production of 11,120 reported for 2009 includes counts from 2005 at Attu/Cape Wrangell in the western Aleutian Islands and at Walrus Island in the Pribilof Islands, and counts from 2008 at three other rookeries (Agattu/Cape Sabak, Agattu/Gillon Point, and Buldir) and one major haulout (Alaid) in the western Aleutian Islands. Pup production in the western Aleutians has declined steadily since the late 1990s. Consequently, data from 2005 and 2008 collected in this area likely over-estimate pup production in 2009.

Pup production in SE Alaska (eastern DPS)

Steller sea lion pup production in SE Alaska (eastern DPS) totaled 7,461 pups in 2009, with 7,443 counted at the 5 major rookeries where 5,510 were counted in 2005 (Tables 1 and 2; Figures 2 and 3). The increase of 1,933 in rookery pup production since 2005 equates to approximately 97 more pups per year at each of the SE Alaska rookeries. Pup counts at each SE Alaska rookery in 2009 are the largest within the records available at NMML which start in the early 1960s. Since 1996, rookery pup production in SE Alaska has increased at a rate of +5.0% per year ($P<0.001$), and a rate of +3.6% per year ($P<0.001$) since the late 1970s, which is slightly greater than the estimate of +3.2% per year ($P<0.001$) reported by Pitcher et al (2007) for the period 1979-2005. Between 2001/02 and 2009, rookery pup production increased 50% (from 4969 to 7443) in SE Alaska, which is equivalent to an increase of approximately 62 pups per rookery per year.

Adult and Juvenile Counts in SE Alaska, and eastern and central Gulf of AK
Seasonal Movement and Initial Estimates of its Effect on 2008 Survey Results

In the 'late' 2009 compared with the 'early' 2008 survey (Tables 4-6; Figures 5-6), we counted:

- 3,048 more non-pups on trend sites and 2,636 more non-pups on all sites in SE Alaska;
- 501 fewer non-pups on trend sites and 812 fewer non-pups on all sites in the eastern Gulf of Alaska; and
- 404 more non-pups on the 28 of 33 trend sites surveyed in the central Gulf of Alaska.

These results are consistent with the hypothesis proposed in 2008 (Fritz et al. 2008) that seasonal movement into the eastern Gulf of Alaska may have affected non-pup trend analyses in this area as well as for the western DPS as a whole. One way to estimate this effect is to compare the actual counts to the predicted 2008 sub-area totals from the regression analyses. In SE Alaska (Figure 6A), the actual non-pup count in 2008 was 2,415 lower and well below the lower 95% confidence bound on the predicted count from the regression. This supports the hypothesis that many adults and juveniles had not yet returned for the breeding season by early June 2008 when the SE Alaska survey was conducted. The vast majority of the 'missing' animals in 2008 were counted on SE Alaska trend sites in 2009, which are dominated numerically by rookeries (Table 6).

In the eastern Gulf of Alaska, the actual non-pup count in 2008 was 752 greater and above the upper 95% confidence bound on the predicted count from the regression (Figure 6B). This also supports our hypothesis that we counted 'extra' sea lions in this area during the 'early' 2008 survey prior to their return to their breeding area. Some or all of these 'extra' animals counted in the eastern Gulf in 2008 could have been animals that returned to SE Alaska for the breeding season. In the central Gulf of Alaska, the actual non-pup count in 2008 was 182 lower, but within the 95% confidence bounds on the predicted count from the regression. This result suggests that the trend in non-pup counts between 2000 and 2009 (omitting 2008) in the central Gulf is too uncertain to support the hypothesis that a significant number of the 'extra' sea lions counted in the eastern Gulf in 2008 came from this sub-area.

An initial estimate of how seasonal movement from SE Alaska into the eastern Gulf may have affected the results of the 2008 non-pup survey was made by subtracting the estimated number of 'extra' animals counted on eastern Gulf of Alaska trend sites (752), and adding the estimated number of 'missed' central Gulf animals (182) to the actual 2008 sub-area totals (Table 7). This resulted in a net subtraction of 570 non-pups from the 2008 western DPS trend site total of 27,519, yielding an adjusted estimate that accounts for movement of 26,589 (Table 7; Figure 7). Use of this adjusted 2008 western DPS total reduced the percent change between 2000 and 2008 from 14% to 12%, and between 2004 and 2008 from 3% to 1%. The subtraction of 570 is a minimum adjustment since it could be argued that there is no need to add the 'missed' 182 central Gulf animals since the actual and predicted 2008 counts in this subarea were not significantly different from one another. If 182 is not added to the original central Gulf total, then the alternative adjusted 2008 western DPS total is 26,407; percent change between 2000 and 2008 is reduced to 11% while that between 2004 and 2008 is reduced to 0%. NMML will continue to study the issue of trans-boundary seasonal movement and its effect on trend analyses in both the eastern and western DPS. These initial data, however, support the hypothesis that SE Alaska was the source of most of the animals that moved into the eastern Gulf and were counted there in late spring 2008.

Implications of Ratios and Trends in Pups and Non-Pups on Rookeries for Natality

The ratio of pups to non-pups provides an estimate of relative natality. Holmes et al (2007) estimated that Steller sea lion natality rates in the central Gulf of Alaska declined 36% between the late 1970s and 2004 based on demographic modeling. They also showed that pup to non-pup ratios declined in the western Gulf of Alaska and the eastern Aleutian Islands during this same period as evidence to suggest that declines in natality rates may not be limited solely to the central Gulf sea lion population. Pup to non-pup ratios based on data collected in 2009 suggest that natality rates of western DPS sea lions are lower than those in SE Alaska (Figure 8). At the two largest and oldest rookeries in SE Alaska (Forrester Complex and Hazy Island), the pup:non-pup ratio was 0.85 in 2009; Pitcher et al. (2007) reported a ratio of 0.75 in 2002. Rookery pup:non-pup ratios within the western DPS in AK ranged from 0.44 to 0.63 by sub-area in 2009, and averaged 0.57, or 33% lower than in SE Alaska. While rookery pup:non-pup ratios are not estimates of actual female natality (since they include juveniles and males in the denominator), they do provide insight into the relative birth rates of females within each region since females dominate rookery populations. For example, pup:non-pup ratios can be reduced because there are few pups per female, and because dependent juveniles from births in previous years are present with their mothers on the rookery. Both of these factors, however, would suggest

reduced birth rates compared with rookeries with higher ratios. The extent to which sub-adult males and other weaned juveniles haul out on rookeries will also affect pup:non-pup ratios and can vary between rookeries independent of differences in natality. The two SE Alaska rookeries are likely near historical highs in pup production and density of animals on shore, which may inhibit juveniles and sub-adult males from hauling out on these rookeries compared to the smaller, less dense rookeries within the western DPS. This would tend to reduce pup:non-pup ratios independent of changes in female natality rates.

While the eastern Aleutians and western Gulf have shown significant positive increases in rates of pup production since 1998, pup increases lag behind increases in numbers of non-pups counted on rookeries. In the eastern Aleutians, the mean rate of increase in pup production (+4.2% per year) is 1.5% lower than that of non-pups on rookeries (+5.7% per year; significance of regression is $P<0.001$), while in the western Gulf of Alaska, the difference is over 2% (pup: +2.6% per year; rookery non-pup: +4.7% per year ($P=0.002$)). By contrast, since 1996, pup production in SE Alaska has increased at a rate of 5.0% per year ($P<0.001$), or 1.3% faster than the increase in numbers of non-pups on rookeries (+3.7% per year; $P=0.003$). This is another indication that overall natality rates within the western DPS of Steller sea lion, even in those areas with increasing numbers of pups, may be lower than those in the eastern DPS in SE Alaska.

Acknowledgments

AFSC thanks Bradley Fritzler, Douglas MacIntyre, Alexander "Kevin" Rooteveel, and the entire NOAA Aircraft Operations Center for all their efforts to survey the entire range of Steller sea lions in Alaska. This was a tremendous accomplishment and we look forward to a continuing productive relationship with NOAA AOC. AFSC also greatly appreciates the continued involvement of Morgan Lynn, Jim Gilpatrick and Wayne Perryman, SWFSC, toward making this survey possible, both through the loan of equipment but more importantly for the commitment of their time. AFSC thanks Don LeRoi (Aerial Imaging Solutions, Old Lyme, CN) for continuing to make improvements to our digital camera system, and Jan Bennett (Office of Aircraft Services) for being our 'eye in the sky' during the survey. AFSC staff who conducted the survey and/or analyzed and counted sea lions off photographs include Lowell Fritz, Kathryn Sweeney, Sara Finneseth, and Carolyn Gudmundson.

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Table 1. Counts of Steller sea lion pups in 2005, 2008 and 2009 during high resolution aerial surveys. Rookeries are listed in **bold**. * 2005 counts listed for Akun/Billings Head and Yunaska were from 2004.

SITE NAME	REGION	2005	2008	2009
BIALI ROCK	SE AK	100		144
CAPE BINGHAM	SE AK			0
CAPE OMMANEY	SE AK			1
EASTERLY	SE AK			1
FORRESTER/C HORN RK	SE AK	303		441
FORRESTER/FORRESTER ISLAND	SE AK	134		0
FORRESTER/LOWRIE	SE AK	1,508		1,734
FORRESTER/NORTH RK	SE AK	951		1,223
FORRESTER/SEA LION RK	SE AK	533		638
GRAVES ROCK	SE AK	175		440
HAZY	SE AK	1,286		1,976
JACOB ROCK	SE AK			2
SUNSET	SE AK			1
THE BROTHERS/SW	SE AK			2
WEST ROCK	SE AK			2
WHITE SISTERS	SE AK	520		847
YASHA	SE AK			10
CAPE RESURRECTION	E GULF			1
CAPE ST. ELIAS	E GULF			18
CHISWELL ISLANDS	E GULF	44		64
GLACIER	E GULF			4
POINT ELRINGTON	E GULF			1
SEAL ROCKS	E GULF	556		740
THE NEEDLE	E GULF			20
Unnamed rock bn Rugged and Aialik Cape	E GULF			1
WOODED (FISH)	E GULF	159		178
CHIRIKOF	C GULF	123		216
CHOWIET	C GULF	432		360
KODIAK/CAPE UGAT	C GULF			1
LATAX ROCKS	C GULF	1		12
MARMOT	C GULF	433		509
NAGAI ROCKS	C GULF	31		18
OUTER (PYE)	C GULF	104		122
SEA OTTER	C GULF	1		0
SUGARLOAF	C GULF	559		613
SUTWIK	C GULF			12
TWOHEADED	C GULF	16		14
USHAGAT/ROCKS SOUTH	C GULF			1
USHAGAT/SW	C GULF	55		70

Table 1 (continued)

SITE NAME	REGION	2005	2008	2009
ATKINS	W GULF	328		338
CHERNABURA	W GULF	153		244
CLUBBING ROCKS NORTH	W GULF	192		244
CLUBBING ROCKS SOUTH	W GULF	391		534
JUDE	W GULF	206		270
LIGHTHOUSE ROCKS	W GULF	11		16
PINNACLE ROCK	W GULF	643		702
SOUTH ROCKS	W GULF	44		60
SUSHILNOI ROCKS	W GULF	12		34
THE WHALEBACK	W GULF	24		40
ADUGAK	E ALEU	185		276
AIKTAK	E ALEU	8		2
AKUN/BILLINGS HEAD	E ALEU	85*		144
AKUTAN/CAPE MORGAN	E ALEU	657		688
AKUTAN/REEF-LAVA	E ALEU			22
AMAK+ROCKS	E ALEU			1
BOGOSLOF/FIRE ISLAND	E ALEU	225		282
OGCHUL	E ALEU	78		90
SEA LION ROCK (AMAK)	E ALEU	158		185
UNIMAK/OKSENOF POINT	E ALEU			6
UGAMAK/NORTH	E ALEU	426		512
UGAMAK/ROUND	E ALEU	45		71
UGAMAK/UGAMAK BAY	E ALEU	298		326
UNALASKA/CAPE IZIGAN	E ALEU	21		29
ADAK/LAKE POINT	C ALEU	311		338
AMCHITKA/COLUMN ROCK	C ALEU	44		40
AMCHITKA/EAST CAPE	C ALEU	24		13
AMLIA/SVIECH. HARBOR	C ALEU	28		34
AYUGADAK	C ALEU	83		44
GRAMP ROCK	C ALEU	387		332
KANAGA/SHIP ROCK	C ALEU	221		214
KASATOCHI/NORTH POINT	C ALEU	372		394
KISKA/CAPE ST STEPHEN	C ALEU	82		91
KISKA/LIEF COVE	C ALEU	115		80
OGLODAK	C ALEU			4
SEGUAM/SADDLERIDGE	C ALEU	530		540
SEGUAM/TURF POINT	C ALEU	7		0
SEMISOPOCHNOI/POCHNOI	C ALEU	16		5
TAG	C ALEU	144		130
ULAK/HASGOX POINT	C ALEU	338		272
YUNASKA	C ALEU	145*		170

Table 1 (continued)

SITE NAME	REGION	2005	2008	2009
AGATTU/CAPE SABAK	W ALEU	113	83	
AGATTU/GILLON POINT	W ALEU	157	142	
ALAID	W ALEU	27	20	
ATTU/CAPE WRANGELL	W ALEU	47		
BULDIR/ROOKERY	W ALEU	26	7	
WALRUS	BERING	29		
TOTAL wDPS in AK		9,950	252	10,792
TOTAL wDPS Rookeries		8,888	232	9,530
TOTAL eDPS in AK		5,510		7,462
TOTAL eDPS Rookeries		5,376		7,443
TOTAL in AK		15,460	252	18,254

Table 2. Counts of Steller sea lion pups at trend rookeries (*italicized*), non-trend rookeries (non-italicized) and major haul-outs (*) in southeast Alaska (eastern distinct population segment - DPS) and in 7 sub-areas of the western DPS in Alaska. Counts collected from both onshore surveys and high resolution aerial photographs from June-July in 1978-1979, 1984-1989, 1990-1992, 1994, 1997, 1998, 2001-2002, 2003-2004, 2005, and 2009.

Sub-Area and Rookery/Haulout	1978-1979	1984-1989	1990-1992	1994	1997	1998	2001-2002	2003-2004	2005	2009
Southeast AK- Eastern DPS										
Forrester Island Complex	2,187		3,261	2,757	2,798	2,753	3,152		3,429	4,036
Hazy Island	32		808	862	1,157	1,199	1,257		1,286	1,976
White Sisters			95	151	205	282	403		520	847
Graves Rock						1	98		175	440
Biali Rocks							59		100	144
Eastern Gulf of Alaska										
Seal Rocks	545	553	657	598	491	542	500	543	556	740
Wooded (Fish)	29			305	120	147	86	173	159	178
Chiswell Islands							54		44	64
Central Gulf of Alaska										
Outer (Pye)	888	557	363	119	104	113	104	59	104	122
Sugarloaf	5,021	2,109	1,683	958	673	703	490	488	559	613
Ushagat							42	43	55	71
Marmot	6,741	4,381	1,611	804	762	642	515	505	433	509
Two-headed*							20	28	16	14
Chowiet	4,670	1,731	636	625		234	387	368	432	360
Chirikof	1,573	1,476	656	325		184	225	189	123	216
Nagai Rocks*							31	23	31	18
Western Gulf of Alaska										
Lighthouse Rocks	250						7		11	16
Atkins [1]	4,538	2,093	485	324	366	352	274	266	328	338
Chernabura	646	379	211	139		54	138	82	153	244
The Whaleback*							16	22	24	40
Jude							182	187	206	270
Pinnacle Rock	2,748	2,013	794	652		639	769	663	643	702
Clubbing Rocks	1,419	1,394	433	547		448	490	566	583	778
South Rocks*	44						36		44	60

Table 2 (continued)

Sub-Area and Rookery/Haulout	1978-1979	1984-1989	1990-1992	1994	1997	1998	2001-2002	2003-2004	2005	2009
Eastern Aleutian Islands										
Sea Lion Rock (Amak)						134	161	185	158	185
Amak*							3			1
Aiktak*							21	7	8	2
Ugamak (and Round)		1,635	847	574	589	558	570	686	769	909
Akun (Billings Head)		60	63	69		56	55	85		144
Akutan (Cape Morgan)		1,130	442	631		505	508	497	657	688
Bogoslof	914	1,109	501	302	281	220	256	278	225	282
Ogchul		172		94		42	57	69	78	90
Adugak		844	262	180		135	172	185	185	276
Central Aleutian Islands										
Yunaska	752	1,026	230	217	192	161	145	145		170
Seguam (Saddleridge)	2,475	2,635	684	444	463	479	468	517	530	540
Seguam (Turf Point)*							24	15	7	0
Agligadak**						0		2	0	0
Amlia (Sviechnikof Harbor)*						13	22	28	28	34
Kasatochi	213	892	178	215	268	247	302	354	372	394
Adak (Lake Point-Cape Yakak)		558	137	327		340	395		311	338
Kanaga (Ship Rock)							113		221	214
Gramp Rock		909	448	425		456	444	439	387	332
Tag		703	357	234		238	155	150	144	130
Ulak (Hasgox Point)	204	1,236	790	638		521	332	257	338	272
Semisopochnoi**	25			21		6	24	19	16	5
Amchitka (East Cape)**				6		9	16	23	24	13
Amchitka (Column Rocks)	135		148	114		70	52	45	44	40
Ayugadak	22	329	163	142		89	90	66	83	44
Kiska (Lief Cove)	476	882	221	233		179	158	101	115	80
Kiska (Cape St. Stephen)	137	258	212	120		54	71	75	82	91
Western Aleutian Islands [2]										
Buldir	1,142	494	381	120	120	122	42		26	7
Alaid*									27	20
Agattu (Cape Sabak)		907	1,127		379	314	212	159	113	83
Agattu (Gillon Point)					258	213	159	174	157	142
Attu (Cape Wrangell)[3]	642				222	154	75	47	47	

Table 2 (continued)

Sub-Area and Rookery/Haulout	1978-1979	1984-1989	1990-1992	1994	1997	1998	2001-2002	2003-2004	2005	2009
Eastern Bering Sea										
Walrus[4]		334	63	61	35		39		29	
TOTAL Western DPS	**36,249**	**32,799**	**14,783**	**10,563**	**5,323**	**9,373**	**9,507**	**8,813**	**9,685**	**10,879**
TOTAL Eastern DPS in AK	**2,219**		**4,164**	**3,770**	**4,160**	**4,235**	**4,969**		**5,510**	**7,443**
TOTAL Pup Count in AK	**38,468**		**18,947**	**14,333**	**9,483**	**13,608**	**14,476**		**15,195**	**18,322**

** Sites formerly identified as rookeries but without a minimum of 50 pups born since 1975

[1]1997 Atkins count from 1996

[2]2009 Western Aleutian Island counts are from 2008

[3]1979 Attu count for whole island

[4]1984-1989 Walrus count from 1982

Table 3. Summary of Steller sea lion pup counts at trend rookeries in the ranges of the western and eastern distinct population segments (DPSs) in Alaska. Kenai to Kiska includes the central and western Gulf of Alaska, and the eastern and central Aleutian Islands sub-areas. Counts collected from both onshore surveys and high resolution aerial photographs from June-July 1978-1979, 1984-1989, 1990-1992, 1994, 1997, 1998, 2001-2002, 2003-2004, 2005, and 2009.

	Western DPS								Eastern DPS
	Gulf of Alaska			Aleutian Islands			Kenai to		
	Eastern	Central	Western	Eastern	Central	Western	Kiska	Total	SE AK
# of Rookeries	2	5	4	5	11*	4	25	31	5
Year									
1978-1979	574	18,893	9,351						2,219
1984-1989		10,254	5,879	4,778	9,382		30,293		
1990-1992		4,904	1,923	2,115	3,568		12,510		4,164
1994	903	2,831	1,662	1,756	3,109		9,358		3,770
1997	611					979			
1998	689	1,876	1,493	1,474	2,834	803	7,677	9,169	4,235
2001-2002	586	1,721	1,671	1,561	2,612	488	7,565	8,639	4,877
2003-2004	716	1,609	1,577	1,731					
2005	715	1,651	1,707	1,921	2,551	343	7,830	8,888	5,510
2009	918	1,820	2,062	2,299	2,431	279	8,612	9,809	7,444

* 1984-89 CAI count does not include Amchitka/Column Rocks (n=10)

Table 4. Counts[1] of adult and juvenile (non-pup) Steller sea lions at trend rookeries and haul-outs in the range of the western DPS in Alaska from high resolution vertical aerial photographs taken in June-July 2004-2009. Trend sites have been surveyed regularly since 1991. Rookeries (**bold**) labeled with an asterisk are 'new' rookeries, which were not included as rookeries in the designation of critical habitat (CH) in 1993 but have produced at least 50 pups since 1975. Rookeries labeled with the superscript, ^{N*}, are listed CH rookeries, but have no record of at least 50 pups since 1975.

