

ALASKA REGIONAL SCIENTIFIC REVIEW GROUP

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30 May 2015

Eileen Sobeck
Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway, Room 14564
Silver Spring, MD 20910

transmitted by electronic mail

Dear Eileen:

The AKSRG held its annual meeting on 25-26 February 2015 at the Alaska Fisheries Science Center's National Marine Mammal Laboratory (NMML) in Seattle, Washington. As usual, staff from the National Marine Fisheries Service (NMFS) Alaska Fisheries Science Center (AFSC) and Alaska Regional Office (ARO) did a very good job of organizing the meeting, preparing draft stock assessment reports (SARs), and providing information on recent and planned marine mammal research and management activities. The draft SARs were distributed to the SRG earlier than usual and that was very helpful. We also appreciated the fact that your agency was able to continue to support a full, face-to-face, meeting of the AKSRG.

At the start of our meeting we heard updates from NMFS staff on recent conservation and management activities for Alaskan seals, sea lions, and cetaceans. The AFSC and ARO are obviously doing the best they can in this funding climate, and are maintaining many important research and management programs. The worst news we heard was that the Alaska Marine Mammal Observer Program (AMMOP) has been defunded.

The AKSRG then reviewed revised drafts of SARs for 23 NMFS-managed stocks. This is the first time we reviewed a complete SAR that dealt with Alaska harbor seals as 12 stocks. It was very good to see the individual abundance estimates and coefficients of variation (CVs) for each stock, and good news that only two stocks show signs of decreasing trends. As the AKSRG had requested earlier, CVs were included with the population estimates calculated for humpback whales from the SPLASH data. The SARs for bearded and ribbon seals included the first reasonable population estimates with CVs ever made for those stocks. The SAR for Southeast Alaska harbor porpoise, a stock of perennial concern to the AKSRG, was substantially revised.

At the end of the meeting the AKSRG had time to reflect with NMFS staff on progress that has been made in assessing the status of Alaska marine mammal stocks since the 1994 amendments to the Marine Mammal Protection Act (MMPA), and to discuss our current situation. As you know, determination of whether a stock qualifies as "strategic" under MMPA section 117 requires at least an estimate of minimum population size and an estimate of the level of incidental mortality and serious injury caused by commercial fisheries. If a stock is determined to be strategic, a take reduction plan may be required to reduce the level of takes by fisheries to below the potential biological removal (PBR) level.

Much has been done in the past 20 years to improve our understanding of abundance and stock status of Alaskan marine mammals. NMML and collaborators (e.g., Alaska Department of Fish and Game, North Slope Borough, and North Gulf Oceanic Society) have continually improved assessment methods, and the result is that we now have long-term datasets on abundance of Steller sea lions, northern fur seals, harbor seals, Cook Inlet belugas, bowhead whales, and killer whales. Estimates of minimum population sizes for those stocks can be determined with high confidence, and recent trends in abundance are known. The bad news is that current and recent abundance information is almost entirely lacking for several stocks of small (beaked whales, harbor and Dall's porpoise) and large (minke, fin, and sperm whale) cetaceans, largely because of the high cost of assessment programs for such widely distributed pelagic species. For those stocks we have no idea of current abundances or trends in abundance.

Estimation of the number of animals being killed or seriously injured in commercial fisheries is also problematic. In general, federally-managed trawl, longline, and pot fisheries provide estimates of marine mammal takes through mandatory bycatch observation programs. Those fisheries, which use large vessels and catch large amounts of fish or shellfish, generally fish with gear that is not very likely to capture, injure, or kill marine mammals. However, state-managed nearshore fisheries, especially those using gillnets, operate in areas used by large numbers of marine mammals and use gear types known to catch mammals, turtles, and seabirds worldwide (Barlow et al. 1994, Read et al. 2006).

