



Alaska Beluga Whale Committee

Tom Gray, Chairman (907-304-2003)

Marvin Okitkun, Vice Chair (907-899-2233)

Kathy Frost, Secretary (808-987-0001)

Billy Adams, Officer at Large (907-852-0350)

Cyrus Harris, Officer at Large (907-350-7835)

DRAFT 2023 AGENDA

Wednesday – Thursday 6, 7 December 2023 Anchorage Hilton Hotel

Wednesday – Day 1

Meeting starts at 8:30

- 1. Invocation**
- 2. Introduction of members, guests, and students**
- 3. Minutes and agenda** - Review, correct, and approve minutes from November 2022 meeting and the agenda
- 4. Funding, partner, meeting and committee reports**
 - A. Funding report (John Citta)
 - B. NMFS Alaska Region report (Barbara Mahoney)
 - C. NMFS Marine Mammal Lab (Robyn Angliss)
 - D. Marine Mammal Commission (Sue Moore)
 - E. Inuvialuit-Inupiat Beluga Whale Commission meeting update (John Citta, Billy Adams)
- 5. Alaska regional reports and harvest reports** (Hunter delegates)
 - A. Statewide beluga harvests plus struck & lost, 2013-2022 (Kathy Frost)
 - B. North Slope (Barrow, Wainwright, Point Lay, Point Hope, Kaktovik, Nuiqsut, Diomede)
 - C. Kotzebue Sound (Buckland, Deering, Kivalina, Kotzebue/Sisualik, Noatak, Shishmaref)
 - D. Norton Sound (Nome, Brevig Mission, Golovin, White Mt., Elim, Shaktoolik, Koyuk, Unalakleet, St. Michael, Stebbins)
 - E. Yukon (Alakanuk, Emmonak, Hooper Bay, Kotlik, Mountain Village, Nunam Iqua, Pilot Station, Pitka's Point, Saint Mary's, Scammon Bay, Chevak, Marshall, Russian Mission)
 - F. Kuskokwim (AVCP, Platinum, Toksook Bay, Quinhagak, other)
 - G. Bristol Bay (Aleknagek, Dillingham; Bristol Bay overall report – Manokotak, Levelock, Clark's Point)
- 6. Aerial surveys**
 - A. Beaufort Sea abundance estimate update (Robyn Angliss)
 - B. Upcoming surveys Eastern Bering Sea 2024; Eastern Chukchi Sea and Beaufort 2025 (John Citta, Robyn Angliss)
- 7. ABWC Projects**
 - A. Beluga stomach analysis and diet projects (Lori Quakenbush)
 - B. Student beluga hunting guide update and timeline, EBS and NSB (Lori Quakenbush)
- 8. Other beluga projects and research**
 - A. Recent genetics sample analysis (Greg O'Corry Crowe)
 - B. Yukon River hydrophone acoustics study (Marvin Okitkun, Barndon Kameroff)
 - C. Historical beluga commercial harvests around the world (John Burns)

***** Banquet at Hilton. Doors open at 6:30. Door prizes!!!! *****

Alaska Beluga Whale Committee

Thursday - Day 2

Meeting starts at 8:30 am

- D. Beluga markings atlas (Lori Quakenbush)
- E. North Slope Borough beluga projects – genetics, tagging, harvest monitoring, aging, drones (John Citta)
- F. Beluga drone studies in Cook Inlet (Paul Wade)

9. North Pacific Research Board Eastern Bering Sea research plan (Danielle Dickson)

10. Beluga Management

- A. Co-Management meetings with NMFS: Nov 2022, May 2023, upcoming (Tom Gray, Robert Suydam)
- B. Kotzebue Sound belugas
 - i. Designating Kotzebue Sound as a separate stock: update (Robyn Angliss)
 - ii. Is Kotzebue Beluga Plan being followed? (Cyrus Harris)
- C. Other stocks
 - i. SAR update: Bristol Bay, Eastern Chukchi (Robyn Angliss)
 - ii. Eastern Bering Sea belugas – management plan, winter meetings (Tom Gray, Lori Quakenbush)

11. Thorny issues

- A. Samples – how do we get message out that samples are important?
 - i. If delegates aren't comfortable or able to get samples, HOW? TCS? Or other ideas?
 - ii. Kits for each delegate
- B. Tagger training and tagging
 - i. We have trained taggers but no one tags. What should we do?

12. Elections (time for normal reelection and/or rotation)

- A. Election for Vice Chairman (now Marvin Okitkun)
- B. Election for Members-at-Large (now Billy Adams and Cyrus Harris)

13. Research Questions for 2023 (Tom Gray, Kathy Frost, John Citta)

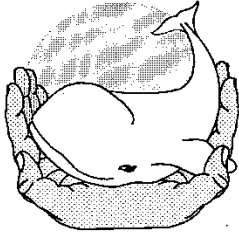
- A. What projects are high priority for 2024?
- B. Do we need to submit a proposal for additional funds in 2024?

14. Youth reports (young hunters tell what they thought of the meeting)

15. Thank you to NSB - finding funding for banquet and other things they do

16. Any other items

17. Next meeting dates



Alaska Beluga Whale Committee

ABWC Officers since 1988

The Officers of the Alaska Beluga Whale Committee are Chairman, Vice Chairman, Secretary and two Members-at-Large. These officers constitute the Executive Committee. Each officer serves for a two-year term and may be re-elected for consecutive terms. The Chairman and Secretary are elected the same year, and the remaining officers in the alternate year to ensure continuity.

Chairman:

1988 – 1995 Walter Sampson, Kotzebue

1995 – 2005 Ross Schaeffer, Kotzebue

2005 - 2017 Willie Goodwin, Kotzebue

2017 – present **Tom Gray, Nome**

Vice Chairman

1988-1995 Jakie Koonuk, Point Hope

1995-2003 Marie Adams Carroll, North Slope Borough Mayor's Office

2003-2014 Harry Brower, North Slope Borough Department of Wildlife Management

2014-2017 Tom Gray, Council/Nome

2017-2021 Albert Simon, Hooper Bay

2021-present **Marvin Okitkun, Kotlik**

Secretary:

1988-present Kathy Frost, retired from ADF&G since 2000)

Officers-at-Large (two)

2018-2021 Jerry Ivanoff, Unalakleet

2018-2021 Marvin Okitkun, Kotlik

2021 – present **Cyrus Harris, Kotzebue**

2021 – present **Billy Adams, Utqiagvik**

In 2018, the ABWC changed its bylaws to replace the positions of Treasurer and Sergeant-at-Arms with two Officers-at-Large. Below are the persons who held the offices of Treasurer and Sergeant-at-Arms through 2018.

Treasurer:

1988-1990 Geoff Carroll, North Slope Borough Department of Wildlife Management

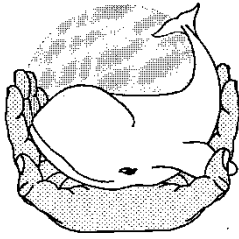
1991-1995 Marie Adams Carroll, North Slope Borough

1995-2018 Molly Chythlook, Dillingham

Sergeant-at-Arms

1988-1996 Nathan Hadley, Sr., Buckland (deceased 2022)

1996-2018 Charles Saccheus, Sr., Elim



Alaska Beluga Whale Committee

2023 ABWC Delegates

North Slope

Barrow (Joe Leavitt)
Point Hope (Leonard Barger; Young hunter
Michael Tuzroyluk)
Point Lay (Jack Henry, Jr.)
Wainwright (Lloyd Tagarook, alternate)

NANA

Buckland (Raymond Lee, Jr.)
Deering (Beverly Moto)
Kivalina (Jerry Norton, Jr.)
Kotzebue (Cyrus Harris, Officer-at-Large)
Noatak (Thurston Booth)

Norton Sound

Brevig Mission (Elmer Seetot)
Elim (Morris Nakarak, Sr.)
Golovin (David Brown)
Koyuk (Archie Ervin)
Nome (Tom Gray, Chairman)
Saint Michael (Joe Akaran)
Shaktoolik (Raymond Hunt; Young hunter Tyler
Takak)
Stebbins (Cylas Okitkun)
Unalakleet (Jacob Ivanoff)

Yukon Delta

Alakanuk (Ken Lee)
Emmonak (Brandon Kameroff)
Hooper Bay (Albert Simon)
Kotlik (John Tonuchuk; Marvin Okitkun, Vice
Chairman)
Mountain Village (Kevin Thompson)
Nunam Iqua (Edwards Adams, Sr.)
Pilot Station (Rex Nick)
Pitka's Point (Stephen Micah Sergie)
Saint Mary's (Lyle Thompson)
Scammon Bay (Wybon Rivers; Young hunter
Edward Prunes)

Kuskokwim

AVCP (Jennifer Hooper)
Quinhagak (Eddie Teeluk)
Platinum (Frank James)
Toksook Bay (Norman John)

Bristol Bay

Aleknagik (Ben Tinker)
Dillingham (Jesse Rogers)
Manokotak (Andrewski Toyukak, not attending)
BBNA (Renee Roque)

North Slope Borough

Billy Adams, Officer-at-Large
John Citta

National Marine Fisheries Service

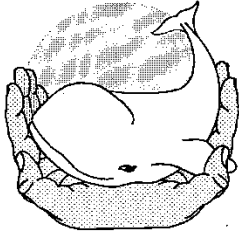
Alaska Region (Anne Marie Eich)
Alaska Region (Barbara Mahoney)
Marine Mammal Lab (Robyn Angliss)
Marine Mammal Lab (John Bengtson)