SITENAME	REGION	2004	2006	2007	2008	2009
CAPE ST. ELIAS	E GULF	318	414	728	1,400	714
CAPE HINCHINBROOK	E GULF	496	237	95	229	102
SEAL ROCKS	E GULF	841	1,119	803	1,024	1,006
WOODED (FISH)	E GULF	523	619	282	603	662
GLACIER	E GULF	620	466	531	509	724
THE NEEDLE	E GULF	123	127	145	88	112
POINT ELRINGTON	E GULF	132	58	37	169	162
CAPE PUGET	E GULF	0	0	0	0	10
CAPE FAIRFIELD	E GULF	0	0	10	47	32
RUGGED	E GULF	0	0	0	8	2
AIALIK CAPE	E GULF	1	103	161	77	88
CHISWELL ISLANDS*	E GULF	72	71	74	68	94
SEAL ROCKS (KENAI)	E GULF	3	4	2	0	13
OUTER (PYE)	C GULF	222	251	268	249	231
GORE POINT	C GULF	0	0	0	0	0
EAST CHUGACH	C GULF	0		0	0	0
PERL	C GULF	49		241	144	150
NAGAHUT ROCKS	C GULF	1		2	21	0
ELIZABETH/CAPE ELIZABETH	C GULF	28		0	0	0
SUGARLOAF	C GULF	667	733	662	849	844
USHAGAT/NW	C GULF	3	0	0	0	0
USHAGAT/SW*	C GULF	101	141	74	96	88
USHAGAT/ROCKS SOUTH	C GULF	8	9	0	45	28
LATAX ROCKS	C GULF	56		115	108	334
SEA OTTER	C GULF	127		100	1	7
RK NEAR SEA OTTER	C GULF	10		0	47	20
AFOGNAK/TONKI CAPE	C GULF	0		0	16	2
SEA LION ROCKS (MARMOT)	C GULF	2		1	13	2
MARMOT	C GULF	703	686	551	644	748
LONG ISLAND	C GULF	32			59	39
KODIAK/CAPE CHINIAK	C GULF	87		241	130	116
UGAK	C GULF	0		0	0	0
KODIAK/GULL POINT	C GULF	109		148	109	89
KODIAK/CAPE BARNABAS	C GULF	0		140	84	130
TWOHEADED	C GULF	266		228	204	251
SITKINAK/CAPE SITKINAK	C GULF	80		104	115	62
KODIAK/CAPE UGAT	C GULF	2	167	248	285	270
KODIAK/STEEP CAPE	C GULF	0	14	61	38	
SHAKUN ROCKS	C GULF	104	67	113	81	
TAKLI	C GULF	85	157	92	67	

Table 4 (continued)

SITENAME	REGION	2004	2006	2007	2008	2009
PUALE BAY	C GULF	58	2	1	2	
UGAIUSHAK	C GULF	0	0	2	0	
SUTWIK	C GULF	206	114	127	93	106
CHOWIET	C GULF	541		424	559	644
CHIRIKOF	C GULF	303		300	300	430
NAGAI ROCKS	C GULF	330		449	234	218
CHERNABURA	W GULF	828		1,228	1,281	1,162
LIGHTHOUSE ROCKS*	W GULF	111	153	152	164	123
KAK	W GULF	17	24		1	
MITROFANIA	W GULF	182	103	116	129	
SPITZ	W GULF	1	0	11	1	
KUPREANOF POINT	W GULF	53	116	53	72	
CASTLE ROCK	W GULF	70	15	38	28	
ATKINS	W GULF	651	663	585	558	630
THE HAYSTACKS	W GULF	38	1	41	3	
THE WHALEBACK	W GULF	102	99	83	102	103
NAGAI/MOUNTAIN POINT	W GULF	80	56	148	60	
SEA LION ROCKS (SHUMAGINS)	W GULF	36	142	44	54	
UNGA/ACHEREDIN POINT	W GULF	264	152	229	202	
JUDE*	W GULF	474	338	445	465	512
PINNACLE ROCK	W GULF	1,011	1,167	1,057	1,094	1,132
CLUBBING ROCKS	W GULF	911	1,037	1,063	952	1,023
CHERNI	W GULF	0	0	0	0	
SOUTH ROCKS	W GULF	528	320	457	451	434
BIRD	W GULF	57	62	97	155	
ROCK	W GULF	17	0	0	0	
UNIMAK/CAPE SARICHEF	E ALEU	250	6	0	167	1
AMAK+ROCKS	E ALEU	733	410	220	265	324
SEA LION ROCK (AMAK)	E ALEU	456	447	385	360	314
UGAMAK COMPLEX	E ALEU	1,304	1,319	1,493	1,619	1,875
AIKTAK	E ALEU	101	111	43	42	61
TIGALDA/ROCKS NE	E ALEU	141	202	236	359	228
TIGALDA/SOUTH SIDE	E ALEU	46	83	105	91	
ROOTOK	E ALEU	96	96	141	60	
TANGINAK	E ALEU	4	6	4	1	
AKUN/BILLINGS HEAD	E ALEU	307	338	523	386	350
AKUTAN/REEF-LAVA	E ALEU	119	103	57	128	166
AKUTAN/CAPE MORGAN	E ALEU	1,021	1,249	1,172	1,135	904
OLD MAN ROCKS	E ALEU	71	112	81	89	
EGG	E ALEU	5	0	0	0	
OUTER SIGNAL	E ALEU	0	0	0	10	
UNALASKA/CAPE SEDANKA	E ALEU	0	0	0	0	
UNALASKA/BISHOP POINT	E ALEU	265	285	196	204	195
UNALASKA/MAKUSHIN BAY	E ALEU	20	88	154	115	
UNALASKA/SPRAY CAPE	E ALEU	0	0	0	0	
UNALASKA/CAPE IZIGAN	E ALEU	238	329	304	188	456

Table 4 (continued)

SITENAME	REGION	2004	2006	2007	2008	2009
BOGOSLOF/FIRE ISLAND	E ALEU	380	358	405	390	398
UMNAK/CAPE ASLIK	E ALEU	119	73		63	
POLIVNOI ROCK	E ALEU	91	42	96	93	
THE PILLARS	E ALEU	4	0	0	0	
OGCHUL	E ALEU	139	132	152	200	224
VSEVIDOF	E ALEU	48	41	35	50	
ADUGAK	E ALEU	259	429	473	636	620
ULIAGA	C ALEU	0	99		66	
KAGAMIL	C ALEU	1	0		0	
CHUGINADAK	C ALEU	129	79		53	
CARLISLE	C ALEU	0	0		27	
HERBERT	C ALEU	38	66		105	
YUNASKA	C ALEU	260	255	279	282	298
CHAGULAK	C ALEU	0	13		59	
AMUKTA+ROCKS	C ALEU	2	18	56	35	
SEGUAM/FINCH POINT	C ALEU	2		0	0	
SEGUAM/SW RIP	C ALEU	40		31	39	
SEGUAM/SADDLERIDGE	C ALEU	923		668	835	856
SEGUAM/TURF POINT	C ALEU	58		8	3	13
SEGUAM/LAVA COVE	C ALEU	0		0	0	
SEGUAM/LAVA POINT	C ALEU	5		0	0	
SEGUAM/WHARF POINT	C ALEU	90		121	49	
AGLIGADAK[N*]	C ALEU	61		15	14	11
AMLIA/EAST CAPE	C ALEU	34		55	117	
AMLIA/SVIECH. HARBOR	C ALEU	144		113	100	192
TANADAK (AMLIA)	C ALEU	1		0	30	
SAGIGIK	C ALEU	30		10	14	
ATKA/NORTH CAPE	C ALEU	383	279	140	32	
ATKA/CAPE KOROVIN	C ALEU	4	0	30	39	
SALT	C ALEU	0		0	4	
KASATOCHI/NORTH POINT	C ALEU	667	610	613	550	609
OGLODAK	C ALEU	86	111	58	99	86
IKIGINAK	C ALEU	0	8	16	0	
FENIMORE	C ALEU	30	10	9	4	
ANAGAKSIK	C ALEU	2	52	14	20	
GREAT SITKIN	C ALEU	0	0	0	0	
LITTLE TANAGA STRAIT	C ALEU	49		15	36	
KAGALASKA	C ALEU	48	0	3	42	
ADAK	C ALEU	1,008		779	621	595
KANAGA/N CAPE	C ALEU	7	13	2	14	
KANAGA/CAPE MIGA	C ALEU	0	0	0	0	
KANAGA/SHIP ROCK*	C ALEU	229		331	322	420
TANAGA/BUMPY POINT	C ALEU	33		33	22	
TANAGA/CAPE SASMIK	C ALEU	122		63	95	
GRAMP ROCK	C ALEU	679			593	442
UGIDAK	C ALEU	25			16	
TAG	C ALEU	242			255	234

Table 4 (continued)

SITENAME	REGION	2004	2006	2007	2008	2009
KAVALGA	C ALEU	56			63	
UNALGA+DINKUM ROCKS	C ALEU	19			0	
ULAK/HASGOX POINT	C ALEU	531			537	514
AMATIGNAK/KNOB POINT	C ALEU	1		0	3	
AMATIGNAK/NITROF POINT	C ALEU	76	38		49	
SEMISOPOCHNOI/POCHNOI[N*]	C ALEU	55	41		32	36
AMCHITKA/CAPE IVAKIN	C ALEU	0	0	0	0	
AMCHITKA/EAST CAPE[N*]	C ALEU	178	103		103	71
AMCHITKA/ST. MAKARIUS	C ALEU	0	0	0	0	
AMCHITKA/COLUMN ROCK	C ALEU	85			71	69
AYUGADAK	C ALEU	152			152	112
RAT	C ALEU	45			0	
SEA LION ROCK (KISKA)	C ALEU	0			0	
TANADAK (KISKA)	C ALEU	34			1	
KISKA/SOBAKA-VEGA	C ALEU	101			52	
KISKA/CAPE ST STEPHEN	C ALEU	210			229	204
KISKA/LIEF COVE	C ALEU	170			162	152
KISKA/PILLAR ROCK	C ALEU	0			0	
BULDIR	W ALEU	108			43	
SHEMYA	W ALEU	17	18		4	
ALAID	W ALEU	125	86		86	
AGATTU/CAPE SABAK	W ALEU	325	282		202	
AGATTU/GILLON POINT	W ALEU	374	308		281	
ATTU/MASSACRE BAY	W ALEU	0	0		0	
ATTU/CHIRIKOF POINT	W ALEU	75	30		42	
ATTU/CHICHAGOF POINT	W ALEU	54	13		25	
ATTU/KRESTA POINT	W ALEU	0	0		0	
ATTU/CAPE WRANGELL	W ALEU	257	260		247	

[1] Counts are unadjusted for resolution differences with 35 mm oblique photographs taken prior to 2004 (Fritz and Stinchcomb 2005).

Table 5. Counts of adult and juvenile (non-pup) Steller sea lions at non-trend haul-outs in the eastern Gulf of Alaska from high resolution vertical aerial photographs taken in June-July 2004, 2006, 2007, 2008, and 2009. Counts are unadjusted for resolution differences with 35 mm oblique photographs taken prior to 2004 (Fritz and Stinchcomb 2005).

SITENAME	REGION	2004	2006	2007	2008	2009
HOOK POINT	E GULF	96	101	132	261	0
STEEP POINT	E GULF	1	63	90	92	88
MIDDLETON	E GULF	4	0	0	0	0
POINT ELEANOR	E GULF		0	0	0	0
PERRY	E GULF		218	437	227	0
PLEIADES	E GULF		0	0	0	0
POINT LaTOUCHE	E GULF	0	0	0	0	0
DANGER	E GULF	12	10	119	2	1
PROCESSION ROCKS	E GULF	36	67	77	102	113
CAPE JUNKEN	E GULF	0	0	0	0	1
CAPE RESURRECTION	E GULF	3	0	12	0	169
GRANITE CAPE	E GULF	1	89	25	4	5
RABBIT	E GULF	0	0	0	0	0
Total E GULF Non-Trend Sites		**153**	**548**	**892**	**688**	**377**

Table 6. Counts of adult and juvenile (non-pup) Steller sea lions at trend (1) and non-trend (0) haul-outs and rookeries (**bold**) in southeast Alaska (eastern DPS) from high resolution vertical aerial photographs taken in July 2002, early June 2008 and late June 2009.

SITENAME	REGION	TREND	2002	2008	2009
LITTLE ISLAND	SE AK	0		0	0
POINT MARSH	SE AK	0	104	4	0
WEST ROCK	SE AK	0	640	841	869
WOLF ROCK	SE AK	0	207	300	170
SAKIE POINT	SE AK	0		0	0
CAPE BARTOLOME	SE AK	0	41	0	0
CAPE ADDINGTON	SE AK	0	1,074	718	9
GRINDALL	SE AK	0	130	374	6
TIMBERED	SE AK	0	442	288	4
HAZY	SE AK	1	2,050	1,686	2,457
EASTERLY	SE AK	0		255	188
CORONATION	SE AK	1	46	279	5
South of Cape Ommaney	SE AK	0		102	113
CAPE OMMANEY	SE AK	0	344	117	160
LARCH BAY	SE AK	0		28	0
SEA LION ROCK (PUFFIN BAY)	SE AK	0	264	0	124
ETOLIN	SE AK	0		0	0
PATTERSON POINT	SE AK	0		0	
BIALI ROCK	SE AK	1	626	408	616
FORRESTER COMPLEX	SE AK	1	3,699	2,894	4,741
JACOB ROCK	SE AK	1	203	101	300
KAIUCHALI (BIORKA)	SE AK	0	46	31	5
HORN CLIFF	SE AK	0		0	0
YASHA	SE AK	0	920	379	612
ST. LAZARIA	SE AK	0		0	0
PINTA ROCKS	SE AK	0		0	0
TURNABOUT	SE AK	0		0	0
ROUND ROCK	SE AK	0		0	0
THE BROTHERS	SE AK	1	981	765	537
SEA LION ISLANDS	SE AK	0		137	298
POINT LULL	SE AK	0		153	162
SAIL	SE AK	0	0	3	496
FALSE POINT PYBUS	SE AK	0	0	0	0
SUNSET	SE AK	0	348	384	322
POINT LEAGUE (STEVENS PASSAGE)	SE AK	0	0	1	0
WHITE SISTERS	SE AK	1	1,156	1,132	1,435
TENAKEE CANNERY POINT	SE AK	0		0	0
CAPE CROSS	SE AK	1	1	1	0
MIST	SE AK	0		0	0
POINT MARSDEN	SE AK	0		0	0
CAPE BINGHAM	SE AK	0	0	0	0
CIRCLE POINT	SE AK	0		0	0

Table 6 (continued)

SITENAME	REGION	TREND	2002	2008	2009
THE SISTERS	SE AK	0		0	0
DOROTHY	SE AK	0		0	0
GRAVES ROCK	SE AK	1	1,001	1,305	1,442
INIAN	SE AK	0	206	116	2
VENISA	SE AK	0	0	0	0
POINT CAROLUS	SE AK	0	0	0	0
BENJAMIN	SE AK	0	0	0	0
HARBOR POINT	SE AK	1	186	178	264
SOUTH MARBLE	SE AK	0	238	786	1,010
CASE (TLINGIT) POINT	SE AK	0		0	0
CAPE FAIRWEATHER	SE AK	0		0	0
MET POINT	SE AK	0		0	0
ELDRED ROCK	SE AK	0		0	0
GRAN (LEDGE) POINT	SE AK	0	331	583	638
TOTAL Southeast Alaska Trend-Site			**9,949**	**8,749**	**11,797**
TOTAL Southeast Alaska Non-Trend			**5,335**	**5,600**	**5,188**
TOTAL			**15,284**	**14,349**	**16,985**

Table 7. Counts of adult and juvenile (non-pup) Steller sea lions observed at rookery and haul-out trend sites in eight sub-areas of Alaska (western stock) in June-July 1991 to 2008. Overall percent differences between various pairs of years are also shown. * For eastern Gulf of Alaska in 1998, counts made in 1999 were substituted for those sites not surveyed in 1998. Subarea count totals for 2004-2008 (**) have been adjusted to account for film format-count differences. Kenai-Kiska is comprised of the central and western Gulf of Alaska and eastern and central Aleutian Islands sub-areas. Kenai-Attu is comprised of the Kenai-Kiska plus the western Aleutian Islands sub-areas. "2008Adj" – counts in the eastern and central Gulf of Alaska were adjusted to account for seasonal movement of sea lions in the northern Gulf of Alaska. For calculations of percent difference, use of the 2008Adj counts is denoted by the use of 2008A.

	Gulf of Alaska			Aleutian Islands					Western Stock
Year	**Eastern**	**Central**	**Western**	**Eastern**	**Central**	**Western**	**Kenai-Kiska**	**Kenai-Attu**	**In Alaska**
1991	4,812	7,872	5,338	5,283	8,656	4,601	27,149	31,750	36,562
1992	3,981	7,358	5,112	5,707	7,633	4,199	25,811	30,010	33,991
1994	3,612	6,505	5,718	5,664	6,909	3,114	24,796	27,910	31,522
1996	2,450	5,400	5,356	5,967	6,368	3,334	23,091	26,425	28,875
1998*	2,158	4,806	5,367	5,774	7,017	2,786	22,964	25,750	27,908
2000	2,102	4,555	3,996	4,990	6,560	1,633	20,101	21,734	23,836
2002	2,615	4,594	4,617	5,261	6,547	1,196	21,018	22,214	24,829
2004**	3,015	4,028	5,233	5,991	6,885	1,286	22,137	23,423	26,438
2006**	3,101			6,031					
2007**	2,760								
2008**	4,065	4,420	5,558	6,405	5,817	894	22,199	23,094	27,159
2008Adj**	3,313	4,602	5,558	6,405	5,817	894	22,382	23,276	26,589
Percent difference									
2000-2008	+93%	-3%	+39%	+28%	-11%	-45%	+10%	+6%	+14%
2000-2008A	+58%	+1%	+39%	+28%	-11%	-45%	+11%	+7%	+12%
2004-2008	+35%	+10%	+6%	+7%	-16%	-30%	0%	-1%	+3%
2004-2008A	+10%	+14%	+6%	+7%	-16%	-30%	+1%	-1%	+1%

Figure 1. Terrestrial rookery and haul-out sites in the range of eastern and western distinct population segments (DPS or stock) of Steller sea lions in Alaska surveyed in 2009 and used in the analysis of population trends. Boundaries of the eastern, central, and western sub-areas of the Gulf of Alaska (GULF) and Aleutian Islands (ALEU) are shown. The eastern and western stocks breed on rookeries east and west of 144°W, respectively. The cross-hatched area extending from southeast Alaska west through most of the central Gulf of Alaska denotes the area in which all trend sites were surveyed to obtain non-pup (NP) count for comparison with 2008.

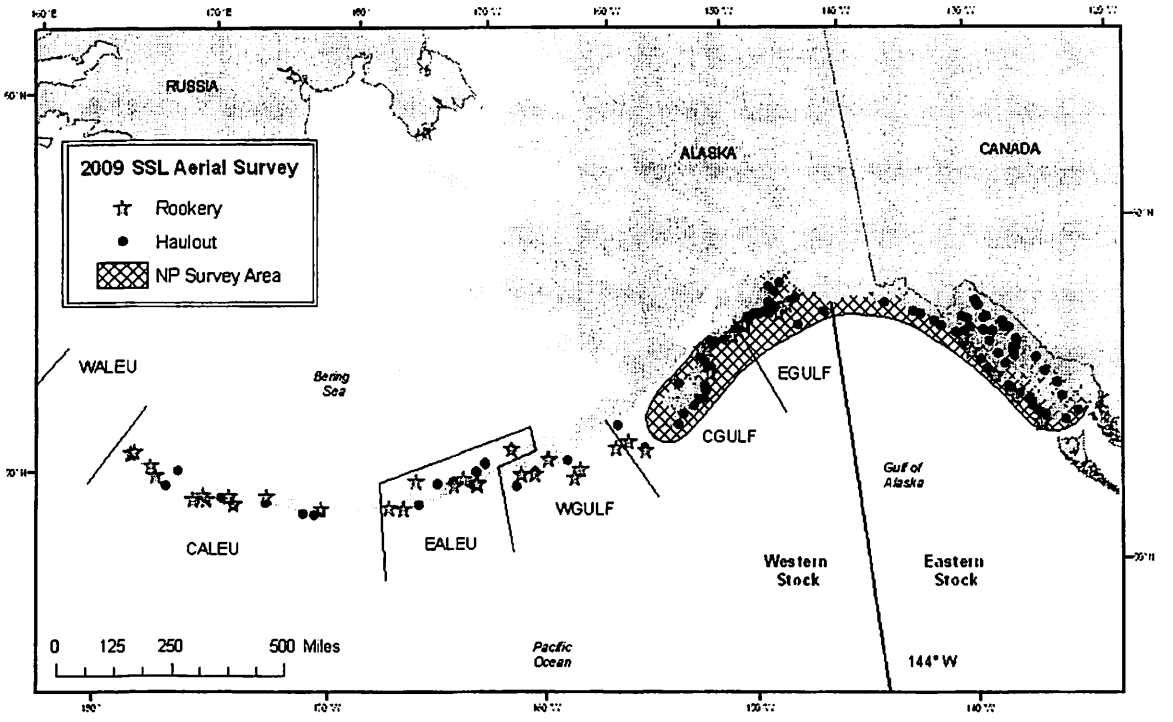


Figure 2. Change in the number of Steller sea lion pups counted at major haul-out and rookery sites between 2005 and 2009 across the range of the western and eastern stocks (distinct population segments) in Alaska. Sites are displayed from west to east in AK, and are grouped into the sub-areas noted in Figure 1. SE AK is part of the eastern stock; all other sub-areas are part of the western stock. 178°W (Tanaga Island) separates rookeries that have predominately declined between 2005 and 2009 from those that have predominately increased.