After the 1994 MMPA amendments instituting the PBR process for managing incidental take of marine mammals in commercial fisheries, the ARO and AFSC developed a plan for observer programs to quantify the number of animals being seriously injured or killed (SI/M) in nearshore, state-managed, category II fisheries. That plan called for observing 11 fisheries for 2 years each, with the expectation that multiple fisheries would be observed concurrently as funding allowed. Another expectation was that the observation cycle would be repeated on a regular basis so that information used to estimate SI/M would be kept relatively current and data would be available on annual variability. Since the AMMOP began in 1999, a total of five fisheries have been observed for two years each, with a total expenditure for the programs of \$8.3 million. Observer coverage within a fishery has ranged from 1.6 to 7.6%, and in some cases the programs only covered a portion of the geographic extent of the fishery. More than half of the fisheries have not yet been observed at all, including the Bristol Bay salmon set and drift gillnet fisheries.

SARs usually point out major omissions, yet status decisions assume that if a fishery has not been observed, and no takes have been reported, then no SI/M interactions have occurred. Bristol Bay is a good example of why this approach is so wrong. As many as 2,841 fishers participate in the annual summer salmon fishery in Bristol Bay using approximately 370 miles of set and drift gillnets. Beluga whales, harbor porpoise, and harbor seals frequent the bays where fishing occurs, and earlier studies (using shoreline surveys not observer programs) documented several mortalities of belugas due to fishery interactions (Frost et al. 1984). But, looking at the most recently published SARs (2013) for those stocks the only recorded fishery takes in the previous five years were one harbor porpoise and three harbor seals in trawl fisheries, and four belugas reported as strandings. In the 2015 draft SAR that we just reviewed, the only harbor seal SI/M data shown for a nearshore fishery were collected in 1990-1991 in Prince William Sound, and in spite of that all 12 stocks are proposed to be classified as non-strategic.

Because NMFS has not been able to support regular monitoring of marine mammal takes in nearshore Alaska fisheries, it is impossible to know if PBR is being exceeded even for stocks with adequate abundance information. This is a bad situation that will only get worse with the

cessation of the AMMOP. Furthermore, 20 years of history has shown that even if AMMOP is revived there will not be sufficient funding to conduct observer programs of the intensity and frequency needed to provide current and reliable SI/M data for all important nearshore fisheries.

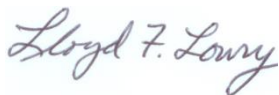
So, our problem is two-fold. First, funding has not been, and likely will never be, adequate to continue ongoing marine mammal assessment programs and to add the programs needed to comprehensively assess those stocks that have been under-studied. Second, funding has not been, and likely will never be, adequate to conduct the observer programs needed to monitor marine mammal SI/M in nearshore fisheries. Therefore, the PBR process will not work well for assessing the status of many Alaskan marine mammal stocks. The AKSRG is aware that AFSC and ARO staff share these concerns.

Something must be done. At GAMMSIII, the AKSRG presented a background paper suggesting the use of alternate means for assessing status of stocks and SI/M resulting from fishing. We also suggested using currently available tools to minimize marine mammal takes regardless of stock status, which would be consistent with the goal of the MMPA to reduce marine mammal takes to "insignificant levels approaching a zero mortality and serious injury rate". An example of this would be to use pingers on nets, as is commonly done in other regions of the U.S. So far, nothing has happened with those suggestions.

Your staff, in concert with the AKSRG, have over the past 20+ years done their best to implement MMPA sections 117 and 118. In those instances where stock abundance can be reasonably measured, and where takes in nearshore fisheries are unlikely, SARs can make a reliable assessment of stock status. Unfortunately, that is not the case for all stocks, leaving important nearshore species like harbor seals and harbor porpoise improperly assessed and at risk. Furthermore, potential measures to mitigate ongoing SI/M are not being developed or implemented. The AKSRG strongly recommends that NMFS direct AFSC and ARO leadership to undertake an immediate review of this situation and develop alternate strategies for the regime governing marine mammal-fishery interactions in Alaska. Ideally, a draft strategy could be prepared for review by the AKSRG at our next annual meeting.

Again, thanks to you and your staff for continued support of the AKSRG and its activities. We stand ready to help you and your staff improve our ability to assess and conserve Alaskan marine mammals.

Sincerely,



Lloyd F. Lowry, Chair
for the Alaska Scientific Review Group

cc: AKSRG members
Doug DeMaster, NMFS AFSC
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Citations

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- Read, A.J., et. al. 2006. Bycatch of marine mammals in U.S. and global fisheries. Conservation Biology 20:163-169.