Alaska Department Fish & Game

Lori Quakenbush
Anna Bryan

Charter and other Members

John Burns
Kathy Frost, Secretary
Robert Suydam
Greg O'Corry-Crowe



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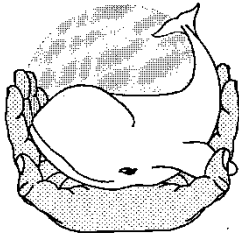
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Saint Mary's (Lyle Thompson)
Scammon Bay (Wybon Rivers; Young hunter
Edward Prunes)

Kuskokwim

AVCP (Jennifer Hooper)
Quinhagak (Eddie Teeluk)
Platinum (Frank James)
Toksook Bay (Norman John)

Bristol Bay

Aleknagik (Ben Tinker)
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Manokotak (Andrewski Toyukak, not attending)
BBNA (Renee Roque)

North Slope Borough

Billy Adams, Officer-at-Large
John Citta

National Marine Fisheries Service

Alaska Region (Anne Marie Eich)
Alaska Region (Barbara Mahoney)
Marine Mammal Lab (Robyn Angliss)
Marine Mammal Lab (John Bengtson)

Alaska Department Fish & Game

Lori Quakenbush
Anna Bryan

Charter and other Members

John Burns
Kathy Frost, Secretary
Robert Suydam
Greg O'Corry-Crowe

ABWC Travel Info & Policies

Meeting Hotel and where you will stay: **Anchorage Hilton**

Check-in: Go to front desk, tell them you are with Alaska Beluga Whale Committee and your name.

Your hotel room will be paid for by a purchase order from the North Slope Borough. The Hilton may request a credit card from you in case you charge any extras. Only the room is covered by the ABWC.

IF you signed your TA and sent it back, you will get your **per diem check** the first day to the meeting. If you need to get to a bank to cash your check, please contact a North Slope Borough representative.

Travel rules:

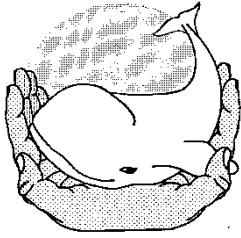
- 1) **If you cannot get out of your village or return home after the meeting due to flight delays or cancellations caused by weather, contact Penney Kennedy (907-319-7594) and she will make changes to your ticket and arrange lodging.** ABWC will cover your change ticket fees and hotel expenses, but only if your flight is cancelled. ABWC will not cover expenses for extra personal days. You must fly home on the next available flight.
- 2) **If you change your ticket for personal reasons, the ABWC will not cover any differences in fare, change fees, lodging, per diem, or other expenses.** You must call your local airline (e.g., Grant Aviation or Wrights Air) and Alaska Air to make ticket changes yourself. Do not call Penney Kennedy if making ticket changes for personal reasons.
- 3) If you have travel problems, call Penney Kennedy (907-319-7594), if Penney is unavailable, call John Citta at 907-699-3224.

Attendance & Sobriety policy:

- 1) You must come to all days of the meeting sober. The ABWC has a written policy about this. If you do not, you will be asked to leave. Your Tribal Council will be notified and asked to return your travel expenses. You will not be able to attend future meetings.
- 2) Delegates are required to be at the meetings and should be there on time. It is expensive to bring delegates into town and we have a lot of business to do. You should not make doctor appointments or other arrangements during meeting times. You should schedule those at another time, such as after the ABWC meeting (see #2, changing your ticket for personal reasons, above).

REMINDER

It is the responsibility of every delegate to report back to their Tribal Council about the meeting. You may arrange a meeting with them to make a report, give them your meeting packet, or do it another way. You might consider talking at the school. Reporting back is especially important when the ABWC is working on beluga plans that will affect every hunter's life.



Alaska Beluga Whale Committee

c/o NSB Dept Wildlife Management

P.O. Box 69

Barrow, AK 99721

Phone (Tom Gray cell) (907) 304-2003

DRAFT Minutes

9-10 November 2022 - Anchorage, Alaska

People attending the meeting were:

Billy Adams	NSB Wildlife, Box 69, Barrow, AK 99723	885-8387 cell billy.adams@north-slope.org
Edward Adams, Sr.	Box 9, Nunam Iqua, AK 99666	(907) 498-2001 cell edadamsr53@gmail.com
Robyn Angliss	NOAA/MML, Seattle, WA 98115	206-778-5664 robyn.angliss@noaa.gov
Raymond Aguvluk	Box 35, Wainwright, AK 99782	319-8926 aguvlukraymond@gmail.com
Joe Akaran	Box 59023, St. Michael, AK 997	933-1110 rockskipper95@gmail.com
Hilda Booth	Box 24, Noatak, AK 99761	485-5134 hilda.booth@maniilaq.org
John Burns Sr.	PO Box 83570, Fairbanks, AK 99709	474-2671 jburnssr@gci.net
Todd Chikigak (youth)	Box 147, Alakanuk, AK 99554	238-2155 cell toddchikigak238@gmail.com
John Citta	NSB Wildlife, Box 69, Barrow, AK 99723852-0350	699-3224 cell John.citta@north-slope.org
Anne-Marie Eich (virtual)	NOAA/NMFS Box 21668, Juneau, AK 99802	586-7172 work annemarie.eich@noaa.gov
Megan Ferguson	NOAA/MML, Seattle, WA 98115	206-200-9489 megan.ferguson@noaa.gov
Kathy Frost	73-4388 Pa'iaha Street, Kailua Kona, HI 96740	(808) 987-0001 kjfrost@hawaii.rr.com
Tom Gray	Box 306, Nome, AK 99762	304-2003 tom@akadventure.com
Cyrus Harris	Box 755, Kotzebue, AK 99752	412-1344 350-7835 cell charris@maniilaq.org
Jennifer Hooper	AVCP, Box 219, Bethel, AK 99559	543-7471 work 545-1329 cell jhooper@avcp.org
Raymond Hunt	Box 92, Shaktoolik, AK 99771	956-1140 raymond_hunt_2010@hotmail.com
Jacob Ivanoff	Box 337, Unalakleet, AK 99684	625-1255 ivanoffjacob@gmail.com
Frank James	Box 25, Platinum, AK 99651	979-2024 frankjames99655@gmail.com
Norman John	Box 37061, Toksook Bay, AK 99637	427-2505 normanjohn_04@yahoo.com
Brandon Kameroff	Box 83, Emmonak, AK 99581	949-6641 brandonkameroff@gmail.com
Warren Lampe	Box 59068, Point Lay, AK 99759	947-7397 whlampe37@gmail.com
Joe Leavitt	Box 503, Barrow, AK 99662	852-2258
Ken Lee	Box 122, Alakanuk, AK 99554	238-2103 alaskangrown35@gmail.com
Barbara Mahoney	NMFS, 222 West 7 th Ave, Anchorage, AK 99513	331-8528 cell barbara.mahoney@noaa.gov
Beverly Moto	Box 73, Deering, AK 99736	363-5020 cell beverlymoto@yahoo.com
Morris Nakarak	Box 39061, Elim, AK 99739	880-5109 mnakarak2018@gmail.com
Greg O'Corry-Crowe	Harbor Branch Oceanographic Institution, FL 34946	772-766-5793 gocorryc@fau.edu
Cylas Okitkun	Box 71155, Stebbins, AK 99671	899-2042 okitkuncylas@gmail.com
Duncan Okitkun	Box 201, St. Mary's, AK 99658	438-6500 duncanokitkun@gmail.com
Marvin Okitkun	Box 20142, Kotlik, AK 99620	899-2233 cell marvinokitkun@yahoo.com
Lori Quakenbush	ADF&G, 1300 College Rd, Fairbanks, AK 99701	987-2760 lori.quakenbush@alaska.gov
Wybon Rivers	Box 44, Scammon Bay, AK 99662	536-2073 cell ybunn_ar_2019@yahoo.com
Renee Roque	Box 724, Dillingham, AK 99576	Phone 843-1324 renee.roque@bbna.com
Albert Simon	Box 91, Hooper Bay, AK 99604	758-2355 cell albertsimon380@gmail.com
Apataaq Simon (youth)	Box 91, Hooper Bay, AK 99604	758-2633 cell
John Slim (youth)	Box 96, Manokotak, AK 99628	891-9854 johnslim93@yahoo.com
Robert Suydam	4778 Mille Dr., Anchorage, AK 99508	559-313-4652 cell rssuydam@gmail.com
Eddie Teeluk	Box 63, Quinagak, AK 99655	556-2065 eteeluk.coq@gmail.com
Kevin Thompson	PO Box 32051 Mountain Village, AK 99632	591-6962 kevint17@yahoo.com
Benjamin Tinker	Box 61, Aleknagek, AK 99555	843-1508 cell bennytinker@icloud.com
Leon Toomer (youth)	Box 310, Kotzebue, AK 99752	412-3789 jtoomer24@hotmail.com
Andrewski Toyukak	Box 30, Manokotak, AK 99628-0030	310-3693 cell aat1230@yahoo.com