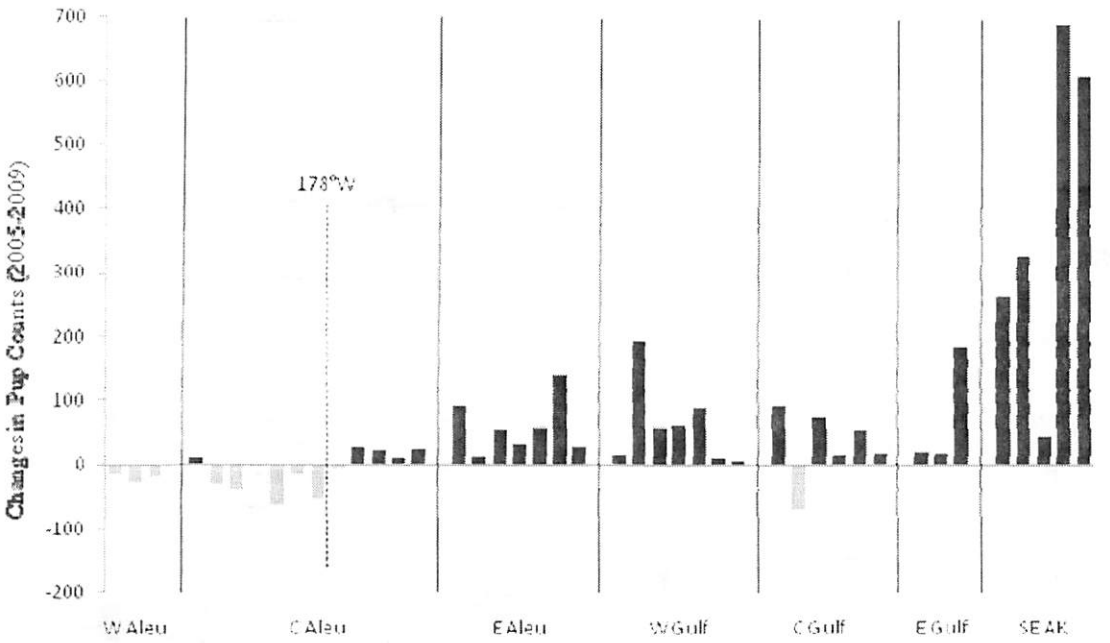


Figure 3. Percent difference in total Steller sea lion pup counts at major rookeries within each sub-area of Alaska between 2001/02 to 2009. DPS = distinct population segment (stck). Sub-areas shown in Figure 1.

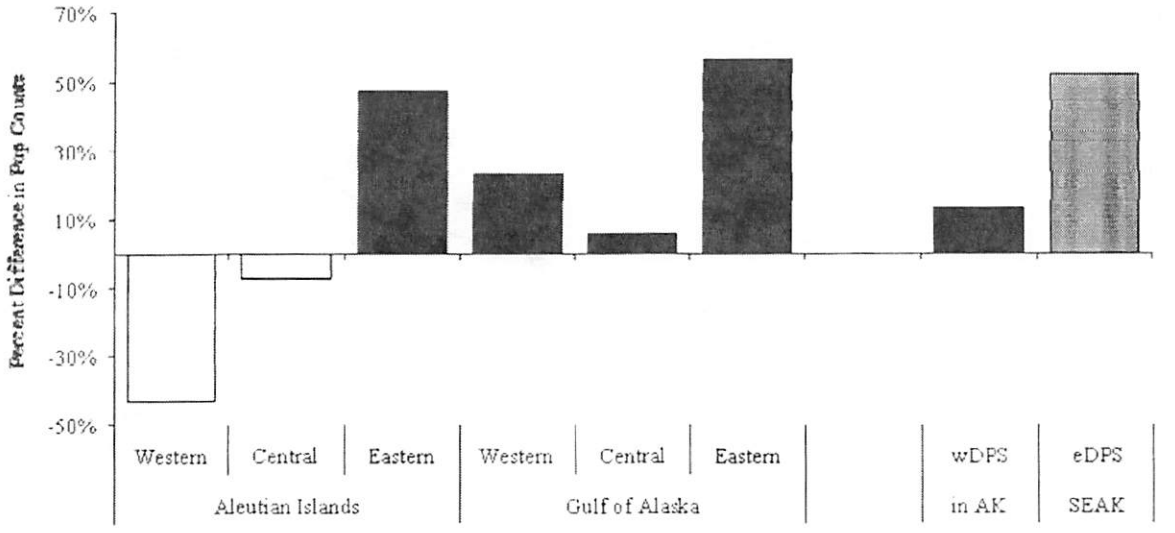


Figure 4. Steller sea lion pup counts at major rookeries within each sub-area of Alaska, 1990-2009 in Alaska (Figure 1). A) Gulf of Alaska and B) Aleutian Islands are part of the western stock, while C) SE Alaska is part of the eastern stock or distinct population segment (DPS).

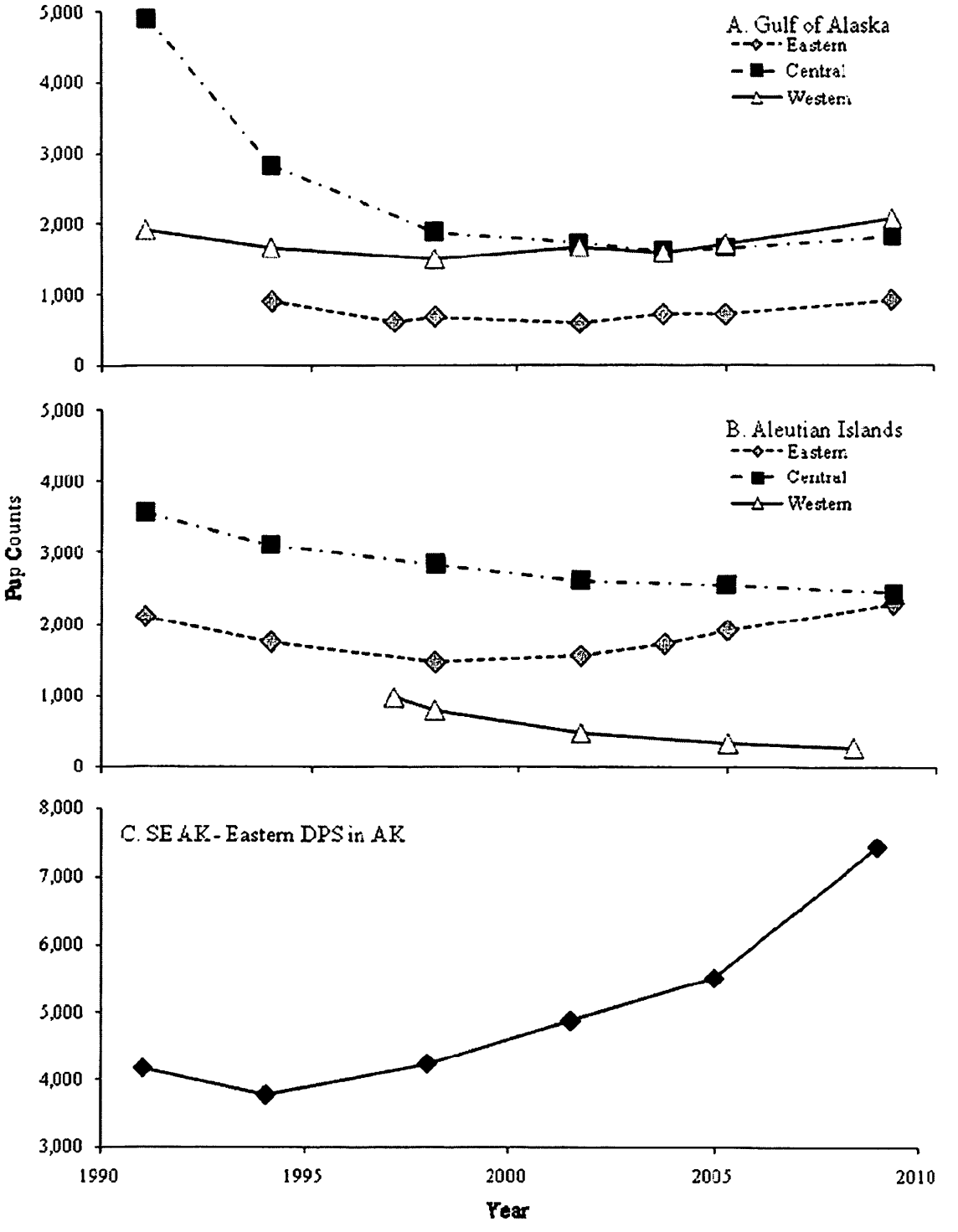


Figure 5. Haul-out and rookery sites surveyed in early June 2008 and late June 2009 to study movement of Steller sea lions in late spring in the northern Gulf of Alaska.

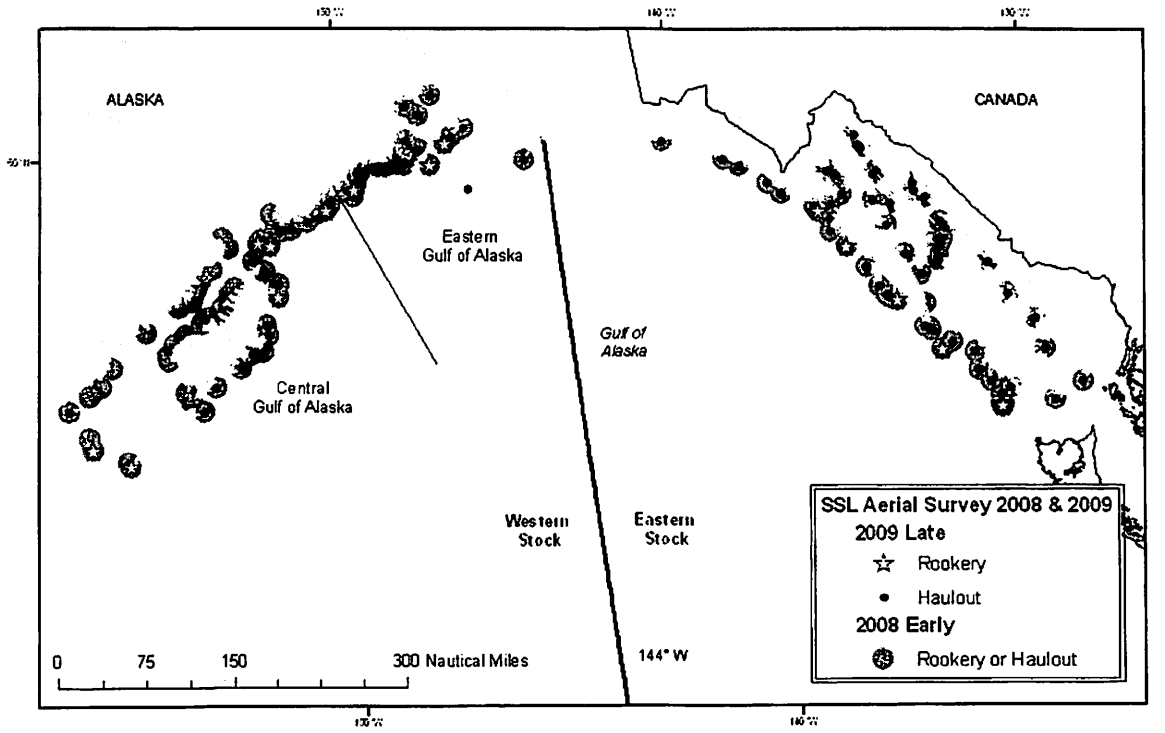


Figure 6. Counts of adult and juvenile (non-pup) Steller sea lions at trend sites from 1990 to 2009 in southeast Alaska (eastern DPS) and the eastern and central Gulf of Alaska (western DPS). The group of trend sites used in the central Gulf of Alaska is modified as explained in the text. The 2008 non-pup count (gray triangle) was counted during a survey early in the breeding season, June 7-13, while the 2009 count is from a survey later in the breeding season, June 24-28. Thick dashed lines show results of regression of log-transformed counts on year (1990-2009 for SE Alaska, 2000-2009 for eastern and central Gulf of Alaska) omitting the 2008 data; thin dashed lines are 95% confidence bounds on regression estimates.

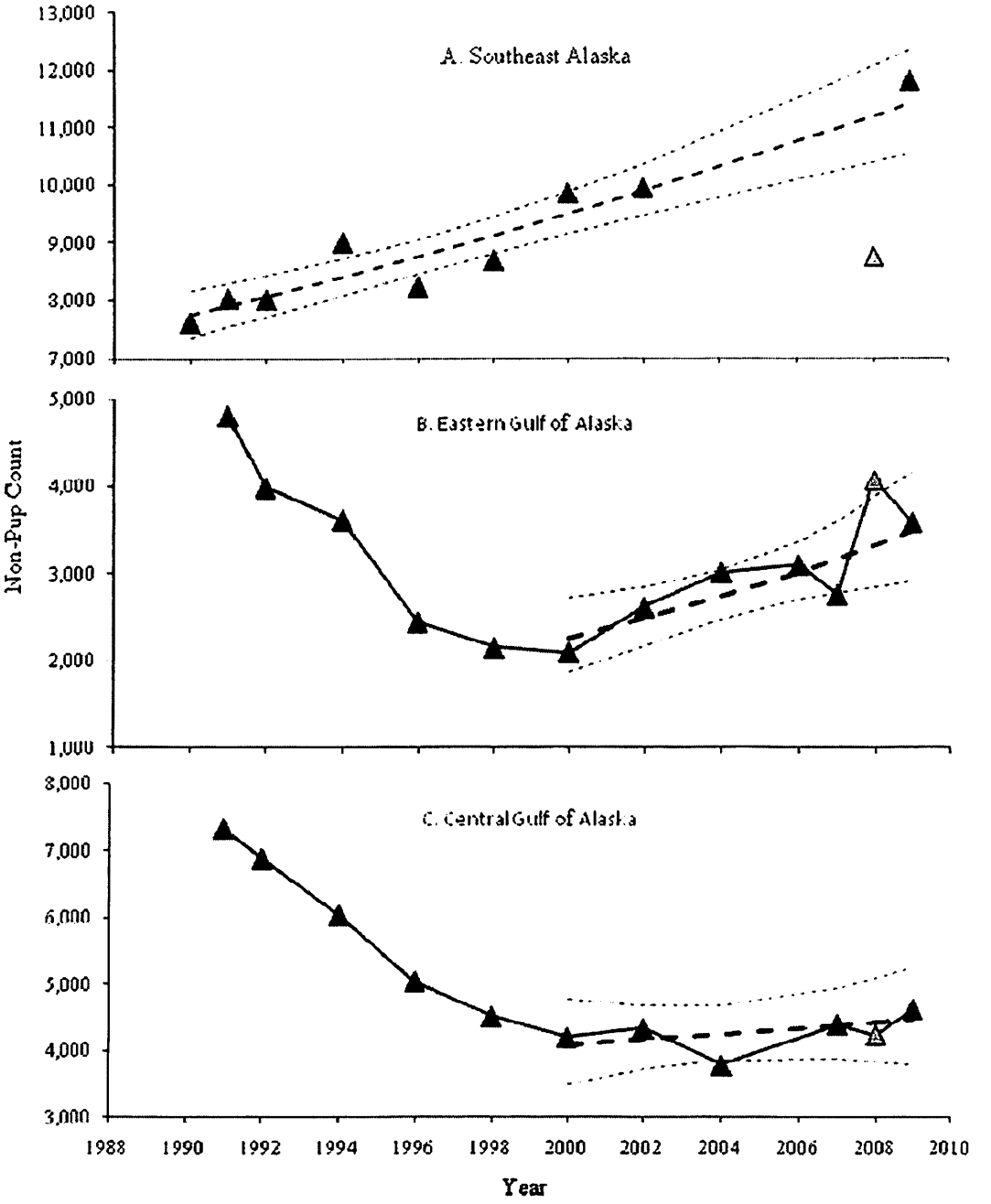


Figure 7. Total count of adult and juvenile Steller sea lions at trend sites within the range of the western stock (distinct population segment, DPS) in Alaska from 1991-2008. Non-pup count adjusted for movement of Steller sea lions primarily between southeast Alaska and the western DPS is shown in gray and with the dashed line.