Michael Tuzroyluk, Jr.	PO BOX 213 Point Hope, AK 99766	712-7160	michael.tuzroyluk@north-slope.org
<u>Visitors</u>			
Amelia Adams	Box 9, Nunam Iqua, AK 99666		
Quincy Adams	Box 1693, Barrow, AK 99723	538-1284	quincy.adams@north-slope.org
Stephania Alvarez	900 1 st ST., Apt. 15, Douglas, AK 99824	219-789-1753	stephanie.m.alvarex@uscg.mil
John Bengtson	NOAA/MML, Seattle, WA 98115	206-930-6271	john.bengtson@noaa.gov
Caroline Brown	ADF&G, Fairbanks, AK 99701	978-8516	caroline.brown@alaska.gov
Vicki Cornish	Marine Mammal Commission	7703-862-9948	vcornish@mmc.gov
Verena Gill	NMFS, 222 West 7 th Ave, Anchorage, AK 99513		
Cordelia Kellie	610 L. Street, Anchorage, AK 99508	317-0808	cordelia_kellie@murkowski.senate.gov
Elisabeth Kruger	810 N St. Ste 300, Anchorage, AK 99501	717-7714	elisabeth.kruger@wwfus.org
Jenna Malek	Anchorage, AK	860-617-0452	jenna.malek@noaa.gov
Enoch Oktollik	Box 139, Wainwright, AK 99782	925-1269	enoch.oktollik@nsbsd.org
Karen Oktollik	Box 139, Wainwright, AK 99782		
Kayla Scheimreif	Box 137, Barrow, AK 99723	855-1181	kayla.scheimreif@north-slope.org
Mary Weinard	Deering, AK 99736		363-5020

Wednesday, 9 November 2022

Tom Gray, ABWC Chairman, called the meeting to order at 8:49 am. Frank James from Platinum gave the invocation. Introductions were made. The agenda and the minutes were approved unanimously. Tom introduced the three ABWC youth delegates to this year's meeting: Todd Chikigak (Alakanuk), John Slim (Manokotak) and Leon Toomer (Kotzebue). Apataaq Simon (Hooper Bay) attended at his father's expense. The NSB sent Michael Tuzroyluk (Pt. Hope).

FUNDING, PARTNER AND MEETING REPORTS

ABWC Funding Report – John Citta reported the ABWC currently has three NOAA grants: 2019: \$188,000; \$12,000 remains, will be closed out at end of month. 2020: \$235,000; end date is 31 July 2023; about \$63,000 remains, will be used for this meeting. 2021: \$204,000; current end date is end of October 2023. Unspent funds (\$50,000) from previous grants were reallocated to help NOAA conduct the 2022 Eastern Bering Sea (EBS) aerial survey; the ABWC hasn't yet been billed for that.

In 2022, NOAA switched from an annual to a three-year grant cycle. ABWC can apply for grants that cover three years and can request supplemental funds in interim years. Supplemental funds may or may not be available. Kathy Frost explained that the ABWC must write detailed proposals and budgets to obtain co-management funding from NOAA. The projects are determined by ABWC delegates and by the executive committee. Money must be spent according to the budget. Albert Simon asked if unspent funds can be carried over to future years. They can, but NOAA prefers not.

Tom noted that ABWC is under-funded. ABWC and NOAA need to go to Washington D.C. to request additional funds. The ANOs managed by US Fish and Wildlife Service (polar bears, sea otters, walrus) went to D.C. to request additional funding, and received it. Because there are many ANOs that receive money from NOAA, obtaining additional funding for ABWC will likely be difficult. Tom urged everyone to be involved, and emphasized the importance of funding. He thanked Kathy for her volunteer work for ABWC over the years, and said that ABWC will need to pay the person who eventually replaces her.

Enoch Oktollik asked why there are no TK projects receiving funding. Kathy responded that the ABWC tries to incorporate hunters and traditional knowledge in all of its studies, for example, tagging studies. The ABWC has hosted a women's workshop, where they discussed medicinal uses of beluga, how to prepare beluga, and how knowledge is shared with children. The ABWC has also done formal TK studies in the past.

NMFS Alaska Region Report – Barbara Mahoney provided the NMFS Alaska Region Report. Anne-Marie Eich has replaced Jon Kurland as the Regional Manager. Anne Marie could not be present but introduced herself by phone.

NMFS Marine Mammal Lab (MML) Report – John Bengtson and Robyn Angliss provided background on the structure of NMFS. John is the Director of MML and Robyn is the cetacean Program Manager. MML conducts science to support management of seals, fur seals, sea lions, and whales by the NMFS Alaska Region. Species harvested for subsistence often receive top priority for funding. NMFS's goal is to update abundance estimates every 5-8 years depending on availability of funding. There are special Congressional funds for Cook Inlet belugas. John and Robyn encouraged hunters to volunteer ideas for projects.

Warren Lampe asked whether subsistence users needed to worry about contaminants in belugas, including radiation contamination caused by the Fukushima tsunami. John Bengtson said NMFS generally doesn't do contaminants research but works collaboratively with many other groups who do, taking an ecosystem approach. Tom noted that if specific contaminants are an obvious issue, the ABWC will try to address them. Any proposed project would need to be discussed by the ABWC membership. Contaminants have been an issue in other parts of the world, but so far not in Alaska.

Cyrus Harris asked if MML and its lab are large enough to track contaminants since this is an ecosystem problem, not just marine mammals. John Bengtson responded that MML takes an ecosystem approach and collaborates with others. Although MML is in Seattle, it conducts widespread studies in Alaska and elsewhere.

International Whaling Commission (IWC) Meeting - John Citta explained that the IWC manages large whales but maintains an interest in small cetaceans like belugas. The ABWC provides beluga harvest information to the IWC each year. The IWC may be less involved with small cetaceans in the future due to financial issues.

Robert Suydam said one of the reasons the ABWC was formed was because the IWC expressed interest in managing belugas. Billy Adams described the trauma from the IWC moratorium on bowhead whaling, and explained that people didn't want that to happen with belugas. The ABWC wanted to demonstrate that information was available locally to make good beluga management decisions, without intervention by others. The ABWC still sends harvest and other information to the IWC. Environmental groups attend the IWC, express concern about the hunting of belugas, and submit proposals for the management of belugas. As a result, it's important for ABWC to be represented at the IWC. Billy said the AEWC sends commissioners to the IWC, and wondered if the ABWC could send some hunters to the IWC.

Inuvialuit-Inupiat (I-I) Beluga Whale Commission Meeting Update - John Citta and Billy Adams reported on the 2022 I-I meeting in Vancouver. The Inuvialuit were originally part of the ABWC, but withdrew in 2000 because Canada does not share information with the IWC. Canadian hunters sometimes still attend ABWC meetings.

The I-I agreement is for the Beaufort Sea stock, but the I-I occasionally discusses other stocks. In 2022, the North Slope Borough Department of Wildlife Management (NSB DWM) gave a presentation on all Alaska stocks, the harvest, Point Lay beluga sampling, Kotzebue Sound belugas and the Eastern Bering Sea management planning process. The main topic at the meeting was tagging-related mortality in Canada in 2019 when they think 16 of 20 belugas died within a month of tagging. Analyses of three beach cast whales were inconclusive. Billy Adams said ocean and ice conditions were very different in 2019, the water was very warm, and belugas were in poor condition. Greg O'Corry Crowe said the same methods were used the 2018 with no mortalities. Robert Suydam said the Canadian tagging occurred before the water warmed up, but pointed out that we'll likely never know why it happened. The I-I asked Department of Fisheries and Oceans (DFO) scientists to do a review of tagging-related mortality. DFO reported that mortalities are rare, about 1% - 3%. Most occur because belugas drown when are not removed from nets quickly enough.

It is possible to age belugas using eye lenses instead of teeth. Aging with eyes isn't as precise as with teeth, but it is more cost-effective. DFO has offered to age beluga eyes from the NSB for free. They also offered to continue fatty acid and stable isotope analyses of samples collected at Point Lay and Point Hope at no cost. Lori Quakenbush will help the NSB with the CITES permit required to send samples to Canada. The I-I planned to have a Beluga Summit in Fall 2023.

REGIONAL HARVEST REPORTS

Beaufort Sea Stock

Barrow (Utqiaġvik) - Joe Leavitt and Quincy Adams reported 14 belugas harvested at Barrow in 2022. Most were white, and 2 were light gray.

Point Hope - Billy Adams reported that 30+ belugas were harvested in spring by 13 whaling captains at Point Hope, with 9 more harvested in August-September. This was later amended by Michael Tuzroyluk to 42 in spring and 9 in the fall. Fall harvests at Point Hope are rare.

Kaktovik - There was no information about the Kaktovik beluga harvest in 2022. Billy Adams hadn't heard anything yet, but said they usually harvest 1 or 2.

Diomede - The Diomede Tribal Council told Lori Quakenbush that Diomede harvested no belugas in 2022.

Eastern Chukchi Sea Stock

Wainwright - Raymond Aguvluk reported that 51 belugas were harvested in summer 2022 (49 white, 2 gray; 29 males, 22 females). Fifty were harvested by boats and one was caught in a net during herding. Wainwright doesn't hunt in the

fall. The stomachs had many kinds of small fishes. Wainwright used to harvest about 100 belugas but it was too many so they cut back to about 50. The harvest occurs in shallow water and hunters use hooks to retrieve the belugas.

Point Lay – Warren Lampe reported that 6 belugas were harvested by Point Lay in 2022 (4 white, 2 gray) with none struck and lost. (John Citta later amended to 7.) Point Lay has a community drive hunt that typically occurs in mid-June - July but it has been getting later and is now in July. Every household receives a share. Only 12 boats participated in 2022 instead of the usual 18-20. Point Lay usually tries to harvest 30-60 belugas.

Kotzebue Sound

Buckland – Raymond Lee reported to Kathy Frost that Buckland landed 3 belugas in 2022 with 3 struck and lost.

Deering – Beverly Moto reported that Deering harvested 1 white beluga about 100 ft from shore. She knew of none struck and lost but Raymond Lee said there was 1. Hundreds passed by in September. Deering saw bigger pods of belugas passing this year than in previous years. A pod of killer whales passed by going north about July 5th.

Kivalina – There was no delegate from Kivalina. Oran Barger reported to Kathy Frost that Kivalina harvested 12 belugas in summer 2022: 10 by boat and 2 in nets. There was uncertainty about this report.

Kotzebue & Noatak – Cyrus Harris reported that Kotzebue/Sisualik harvested 9 belugas with 1 struck and lost (8 white, 1 gray; 4 by boat, 5 by net; 5 male, 2 female, 2 unknown). Two white belugas were harvested in June with no struck and lost. Five were harvested in July (4 white, 1 gray; 1 S&L) and 2 in the fall. More (mostly white) belugas were sighted in 2022 than had been seen in the last 20 years. No belugas were found washed up on the beach, and there were no killer whale sightings. Two beluga stomachs and a few DNA samples were sent to ADFG. Leon Toomer (youth delegate) said about 20 belugas were seen in front of town in October but there was too much ice to go out hunting.

Hilda Booth reported that Noatak netted one white beluga at Sisualik. Tom Gray asked if Hilda's report for Noatak was part of the Kotzebue harvest report. Cyrus Harris thought the Noatak beluga was likely counted in his report, but was not certain.

Shishmaref – Tom Gray reported that Shishmaref harvested 1 beluga in October 2022. He commented that belugas are showing up in different places.

Eastern Bering Sea Stock – Norton Sound

Brevig Mission – Tom Gray reported that Brevig Mission harvested 7 belugas in 2022. Brevig Mission does not have a history of catching whales. We need to collect samples to find out where they come from.

Elim – Morris Nakarak Sr. reported that 14 belugas were harvested in 2022 with 6 struck and lost (8 white, 4 grays; 13 by boat, 1 by net; 10 males, 4 females). Seven were harvested in spring and 7 in fall.

Golovin – Charlie Brown reported to Tom Gray that Golovin harvested 2 belugas in 2022.

Koyuk – There was no delegate from Koyuk. Raymond Hunt reported that Koyuk harvested about 3 or 4 belugas.

Nome/Council – Tom Gray reported that 9 belugas were harvested at Nome in 2022 (1 white, 5 grays, 3 unknown), with 1 struck and lost. One was a 6 ft calf. At least 5 were netted.

Saint Michael – Joe Akaran said St. Michael harvested no belugas in 2022. Belugas passed by but none were caught. Few hunters are going out now. There were belugas clustered together like they were being chased by killer whales. Cylas Okitkun reported that St. Michael harvested 2 belugas in 2022: one gray by net and one white by boat.

Shaktoolik – Raymond Hunt said Shaktoolik harvested 35 belugas in 2022 (31 white, 4 gray; 34 by boat, 1 at the lead; 30 males, 5 females). They set nets but didn't catch any. Nineteen (19) were harvested in spring (17 white, 2 gray; 18 by boat, none by net, 1 from the lead; 1 in shallow water, 18 in deep water) with none struck and lost. None were harvested in summer. In fall, 16 were harvested with no struck and lost (14 white, 2 gray; 15 by boat, 1 from shore; 15 in shallow water, and 1 in deep water).

Stebbins – Cylas Okitkun reported that 18 belugas were harvested in 2022, including 5 struck and lost (11 white, 2 gray; 12 by boat, 1 by net; 10 in spring, 3 in summer, 5 struck and lost). No belugas were found washed up. He didn't look at the stomachs.

Unalakleet – Jacob Ivanoff reported that Unalakleet harvested 4 belugas in 2022 (1 white, 3 gray). One was netted in spring and 3 were harvested in the fall (1 shot from the beach and 2 by net). Two were shot at but missed. No belugas

were found washed up, and no killer whales were seen. Pods were smaller and they saw fewer moving around than previous years. Belugas are feeding closer to the beach now in 2-3 ft of water.

White Mountain – Tom Gray reported that White Mountain harvested no belugas in 2022.

Eastern Bering Sea Stock – Yukon

Alakanuk – Ken Lee only received a report of 2 white belugas caught in September in shallow water with boats, plus 1 struck and lost beluga. One of these had bad skin and wasn't used. Tom thought it was likely just a molting whale. No skin samples were collected. Many belugas were sighted near the mouth of the Yukon throughout summer. Many hunters were reluctant to report their harvest information to Ken. Tom stressed the importance of accurate reporting if hunters are going to manage their own harvest. Kathy commented that for the last 10 years up to 18 Alakanuk hunters had been reporting. Duncan Okitkun said that Alakanuk hunters harvested 6 belugas in 2022 (5 white, 1 gray). Camille Augline confirmed to Kathy Frost that the harvest was 6 (3 summer, 3 fall, all shallow; 4 white, 2 gray).

Chevak – Albert Simon said Chevak harvested 2 white belugas in 2022.

Emmonak – Brandon Kameroff reported that 7 belugas were harvested by Emmonak in 2022 (5 white, 2 gray; 4 males, 3 females; 4 summer, 3 fall) with none struck and lost. All were harvested by boat in shallow water and harpooned before they were shot. Nothing unusual was seen, no belugas were found washed up on shore, and no killer whales were sighted.

Hooper Bay – Albert Simon reported that 24 belugas were harvested by Hooper Bay in 2022, mostly in spring (15 white, 6 gray, 3 subadults). All were harvested by boat. There were 15 boat captains. Four belugas were struck and lost, but 2 were later recovered and used.

Kotlik – Marvin Okitkun reported that 22 belugas were harvested by Kotlik in 2022. Ten were harvested in summer (8 white, 2 gray caught in salmon nets). Twelve were harvested in fall (3 white, 6 subadult, 3 gray).

Marshall – Marvin Okitkun said Marshall harvested 3 white belugas in 2022.

Mountain Village – Kevin Thomson reported that Mountain Village harvested 1 white beluga in summer in 2022.

Nunam Iqua – Edward Adams Sr. reported that Nunam Iqua harvested 3 belugas in 2022 (2 white, 1 gray) with no struck and lost. The hunters harpoon before they shoot. Nunam Iqua teaches young people to chase whales to shallow spots.

Pilot Station – There was no delegate from Pilot Station. Marvin Okitkun said Pilot Station took 2 belugas in summer 2022. Rex Nick also reported to Kathy Frost that 2 white belugas were harvested.

Pitka's Point – Jennifer Hooper (from Rex Nick) reported that Pitka's Point harvested 5 white males in shallow water in August.

Russian Mission – Jennifer Hooper reported that Russian Mission harvested 1 white male in 2022.

Saint. Mary's – Duncan Okitkun reported that St. Mary's harvested 5 belugas in 2022 (3 white, 2 gray).

Scammon Bay – Wybon Rivers reported that 45 belugas were harvested by Scammon Bay in 2022 with 3 struck and lost. All were harvested by boat in shallow water. In spring, 12 were taken (7 white, 5 gray, none struck and lost). In summer, 19 were harvested with 2 struck and lost (4 white, 15 gray). In fall, 14 belugas were harvested (5 white, 9 gray) with 1 struck and lost. Four killer whales were sighted on sand bars hunting belugas. One of Wybon's uncles harvested a beluga that was bit on the tail by a killer whale.

Kuskokwim – Jennifer Hooper said she sent surveys out for the Kuskokwim communities and also reached out by phone. She received 5 surveys back. **Kipnuk** doesn't see belugas and did not harvest belugas in 2022. **Eek** did not harvest belugas. Frank James said that **Platinum** harvested no belugas in 2022, although there were more sightings this year. A long line of belugas was seen in September, and he saw 20 near town in October. Frank harvests his belugas near Dillingham. **Bethel** harvested 1 18-ft male beluga on May 26. Three belugas were spotted, and 6 or 7 boats went out. They harvested 1 beluga. Eddie Teeluk heard a 2nd was harvested later upriver. Jennifer sent samples to Lori Quakenbush. About a week later a group of belugas was spotted at Kalskag, about 145 miles upriver, but there was no word of harvest. Salmon were caught with beluga tooth marks. Jennifer also shared a story about a great grandfather near Eek. He carved wooden plugs. When the belugas came into the shallows to feed on salmon and stranded, he would jump on a beluga's back and plug its blowhole, then harvest it. Other hunters said this is an old Carter Bay story. **Kwigillingok** harvested 1 white beluga by boat in shallow water in November plus 1 struck and lost. (Note: this may have been Kongiganak and not Kwigillingok.)

Toksook Bay – Norman John reported that 9 belugas were harvested in 2022 (7 white, 2 gray; 5 male, 4 female) with 1 struck and lost. It hadn't been shot, but there was just a harpoon malfunction. Two were harvested in the fall, and 5 in the spring. No killer whales were seen. Lori Quakenbush thanked Norman for bringing in a sample from Toksook Bay.

Newtok – Norman John reported that Newtok harvested 2 white belugas in 2022.

Quinhagak – Eddie Teeluk reported that Quinhagak harvested 3 gray belugas in spring 2022.

Bristol Bay Stock

The total known harvest for Bristol Bay in 2022 was 15. There was no reported beluga harvest from the east Bristol Bay region in 2022. There was no delegate and no information for **Levelock, Naknek, Iliamna, and Igiugig** for 2022.