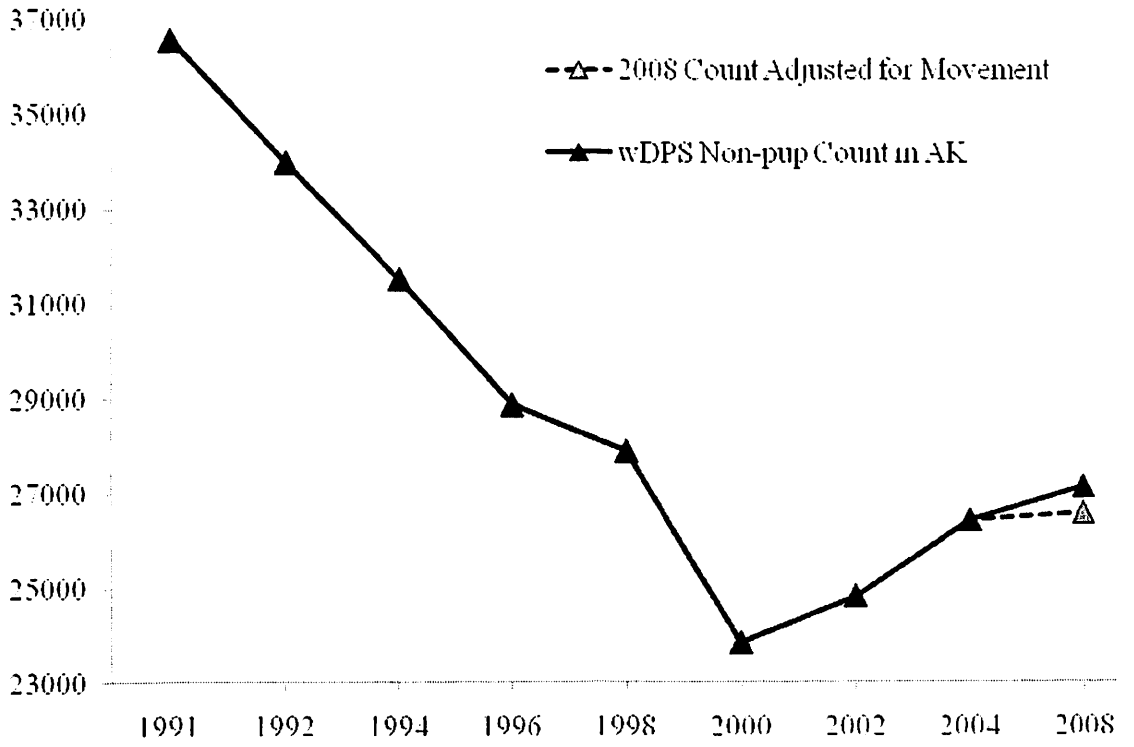
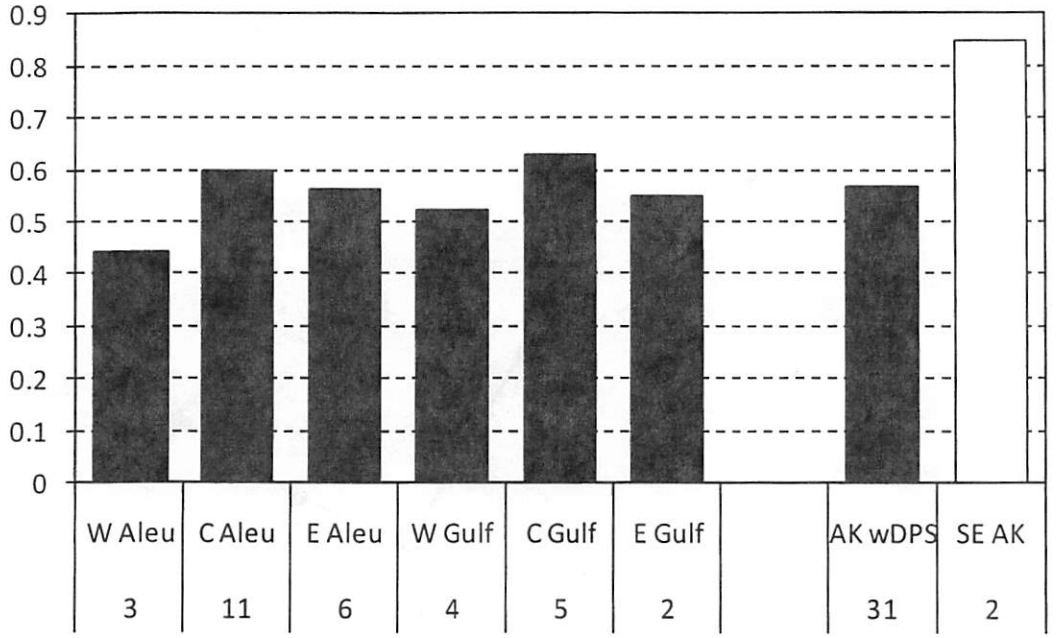


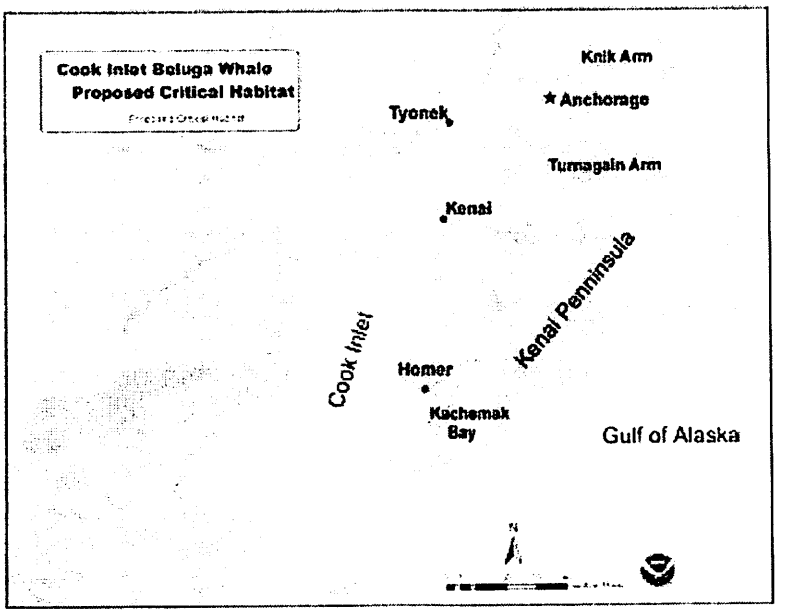
Figure 8. Ratio of Steller sea lion pups to non-pups (adults and juveniles) on major rookeries within each sub-area of Alaska in June-July 2009 (see Figure 1). Number of rookeries within each sub-area is shown. The 6 sub-areas in the Aleutian Islands (Aleu) and Gulf of Alaska (Gulf) form the western stock, or distinct population segment (DPS) in Alaska (AK wDPS). SE Alaska is part of the eastern DPS.



NOAA Fisheries News Releases

NEWS RELEASE
December 1, 2009
Connie Barclay, Public Affairs
301-713-2370

NOAA PROPOSES CRITICAL HABITAT FOR COOK INLET BELUGA WHALES. AGENCY TO HOLD PUBLIC MEETING/ACCEPTING COMMENTS



Proposed critical habitat for Cook Inlet beluga whales. Click map to view a larger version.

NOAA's Fisheries Service is seeking public comment on a proposal that identifies more than a third of Cook Inlet in Alaska as critical habitat for the remaining approximately 300 endangered Cook Inlet beluga whales.

In October 2008, NOAA's Fisheries Service listed Cook Inlet beluga whales as endangered. Under the Endangered Species Act (ESA), NOAA's Fisheries Service must designate critical habitat for all listed species.

"We have used the best available science and the traditional knowledge of Alaska natives to identify areas essential to helping Cook Inlet beluga whales survive," said Doug Mecum, acting administrator of NOAA's Fisheries Service Alaska region. "Protecting these endangered whales is one of our top priorities."

The ESA requires designation of critical habitat whenever a species is listed for protection. Federal agencies must consult with NOAA's Fisheries Service to ensure that they do not fund, authorize, or

carry out a project that will destroy or adversely modify the critical habitat. This requirement does not apply to activities on private land that do not involve a federal agency, permit or funding.

Managers expect to have a final designation of critical habitat for the Cook Inlet beluga whales in the spring of 2010.

The NOAA's Fisheries Service proposal designates a total of 3,016 square miles, including the upper portions of Cook Inlet, where whales concentrate in summer months, mid-Cook Inlet, the western shore of lower Cook Inlet and Kachemak Bay on the eastern side of the lower inlet.

NOAA's Fisheries Service experts believe Cook Inlet beluga whales once numbered more than 1,300, but only around 300 remain, according to the latest population estimates completed in June. NOAA's Fisheries Service biologists and scientists have surveyed the Cook Inlet beluga whale, estimated the species' abundance and reviewed the population's status. They have also collected tissue samples, carried out necropsies on whales found dead and responded to beluga whale strandings.

In their formal status review of Cook Inlet beluga whales, NOAA's Fisheries Service scientists estimated a 26 percent chance that these whales will become extinct in the next 100 years.

Cook Inlet belugas are one of five populations of belugas recognized within U.S. waters. The other beluga populations, which are not listed as threatened or endangered, summer in Bristol Bay, the eastern Bering Sea, the eastern Chukchi Sea and the Beaufort Sea. Of the five populations of beluga whales in Alaska, the Cook Inlet population is considered to be the most isolated based on the degree of genetic differentiation and geographic distance between the Cook Inlet population and the four other beluga populations.

The recovery of Cook Inlet whales is potentially hindered by severe stranding events; continued development within and along upper Cook Inlet; industrial and municipal activities that discharge or accidentally spill pollutants; disease; predation by killer whales and losses of available prey to fishing or loss of prey habitat. Protecting habitat is essential to the beluga whales' recovery.

The comment period on the proposed critical habitat area opens December 2, 2009 and comments must be received by January 31, 2010. Send comments to: Assistant Regional Administrator, Protected Resources, Alaska Region, NOAA Fisheries, ATTN: Ellen Sebastian. Comments must be identified by "RIN 0648-AX50" and sent by any one of the following methods:

- Electronic submissions: Submit all electronic public comments via the Federal eRulemaking Portal website at http://www.regulations.gov
- Mail: P.O. Box 21668, Juneau, AK, 99802-1668.
- Fax: 907-586-7557
- Hand deliver to the Federal Building: 709 West 9th Street, Room 420A, Juneau, AK

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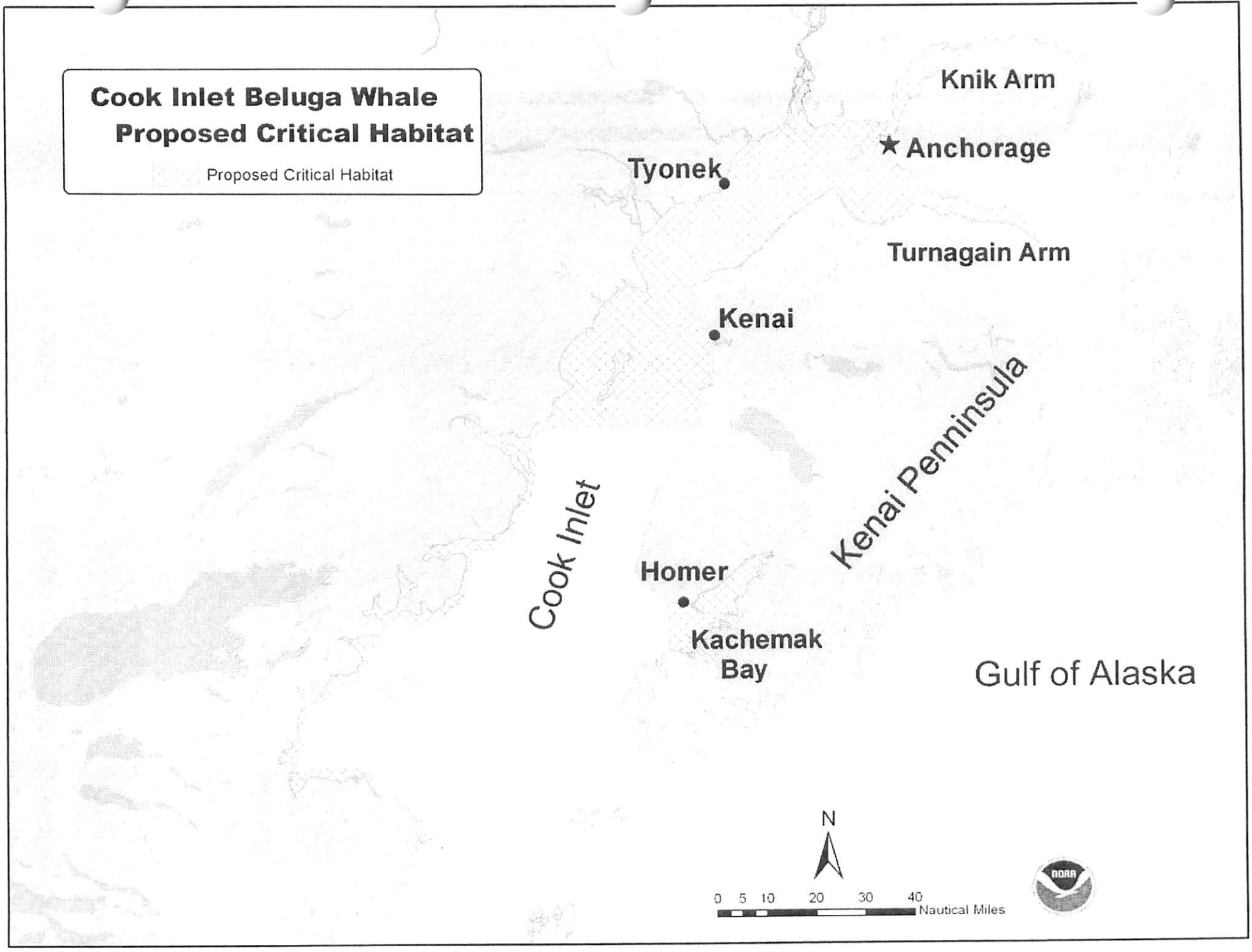

Cook Inlet Beluga Whale
Proposed Critical Habitat
Proposed Critical Habitat
Knik Arm
Anchorage
Tyonek
Turnagain Arm
Kenai
Kenai Penninsula
Cook Inlet
Homer
Kachemak
Bay
Gulf of Alaska
N
0 5 10 20 30 40
Nautical Miles
NOAA

Proposed Rules

Federal Register
Vol. 74, No. 230
Wednesday, December 2, 2009

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2007–1130; FRL–9087–8]

Approval and Promulgation of Air Quality Implementation Plans; Minnesota

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve a site-specific revision to the Minnesota sulfur dioxide (SO_2) State Implementation Plan (SIP) for the Rochester Public Utilities Silver Lake Plant (RPU–SLP), located in Rochester, Minnesota. In its October 16, 2007, submittal, the Minnesota Pollution Control Agency (MPCA) requested that EPA approve certain conditions contained in RPU–SLP's revised Federally enforceable joint Title I/Title V document into the Minnesota SO_2 SIP. The request is approvable because it satisfies the requirements of the Clean Air Act.

DATES: Comments must be received on or before January 4, 2010.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R05–OAR–2007–1130, by one of the following methods:

- *http://www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail: mooney.john@epa.gov.*
- *Fax:* (312) 692–2551.
- *Mail:* John M. Mooney, Chief, Criteria Pollutant Section, Air Programs Branch (AR 18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.
- *Hand Delivery:* John M. Mooney, Chief, Criteria Pollutant Section, Air Programs Branch (AR 18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604. Such deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Please see the direct final rule which is located in the Rules section of this **Federal Register** for detailed instructions on how to submit comments.

FOR FURTHER INFORMATION CONTACT: Christos Panos, Environmental Engineer, Criteria Pollutant Section, Air Programs Branch (AR–18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8328, *panos.christos@epa.gov.*

SUPPLEMENTARY INFORMATION: In the Rules section of this **Federal Register**, EPA is approving the state's SIP submittal as a direct final rule without prior proposal because the Agency views this as a noncontroversial submittal and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no adverse comments are received in response to this rule, no further activity is contemplated. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period. Any parties interested in commenting on this action should do so at this time. Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment. For additional information, see the direct final rule which is located in the Rules section of this **Federal Register.**

Dated: November 17, 2009.

Walter W. Kovalick Jr.,

Acting Regional Administrator, Region 5.

[FR Doc. E9–28677 Filed 12–1–09; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 226

[Docket No. 090224232–91321–03]

RIN 0648–AX50

Endangered and Threatened Species: Designation of Critical Habitat for Cook Inlet Beluga Whale

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comment.

SUMMARY: We, the National Marine Fisheries Service (NMFS), propose to designate critical habitat for the Cook Inlet beluga whale (*Delphinapterus leucas*) distinct population segment under the Endangered Species Act (ESA). Two areas are proposed, comprising 7,809 square kilometers (3,016 square miles) of marine habitat. We solicit comments from the public on all aspects of the proposal.

DATES: Comments and information regarding this proposed rule must be received by close of business on February 1, 2010. Requests for public hearings must be made in writing and received by January 19, 2010.

ADDRESSES: Send comments to Kaja Brix, Assistant Regional Administrator, Protected Resources, Alaska Region, NMFS, ATTN: Ellen Sebastian. You may submit comments, identified by "RIN 0648–AX50" by any one of the following methods:

- Electronic submissions: Submit all electronic public comments via the Federal eRulemaking Portal website at *http://www.regulations.gov.*
- Mail: P.O. Box 21668, Juneau, AK, 99802–1668.
- Fax: 907–586–7557
- Hand deliver to the Federal Building: 709 West 9th Street, Room 420A, Juneau, AK.

All comments received are a part of the public record and generally will be posted to *http://www.regulations.gov* without change. All Personal Identifying Information (e.g., name, address) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business

Information or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter N/A in the required fields, if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, WordPerfect, of Adobe portable document file (PDF) format only.

The proposed rule, maps, status reviews, and other materials relating to Cook Inlet beluga whales and this proposal can be found on our Web site at: *http://www.fakr.noaa.gov/*.

FOR FURTHER INFORMATION CONTACT: Kaja Brix, NMFS, Alaska Region, (907) 586–7824; or Marta Nammack, NMFS, (301) 713–1401.

SUPPLEMENTARY INFORMATION:

Rulemaking Background

We are responsible for determining whether species, subspecies, or distinct population segments (DPSs) are threatened or endangered and for designating critical habitat for these species under the Endangered Species Act (ESA) (16 U.S.C. 1531 *et seq.*). To be considered for listing under the ESA, a group of organisms must constitute a "species" which is defined in section 3 of the ESA to include "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." We consider a group of organisms to be a DPS for purposes of ESA listing when it is both discrete from other populations and significant to the species to which it belongs (61 FR 4722; February 7, 1996). We previously found the Cook Inlet beluga whale population segment to be reproductively, genetically, and physically discrete from the four other known beluga populations in Alaska and significant because it is in a unique ecological setting for the taxon, and its loss would result in a significant gap in the taxon's range. Following completion of a Status Review of the Cook Inlet beluga whale under the ESA, we published a proposed rule to list this DPS as an endangered species on April 20, 2007 (72 FR 19854). We subsequently extended the date for final determination on the proposed action by 6 months, until October 20, 2008 (73 FR 21578), as provided for by the ESA (section 4(b)(6)(B)(i)). We published a Final Rule to list the Cook Inlet beluga whale as an endangered species on October 22, 2008 (73 FR 62919). Initiating the process for designation of critical habitat, we published an Advance Notice of Proposed Rulemaking on April 14, 2009 (74 FR 17131).

We considered various alternatives to the critical habitat designation for the Cook Inlet beluga whale. The alternative of not designating critical habitat for the Cook Inlet beluga whale would impose no economic, national security, or other relevant impacts, but would not provide any conservation benefit to the species. This alternative is not .proposed because such an approach does not meet the legal requirements of the ESA and would not provide for the conservation of Cook Inlet beluga whale. The alternative of designating all eligible occupied habitat areas also was considered and rejected because some areas within the occupied range were not considered to be critical habitat, and did not contain the identified physical or biological features that are essential to the conservation of the Cook Inlet beluga.

An alternative to designating critical habitat within all eligible occupied areas is the designation of critical habitat within a subset of these areas. Under section 4(b)(2) of the ESA, we must consider the economic impacts, impacts to national security, and other relevant impacts of designating any particular area as critical habitat. We have the discretion to exclude any particular area from designation as critical habitat if the benefits of exclusion (i.e., the impacts that would be avoided if an area were excluded from the designation) outweigh the benefits of designation (i.e., the conservation benefits to the Cook Inlet beluga whale if an area were designated), so long as exclusion of the area will not result in extinction of the species. Exclusion under section 4(b)(2) of the ESA of one or more of the areas considered for designation would reduce the total impacts of designation. The determination to exclude any particular areas depends on our ESA 4(b)(2) analysis, which is described in detail in the ESA 4(b)(2) analysis report. Under this proposed rule (the preferred alternative), we do not propose to exclude any areas. The total estimated economic impact associated with this proposed rule is $157,000 to $472,000 (discounted at 7 percent) or $187,000 to $571,000 (discounted at 3 percent). We propose this alternative because it results in a critical habitat designation that provides for the conservation of the Cook Inlet beluga whale, without economic effects of sufficient significance to warrant any exclusions from that designation. Other areas within their range did not contain the identified physical or biological features that are essential to the conservation of the Cook Inlet beluga. This alternative also meets the requirements under the ESA and our joint NMFS-USFWS regulations concerning critical habitat.

Critical Habitat

Section 4(b)(2) of the ESA requires us to designate critical habitat for threatened and endangered species "on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat." This section also grants the Secretary of Commerce (Secretary) discretion to exclude any area from critical habitat if he determines "the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat." The Secretary's discretion is limited, as he may not exclude areas that "will result in the extinction of the species."

The ESA defines critical habitat under section 3(5)(A) as: "(i) the specific areas within the geographical area occupied by the species, at the time it is listed . . ., on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species."

Once critical habitat is designated, section 7 of the ESA requires Federal agencies to ensure they do not fund, authorize, or carry out any actions that will destroy or adversely modify that habitat. This requirement is additional to the section 7 requirement that Federal agencies ensure their actions do not jeopardize the continued existence of listed species.

Issues for Consideration and Evaluation

Section 4(a)(3) of the ESA requires us to designate critical habitat for threatened and endangered species. We are currently proposing to designate critical habitat for the Cook Inlet beluga whale. We have considered a number of issues in developing this proposed rule:

- What areas are occupied by the species at the time of listing?
- What physical and biological features are essential to the species' conservation?
- Are those essential features ones that may require special management considerations or protection?

- Are there any areas outside those currently occupied that are "essential for conservation?"
- What economic, national security, and other relevant impacts would result from a critical habitat designation?
- What is the appropriate geographic scale for weighing the benefits of exclusion and benefits of designation?
- Will the exclusion of any particular area from the critical habitat designation result in the extinction of the species?

Answering these questions involves a variety of considerations that we outline below.

Cook Inlet Beluga Whale Biology and Habitat Use

The beluga whale is a small, toothed whale in the family Monodontidae, a family it shares with only the narwhal. Belugas are also known as "white whales" because of the white coloration of the adults. The beluga whale is a northern hemisphere species that inhabits fjords, estuaries, and shallow water of Arctic and subarctic oceans. Five distinct stocks of beluga whales are currently recognized in Alaska: Beaufort Sea, eastern Chukchi Sea, eastern Bering Sea, Bristol Bay, and Cook Inlet. The Cook Inlet population is numerically the smallest of these, and is the only one of the five Alaskan stocks occurring south of the Alaska Peninsula in waters of the Gulf of Alaska.