The west Bristol Bay region harvested 15 belugas in 2022. Renee Roque reported that **Dillingham** harvested 7 belugas in 2022 (2 white, 5 gray; 5 males, 2 females). Three gray belugas were harvested by boat in spring, 2 in summer (1 gray, 1 white) and 2 in fall (1 white, 1 gray). This includes 2 belugas harvested by Frank James from Platinum. This year there were a lot of sockeye. The belugas were chasing salmon upriver, and two ended up in Aleknagik Lake. Ben Tinker reported that **Aleknagik** harvested 4 belugas in 2022 (2 white and 2 gray) plus 1 struck and lost. **Manokotak** harvested 2 white belugas in 2022. **Nushagak** harvested 1 gray beluga in 2022. **New Stuyahok** harvested 1 beluga in 2022. There was no information for **Clarks Point**.

Tom thanked everyone for their harvest reports. We need to collect more samples. They are easy to collect and to keep.

ABWC PROJECTS

Tagging Training and Tagging - Tom Gray, Robert Suydam and Marvin Okitkun reported on beluga tagging at Kotlik in 2022. The project didn't come together well although they worked hard at it. Tom broke the lower unit on his boat. They struggled to find belugas. Their timing was bad. Marvin explained that belugas don't follow a calendar and the presence of belugas coincides with the salmon. It makes it difficult to plan field work in advance. Robert pointed out that the methods have to be different in every area. A longer net might have helped in 2022 but there were so few belugas it's hard to know. If the ABWC considers tagging at Kotlik again, timing will be crucial.

Tom Gray stressed the only way to get information on belugas is to keep the tagging program moving forward. We're always learning, and nothing is perfect. We need to keep working on this.

Kathy said scientists had unsuccessfully tried to tag belugas for years. The ABWC decided to try opportunistic hunter tagging. They went to Kotlik to train hunters but it failed for the same reasons that scientists tagging failed: weather and schedules. Tom said he has tried hard to tag, but wanted funders to understand that you can try to catch a live whale but that it doesn't always happen. Tom won't train hunters to tag unless they have a net and are willing to release a live animal. "The first animal I tagged I told my crew we were putting on a tag and turning it loose. My crew almost shot me – no way are we turning it loose. I did and luckily, I got a few more whales. My own people couldn't understand what I was trying to do. We need information on these whales. I'm talking to the funders – don't give up on us. This is almost as important as the surveys."

Kathy explained that when a beluga is caught and tagged, it must be reported on ADFG's NOAA marine mammal permit. For several years, the ABWC grant from NOAA included funds to reimburse hunters \$1000 for catching a beluga and allowing it to be tagged rather than harvested. When ADFG applied for their new permit in 2021, the Marine Mammal Commission (MMC) commented on ADFG's permit application and recommended against paying hunters to catch or tag. NOAA issued the permit anyway. Robert Suydam was recused from reviewing the MMC's response to the request because he is listed on the ADFG permit. In addition to the payment issue, ADFG was told the same net cannot be used for both subsistence and science. None of this was stated in the permit that was issued. Robert pointed out that different lawyers have different opinions and suggested that the ABWC send a letter to the MMC and the NOAA permit office to explain concerns around these issues and stress the importance of tagging information for belugas. Vicki Cornish (MMC) said that she wasn't aware of the details of this issue but would try to find out more about it. She expressed her personal support of compensating hunters for their work but couldn't comment on the letter, as she does not manage permits. John Bengtson (NOAA MML) acknowledged that this is an important issue, and that he shares the ABWC's permitting frustrations. He offered to talk to NOAA about the permit. Jacob Ivanoff suggested inviting someone from the permitting office to an ABWC meeting so that they can hear the discussion, instead of just sending a few people to DC.

Robert said about 60-70 belugas have been tagged in Bristol Bay, 6-7 in the Eastern Bering Sea, about 30 at Point Lay, and about 50 in the Mackenzie River Delta. Warren Lampe asked how the ABWC decides where to tag. Kathy said this is a group process and is driven by the hunter delegates and the need for information. Even though belugas have already

been tagged at Pt. Lay, there are questions about the effects of climate change. The ABWC hasn't tried to tag in Kotzebue Sound because very few belugas are present and they are not predictable enough to plan for tagging. There are trained hunter taggers in Kotzebue Sound but so far there have been no local efforts to tag. Warren commended and thanked the hunters who do their own tagging. Kathy mentioned that Charlie Saccheus Sr. from Elim was the first Alaska Native hunter to be listed on a marine mammal research permit.

Eddie Teeluk asked if it is necessary to use nets. He has heard that people tag sharks using harpoons. Lori Quakenbush replied that we're always looking for better ways to attach tags. ADFG has done that type of tagging with walrus. Greg O'Corry-Crowe has done it with the Canadians. They are waiting to see how long those tags last. Harpoon tags are expensive and, if they don't stay on long, they may not be suitable for answering the important questions about beluga movements.

Stomach analysis – Lori Quakenbush thanked hunters for sending in stomach samples. The NMFS Alaska Region pays for the analysis. In 2021, 14 stomachs were received from ABWC hunters: 1 from Kotzebue; 9 from Point Lay, and 4 from Barrow. In 2022, 16 stomachs were received: 1 from Scammon Bay; 4 from Nome; 2 from Kotzebue; 5 from Point Lay; and 4 from Barrow. A stomach collected by Cyrus in Kotzebue had 9 pounds of gravel, in addition to fish otoliths, marine worms, shrimp and other invertebrates. This amount of gravel is unusual. Belugas from Pt. Lay had very little in their stomachs: a few fish, worms, shrimp and tunicates. The stomachs from Barrow were contained fish, marine worms, shrimp, isopods (toe biters) and octopus. Lori encouraged everyone to continue sending in whole stomachs.

Bristol Bay beluga surveys – Lori Quakenbush reported on the July 2022 aerial survey that ADFG flew in Bristol Bay. The survey crew was Lori, Anna Bryan and Justin Olnes. Six complete surveys were flown from Dillingham to King Salmon, but two were not usable due to poor visibility from fog and choppy water. During the four usable surveys, the range of belugas counted was 432-617. The average of the four surveys (540 belugas) was used. After correction factors were applied for belugas that were underwater (2.62) and newborns and yearlings (1.18) the abundance estimate was 1,669 belugas. This was lower than the 2016 estimate of 2,040, suggesting a possible decline. Tom commented that because the harvest level is so low this downtrend isn't a big concern at this point. Kathy said the harvest has been less than 20 per year for the last few years.

John Burns asked if belugas in Bristol Bay avoid fishing activity. Both Lori Quakenbush and Kathy Frost said they don't appear to. Belugas occur both near fishing activities and in other areas.

For previous Bristol Bay surveys, Kathy Frost noted that at least 5-7 usable surveys were considered necessary to produce an adequate abundance estimate. Sometimes 4 surveys would be done one year and additional surveys the next year. Kathy didn't think 4 surveys were adequate for obtaining an estimate. Lori replied that they circled the large groups and didn't have a lot of variability, but if possible, they would be happy to fly another survey in the next few years. Kathy commented that this isn't currently a big conservation concern for ABWC because it's a lightly harvested stock.

Frank James noticed the survey area didn't go past the Igushik River. He saw belugas along the beach west of Cape Constantine during the 3rd week of July and suggested checking that area in a future survey. Lori responded that that could be done, although if the transects are changed they won't be comparable to ones done in the past.

Jacob Ivanoff asked if harmful algal blooms impact belugas. Lori said ADFG tests for domoic acid and saxitoxin. So far, the levels aren't high enough to see toxic effects in seals and whales.

Tom acknowledged Ben Tinker as the boat driver for all Bristol Bay tagging and for his ability to efficiently catch belugas with nets.

Eastern Bering Sea Aerial Surveys – Megan Ferguson described the 2022 EBS Aerial Surveys conducted by NMFS. The EBS survey flies straight transects a set distance apart, unlike Bristol Bay surveys where the plane flies along the shoreline. As the plane passes by, some belugas are seen and others are not. The challenge is to determine the proportion that was missed by observers or were underwater and couldn't be seen and counted. The study area was all of Norton Sound and the Yukon delta south to Hooper Bay. There were only four good survey days and eight usable survey flights, with seven bad weather days. Some lines in central Norton Sound could not be flown. Three large groups of belugas were counted in the survey area, and this made the analysis more complicated.

Raymond Aguvluk asked when surveys of eastern Chukchi Sea belugas will be flown again. Robyn Angliss said NMFS will likely fly them in conjunction with the 2025 bowhead surveys. NMFS tries to survey beluga stocks every 5-7 years.

Robert Suydam stressed that belugas are an important subsistence food and good abundance estimates are needed for determining the sustainable harvest. The International Whaling Commission (IWC) has a sub-committee to evaluate abundance estimates and whether they are good enough for management purposes. Robert suggested sending the EBS

estimates to this sub-committee for review. There was a motion for NMFS to submit the EBS survey results and report to the IWC Scientific Committee for its review and comments, and that everything that is sent to IWC will also be sent to ABWC. (Robert moved; Morris Nakarak Sr. 2nd). Tom wanted to make sure people understood that the motion is for the surveys go through a check process. The motion passed unanimously.

John Bengtson voiced his support for the motion. NMFS had identified problems with the 2022 survey, and Megan did a reanalysis to correct those shortcomings. Her abundance estimate is the best available estimate right now. Issues remain about the correction factor and whether or not to correct for dark colored calves and neonates. John Bengtson noted that sometimes it takes a year or even two to complete the analysis, publishing, and peer review. Tom replied that this happened with the Western Arctic caribou herd too: that scientists can go home and not lose any sleep, but the village representatives are still held accountable. He said that he thought the current results should be used, instead of adding more delays to the process. Warren Lampe said that we need confidence in the estimate. John Burns encouraged NMFS to provide the survey report to the ABWC at the same time it sends the report to the IWC, and not wait until IWC review is complete.

Kathy Frost requested that NMFS communicate expectations to ABWC about when survey reports will be available. If NMFS does PR in the villages to promote the aerial surveys, it needs to be prepared to give a report about the surveys in a timely manner.

John Citta requested that Megan Ferguson apply the spatial model used to analyze the 2022 data to the 2017 data. This will help to understand how that model affects the survey results. Megan agreed to do this.

Student beluga hunting guide – Lori Quakenbush provided an update on the Beluga Student Guidebook that ADFG is developing with funding from ABWC and the NSB. The project began in 2019 and is based on a seal hunting guide for the AVCP region. It is geared for grades 4-6. Lori requested that hunters provide feedback on what needs to be added. She also requested submissions of beluga art and traditional beluga stories. There will be ten chapters. In a questionnaire handed out by Lori at the 2021 ABWC meeting, most hunters agreed that a .30 caliber rifle such as a .30-06, .30-.30, or .300 is needed for belugas, although some thought a .243 is sufficient. Tom Gray encouraged hunters to give their comments to Lori later.

History of beluga commercial harvests – John Burns provided a summary of historical commercial use of belugas in Alaska. Two regions were affected in different ways: “Russian America” south of Saint Michael and the area north of that. Belugas were originally used locally, then later exploited commercially by the Russians. Ultimately, Russian presence ended up as the Russian American Company which was later sold to Northern Commercial. Alaska was settled by Russians starting in 1732. The Russians mistreated local people and wiped out or greatly reduced natural resources. They were the first to decimate belugas. In the early 1800s, beluga oil was used to pay for furs (sea otters, fur seals, sea lions). In 1843, belugas were one of the main trade items at St. Michael. Commercial whaling ships from Europe also purchased fur with whale oil. By the late 1800s, beluga oil was difficult to obtain. Beluga oil was still an important trade item in Kotzebue in the 1930s.

Many years ago, large groups of people sometimes camped at places where they hunted. In 1894, a census taker found an ossuary (collection of bones) in the Kuskokwim with 20 rows of beluga skulls, each row with over 200 skulls. The closer to the water the skulls were, the older they were. In the past, Sisualik hosted a large annual trade fair. Two hundred or more kayaks participated in beluga drive hunts to provide food for those who attended the fair.

The main cause of depleted beluga stocks today is over-exploitation by the Russians. The history suggests that there were many more belugas in the past.

Thursday 10 November

Tom Gray called the meeting to order at 08:47. Frank James gave the invocation. Tom noted there would be a NMFS-ABWC co-management meeting on Friday. He said there will be village meetings in December in Norton Sound (Elim, Shaktoolik, Nome and Unalakleet; Tom Gray and Lori Quakenbush) and the Yukon (Hooper Bay, Scammon Bay, Kotlik; Marvin Okitkun and Lori Quakenbush) to explain the EBS management plan. There will be a workshop in Nome. The ABWC is trying to get Kawerak involved. Tom added that hunters from villages without meetings can get involved by

attending a meeting by snowmachine. Albert Simon suggested that the ABWC send the draft beluga management plan to the Traditional Councils and write them a letter about the meetings. (This was done.)

Some delegates were concerned about the coming storm and asked if stays could be extended in Anchorage. Kathy Frost said this was a possibility, but to please not take advantage of the committee, for example by extending stays for shopping. Delegates should call the NSB 24-hr travel number about any changes.

OTHER BELUGA PROJECTS AND RESEARCH cont.

Beaufort Sea beluga aerial survey analysis – Megan Ferguson is working on a new abundance estimate for Beaufort Sea belugas based on August 2019 bowhead surveys when belugas were also counted. The Alaska analysis was intended to compliment Canadian drone surveys conducted in July 2019. The Canadian survey was impacted by bad weather, so they missed the northern parts of the survey range. The Canadian abundance estimate is in review and should be available in early 2023. Megan’s analysis of the August 2019 data will provide an independent estimate. It is known that the estimate will be biased low because the Viscount Melville Sound area wasn’t surveyed, and also because it was primarily a bowhead survey.

Tom asked about changes in methods. Kathy noted that hunting methods have changed, and science methods have changed too. The field is advancing, so we’re hopefully finding better methods. Robert Suydam said that in order to make good decisions, we have to have current information. The Beaufort Sea stock estimate of about 40,000 is from 1992.

Robert questioned why analysis of the 2019 Alaska surveys is not complete. The ABWC requested funding to help with the analysis three years ago, but was told that NMFS would take care of it. Robyn replied that Megan was also doing other things in the intervening years. Now that the bowhead project is done, NMFS is turning back to belugas. Robert clarified that his question wasn’t a criticism of Megan because the analyses she’s done are helpful to subsistence. However, the ABWC was trying to be a good co-management partner by providing funding for Geof Givens to do the analysis, and now we’re still far from having results. Megan said that Geof had recommended that she do the analysis because she is the most familiar with the data. Robert answered that this was understandable but that someone else could have been found to help with the analysis. It was a missed opportunity to use dollars in hand.

Tom was concerned about analysis of the 2022 EBS survey data. It’s not possible to manage harvests when survey results aren’t available for three or more years. Tom emphasized that we are managing peoples’ food. Robyn appreciated knowing that NMFS hadn’t met ABWC’s expectations about survey results and encouraged conversations about expectations in the future.

North Slope Borough beluga projects – John Citta briefly summarized NSB projects relating to belugas. 1) The NSB DWM monitored the beluga harvest at Point Lay in summer 2022. The harvest was very low and there was no opportunity to tag in conjunction with the hunt. NSB DWM plans to continue harvest monitoring at Point Lay, and hopes to monitor the harvest at Point Hope in spring 2023. The Canadians have offered to analyze stomach contents and other samples for contaminants. 2) The NSB DWM received earmarked funds from Congress to do a close-kin mark-recapture study on Eastern Chukchi Sea belugas that will allow estimation of abundance from harvest samples. No one has used this technique for belugas yet. 3) The Department is seeking a grant to investigate the suitability of different tissues for determining age using genetics. This is called “epigenetic aging.” Blood samples are currently used but are difficult to handle. Skin might work. 4) Mystic Aquarium will likely host an exchange between students from Point Lay and the Mashantucket Pequot tribe in Connecticut in 2023, with 2-6 students from Point Lay traveling to Mystic Aquarium. This project, which is led by the NSB and Mystic, occurred in the past but not in recent years. Robert Suydam noted that one year the ABWC provided funds for Buckland students to participate.

ABWC Research Plan – Robert Suydam presented a draft research plan for the ABWC. The highest priorities are estimating abundance, determining stock structure and documenting harvest and struck and lost. It is not possible to manage belugas without this information. Tom Gray stressed that these are the “bottom line” for beluga management and the ABWC. Other research needs include information about movements, health, diet and reproduction. Kathy said a budget is needed for these projects. This plan, with an accompanying budget, is timely if the ABWC requests money from Congress or others. John Citta commented that it is a very general plan, and that different stocks aren’t prioritized. Robert agreed that stocks should be prioritized, and that he would work on this with John Citta.

Raymond Aguvluk noted that because there are thousands of belugas up north, this should be a high priority. Robert replied that counting belugas from the ice is very difficult. He added that this is why the plan specifies research priorities and not methods. The ABWC Executive Committee and NMFS should work together to develop a schedule for when and where aerial surveys should be conducted. Enoch Oktollik said that information is needed on wintering areas for belugas.

Robert responded that this can be added to the plan, as well as migratory routes. Migratory routes are known from tagging but in some cases not many animals have been tagged. Tom Gray noted that the ABWC needs funds for management in addition to research.

John Citta recommended that the plan be a stand-alone document so that it can be taken to DC or used to obtain other funding. There was a motion to adopt the plan (Marvin Okitkun, Lori Quakenbush 2nd) as written (without a budget). Robert will work with others to develop a budget. The motion passed unanimously.

What samples show us – Greg O’Corry-Crowe gave a presentation about the information samples can provide including health and physiology, reproduction, age, diet, contaminants, pathogens, stock structure, kinship and the environment. They can help us to understand the health of individuals and populations of belugas, the cause of declines and also the health of humans and the ecosystem. Samples allow us to “time travel.” They can tell us about the past and the present and help us to predict the future. Samples are especially needed now because the climate is changing so fast. Greg explained that it is important to collect samples over a long period of time. Sometimes the reason for collecting those samples is not immediately obvious but new questions and methods may emerge in the future that samples can be used to address. An example of this is beluga jaws collected from the Elephant Point harvest in the 1980s. The jaws were sitting in a box until it turned out that DNA could be extracted from the teeth. This has been helpful in understanding stock structure in Kotzebue Sound.

Greg talked about new science approaches using epigenetics, genomics, and environmental DNA (eDNA). Epigenetics (analyzing DNA) can be used to estimate a beluga’s age. We can think about DNA as a train. The train track is the road of life. Over life, DNA molecules jump on and off the train. Some of them help and some just add baggage. The number of DNA add-ons that a beluga has can give a relative age for that whale. It is more difficult to age belugas from their teeth as they get older because their teeth wear down, and epigenetics may help with this problem.

Beluga genomics (the study of genes in beluga cells) can give us new information about stock identification. In the past, scientists usually looked at only 400-500 base pairs. Now they can look at all 2 billion base pairs that are present. By analyzing the DNA in a small piece of skin it is possible to know what stock that beluga came from. Another genetic tool is environmental DNA. This is the DNA in cells that are shed into the water. These cells can come from skin or from the air the belugas breathe out. eDNA can detect when belugas have been somewhere, even if no one sees them.