A detailed description of the biology of the Cook Inlet beluga whale may be found in the Proposed Listing Rule (72 FR 19854; April 20, 2007). Belugas generally occur in shallow, coastal waters, and while some populations make long seasonal migrations, Cook Inlet belugas reside in Cook Inlet year round. Data from satellite tagged whales documented that Cook Inlet belugas concentrate in the upper Inlet at rivers and bays in the summer and fall, and then tend to disperse into deeper waters moving to mid Inlet locations in the winter. The Traditional Ecological Knowledge (TEK) of Alaska Natives and systematic aerial survey data document a contraction of the summer range of Cook Inlet belugas over the last 2 decades of the twentieth century. While belugas were once abundant and frequently sighted in the lower Inlet during summer, they are now primarily concentrated in the upper Inlet. This constriction is likely a function of a reduced population seeking the highest quality habitat that offers the most abundant prey, most favorable feeding topography, the best calving areas, and the best protection from predation. An expanding population would likely use the lower Inlet more extensively.

While mating is assumed to occur sometime between late winter and early spring, there is little information available on the mating behavior of belugas. Most calving in Cook Inlet is assumed to occur from mid-May to mid-July (Calkins, 1983), although Native hunters have observed calving from April through August (Huntington, 2000). Newborn calves have been observed in mid-to-late July. Alaska Natives described calving areas as the northern side of Kachemak Bay in April and May, off the mouths of the Beluga and Susitna rivers in May, and in Chickaloon Bay and Turnagain Arm during the summer (Huntington, 2000). The warmer waters from these freshwater sources may be important to newborn calves during their first few days of life (Katona *et al.*, 1983; Calkins, 1989). Surveys conducted from 2005 to 2007 in the upper Inlet by LGL, Inc., documented neither localized calving areas nor a definitive calving season, since calves were encountered in all surveyed locations and months (April-October) (McGuire *et al.*, 2008). The warmer, fresher coastal waters may also be important areas for belugas' seasonal summer molt.

Cook Inlet belugas are opportunistic feeders and feed on a wide variety of prey species, focusing on specific species when they are seasonally abundant. Pacific eulachon are an important early spring food resource for beluga whales in Cook Inlet, as evidenced by the stomach contents of a beluga hunted near the Susitna River in April 1998 that was filled exclusively with eulachon (NMFS unpubl. data). These fish first enter the upper Inlet in April, with two major spawning migrations occurring in the Susitna River in May and July. The early run is estimated at several hundred thousand fish and the later run at several million (Calkins, 1989).

In the summer, as eulachon runs begin to diminish, belugas rely heavily on several species of salmon as a primary prey resource. Beluga whale hunters in Cook Inlet reported one whale having 19 adult king salmon in its stomach (Huntington, 2000). NMFS (unpubl. data) reported a 14 foot 3 inch (4.3 m) male with 12 coho salmon, totaling 61.5 lbs (27.9 kg), in its stomach.

The seasonal availability of energy-rich prey such as eulachon, which may contain as much as 21 percent oil (Payne *et al.*, 1999), and salmon are very important to the energetics of belugas (Abookire and Piatt, 2005; Litzow *et al.*, 2006). Native hunters in Cook Inlet have stated that beluga whale blubber is thicker after the whales have fed on eulachon than in the early spring prior to eulachon runs. In spring, the whales were described as thin with blubber only 2–3 inches (5–8 cm) thick compared to the fall when the blubber may be up to 1 ft (30 cm) thick (Huntington, 2000). Eating such fatty prey and building up fat reserves throughout spring and summer may allow beluga whales to sustain themselves during periods of reduced prey availability (e.g., winter) or other adverse impacts by using the energy stored in their blubber to meet metabolic needs. Mature females have additional energy requirements. The known presence of pregnant females in late March, April, and June (Mahoney and Shelden, 2000; Vos and Shelden, 2005) suggests breeding may be occurring in late spring into early summer. Calves depend on their mother's milk as their sole source of nutrition, and lactation lasts up to 23 months (Braham, 1984), though young whales begin to consume prey as early as 12 months of age (Burns and Seaman, 1986). Therefore, the summer feeding period is critical to pregnant and lactating belugas. Summertime prey availability is difficult to quantify. Known salmon escapement numbers and commercial harvests have fluctuated widely throughout the last 40 years; however, samples of harvested and stranded beluga whales have shown consistent summer blubber thicknesses.

In the fall, as anadromous fish runs begin to decline, belugas again return to consume the fish species found in nearshore bays and estuaries. This includes cod species as well as other bottom-dwellers such as Pacific staghorn sculpin and flatfishes, such as starry flounder and yellowfin sole. This change in diet in the fall is consistent with other beluga populations known to feed on a wide variety of food. Pacific staghorn sculpin are commonly found nearshore in bays and estuaries on sandy substrate (Eschmeyer *et al.*, 1983). Flatfish are typically found in very shallow water and estuaries during the warm summer months and move into deeper water in the winter as coastal water temperatures cool (though some may occur in deep water year-round) (Morrow, 1980).

The available information indicates that Cook Inlet belugas continue to move within the Inlet during the winter months. They concentrate in deeper waters in mid Inlet past Kalgin Island, with occasional forays into the upper Inlet, including the upper ends of Knik and Turnagain Arms. While the beluga whales move into the mid Inlet during the winter, ice cover does not appear to limit their movements. Their winter

distribution does not appear to be associated with river mouths, as it is during the warmer months. The spatial dispersal and diversity of winter prey likely influence the wider beluga winter range throughout the mid and lower Inlet.

There is obvious and repeated use of certain habitats by Cook Inlet beluga whales. Intensive aerial abundance surveys conducted in June and July since 1993 have consistently documented high use of Knik Arm, Turnagain Arm, Chickaloon Bay and the Susitna River delta areas of the upper Inlet. Ninety-six to one hundred percent of all belugas sighted during these surveys were in the upper Inlet near Anchorage (Rugh *et al.*, in review). The high use of these areas by belugas is further supported by data from satellite tagging studies.

The range of Cook Inlet belugas has been previously defined as the waters of the Gulf of Alaska north of 58.0° N. and freshwater tributaries to these waters based on then-available scientific data (65 FR 34590, May 31, 2000; MMPA Sec. 216.15(g); 76 FR 62919, Oct. 22, 2008). There are few beluga sightings in the Gulf of Alaska outside Cook Inlet. In the 1970s and 1980s, beluga sightings occurred across much of the northern and central parts of Cook Inlet, but in the 1990s the summer distribution narrowed to primarily the northernmost portions of Cook Inlet. More of the Inlet was used by beluga whales during the spring, summer, and fall during the 1970s and 1980s than is presently used. However, because sightings continue to occur over the entire described range, we consider the present range of this DPS to be occupied habitat. The present range of the listed Cook Inlet beluga is limited to Cook Inlet waters north of a line from Cape Douglas to Cape Elizabeth (Figure 1).

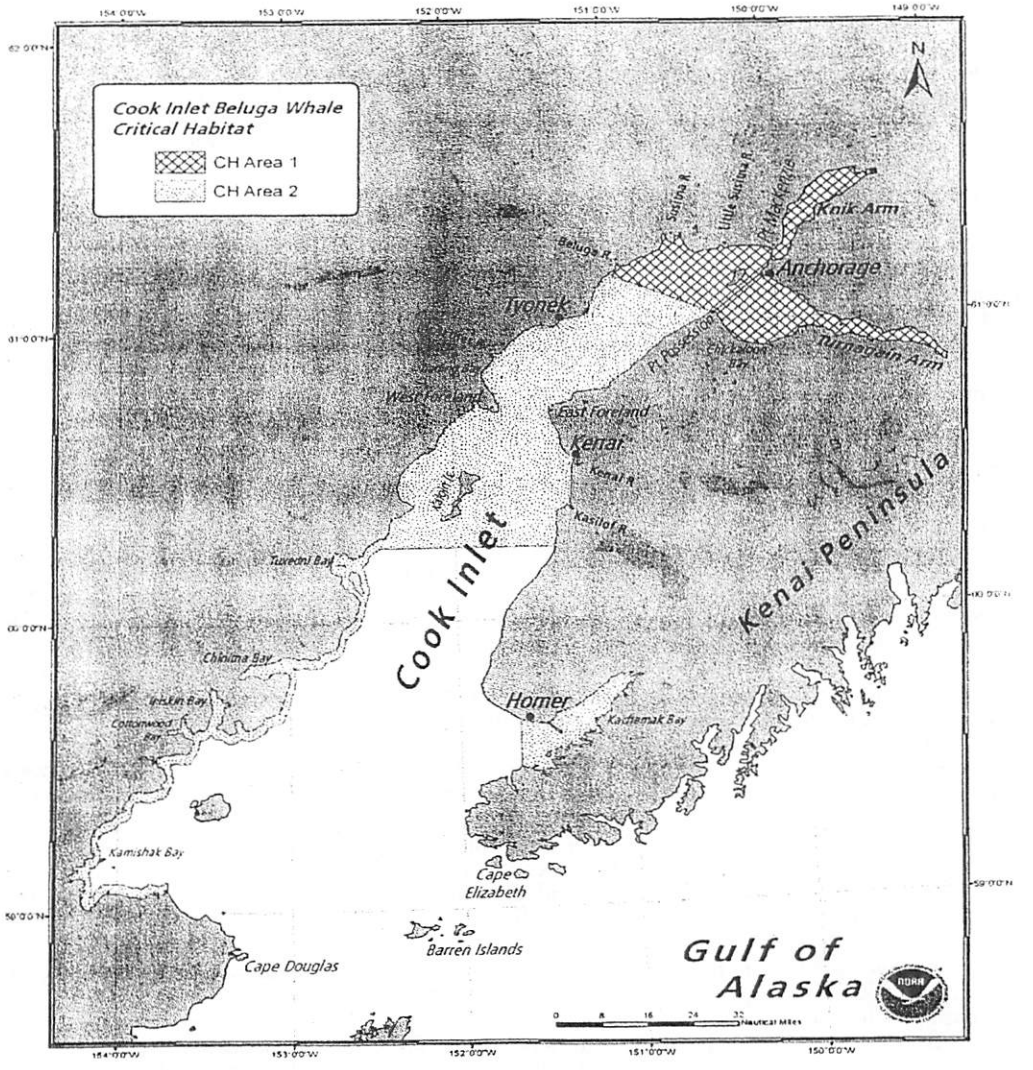
Proposed Critical Habitat

After considering comments received in response to the Advance Notice of Proposed Rulemaking (74 FR 17131; April 14, 2009), sighting reports, satellite telemetry data, TEK, scientific papers and other research, the biology and ecology of the Cook Inlet DPS of beluga whales, and information indicating the presence of one or more of the identified PCEs within certain areas of their range, we have identified the "specific areas" within the geographical area occupied by the Cook Inlet beluga whale to be proposed as critical habitat. We propose to designate critical habitat within the following areas (Figure 1).

Area 1: Area 1 encompasses 1,918 square kilometers (741 sq. mi.) of Cook Inlet northeast of a line from the mouth of Threemile Creek (61° 08.5′ N., 151° 04.4′ W.) to Point Possession (61° 02.1′ N., 150° 24.3′ W.). This area is bounded by the Municipality of Anchorage, the Matanuska-Susitna Borough, and the Kenai Peninsula borough. The area contains shallow tidal flats, river mouths or estuarine areas, and is important as foraging and calving habitats. Mudflats and shallow areas adjacent to medium and high flow accumulation streams may also provide for other biological needs, such as molting or escape from predators (Shelden *et al.*, 2003). Area 1 also has the highest concentrations of belugas from spring through fall as well as the greatest potential for adverse impact from anthropogenic threats.

Many rivers in Area 1 habitat have large eulachon and salmon runs. Two such rivers in Turnagain Arm, Twenty-mile River and Placer River, are visited by belugas in early spring, indicating the importance of eulachon runs for beluga feeding. Beluga use of upper Turnagain Arm decreases in the summer and then increases again in August through the fall, coinciding with the coho salmon run. Early spring (March to May) and fall (August to October) use of Knik Arm is confirmed by studies by Funk *et al.* (2005). Intensive summer feeding by belugas occurs in the Susitna delta area, Knik Arm and Turnagain Arm.

Figure 1. Proposed critical habitat for Cook Inlet beluga whales.



Whales regularly move into and out of Knik Arm and the Susitna delta (Hobbs *et al.*, 2000; Rugh *et al.*, 2004). The combination of satellite telemetry data and long-term aerial survey data demonstrate beluga whales use Knik Arm 12 months of the year, often entering and leaving the Arm on a daily basis (Hobbs *et al.*, 2005; Rugh *et al.*, 2005, 2007). These surveys demonstrate intensive use of the Susitna delta area (from the Little Susitna River to Beluga River) and Chickaloon Bay (Turnagain Arm) with frequent large scale movements between the delta area, Knik Arm and Turnagain Arm. During annual aerial surveys conducted by NMML in June-July, up to 61 percent of the whales sighted in Cook Inlet were in Knik Arm (Rugh *et al.*, 2000, 2005). The Chickaloon Bay area also appears to be used by belugas throughout the year.

Belugas are particularly vulnerable to impacts in Area 1 due to their high seasonal densities and the biological importance of the area. Because of their intensive use of this area (e.g., foraging, nursery, predator avoidance), activities that restrict or deter use of or access to Area 1 habitat could reduce beluga calving success, impair their ability to secure prey, and increase their susceptibility to predation by killer whales. Activities that reduce anadromous fish runs could also negatively impact beluga foraging success, reducing their fitness, survival, and recovery. Furthermore, the tendency for belugas to occur in high concentrations in Area 1 habitat predisposes them to harm from such events as oil spills.

Area 2: Area 2 consists of 5,891 square kilometers (2,275 square miles) of less concentrated spring and summer beluga use, but known fall and winter use areas. It is located south of Area 1, north of a line at 60° 25.0' N., and includes nearshore areas south of 60° 25.0' N. along the west side of the Inlet and Kachemak Bay on the east side of the lower inlet.

Area 2 is largely based on dispersed fall and winter feeding and transit areas in waters where whales typically occur in smaller densities or deeper waters. It includes both near and offshore areas of the mid and upper Inlet, and nearshore areas of the lower Inlet. Due to the role of this area as probable fall feeding areas, Area 2 includes Tuxedni,

Chinitna, and Kamishak Bays on the west coast and a portion of Kachemak Bay on the east coast. Winter aerial surveys (Hansen, 1999) sighted belugas from the forelands south, with many observations around Kalgin Island. Based on tracking data, Hobbs *et al.* (2005) document important winter habitat concentration areas reaching south of Kalgin Island.

Belugas have been regularly sighted at the Homer Spit and the head of Kachemak Bay, appearing during spring and fall of some years in groups of 10–20 individuals (Speckman and Piatt, 2000). Belugas have also been common at Fox River Flats, Muddy Bay, and the northwest shore of Kachemak Bay (NMFS unpubl. data), sometimes remaining in Kachemak Bay all summer (Huntington, 2000).

Dive behavior indicates beluga whales make relatively deeper dives (e.g., to the bottom) and are at the surface less frequently in Area 2, and hence are less frequently observed (Hobbs *et al.*, 2005). It is believed these deep dives are associated with feeding during the fall and winter months (NMFS unpubl. data). The combination of deeper dives, consistent use of certain areas, and stomach content analyses indicate that belugas whales are actively feeding in these areas. Hence, deeper mid Inlet habitats may be important to the winter survival and recovery of Cook Inlet beluga whales.

Physical and Biological Features Essential for Conservation

ESA section 3(5)(A)(i) defines critical habitat to include those "specific areas within the geographical area occupied by the species at the time it is listed . . . on which are found those physical or biological features . . . (I) essential to the conservation of the species and (II) which may require special management considerations or protection." Joint NMFS/FWS regulations for listing endangered and threatened species and designating critical habitat at section 50 CFR 424.12(b) state that the agency "shall consider those physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection" (also referred to as "Essential Features" or "Primary Constituent Elements"). Pursuant to the regulations, such requirements include, but are not limited to, the following: (1) Space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species. These regulations go on to emphasize that the agency shall focus on essential features within the specific areas considered for designation. These features "may include, but are not limited to, the following: roost sites, nesting grounds, spawning sites, feeding sites, seasonal wetland or dryland, water quality or quantity, geological formation, vegetation type, tide, and specific soil types."

Scientific research, direct observation, and TEK indicate fish are the primary prey species of the Cook Inlet beluga whale, and that certain species are especially important. This importance may be due to feeding strategies of the whales, physical attributes of the prey (e.g., size), the caloric value of the prey, the availability of the prey, and the life-history aspects of the whales, among other considerations. Two fish species that are highly utilized by Cook Inlet beluga whales are king or Chinook salmon and Pacific eulachon. Both of these species are characterized as having very high fat content, returning to the upper Inlet early in the spring, and having adult (spawning) returns which occupy relatively narrow timeframes during which large concentrations of fish may be present at or near the mouths of tributary streams.

Analysis of stomach contents and research of fatty acid signatures within beluga blubber indicate the importance of other species of fish and invertebrates to the diets of these whales. The most prominent of these are other Pacific salmon (sockeye, chum, and coho), Pacific cod, walleye pollock, saffron cod, and yellowfin sole. Beluga whales are also known to feed on a wide variety of vertebrate and invertebrate prey species. However, the aforementioned fish species occupy a prominent role in their foraging and energetic budgets and are considered essential to the beluga whale's conservation.

NMFS research has considered the distribution of the Cook Inlet beluga whale and its correlations with behavior, habitat function, and physical parameters (Goetz *et al.*, 2007). While these whales are highly mobile and capable of ranging over a large portion of Cook Inlet on a daily basis, in fact they commonly occupy very discrete areas of the Inlet, particularly during summer months. These areas are important feeding habitats, whose value is due to the presence of certain species of prey within the site, the numbers of prey species within the site, and the physical aspects of the site which may act to concentrate prey or otherwise facilitate feeding strategy. In upper Cook Inlet, beluga whales concentrate offshore from several important salmon streams and appear to use a feeding strategy which takes advantage of the bathymetry in the area. The channels formed by the river mouths and the shallow waters act as a funnel for salmon as they move past waiting belugas. Dense concentrations of prey may be essential to beluga whale foraging. Hazard (1988) hypothesized that beluga whales were more successful feeding in rivers where prey were concentrated than in bays where prey were dispersed. Fried *et al.* (1979) noted that beluga whales in Bristol Bay fed at the mouth of the Snake River, where salmon runs are smaller than in other rivers in Bristol Bay. However, the mouth of the Snake River is shallower, and hence may concentrate prey. Research on beluga whales in Bristol Bay suggests these whales preferred certain streams for feeding based on the configuration of the stream channel (Frost *et al.*, 1983). This study theorized beluga whales' feeding efficiencies improve in relatively shallow channels where fish are confined or concentrated. Bathymetry and fish density may be more important than sheer numbers of fish in beluga feeding success. Although beluga whales do not always feed at the streams with the highest runs of fish, proximity to medium to high flow river systems is also an important descriptor in assigning importance to feeding habitats. Research has found beluga distribution in Cook Inlet is significantly greater near mudflats and medium and high flow accumulation rivers. (These waters were categorized in Goetz *et al.* (2007) using a digital elevation model, similar to drainage basins. A complete list of these waters may be found on the NMFS website *http://www.fakr.noaa.gov/.*) Beluga whales are seldom observed near small flow tributaries.

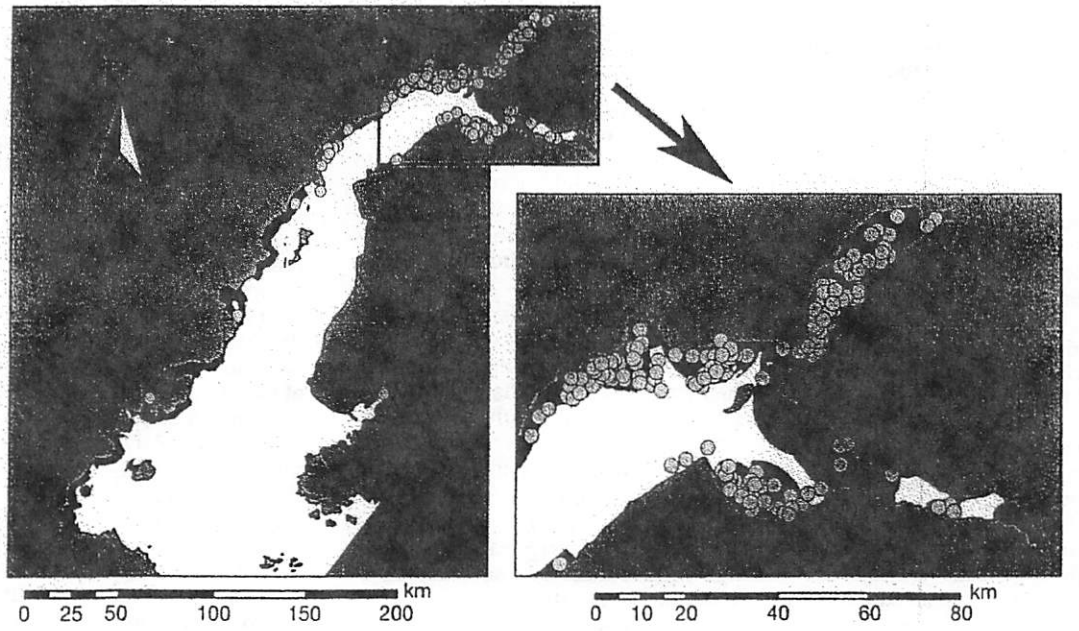
Cook Inlet beluga whales are preyed upon by killer whales, their only known natural predator. We have received reports of killer whales throughout Cook Inlet, and have responded to several instances of predation within Turnagain Arm, near Anchorage.