Greg explained that skin samples are especially valuable because they are easy to collect, only a small piece is needed, and there is a lot of DNA in skin. There is usually some blubber attached to skin samples and other information is available from blubber. If there is a health problem with a beluga stock, genetics can help us understand if it is an immune problem, a reproductive problem, or susceptibility to a particular disease. Often, it’s more than one thing.

Proposed framework for a reporting and sampling program - At its 2021 meeting, in response to an offer by Jon Kurland of NMFS and because getting samples is so important for management, the ABWC passed a resolution requesting that NMFS prepare a report about possible regulations to require sampling of harvested belugas. NMFS evaluated the feasibility of developing a reporting and sampling program, drafted an outline of such a program, and Barb Mahoney and Verena Gill presented the NMFS findings to the ABWC. To develop the plan, NMFS reviewed other reporting and sampling programs in Cook Inlet, Canada and USFWS as well as how ABWC and NMFS currently obtain beluga samples. NMFS provided two options: 1) collect a lower jaw from each harvested beluga or 2) collect only a skin sample. The next step will be to get the ABWC’s response to the NMFS ideas.

Albert Simon asked if the sampling program would cause NOAA to compete for funding with the ABWC. Verena replied no. This would be the ABWC’s and NMFS’s program jointly, and co-management money could not be used to fund it. Tom Gray was concerned that as soon as regulations are involved, some other agency would be doing the enforcement. He expressed his support for getting samples from harvested belugas, and reiterated that the ABWC had requested that NMFS develop a sampling program, but was concerned about enforcement by outsiders. It is essential that ABWC control the samples and the harvest data. Now and in the near future any sampling program should be voluntary.

Co-management with NMFS – Tom Gray explained co-management as a “marriage.” The parties must work together to resolve their differences and solve problems. NMFS representatives from MML and the Alaska Region meet with the ABWC Executive Committee and others twice a year. They are currently discussing another EBS aerial survey in 2024. The ABWC would contribute carry-over funds towards the survey.

Kotzebue Sound belugas – plan status and harvest – Kathy Frost provided some background on Kotzebue Sound belugas. She explained that the decline in Kotzebue Sound belugas probably started 200 years ago when beluga oil was used in trade. In the 1970s there may have been 1000-2000 belugas in the Sound. The harvest increased in the late

1970s when people got bigger, faster boats and traveled farther to hunt. In 1984, following several years of harvests near 100, the harvest collapsed. Since 1984 few belugas have been seen or harvested in Kotzebue Sound except for several years when belugas from another stock entered the Sound. Starting in 1989, Buckland ABWC delegates requested that something be done to bring belugas back to Kotzebue Sound. The Native Village of Buckland wrote a proposal and received a Tribal Wildlife Grant in 2014 to collect traditional knowledge about Kotzebue Sound belugas. In 2016 Noatak received a grant to do the same. In 2017, elders from the five Kotzebue Sound beluga hunting villages, in cooperation with the ABWC, developed a beluga management plan to help bring belugas back. During 2020-22, that plan was signed by all five villages. However, since adoption, the harvest has increased. No one wants the last belugas to disappear from Kotzebue Sound, but it is unclear how to convince local hunters to reduce their harvest and collect samples to learn more about the belugas.

Billy Adams expressed concern about proposed regulations, especially when the communities that will be affected aren't represented in the room (Cyrus Harris (Kotzebue) was called away due to a family emergency; a Buckland delegate couldn't make it due to the storm; only delegates from Noatak and Deering, and a young hunter from Kotzebue, were present.). Kathy Frost said the beluga plan was made by the hunters, not by outsiders or scientists. There have been many meetings in Kotzebue over the past years, run by local elders, but the young hunters don't come to the meetings. In 2021 the ABWC obtained co-management funds to hold a meeting about the plan, but the Native Village of Kotzebue declined. John Burns stated "This is a social issue, not a biological issue. You won't get a consensus unless you have legal regulations and consequences. If you don't do that, you won't get the whales back."

Tom Gray said that Kotzebue Sound is at the "last resort" point. Hunters who come to the meetings agree with the need to act, but those who don't attend don't agree and don't abide by the rules. There is no local buy in. This is a regional problem. Any consideration of regulations for Kotzebue Sound should not penalize people in other places.

Kotzebue Sound beluga genetics– Greg O'Corry-Crowe provided an overview of genetic studies of Kotzebue Sound belugas. There was a precipitous drop in abundance after 1983. Harvests have been low since then except in several years (1996, 2007) when there was a large influx of belugas. Greg has analyzed samples from both before and after the decline. Belugas before the decline had different genetics than all other Alaska stocks. Those harvested in 1996 and 2007 were similar to Beaufort Sea belugas. No belugas satellite tagged in other areas (Chukchi, Beaufort) have entered Kotzebue Sound. He explained how DNA shows that there is genetic variation across regions. Some DNA is unique to Kotzebue Sound, demonstrating that Kotzebue Sound belugas were a distinct stock in the 1980s.

Megan noted that Canada has many genetic samples that haven't been compared to US data. Greg replied that in the early years, they got samples from the Mackenzie. He thought it would be feasible to compare more recent samples, but the genetic markers would have to be standardized so that they're directly comparable.

Tom asked about the status of designating Kotzebue Sound belugas as a separate stock. Greg said he has provided genetics information to NMFS. NMFS will decide whether to classify it as a stock using multiple lines of evidence. Greg thinks the genetics indicate they are a separate stock. However, NMFS will follow a process for listing stocks.

Kotzebue Sound: Marine Mammal Commission Viewpoint - Vicki Cornish explained the role of Marine Mammal Commission (MMC) oversight. Vicki expressed MMC support for sampling of all harvested Kotzebue Sound belugas. She was disappointed that not all Kotzebue Sound representatives were present. Tom Gray emphasized that strong help is needed with this situation. Billy Adams and Tom Gray both pointed out that this is a long and complicated issue. Everyone needs to be at the table. Billy added that the ABWC needs to bring more information to the villages, and hear from their representatives. The bottom line is that everyone needs to come together to conserve the belugas. Tom reiterated that Kotzebue Sound belugas should be designated as a separate stock.

Designating Kotzebue Sound as a separate stock – Robyn Angliss explained that NMFS accepts both scientific information and traditional knowledge about beluga movements when making its decision about whether to designate Kotzebue Sound belugas as a separate stock. It is a two-step process. First, NMFS must decide whether Kotzebue Sound belugas are a demographically independent population (DIP). This means the population is not controlled by immigration or emigration. If they are determined to be a DIP, NMFS will decide whether they meet the MMPA requirements for a stock. The process began a year ago. NMFS has talked with Greg O'Corry-Crowe about the genetics, but still has more questions. They are seeking a balance between progressing fast and carefully.

Robert Suydam noted that this was quite clearly a stock based on genetics samples from the 1980s. The issue is not whether there was a stock, but whether it still exists. Genetic evidence indicates that the original Kotzebue Sound stock is still present. Belugas from the Beaufort Sea that were present in 1996 and 2007 were an anomaly. There is a cost to

delaying this decision. Tom Gray stated that we need to act, we cannot “what if this to death.” Robyn said if they are designated as a stock, it will be very small. Risk will be very high and there will be lots of concern for the population.

Robert Suydam asked Robyn what data are still needed to decide about the Kotzebue Sound stock. If more samples are needed, there are lots of beluga teeth from the 70s and 80s. Robyn responded that there is strong evidence for it having been a separate stock historically, but the contemporary situation is not well understood. NMFS is not confident about whether there is currently a Kotzebue stock, and that there could be other ways to explain some samples that couldn't be assigned to a stock. Canadian genetics data might help with this, but it will require more work. It's challenging to infer much about the current stock based on the existing data. Kathy Frost noted that scientists have been discussing this for about 20 years. The issue isn't whether non-Kotzebue Sound belugas are now sometimes present, but that they once existed and are greatly depleted. The question is how to ensure that there will be Kotzebue Sound belugas in the future. We don't need more samples to know if there was once a separate Kotzebue stock.

Robert said the genetics clearly show there was and is a unique stock in Kotzebue Sound, and that if designating it as a separate stock will assist with the population's recovery, we shouldn't wait. Robyn clarified that NMFS has just started looking at the issue, and only had the first conversation about it three weeks ago. She added that NMFS put a banner on the stock assessment reports for Southeast Alaska harbor porpoises, noting there is evidence for two stocks, but that data are still being collected. She suggested this could be done for Kotzebue Sound belugas, and it would be a positive step.

Robert asked how long it typically takes to designate a stock. Robyn said that in this case, it will depend on what additional information is needed, and that it could easily take 2 or 2.5 years. Tom Grey thought naming it a stock holds folks accountable so they won't just forget about it. “It's important to start the process, no matter how long it takes.”

Greg O'Corry-Crowe said the genetics have established that there certainly was a separate Kotzebue Sound stock. If we don't accept that, then we don't accept how other stocks were defined and how NMFS defines stocks. If there is good evidence that the stock once existed, do we need equally good evidence for whether or not it still exists? If we spend a lot of time on trying to define the current situation, we might wait too long and Kotzebue Sound belugas will be gone.

John Citta added that the harvest collapsed in the 1980s but that harvesting never stopped completely, indicating that some Kotzebue Sound belugas were still present. NMFS found one beaked whale washed up in the Aleutians and the Scientific Review Group created a completely different stock based on this. Are we still going to say we don't have enough information to designate a different Kotzebue Sound beluga stock?