Given the small population size of the Cook Inlet beluga whales, predation may have a significant effect on beluga recovery. In addition to directly reducing the beluga population, the presence of killer whales in Cook Inlet may also increase stranding events. We consider killer whale predation to be a potentially significant threat to the conservation and recovery of these

whales. Beluga whales may employ several defense strategies against killer whale predation. One strategy is to retreat to shallow estuaries too shallow for the larger killer whales. These areas might also provide acoustical camouflage due to their shallow depths, silt loads, and multiple channels.

Because of their importance in the Cook Inlet beluga whale's feeding strategy, as predator escape terrain, and in providing other habitat values, we consider "mudflats," identified here as shallow and nearshore waters proximate to certain tributary streams, to a be physical feature essential to the conservation of the Cook Inlet beluga whale. Figure 2 presents the location of this feature within Cook Inlet.

Figure 2. Cook Inlet beluga whale habitat use (black) as predicted by the proximity to mudflats and high and medium flow waters, with beluga sightings from summer aerial surveys (1993-2004) shown as dots (Goetz et al., 2007).



For purposes of describing and locating this feature, and after consultation with the author of the model presented in Goetz *et al.* (2007), we determined spatial extent of this feature may best be described as being within the 30–foot (9.1 m) depth contour and within 5 miles (8.0 km) of medium and high flow accumulation rivers.

It appears Cook Inlet beluga whales have lower levels of contaminants stored in their bodies than other populations of belugas. Because these whales occupy the most populated and developed region of the state, they must compete with various anthropogenic stressors, including pollution. These whales often occur in dense aggregations within small nearshore areas, where they are predisposed to adverse effects of pollution. Beluga whales are apex predators, occupying the upper levels of the food chain. This predisposes them to illness and injury by biomagnification of certain pollutants. Another population of beluga whales found in the Gulf of St. Lawrence in Canada is characterized by very high body burdens of contaminants. There, high levels of PCBs, DDT, Mirex, mercury, lead, and indicators of hydrocarbon exposure have been detected in belugas. These substances are well-known for their toxic effects on animal life and for interfering with reproduction and resistance to disease. Many of these contaminants are transferred from mother to calf through nursing.

Given present abundance levels, the impact of any additional mortalities to

the extinction risk for this DPS, the sensitivity of beluga whales to certain pollutants, their trophic position and biomagnifications, the fact that large numbers of Cook Inlet beluga whales typically occupy very small habitats, and that their range includes the most populated and industrialized area of the state, we consider water quality to be an important aspect of their ecology, and essential to their conservation within both areas 1 and 2.

Cook Inlet beluga whales do not occupy an extensive range, and are not known to undertake migrations. Within their occupied range, however, these whales move freely and continuously. The range of the Cook Inlet beluga whale is neither biologically nor physically uniform. It ranges between shallow mudflats, glacial fjords, deep waters with marine salinities, vegetated shallows of predominantly freshwaters, and areas of the upper Inlet in which heavy ice scour, extreme tidal fluctuations, high silt content, low temperatures, and high turbidity work to limit any intertidal or persistent nearshore organisms. Beluga whales have adapted here by utilizing certain areas over time and space to meet their ecological needs. While much remains to be understood of their ecology and basic life history, it is apparent a large part of their movement and distribution is associated with feeding. Feeding habitat occurs near the mouths of anadromous fish streams, coinciding with the spawning runs of returning adult salmon. These habitats may change quickly as each species of salmon, and often each particular river, is characterized as having its individual run timing. Calving habitat is poorly described, but may depend on such factors as temperatures, depths, and salinities. Predator avoidance may be a very important habitat attribute, and is likely to exist only in shallows within Turnagain and Knik Arms of the upper Inlet. Causeways, dams, and non-physical effects (e.g., noise) can interfere with whale movements. It is essential to the conservation of Cook Inlet beluga whales that they have unrestricted access within and between the critical habitat areas.

Beluga whales are known to be among the most adept users of sound of all marine mammals, using sound rather than sight for many important functions, especially in the highly turbid waters of upper Cook Inlet. Beluga whales use sound to communicate, locate prey, and navigate, and may make different sounds in response to different stimuli. Beluga whales produce high frequency sounds which they use as a type of sonar for finding and pursuing prey, and likely for navigating through ice-laden waters. In Cook Inlet, beluga whales must compete acoustically with natural and anthropogenic sounds. Man-made sources of noise in Cook Inlet include large and small vessels, aircraft, oil and gas drilling, marine seismic surveys, pile driving, and dredging. The effects of man-made noise on beluga whales and associated increased "background" noises may be analogous to a human's reduced visual acuity when confronted with heavy fog or darkness.

Anthropogenic noise above ambient levels may cause behavioral reactions in whales (harassment) or mask communication between these animals. The effects of harassment may also include abandonment of habitat. At louder levels, noise may result in temporary or permanent damage to the whales' hearing. Empirical data exist on the reaction of beluga whales to in-water noise (harassment and injury thresholds) but are lacking regarding levels that might elicit more subtle reactions such as avoiding certain areas. Noise capable of killing or injuring beluga whales, or that might cause the abandonment of important habitats, would be expected to have consequences to this DPS in terms of survival and recovery. We consider "quiet" areas in which noise levels do not interfere with important life history functions and behavior of these whales to be an essential feature of this critical habitat. This feature is found in both areas 1 and 2.

Based on the best scientific data available of the ecology and natural history of Cook Inlet beluga whales and their conservation needs, we have determined the following physical or biological features are essential to the conservation of this species:

1. Intertidal and subtidal waters of Cook Inlet with depths <30 feet (9.1 m) (MLLW) and within 5 miles (8.0 km) of high and medium flow accumulation anadromous fish streams;

2. Primary prey species consisting of four (4) species of Pacific salmon (Chinook, sockeye, chum, and coho), Pacific eulachon, Pacific cod, walleye pollock, saffron cod, and yellowfin sole;

3. The absence of toxins or other agents of a type or amount harmful to beluga whales;

4. Unrestricted passage within or between the critical habitat areas; and

5. Absence of in-water noise at levels resulting in the abandonment of habitat by Cook Inlet beluga whales.

All of these features are found or identified within the areas proposed as critical habitat.

Critical Habitat Boundaries

NMFS' ESA regulations relevant to describing a geographical area and "specific areas" state that "each critical habitat will be defined by specific limits using reference points and lines as found on standard topographic maps of the area" (50 CFR 424.12). These regulations require that we also identify the state(s), county(ies), or other local governmental units within which all or part of the critical habitat is located. However, the regulations note that such political units typically would not constitute the boundaries of critical habitat. In addition, the regulations state that ephemeral reference points (e.g., trees, sand bars) shall not be used in defining critical habitat.

We have limited information on the distribution and occurrence of Cook Inlet beluga whales within tributary waters of Cook Inlet. Traditional Knowledge of Alaska Native hunters tells us these whales have occurred several miles up the Susitna and Beluga Rivers in past years, and whales have been observed above tidewater in the Knik River at Turnagain Arm. We propose critical habitat be bounded on the upland by Mean Higher High Water (MHHW) datum, the lower reaches of certain important tributary waters entering the Inlet, and the following descriptions:

(1) Area 1. All marine waters of Cook Inlet north of a line connecting Point Possession (61.04° N., 150.37°. W) and the mouth of Threemile Creek (61.0855° N., 151.0440° W.), including waters of the Susitna River south of 61.33.33 N latitude, the Little Susitna River south of 61.30° N. latitude, and the Chikaloon River north of 60.8833° N. latitude.

(2) Area 2. All marine waters of Cook Inlet south of a line connecting Point Possession (61.04° N., 150.37° W.) and the mouth of Threemile Creek (61.0855° N., 151.0440° W.) and north of 60.25° N latitude, including waters within 2 nautical miles (3.2 km) of MHHW along the western shoreline of Cook Inlet between 60.25° N. latitude and the mouth of the Douglas River (59.04° N., 153.45° W.); all waters of Kachemak Bay east of 40.00 W longitude; and waters of the Kenai River below the Warren Ames bridge at Kenai, Alaska.

Special Management Considerations or Protection

An occupied area may be designated as critical habitat only if it contains physical and biological features that "may require special management considerations or protection." It is important to note the term "may require special management considerations or

protection" refers to the physical or biological features, rather than the area proposed as critical habitat. Neither the ESA nor NMFS regulations define the "may require" standard. We interpret it to mean that a feature may presently or in the future require special management considerations or protection. 50 CFR 424.02(j) defines "special management considerations or protection" to mean "any methods or procedures useful in protecting physical and biological features of the environment for the conservation of listed species." We considered whether the PCEs identified for Cook Inlet beluga whales may require special management considerations or protection. In our initial determination, we considered whether there is:

(a) Presently a negative impact on the feature(s);

(b) A possible negative impact on the feature in the future;

(c) Presently a need to manage the feature(s); or

(d) A possible need to manage the feature(s) in the future.

Intertidal and subtidal waters of Cook Inlet with depths <30 feet (MLLW) and within 5 miles (8.0 km) of high and medium flow anadromous fish streams support important beluga feeding habitat because of their shallow depths and bottom structure, which act to concentrate prey and aid in feeding efficiency by belugas. The physical attributes of this PCE could be modified or lost through filling, dredging, channel re-alignment, dikes, and other structures. Within navigable waters, the Army Corps of Engineers has jurisdiction over these actions and structures and administers a permit program under the Rivers and Harbors Act and Clean Water Act. In establishing these laws, it was the intent of the U.S. Congress to regulate and manage these activities. The Clean Water Act (CWA) was created to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Section 404 of the CWA regulates the discharge of fill materials into these waters, noting concerns with regard to water supplies, shellfish beds, fishery areas, and spawning and breeding areas. The intent of Congress to protect these features indicates that they may require special management considerations or protection.

Four (4) species of Pacific salmon (Chinook, sockeye, chum, and coho), Pacific eulachon, Pacific cod, walleye pollock, saffron cod, and yellowfin sole constitute the most important food sources for Cook Inlet beluga whales as identified through research and as held by the traditional wisdom and knowledge of Alaska Natives who have participated in the subsistence hunting of these whales. Stomach analysis of Cook Inlet beluga whales has found these species constitute the majority of consumed prey by weight during summer/ice free periods. All of these species are targeted by commercial fisheries, and some are prized by sport fishermen. The recognition of harm due to overexploitation and the need for continued management underlie the efforts of the state and Federal government to conserve these species. The fisheries in state waters of Cook Inlet are managed under various management plans. In addition to commercial fisheries, State plans manage subsistence, sport, guided sport, and personal use fisheries. Federal fisheries management plans provide for sustainable fishing in Federal waters of lower Cook Inlet. These regulatory efforts indicate that these four fish species may require special management considerations or protection.

Cook Inlet is the most populated and industrialized region of the state. Its waters receive various pollutant loads through activities that include urban runoff, oil and gas activities (discharges of drilling muds and cuttings, production waters, treated sewage effluent discharge, deck drainage), municipal sewage treatment effluents, oil and other chemical spills, fish processing, and other regulated discharges. The U.S. Environmental Protection Agency (EPA) regulates many of these pollutants, and may authorize certain discharges under their National Pollution Discharge Elimination System (section 402 of the CWA). Management of pollutants and toxins is necessary to protect and maintain the biological, ecological, and aesthetic integrity of Cook Inlet's waters. Accordingly, ensuring the absence of toxins or other agents of a type or amount harmful to beluga whales may require special management considerations or protection.

Certain actions may have the effect of reducing or preventing beluga whales from freely accessing the habitat area necessary for their survival. Dams and causeways may create physical barriers, while noise and other disturbance or harassment might cause a behavior barrier, whereby the whales reach these areas with difficulty or, in a worst case, abandon the affected habitat areas altogether due to such stressors. Most in-water structures would be managed under several on-going Federal regulatory programs (e.g., CWA). Regulation for behavior barriers is less clear. Any significant behavioral reaction with the potential to injure whales may be prohibited under the provisions of the ESA and MMPA. However, it is unclear whether these two acts could manage this proposed feature in the absence of designation of critical habitat and recognition of this PCE. The unrestricted passage within or between critical habitat areas may require special management considerations or protection.

We have discussed the importance of sound to beluga whales, and concern for man-made noise in their environment. There exists a large body of information on the effects of noise on beluga whales. Research on captive animals has found noise levels that result in temporary threshold shifts in beluga hearing. Based on this research and empirical data from belugas in the wild, we have established in-water noise levels that define when these animals are harassed or injured. We consider the threshold for acoustic harassment to be 160 dB re: 1 μPa for impulsive sounds (e.g., pile driving) and 120 dB re: 1 μPa for continuous noise.

No specific mechanisms presently exist to regulate in-water noise, other than secondarily through an associated authorization. Even then, there is some question whether the authorizing state, local, or Federal agency has the authority to regulate noise. Because of the importance of the ability to use sound to Cook Inlet beluga whales, the absence of in-water noise at levels harmful to the whales is an essential feature that may require special management considerations or protection.

While these PCEs are currently subject to the aforementioned regulatory management, there remain additional and unmet management needs owing to the fact that none of these management regimes is directed at the conservation and recovery needs of Cook Inlet beluga whales. This reinforces the finding that each of the identified PCEs "may require special management considerations."

Areas Outside the Geographical Area Occupied by the Species

Section 3(5)(A)(ii) of the ESA defines critical habitat to include specific areas outside the geographical area occupied by the species only if the Secretary determines them to be essential for the conservation of the species. Section 3(3) of the ESA defines conservation as "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." NMFS' ESA regulations at 424.12(e) state that the

agency "shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species." We are not proposing to designate any areas not occupied at the time of listing because any such areas are presently unknown (if they exist), and the value of any such habitat in conserving this species cannot be determined.

Activities That May be Affected by This Action

Section 4(b)(8) of the ESA requires that we describe briefly and evaluate, in any proposed or final regulation to designate critical habitat, those activities that may destroy or adversely modify such habitat, or that may be affected by such designation. A wide variety of activities may affect critical habitat and, when carried out, funded, or authorized by a Federal agency, require consultation under section 7 of the ESA. Such activities include: coastal development; pollutant discharge; navigational projects (dredging); bridge construction; marine tidal generation projects; marine geophysical research; oil and gas exploration, development, and production; Department of Defense activities; and hydroelectric development. We do not propose to include in critical habitat any manmade structures and the land on which they rest within the described boundaries that were in existence at the time of designation. While these areas would not be directly affected by designation, they may be affected if a Federal action associated with the area/structure (e.g., a discharge permit from the EPA) might have indirect impacts to critical habitat.

Consistent with recent agency guidance on conducting adverse modification analyses, we will apply the statutory provisions of the ESA, including those in section 3 that define "critical habitat" and "conservation," to determine whether a proposed action might result in the destruction or adverse modification of critical habitat. These activities are discussed further in the following sections.

Impacts of Designation

ESA Section 4(b)(2) provides that "the Secretary shall designate critical habitat . . . on the basis of the best scientific data available and after taking into consideration the economic impact, impact to national security, and any other relevant impact of specifying any particular area as critical habitat." The primary impact of a critical habitat designation comes from the ESA section 7(a)(2) requirement that Federal agencies ensure their actions are not likely to result in the destruction or adverse modification of critical habitat. Determining this impact is complicated by the fact that section 7(a)(2) contains the additional requirement that Federal agencies must ensure their actions are not likely to jeopardize the species' continued existence. The true impact of designation is the extent to which Federal agencies modify their actions to ensure their actions are not likely to adversely modify the critical habitat–beyond any modifications they would make because of the listing and requirement to avoid jeopardizing the continued existence of the listed species. Additional impacts of designation include state and local protections that may be triggered as a direct result of designation, and benefits that may arise from education of the public to the importance of an area for species conservation. We did not identify state or local protections that may be triggered by this proposed designation, but have identified educational benefits. We discuss educational benefits in the "Benefits of Designation" section below.

We have sought to predict the incremental change in Federal agency activities as a result of critical habitat designation and the adverse modification prohibition, beyond the changes predicted to occur as a result of the listing and the jeopardy prohibition, to the fullest extent practicable, given available information and scientific knowledge. We examined the types of activities that may be federally authorized, funded, or undertaken that have the potential to affect Cook Inlet beluga whale critical habitat. We identified several specific categories of activities and/or economic sectors that may affect Cook Inlet beluga critical habitat and, therefore, would be subject to ESA section 7's adverse modification requirements. These include: fishing (commercial, sport, personal-use, and subsistence), marine transportation (vessel traffic, port development, transshipment of goods, ferry and cruise ship activity), energy (oil and natural gas, coal, geothermal, wind, and tidal generation), tourism/recreation, cultural and social (Alaska Native access), large-scale infrastructure (Knik Arm crossing, highway and bridge retrofitting projects along Turnagain Arm), public education/science (environmental education, public policy development, and decision-making), national defense (Fort Richardson and Elmendorf AFB), and water quality management (waste water discharges, municipal treatment facilities, oil and other toxin spills).

We next considered the range of modifications we might recommend during consultation on these activities to avoid the destruction or adverse modification of Cook Inlet beluga whale critical habitat. A draft economic report describes in detail the actions that may be affected, the potential range of modifications we might recommend for those actions, and the estimate of economic impacts that might result from such changes (Entrix, 2009). The report describes the likelihood of an ESA section 7 consultation resulting in changes to each type of action. This report is available on the NMFS Alaska Region Web site at *http://www.akr.noaa.gov/*. We are soliciting comments on our analysis of impacts and their potential benefits and costs.

General Analytic Approach

To evaluate potential impacts of designation, we first identified activities or actions that may affect Cook Inlet beluga whale critical habitat and, therefore, be subject to ESA section 7 consultation. We then identified and assessed the costs of the critical habitat designation to each of these, as well as any substantial benefits to recreation, subsistence uses, education, and the other sectors identified above.

When there were sufficient empirical data and supporting information, we used an incremental approach in assessing the economic and other impacts of the critical habitat designation. When there was insufficient information with which to objectively disentangle impacts between those occurring from the listing and those occurring from the critical habitat designation, we identified the impacts as co-extensive. In other words, in those situations, we identified all potential costs and benefits resulting from section 7 consultation, regardless of whether they are wholly and uniquely attributable to "adverse modification" or whether they result from the "jeopardy" prohibition of section 7. Next, based upon an extensive national survey of U.S. Fish and Wildlife Service (USFWS) section 7 consultations, we apportioned the co-extensive impacts in such a way as to isolate only those costs attributable to critical habitat designation. (In 2002, Industrial Economics, Inc. (IEc.) reviewed the consultation records from several U.S. Fish & Wildlife Service field offices across the country and analyzed the administrative costs of such consultations, based on data from the Federal Government Schedule Rates, Office of Personnel Management, 2007. IEc. developed an algorithm to allocate co-extensive costs between those that

are attributable to the listing decision and those that are attributable to the critical habitat designation. NMFS relied on that algorithm to similarly apportion co-extensive impacts here.)

We allocated the impacts to each critical habitat area. In considering potential impacts for each area, we kept in mind certain analytical limitations. First, not all activity types are equally likely to incur changes as a result of ESA section 7 consultation within each activity type. Second, estimates are based on potential changes, so there is a wide range of estimated impacts. Third, in balancing the benefits of designation against the benefits of exclusion, we gave greater weight to changes we considered "likely" or "potential," than to changes we considered "unlikely."

Benefits of Designation

The primary benefit of designation is that section 7 of the ESA requires all Federal agencies to ensure their actions are not likely to destroy or adversely modify critical habitat. This is in addition to the requirement that all Federal agencies ensure their actions are not likely to jeopardize the species' continued existence. Another benefit of designation is that it provides notice of areas and features important to species conservation, and information about the types of activities that may reduce the conservation value of the habitat, which can be effective for education and outreach.

In addition to the direct benefits of critical habitat designation to the Cook Inlet beluga whales, there will be ancillary benefits. These other benefits may be economic in nature, or they may be expressed through beneficial changes in the ecological functioning of Cook Inlet. For example, an increase in the beluga whale population could induce growth of an active whale watching industry sector, with benefits flowing to a wide range of suppliers of support goods and services (e.g., lodging, restaurants, tourist services, marine services). Another example could be the resumption of traditional subsistence harvests of beluga whales in Cook Inlet, to the extent that designation of critical habitat may result in the recovery of this population to levels that would sustain a harvest. This consequence would have important social and cultural value. Yet another example could be reduced levels of pollution in Cook Inlet, with associated benefits accruing to a suite of ecological services, culminating in an improved quality of life for Cook Inlet residents and visitors, alike. With sufficient information, it is possible to monetize many of the benefits of critical habitat designation.

To determine the direct benefits of critical habitat designation, we would have to first quantify the ecological and biological benefits accruing to the Cook Inlet beluga whale population expected from ESA section 7 consultation (for example, the number of whales saved or the increase in their longevity, health, productivity, etc., deriving from protection of critical habitat), and then translate those benefit streams into dollars (for example, using information about society's willingness-to-pay to achieve these outcomes). For the ancillary benefits, monetizing impacts would require quantifying the effects of critical habitat protection to these other potential sources of benefits, and then translating these impacts into comparable (i.e., discounted present value) dollars, employing the appropriate rate of social time preference, and projecting the schedule at which benefits would accrue, over time.

While conceptually achievable, we are not aware of any such analysis having been completed for Cook Inlet beluga whales or their critical habitat. A research project that intends to address these specific issues for the Cook Inlet beluga whale has been initiated by researchers at NOAA's Alaska Fisheries Science Center. That research is in the very early design and development stage, with even preliminary results not anticipated for, perhaps, several years.

ESA section 4(b)(2) requires us also to consider impacts other than economic impacts. These can be equally difficult to monetize; for example, we lack information to monetize the benefits to national security from excluding certain areas from the critical habitat designation. Given the lack of information that would allow us either to quantify or monetize the benefits of designating critical habitat, we have determined the "qualitative conservation benefits" of designating each of the two particular areas identified as critical habitat for Cook Inlet beluga whales.

In determining the benefit of designation for each area, we considered a number of factors. We took into account the physical and biological features present in the area, the types of human activities that may threaten these features occurring in and/or adjacent to the area, and the likelihood that designation would lead to changes in those activities, either because of an ESA section 7 consultation or because of the educational effect of designation. We also considered that each area is unique and supports a distinct and critical aspect of the whales' life history. This consideration is described in the 4(b)(2) preparatory analysis supporting this proposed rule and summarized above (Proposed Critical Habitat).

Designation of critical habitat in Area 1 is likely to improve the ability of an ESA section 7 consultation to focus on Cook Inlet nearshore areas, beluga prey species, water quality, and passage conditions, as essential biological features of the whales' habitat. As the most industrialized and populated region of the State, Area 1 receives high volumes of waste discharge. Designation of this area as critical habitat is likely to improve the ability of a section 7 consultation to affect water quality management activities, though we have little information at this time to predict what those actions may be, or how such actions may be changed, as a result of section 7 consultation. We believe critical habitat designation will provide significant conservation benefits to beluga whales, particularly in Area 1, because of its educational value for all users of the upper Inlet. If we can publicly highlight that the area is "critical habitat" for the whales, it will strengthen the messages to all users, whether industrial, municipal, commercial, tribal, recreational, or residential of their impacts upon, and responsibility for, the upper-Inlet area. Because Area 1 contains most of what we consider high-value foraging habitat, designation is likely to increase awareness of this habitat value and the need for special attention to issues that might degrade, diminish, or otherwise adversely impact this habitat.

Area 2 contains areas known to provide foraging and overwintering areas for Cook Inlet belugas, and is generally more remote and less intensively developed than Area 1. Designation of critical habitat will heighten public awareness of the beluga's use of, and dependence upon, this habitat. It would also have many of the benefits described for Area 1.

ESA Section 4(a)(3)(B)(i) Analysis

Section 4(a)(3)(B)(i) of the ESA provides: "The Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such a plan provides benefit to the species for which critical habitat is proposed for designation." In response to the ANPR, we have received a request from the U.S. Air Force to

exempt Elmendorf Air Force Base (EAFB) from the designated critical habitat. The Air Force seeks this exemption based on the existence of an Integrated Natural Resource Management Plan (INRMP), consistent with Public Law 108–136. However, because this military property extends seaward to MHHW and we have not proposed to designate as critical habitat any tributary waters within the EAFB areas covered by the INRMP, no portions of the EAFB areas overlap with the proposed critical habitat. Section 4(a)(3)(B)(i)'s exemption is therefore unnecessary and inapplicable to those areas. In the event that the proposed critical habitat boundaries might change in the final rule, we will evaluate this request and the benefit of the Elmendorf INRMP in providing for the conservation of the Cook Inlet beluga whale.

We have also considered exclusion under ESA section 4(a)(3)(B)(i) for a military live-fire practice range on Fort Richardson, near Anchorage. The Eagle River Flats range (ERF) provides training in artillery such as mortars. While the boundaries for the ERF (i.e., the MHHW line) do not overlap with the proposed critical habitat, the firing range includes the lower reaches of Eagle River which could have been included in the designation (similar to the Susitna and Little Susitna Rivers). Research by Fort Richardson has documented beluga whale use, including feeding behavior, within this portion of Eagle River.

We have considered the INRMP for Fort Richardson and whether that plan provides benefit for the Cook Inlet beluga whale. Based on our consideration of these factors, we conclude the Fort Richardson INRMP provides benefits for the Cook Inlet beluga whale and the exclusion of the ERF is consistent with section 4(a)(3)(B)(i) of the ESA. Therefore, the proposed designation does not include any area within the ERF. However, areas outside the area covered by the INRMP, such as those areas outside of and surrounding the ERF range, are not subject to the exemption contained in section 4(a)(3)(B)(i).

ESA Section 4(b)(2) Analysis

We have described the specific areas that fall within the ESA section 3(5) definition of critical habitat and that are eligible for designation as critical habitat. Section 4(b)(2) of the ESA requires the Secretary to consider the economic impact, impact on national security, and any other relevant impact of designation. The Secretary has the discretion to exclude any particular area from designation if he determines the benefits of exclusion outweigh the benefits of designation of that particular area, based upon best scientific and commercial data. The Secretary may not exclude an area from designation if exclusion will result in the extinction of the species. The authority to exclude any particular area from the critical habitat designation is discretionary.

To determine the "benefits of excluding a particular area," we considered the previously-discussed Federal activities that have the potential to be changed, as a direct result of a section 7 consultation and application of the prohibition against destroying or adversely modifying critical habitat. We considered changes to those actions that could potentially be required to avoid destroying or adversely modifying critical habitat, regardless of whether the changes could also potentially be required to avoid jeopardizing the whales' continued existence. When both "adverse modification" and "jeopardy" considerations were present, we apportioned the respective shares of the impacts of consultation, as described above, in the discussion of our General Analytic Approach. We also considered economic benefits of excluding each "particular" area, and considered national security benefits of excluding particular areas, based on military ownership, interests, or control.

ESA section 4(b)(2) does not specify a method for the weighing process. Agencies are frequently required to balance benefits of regulations against impacts. Executive Order (E.O.) 12866 most recently established this requirement for Federal agency regulation. Executive branch guidance from the Office of Management and Budget (OMB) suggests that benefits should first be monetized (converted into dollars). Benefits that cannot be monetized should be quantified (converted into units). Where benefits can be neither monetized nor quantified, agencies are to describe the expected benefits (U.S. Office of Management and Budget, Circular A–4, September 17, 2003 (OMB, 2003)).

The draft economic report (Entrix, 2009) describes in detail, the actions that may be affected and the estimate of economic impacts that might result from critical habitat designation.

Section 4(b)(2) of the ESA requires that we balance the benefit of designation against the benefit of exclusion for each particular area. The benefit to the species of designation depends upon the conservation value of the area, the seriousness of the threats to that conservation value, and the extent to which an ESA section 7 consultation or the educational aspects of designation will address those threats. If a threat bears a closer relationship to the destruction or adverse modification prohibition of section 7, we can begin to understand and give weight to the incremental benefit of designation, beyond the protection provided by listing and the jeopardy prohibition. We have identified the anthropogenic threats that face each area, and the likelihood that the destruction or adverse modification prohibition will enhance our ability to address those threats. Based upon the best available science, and the Regulatory Impact Review (RIR)/4(b)(2) preparatory analysis/Initial Regulatory Flexibility Analysis (IRFA), we believe designation of critical habitat will enhance our ability to address many of these threats, either through an ESA section 7 consultation or through ongoing public outreach and education. Because some of these threats bear a stronger relationship to adverse modification than to jeopardy, we also believe there is an incremental benefit of designation beyond the protection afforded by the jeopardy prohibition.

The benefit of designation also depends on the conservation value of the area. The habitat areas for Cook Inlet beluga whales are unique and irreplaceable. Each of the proposed critical habitat areas supports a distinct aspect of the whales' life history, and the conservation function of each area complements the conservation function of the other. Therefore, designation of each critical habitat area benefits the conservation function of the other area. For all of the reasons discussed above, we consider the benefit of designation of each area (when taken in its entirety) to be high. The benefit of exclusion of an area depends on some of the same factors – the likelihood of an ESA section 7 consultation and the extent to which an activity is likely to change, either in response to critical habitat designation, or as a result of that consultation. As with the benefit of the designation-side of the equation, if a threat bears a closer relationship to the adverse modification prohibition of section 7, we can begin to understand and give weight to the incremental cost of designation (benefit of inclusion) beyond the cost associated with listing and the jeopardy prohibition. In balancing the potential costs of designation, we also considered the nature of the threats and the relevance of section 7's destruction or adverse modification prohibition to each threat. Because adverse modification and jeopardy bear an equally strong

relationship to many activities, we gave these costs of designation moderate weight. We recognize that we have not monetized (quantified) the costs that may be associated with the education benefit of designation.

Section 4(b)(2) requires consideration of national security interests, in addition to any economic factors. Possible impacts to national security due to designation of critical habitat include: preventing, restricting, or delaying training access to these sites; restricting or delaying training activities; and delaying response times for troop deployments and overall operations. The benefit of excluding these particular areas may include that the Department of Defense would only be required to comply with the jeopardy prohibition of ESA section 7(a)(2) and not the adverse modification prohibition. However, unless the areas excluded include areas outside and beyond the military properties, it is possible that consultation would continue to include impacts to critical habitat, because of the requirement to consider indirect, as well as direct impacts.

Two military installations may be affected by designation of critical habitat for Cook Inlet beluga whales. These are the Fort Richardson Army Base and Elmendorf Air Force Base, both located immediately adjacent to the critical habitat Area 1. Additionally, the Department of Defense has operational issues associated with the Port of Anchorage. The draft economic report presents economic costs associated with designation for the two installations.

In response to the ANPR, we received a request to delete the Port of Anchorage (POA) from the proposed critical habitat. The POA cites the designation of the Port as a Strategic Military Seaport by the Department of the Army's Military Surface and Distribution Command as justification for their request. We have requested additional information from the POA regarding this specific request for inclusion in the final 4(b)(2) analysis, but we do not propose this exclusion. Therefore, at present, no finding has been made on this request.

We did not identify other relevant impacts of designation beyond economic impacts and impacts on national security.

At present, we believe that the benefits of excluding any particular area do not outweigh the benefits of designating those areas as critical habitat, given the endangered status of the whales, the uniqueness of the habitat, the fact that threats to habitat were a primary concern leading to our endangered finding, and the fact that designation will enhance the ability of an ESA section 7 consultation to protect the critical elements of this habitat.

Public Hearings

50 CFR 424.16(c)(3) requires the Secretary to promptly hold at least one public hearing if any person requests one within 45 days of publication of a proposed rule to designate critical habitat. Such hearings provide the opportunity for interested individuals and parties to give opinions, exchange information, and engage in a constructive dialogue concerning this proposed rule. We encourage the public's involvement in this matter. Based on the level of past interest in Federal actions concerning Cook Inlet beluga whales, we intend to conduct at least one public hearing. A notice of this and any additional hearings will appear in the **Federal Register**, local newspapers, and on our website at least 2 weeks prior to the meeting.

Classifications

Clarity of the Rule

E.O. 12866 requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand, including answers to questions such as the following: (1) Are the requirements in the proposed rule clearly stated? (2) Does the proposed rule contain technical jargon that interferes with its clarity? (3) Does the format of the proposed rule (grouping and order of the sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) What else could we do to make this proposed rule easier to understand? You may send comments on how we could make this proposed rule easier to understand to one of the addresses identified in the **ADDRESSES** section.

Regulatory Planning and Review

In accordance with E.O. 12866, this document is a significant rule and has been reviewed by the OMB. As noted above, we have prepared several reports to support and assess the exclusion process under section 4(b)(2) of the ESA. The economic benefits and costs of the proposed critical habitat designations are described in our draft economic report (i.e. RIR/4(b)(2) preparatory analysis/IRFA).

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must either certify that the action is not likely to result in significant adverse economic impacts on a substantial number of small entities; or it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). NMFS has prepared an initial regulatory flexibility analysis (IRFA) and this document is available upon request or see our web site (see **ADDRESSES**). This IRFA evaluates the potential effects of the proposed critical habitat designation on federally regulated small entities. The reasons for the action, a statement of the objectives of the action, and the legal basis for the proposed rule, are discussed earlier in the preamble. A summary of the analysis follows.

The small entities that may be directly regulated by this action are those that seek formal approval (e.g., a permit) from, or are otherwise authorized by, a Federal agency to undertake an action or activity that "may affect" critical habitat for the Cook Inlet beluga whale. Submission by a small entity of such a request for a Federal agency's approval would require that agency (i.e., the 'action agency') to consult with NMFS (i.e., the 'consulting agency').

Consultations vary from simple to highly complex, depending on the specific facts of each action or activity for which application is made. Attributable costs are directly proportionate to complexity. In the majority of instances projected to take place under the proposed critical habitat designation, these costs are expected to accrue solely to the Federal agencies that are party to the consultation. In only the most complex formal consultations, a private sector applicant might incur costs directly attributable to the designation consultation process. For example, if the formal consultation concludes that the proposed activity is likely to destroy or adversely modify critical habitat, the applicant will have to implement modifications to avoid such effects. These modifications have the potential to result in adverse economic impacts, although they need not necessarily do so.

An examination of the Federal agencies with management, enforcement, or other regulatory authority over activities or actions within, or immediately adjacent to, the proposed critical habitat area, resulted

in the following list: the Army Corps of Engineers (COE), EPA, Minerals Management Service (MMS), Maritime Administration (MARAD), U.S. Coast Guard (USCG), Department of Defense (DOD), NOAA Fisheries Service (NMFS), Federal Highway Administration (FHWA), Federal Energy Regulatory Commission (FERC), and Federal Aviation Administration (FAA). Activities or actions with a nexus to each, and which may be expected to require some level of consultation, include: COE permits for structures and work in waters of the United States; EPA permitting of discharges under the National Pollutant Discharge Elimination System; MMS oil and gas exploration and production permitting in Federal waters of Cook Inlet; MARAD permits for the Port of Anchorage expansion; USCG permits for spill response plans; DOD activities at the Army's Fort Richardson and Air Force's Elmendorf facilities; NMFS authorizations of commercial fisheries, and review of subsistence harvest allowances; FHWA funding of highway and bridge improvements along Turnagain Arm; FERC permits for turbine electrical generation projects (wind and tidal); FAA permitting of regional airport expansions and development.

A 10-year "post-critical habitat designation" analytical horizon was adopted, during which time NMFS may reasonably expect to consult on critical habitat-related actions with one or more of the action agencies identified above. The majority of the consultations are expected to be "informal" (we estimate ninety percent of all consultations would be informal). In each of these, no adverse impacts would accrue to the entity seeking a permit, authorization, etc. The more complex and costly "formal" consultations are projected to account for, perhaps, ten percent. Here, NMFS and the Federal action agency may develop alternatives that prevent the likelihood that critical habitat will be destroyed or adversely affected. The extent to which these "formal" consultations will result in more than de minimus third party costs, as well as whether such third parties constitute small entities for Regulatory Flexibility Act purposes, cannot be predicted, a priori. Often, no consultation will be necessary, as all questions can be resolved through the "technical assistance" process.

We lack sufficient information to estimate precisely the number of consultations that may result in a determination of destruction or adverse modification to critical habitat. However, on the basis of the underlying biological, oceanographic, and ecological science used to identify the PCEs that define critical habitat for the Cook Inlet beluga whale, as well as the foregoing assumptions, empirical data, historical information, and accumulated experience regarding human activity in Cook Inlet, we believe that various federally authorized activities have the potential to "destroy or adversely modify" Cook Inlet beluga whale critical habitat. While we are unable to predict in advance exactly which activities might result in the destruction of adverse modification of the proposed critical habitat, we note that such activities are restricted to those actions impacting the identified essential features, or PCEs. Importantly, however, an action that may adversely affect a PCE is not necessarily one that will result in the destruction or adverse modification of the proposed critical habitat.

Executive Order 13211

On May 18, 2001, the President issued an E.O. on regulations that significantly affect energy supply, distribution, and use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking any action that promulgates or is expected to lead to the promulgation of a final rule or regulation that (1) is a significant regulatory action under E.O. 12866 and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy.

NMFS has considered the potential impacts of this action on the supply, distribution, or use of energy and finds the designation of critical habitat will not have impacts that exceed the thresholds identified above.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act, we make the following findings:

(a) This proposed rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, tribal governments, or the private sector and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding" and the State, local, or tribal governments "lack authority" to adjust accordingly. (At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement.)

"Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance; or (ii) a duty arising from participation in a voluntary Federal program." The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the ESA, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities who receive Federal funding, assistance, permits or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above to State governments.

(b) Due to the prohibition against the take of this species both within and outside of the designated areas, we do not anticipate that this proposed rule will significantly or uniquely affect small governments. As such, a Small Government Agency Plan is not required.

Takings

In accordance with E.O. 12630, the proposed rule does not have significant takings implications. A takings implication assessment is not required. The designation of critical habitat

affects only Federal agency actions. Private lands do not exist within the proposed critical habitat and therefore would not be affected by this action.

Federalism

In accordance with E.O. 13132, this proposed rule does not have significant federalism effects. A federalism assessment is not required. In keeping with Department of Commerce policies, we request information from, and will coordinate development of, this proposed critical habitat designation with appropriate state resource agencies in Alaska. The proposed designation may have some benefit to state and local resource agencies in that the areas essential to the conservation of the species are more clearly defined, and the PCEs of the habitat necessary to the survival of Cook Inlet beluga whale are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, it may assist local governments in long-range planning (rather than waiting for case-by-case ESA section 7 consultations to occur).

Civil Justice Reform

In accordance with E.O. 12988, the Department of Commerce has determined that this proposed rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the ESA. This proposed rule uses standard property descriptions and identifies the PCEs within the designated areas to assist the public in understanding the habitat needs of the Cook Inlet beluga whale.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This proposed rule does not contain new or revised information collection for which OMB approval is required under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

NMFS has determined that an environmental analysis as provided for under the National Environmental Policy Act of 1969 for critical habitat designations made pursuant to the ESA is not required. See *Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied, 116 S.Ct. 698 (1996).

Government-to-Government Relationship

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. E.O. 13175 - Consultation and Coordination with Indian Tribal Governments- outlines the responsibilities of the Federal Government in matters affecting tribal interests. Public Law 108–199 (2004), codified in notes to 25 U.S.C.A. § 450, requires all Federal agencies to consult with Alaska Native corporations on the same basis as Indian tribes under this Executive Order.

NMFS has determined the proposed designation of critical habitat for the Cook Inlet beluga whale in Cook Inlet, Alaska, would not have tribal implications, nor affect any tribal governments or Native corporations. Although the Cook Inlet beluga whale may be hunted by Alaska Natives for traditional use or subsistence purposes, none of the proposed critical habitat areas occurs on tribal lands, affects tribal trust resources, or the exercise of tribal rights.

References Cited

A complete list of all references cited in this rulemaking can be found on our website at *http://www.fakr.noaa.gov/* and is available upon request from the NMFS office in Juneau, Alaska (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 226

Endangered and threatened species.

Dated: November 24, 2009.

James W. Balsiger,

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.

For the reasons set out in the preamble, we propose to amend part 226, title 50 of the Code of Regulations, as set forth below:

PART 226—DESIGNATED CRITICAL HABITAT

1. The authority citation of part 226 continues to read as follows:

Authority: 16 U.S.C. 1533.

2. Add a new § 226.220 as follows:

§ 226.220 Critical habitat for the Cook Inlet beluga whale.

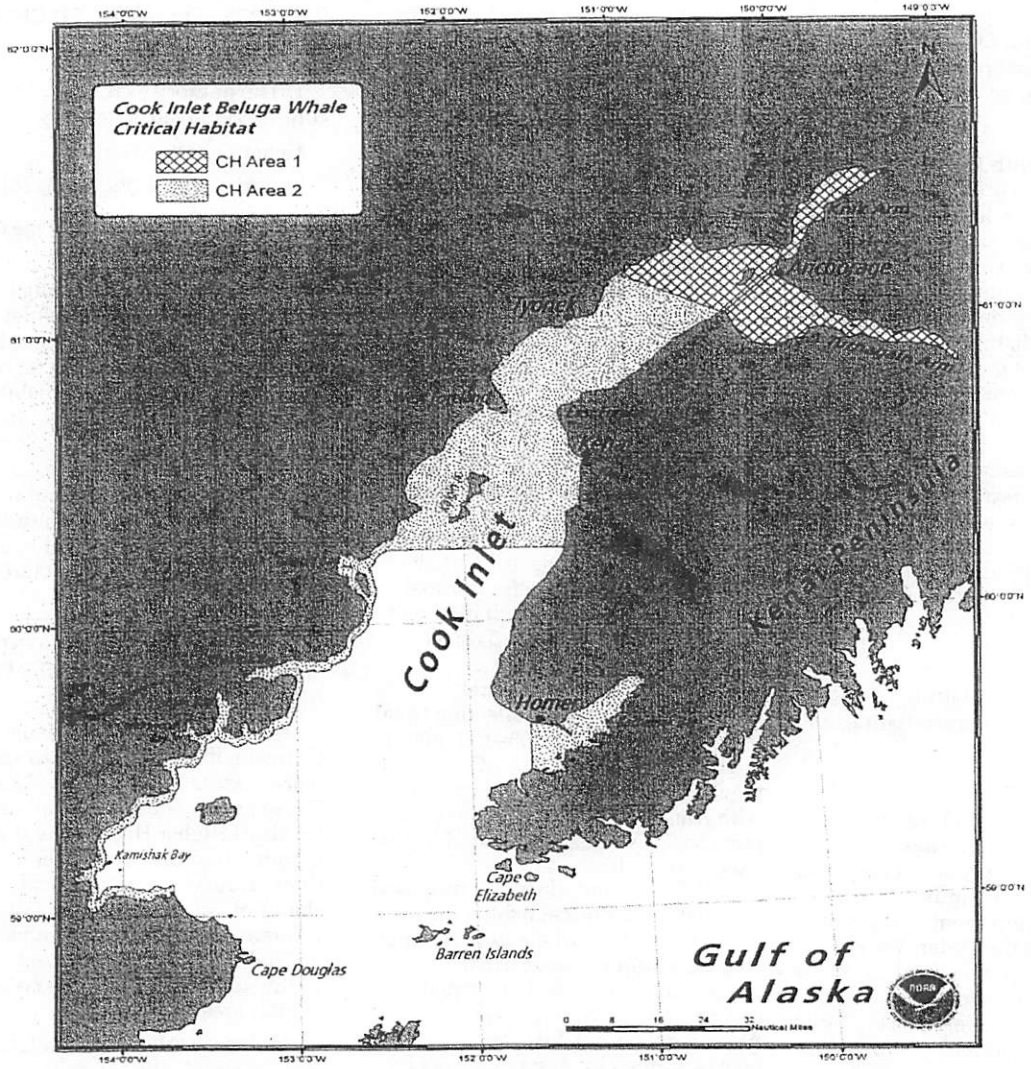
Critical habitat is designated in Cook Inlet, Alaska, for the Cook Inlet beluga whale as described in paragraphs (a) and (b) of this section. The textual description of this critical habitat is the definitive source for determining the critical habitat boundaries. General location maps are provided for general guidance purposes only, and not as a definitive source for determining critical habitat boundaries. Critical habitat does not include manmade structures and the land on which they rest within the designated boundaries described in (a) (1) and (a) (2) that were in existence as of [*Insert effective date of the FINAL RULE*].

(a) *Critical Habitat Boundaries.* Critical habitat includes two specific marine areas in Cook Inlet, Alaska. These areas are bounded on the upland by Mean Higher High Water (MHHW) datum, other than the lower reaches of three tributary rivers. Critical habitat shall not extend into the tidally-influenced channels of tributary waters of Cook Inlet, with the exceptions noted in the descriptions of each critical habitat area.

(1) *Area 1.* All marine waters of Cook Inlet north of a line from the mouth of Threemile Creek (61° 08.5' N., 151° 04.4' W.) connecting to Point Possession (61° 02.1' N., 150° 24.3' W.), including waters of the Susitna River south of 61° 20.0' N., the Little Susitna River south of 61° 18.0' N., and the Chikaloon River north of 60° 53.0' N.

(2) *Area 2.* All marine waters of Cook Inlet south of a line from the mouth of Threemile Creek (61° 08.5' N., 151° 04.4' W.) to Point Possession (61° 02.1' N., 150° 24.3' W.), including waters within 2 nautical miles seaward of MHHW along the western shoreline of Cook Inlet between 60° 25' N. and the mouth of the Douglas River (59° 04' N., 153° 46.0' W.); all waters of Kachemak Bay east of 151° 40.0' W.; and waters of the Kenai River below the Warren Ames bridge at Kenai, Alaska.

(b) A map of the proposed critical habitat for Cook Inlet beluga whale follows.



(c) *Primary constituent elements.* The primary constituent elements essential to the conservation of Cook Inlet beluga whales are:

(1) Intertidal and subtidal waters of Cook Inlet with depths <30 feet (MLLW) and within 5 miles of high and medium flow anadromous fish streams.

(2) Primary prey species consisting of four (4) species of Pacific salmon (Chinook, sockeye, chum, and coho), Pacific eulachon, Pacific cod, walleye pollock, saffron cod, and yellowfin sole.

(3) The absence of toxins or other agents of a type or amount harmful to beluga whales.

(4) Unrestricted passage within or between the critical habitat areas.

(5) The absence of in-water noise at levels resulting in the abandonment of habitat by Cook Inlet beluga whales.

[FR Doc. E9–28760 Filed 12–1–09; 8:45 am]
BILLING CODE 3510–22–S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 635

[Docket No. 0907171140–91141–01]

RIN 0648–XQ38

Atlantic Highly Migratory Species; 2010 Atlantic Bluefin Tuna Quota Specifications

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments; notice of public hearings.

SUMMARY: NMFS proposes 2010 fishing year specifications for the Atlantic bluefin tuna (BFT) fishery to set BFT quotas for each of the established domestic fishing categories. This action is necessary to implement recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT), as required by the Atlantic Tunas Convention Act (ATCA), and to achieve domestic management objectives under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). NMFS solicits written comments and will hold public hearings to receive oral comments on these proposed actions.

DATES: Written comments must be received on or before January 4, 2010.

The public hearing dates are:

1. December 14, 2009, 3 p.m. to 5 p.m., Silver Spring, MD.

2. December 15, 2009, 3 p.m. to 5 p.m., Gloucester, MA.

ADDRESSES: You may submit comments, identified by "0648–XQ38", by any one of the following methods:

December 2009
AGENDA B7
Supplemental

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

DEC 2009

Chris Oliver
Executive Director
North Pacific Fishery Management Council
605 West 4th, Suite 306
Anchorage, Alaska 99501-2252

Dear Mr. Oliver:

This document transmits the supplemental biological opinion prepared by the National Marine Fisheries Service (NOAA Fisheries), Northwest Region issued under the authority of section 7 of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1536), concerning authorization of the Bering Sea/Aleutian Islands groundfish fisheries. In particular, we considered the potential effects of Amendment 91 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area. NOAA Fisheries has determined that the proposed action is not likely to jeopardize the continued existence of Lower Columbia River Chinook or Upper Willamette River Chinook.

If you have questions regarding this biological opinion, please contact Peter Dygert of my staff (206-526-6734).

Sincerely

/s/ Barry A. Thom,
Acting Regional Administrator

Enclosure

PUBLIC TESTIMONY SIGN-UP SHEET

Agenda Item: B Reports

	NAME *(PLEASE PRINT)*	TESTIFYING ON BEHALF OF:
1	DAVID LITTLE	FROZEN LL COALITION
2	Victoria O'Connell	Halibut Coalition
3	Jason Anderson	BVC
4	GLENN REED	PSPA
5	GERRY MERRIGAN	SELF
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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.

Handout

HALIBUT COALITION

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halibutcoalition@gmail.com
www.halibutcoalition.org

December 7, 2009

Mr Eric Olson
Chair
North Pacific Fishery Management Council
605 West 4th Ave, Ste 306
Anchorage, AK 99501

Dear Chairman Olson and Member of the Council,

Re: Agenda Item: B Reports

During the B reports of your December meeting, NMFS will provide an update on the halibut charter moratorium and a briefing on the outcome of the lawsuit filed by charter plaintiffs against the 2C conservation management measures. Members of the Halibut Coalition request that the Council take this opportunity to STRONGLY urge NMFS to implement effective management measures to limit Area 2C charter halibut harvest to the GHL in 2010. We make this recommendation for the following reasons:

- The estimated 2009 charter harvest in Area 2C, with the one halibut daily limit in place for the entire season, is 1.3 million pounds.
- The 2009 charter halibut GHL in Area 2C is .788 million pounds, hence the charter fleet exceeded its 2009 GHL by a preliminary estimate of .518 million pounds. (The 2008 preliminary harvest numbers underestimated the harvest)
- The Council, IPHC, and NMFS have repeatedly committed to managing the charter halibut fishery to the GHL until a long-term management strategy is in place.
- A federal judge has ruled that charter GHL overages constitute a conservation threat to the resource (see attached memo).
- Despite substantial setline quota reductions over the past four years, the Area 2C halibut stock continues to decline and an additional quota reduction is anticipated in 2010.

- The charter halibut moratorium is not scheduled to limit participation and in the charter fishery until 2011, hence in the absence of additional restrictions the 2010 charter harvest can be projected to equal or exceed the 2009 harvest.

- Commercial fishermen and processors, subsistence harvesters and fishery dependent communities have suffered severe economic hardship as a result of the estimated 58% halibut biomass decline in Area 2C. An additional 26% reduction is now recommended for 2C by the IPHC staff. Fishermen and processors have focused on the long-term as they grimly accepting conservation reductions. Given continued declines and poor age-class structure, the Area 2C stock cannot withstand more quota overages. NMFS has been told by a federal judge to manage the charter sector to the GHL, and clearly the one halibut daily limit is insufficient to prevent GHL overages.

Coalition members request that the Council direct NMFS to implement both of the following:

1) additional restrictions on 2C halibut charter harvest for 2010;

2) 2010 **effective** implementation of the halibut charter moratorium

The Council might also take note that additional regulatory controls would be triggered in Area 2C by the Catch Sharing Plan, which is scheduled for implementation in 2011 pending Secretarial approval, if it were in place in 2010. The additional regulatory action triggered would be a maximum size on the retained halibut (see table 1, pages 1-2 of Northern Economics Analysis: *Issues in selecting a maximum length limit to manage charter halibut harvest in times of low abundance.* July 6, 2009)

Attached is a summary of the charter lawsuit (Van Valin v. Locke, 2009 WL 4068028 (D.D.C., November 23, 2009) prepared by the Halibut Coalition attorney, George Mannina. To quote from Mr. Mannina's conclusion:

> "The Court's decision stands for the principles that (1) the GHL is the maximum harvest level for the charter sector and NMFS can regulate the charter fleet to limit the charter harvest to the GHL, (2) exceeding the GHL constitutes a conservation threat to the resource, (3) the charter sector's current harvest levels in excess of the GHL are not properly part of the fleet's "present participation" in the fishery because rewarding overfishing above the GHL is inappropriate, and (4) regulations implementing the GHL are fair and equitable because limiting the charter fleet to its GHL is a legitimate fishery management objective, provided the Administrative Record documents the relationship between the objective and the regulation selected." (G. Mannina memo, 12/5/09)

In closing, the Halibut Coalition urges NMFS to take appropriate action to limit the 2010 2C charter harvest to the GHL. Such action is consistent with past Council, NMFS and IPHC commitments; it is consistent with the findings of the court; and it is essential to conservation of the 2C halibut resource.

Thank you for your attention,

Sincerely,

Julianne Curry, Petersburg Vessel Owners Association

Rochelle van den Broek, Groundfish Division, Cordova District Fishermen United

Jeff Stephan, United Fishermen's Marketing Association

Robert Alverson, General Manager, Fishing Vessel Owners Association

Linda Behnken, Executive Director, Alaska Longline Fishermen's Association

Roland Maw, Upper Cook Inlet Drift Association

Tim Henkel, President, Deep Sea Fishermen's Union

Rhonda Hubbard, Kruzof Fisheries, LLC

Chris Knight, United Southeast Alaska Gillnetters

Peggy Parker, Executive Director, Halibut Association of North America

Thomas M. McLaughlin, President/CEO Seafood Producers Cooperative

Kathy Hansen, Executive Director, Southeast Alaska Fishermen's Association

Enclosure: George Mannina, Nossaman LLP, Memo of December 5, 2009

Copy: Mr. Sean Parnell, Governor, State of Alaska
Senator Lisa Murkowski, U.S. Senate
Senator Mark Begich, U.S. Senate
Congressman Don Young, U.S. House of Representatives
Mr. Denby Lloyd, Commissioner, Alaska Department of Fish and Game
Dr. Bruce Leaman, Executive Director, International Pacific Halibut Commission
Ms Jane Lubchenco, Undersecretary of Commerce for Oceans and Atmosphere
Mr. Jim Balsiger, Regional Administrator, NMFS Alaska

NOSSAMAN LLP
O'Connor & Hannan

Memorandum

TO: Linda Behnken

FROM: George J. Mannina, Jr.

DATE: December 5, 2009

RE: Analysis of the Decision in *Van Valin v. Locke,* 2009 W.L. 4068028 (D.D.C. November 23, 2009)

On November 23, 2009, Judge Collyer rejected the charter boat plaintiffs' argument that the GHL is not an enforceable limit, the regulations enforcing the GHL are not fair and equitable, and the enforcing regulations do not account for the present participation of the charter fleet in the halibut fishery.

The GHL is an Enforceable Cap on the Charter Harvest

The Court noted the Northern Pacific Halibut Act grants the Secretary broad authority to adopt necessary regulations to carry out the purposes of the Act and the International Convention. *Van Valin v. Locke,* 2009 W.L. 4068028 (D.D.C. Nov. 23, 2009) at 1. The Court found: "The GHL regulations establish the total maximum poundage for the charter vessel fishery each year according to a predetermined formula that depends on that year's CEY." *Id.* at 2, *citing* 68 Fed. Reg. 47256, 47259 (August 8, 2003). The Court went on to cite with approval the statement in preamble to the regulations setting the GHL levels that "the goal for the GHL was to provide a limit on the total amount of harvests in the guided fishery...." *Id.* The Court continued by quoting with approval the preamble to the final one halibut rule that "charter removals should be close to the GHL...." *Id.* at 8, *citing* 74 Fed. Reg. 21194 (May 6, 2009).

The Court noted that the plaintiff charter operators had argued the GHL "merely set benchmarks and did not limit the halibut harvest." 2009 W.L. 4068028 at 9. The Court responded to Plaintiffs' argument stating: "This argument is unsupported by the Administrative Record." *Id.* The Court noted the word "benchmark" is to be understood in the context that the GHL is a "benchmark" that tells the agency when it is necessary to adopt appropriate enforcement measures. *Id.* at 2, 9. Thus, the Court noted the GHL is not self-enforcing but sets the charter limit that is to be enforced "by subsequent regulation." *Id.* at 2.

Enforcing the GHL is Necessary for the Conservation of the Resource

Plaintiff charter boat operators had disputed the view that there was a conservation basis for enforcing the GHL. The Court rejected Plaintiffs' argument. The Court found that the GHL and the one halibut implementing rule were indeed rooted in conservation. The Court stated that the decline of the halibut biomass was a central fact in the North Pacific Council recommending "that the charter harvest be regulated...." *Id.* at 3. The Court found "The guided sport sector's overharvesting potentially undermines IPHC's conservation and management goals for the overall halibut stock. Thus, the final rule was based, in part, on a conservation concern...." *Id.* at 8. It is significant that the Court equated GHL exceedances with overfishing. The Court concluded by quoting with approval the preamble to the final rule that stated:

> As conservation of the halibut resource is the overarching goal of the IPHC, the magnitude of charter vessel harvest over the GHL in Area 2C has raised concern that such excessive harvests by the charter sector pose a conservation risk, with the potential to undermine the IPHC's conservation and management goals for the overall halibut stock. Therefore, restraining charter sector harvests to approximately the GHL would contribute to the conservation of the halibut resource.

Id. at 8-9, *citing* 74 Fed. Reg. at 21194-95.

The Regulations to Enforce the GHL Are Fair and Equitable

The Court noted that Plaintiffs did not challenge that NMFS has the authority to adopt harvest restrictions to implement the GHL. 2009 W.L. 4068028 at 5. Rather, Plaintiffs asserted that NMFS has never explained why the GHL and its implementing regulations were fair and equitable. In response, the Court noted the Secretary promulgated the regulations, in part, "to address the imbalance caused by the de facto reallocation from the commercial fishery to the charter industry caused by the charter sector's rapidly increasing harvests in recent years." *Id.* at 8. The Court found the Halibut Act does not require that NMFS make a specific finding and declaration that the regulation is fair and equitable but only that the allocation "*be* fair and equitable." *Id.* at 5 (emphasis in original).

The Court went on to state:

> When determining fairness and equity the focus is not on the impact of the regulation, but on its purpose. So long as the motive behind the regulation is justified in terms of the fishery management objective, advantaging one group over another is permissible under [National] Standard Four. 50 C.F.R. § 600.325(c)(3)(i)(A); *see also Alliance Against IFQs,* 84 F.3d at 350. The motive behind the Final Rule was justified in terms of fairness and equity; the Secretary considered the allocation of the halibut resource and conservation of the halibut resource in proper historical context.

Id. at 9. The Court then traced where in the Administrative Record NMFS considered the fairness and equity of the allocation and its implementing regulations, including the impact of the regulation on all user groups.

Present Participation in the Fishery was Properly Considered

Plaintiff charter operators argued that the one halibut rule was improper because it did not consider the current level of participation in the fishery by the charter operators. The Court soundly rejected this argument stating:

> While present participation in the fishery is one factor that the Secretary must examine when considering fishery management measures, another factor is historic harvest participation levels. *See* 16 U.S.C. § 1853(b)(6) (one of the factors to be considered under the Magnuson Act is historic participation and dependence on the fishery). In *Yakutat v. Gutierrez,* 407 F.3d 1054 (9th Cir. 2005), ... [t]he court found that it was permissible for the Secretary to place a higher premium on historical participation in the fishery rather than focusing solely on present participation. *Id.* at 1073. When promulgating the Final Rule, the Secretary examined the historical participation in the Pacific halibut harvest and the charter fishery's excessive harvests in recent years.

Id. at 11.

The Court went on to state that "Where overfishing by one group in recent years is the precise concern that the regulation intends to address, it makes sense to disregard the most recent participation data." *Id.* The Court's reasoning was that the charter sector should not be rewarded for ignoring the GHL. The Court stated:

> The Charter Operators' argument that the Secretary should have relied on recent participation data is in essence a claim that they are entitled to a greater allocation of the harvest because they have been harvesting a greater amount in recent years, *i.e.,* that they should be rewarded for exceeding the guidelines year after year. The Secretary understandably chose not to encourage such overharvesting.

Id. Again, note that the Court calls the GHL exceedences "overfishing" and "overharvesting."

Conclusion

The Court's decision stands for the principles that (1) the GHL is the maximum harvest level for the charter sector and NMFS can regulate the charter fleet to limit the charter harvest to the GHL, (2) exceeding the GHL constitutes a conservation threat to the resource, (3) the charter sector's current harvest levels in excess of the GHL are not properly part of the fleet's "present participation" in the fishery because rewarding overfishing above the GHL is inappropriate, and (4) regulations implementing the GHL are fair and equitable because limiting the charter fleet to its GHL is a legitimate fishery management objective, provided the Administrative Record documents the relationship between the objective and the regulation selected.