Eastern Bering Sea belugas - Eastern Bering Sea belugas were not discussed due to time constraints and because this material was discussed extensively during the EBS workshop on Tuesday. Duncan Okitkun performed a drum song.

ELECTIONS

Elections were held for the Chairman and Secretary. Elections for Chairman and Secretary alternate with elections for Vice Chairman and Members-at-Large. Robert Suydam nominated Tom Gray to continue as Chairman and Billy Adams moved to close the nominations. There was unanimous agreement for Tom to continue as Chairman. Albert Simon nominated Kathy Frost to continue as Secretary and Robert Suydam moved to close nominations. There was unanimous agreement for Kathy to continue as Secretary.

Tom Gray said that Kathy needs help. Kathy especially needs help with the ABWC Facebook page and with harvest information.

ABWC bylaws state “at its discretion the committee may include non-voting technical advisors”. Robert Suydam proposed and made a motion that Greg O'Corry-Crowe and Doug DeMaster be formally designated as non-voting technical advisors. The motion was passed unanimously.

RESEARCH QUESTIONS FOR 2023

Tom Gray said that NMFS will conduct another EBS survey in 2024 if funding is available. Robert Suydam supported the idea, and said that ABWC will submit a co-management proposal in March to help fund this survey. After the proposal is submitted, it goes through a review process. John Bengtson suggested the ABWC could request funds from WWF for the 2024 EBS survey.

Tom said it is important to continue the hunter tagger program. Kathy Frost said NMFS has already approved three projects for the next three years, including hunter tagger training. Frank James thinks it might be possible to tag in Goodnews Bay and suggested that AVCP might help to fund this. Frank would be interested in learning to tag. Tom believes the only way hunters can realistically catch belugas for tagging is with nets. They must have a history of setting

nets. It takes experience. Eddie Teeluk asked about using harpoon tags. Tom said that harpoon tags would likely work, but they are not permitted. Because beluga maktak is soft, harpoon tags do not stay on long enough to answer many of the important questions about beluga movements and wintering areas. Hilda Booth said it is important to ask the elders about where belugas are and good places to tag because they've got a lot of knowledge and that's how we learn. Tom said when he moved to White Mountain, he wanted to learn how to catch belugas. He talked to some hunters on the phone, and went out with a guy from Point Hope to set a net. "That's how we learn."

Billy Adams suggested more opportunities need to be created to encourage harvest reporting and train young hunters in the Kotzebue Sound region. Robert Suydam noted that all of the villages have endorsed the management plan. He suggested holding another meeting to create an implementation plan for these management suggestions. Kathy replied that ABWC reallocated \$30,000 to meet with Kotzebue hunters this year, but the Native Village of Kotzebue was not interested in having a meeting.

Kathy Frost summarized the research questions and other priorities for 2023: funding for harvest sampling; regional planning in the EBS; hunter tagger training program; the expansion of regional planning to Kotzebue Sound; and an Eastern Bering Sea aerial survey in 2024. Tom says funding is needed to hire someone to help Kathy as Secretary. Tom Gray added that a budget is needed to travel to Washington DC to secure additional funding and discuss permit issues.

ROUND TABLE

John Citta praised the group for honest, difficult discussion. He is excited about a trip to Washington DC.

Renee Roque was impressed with how many players are working together. She wants to come again in the future.

Duncan Okitkun said this is his 4th ABWC meeting. He wondered if the ABWC could get samples from Russia.

Eddie Teeluk said this is his second year. He will keep track of belugas in his area.

Raymond Hunt wanted to see more focus on youth education and getting more DNA samples.

Cylas Okitkun said it was good to be here and learn.

Barbara Mahoney said that the NMFS Region will help in any way that it can.

Jennifer Hooper would like to learn how to help with management planning and sampling. She wants to help.

Joe Akaran said he learned how much hard work it takes to manage belugas and he is proud to be here.

Edward Adams, Sr. said that he never stops learning when he comes.

Morris Nakarak was impressed by how many dedicated people are here at this meeting.

Brandon Kameroff said that participating in tagging was very educational.

Robert Suydam appreciates what the ABWC does. He learns every year. He thinks the relationship between the ABWC and NMFS is positively growing. He thanked the MMC for coming. He thought John Burns' presentation about commercial harvest was relevant to current conservation and management. He thanked Tom Gray and Kathy Frost for their work.

Greg O'Corry-Crowe said the ABWC does a lot with a little. This takes hard work by many.

Marvin Okitkun said he learns and grows every time he comes. This is a big, diverse group.

Kathy Frost said the ABWC has dared to be different which has made a big difference in its success. John Burns' talk about commercial harvest has changed her thinking about the history of beluga harvests.

Norman John never knew about tagging before he came and all of the interesting things it could teach us.

Kenneth Lee said it was eye opening about how much is going on with belugas.

Quincy Adams saw that scientists and hunters CAN work together. It takes time for mutual understanding but it grows exponentially.

Franks James said the group keeps climbing and making progress. As long as we work together, we will move forward.

Billy Adams is hoping that more Kotzebue Sound hunters will get involved and for more meaningful interaction.

Megan Ferguson likes the way the group works through problems.

Robyn Angliss said the group doesn't shy away from hard conversations. She looks forward to the future.

Ben Tinker thanked Kathy Frost for her work.

Albert Simon said this is one of the best meetings he attends. There are good learners and good leaders. The group is very solid with a lot of diversity and different ideas. We learn from each other and work together.

Wybon Rivers said he will get more samples next year.

Warren Lampe said Point Lay is very lucky to have the NSB Department of Wildlife collecting samples from their harvest. People at the ABWC meeting are not afraid to ask questions or make comments.

Raymond Aguvluk thanked the group for a good meeting.

Lori Quakenbush said we got quite a few samples at this meeting and thanked the hunters for bringing them. She reminded everyone about the EBS village meetings and also about needing material for the Student Guide.

John Bengtson said this is a strong group that gets lots done when it works together. Everyone contributes in their own way.

Vicki Cornish said things work very differently in Washington DC. She tells people there what true co-management looks like. She offered the MMC's help.

Kathy Frost reminded everyone to take what they learned at this meeting back to their villages and to share it with other hunters. She thanked Kayla Scheimreif for helping to take minutes.

CLOSING

Tom Gray said that at his first meeting there was mostly gray hair. Now there are many young hunters at the meetings. We need the youth and want them to keep coming. He thanked the families and extended families supporting the ABWC. The ABWC is an extended family that has tendrils reaching to thousands. Family isn't based on color.

We are living in changing times. If we don't also change, we will get left behind. There is huge passion in this room about belugas (but muktuk on a stick over the fire is the best thing in the world!).

The meeting was adjourned at 5:06m.

These minutes were prepared and submitted by Kathy Frost, ABWC Secretary, with assistance from Kayla Scheimreif from the NSB Department of Wildlife.

BYLAWS

ALASKA BELUGA WHALE COMMITTEE

ARTICLE 1. NAME AND PURPOSE

Section 1. Name

The name of this committee shall be the "Alaska Beluga Whale Committee."

Section 2. Purpose

The purpose of the Alaska Beluga Whale Committee is to:

- A. Facilitate and promote wise conservation, management, and use of beluga whales based on the best available information and socioeconomic considerations;
- B. Provide information to the public, appropriate resource management agencies, or other interested parties, and to serve as a contact point for exchange of information on beluga whales;
- C. Identify important beluga habitat and encourage its protection in the face of resource development and increased human activity in the coastal zone;
- D. Promote development of a management plan for beluga whales;
- E. Promote hunter education and use traditional knowledge to improve hunting and harvest techniques;
- F. Promote and encourage planning, prioritization and carrying out of research required for wise conservation, management, and use of beluga whales;
- G. Compile harvest statistics with active participation by coastal hunters in the development and implementation of harvest monitoring efforts;
- H. Advocate cooperation by the United States with other nations and indigenous groups in exchanging information that contributes toward improved conservation and management of beluga whales;
- I. Educate and promote understanding about beluga whale issues among users, resource managers, and other interest groups.

ARTICLE II. MEMBERSHIP

Section 1. Membership

- A. Voting members of the Alaska Beluga Whale Committee shall consist of:
 - 1) Representatives from communities that harvest belugas in each of the following Alaska regions: North Slope, northeastern Chukchi Sea, Kotzebue Sound, Norton Sound, Yukon Delta, Kuskokwim, and Bristol Bay. Each region may also appoint an at-large regional representative.

- 2) Two representatives each from the US National Marine Fisheries Service, the Alaska Department of Fish and Game, North Slope Borough, and others as determined and voted on by the Committee.
 - 3) Charter members. Charter members include those who were present at either the first or the second meeting of the Committee.
- B. Other members may be added by a vote of the Committee.
 - C. At its discretion, the Committee may include non-voting technical advisors who may attend meetings and participate in Committee discussions.
 - D. The Executive Committee, with input from the membership, shall determine the communities to be invited to attend the annual meeting. This will be based on community beluga harvest, past participation, regional beluga conservation and management issues, and the annual budget available for meeting travel.
 - E. Any beluga hunting community or region that is not covered by the Committee budget may send a representative to the annual meeting at its own cost. The name of that person must be submitted to the Executive Committee in advance.

Section 2. Selection

Committee members shall be selected and/or removed in the manner determined by the appropriate tribal council or regional organization. Each member should have a designated alternate to act in the absence of the regular member. Members will serve until their community appoints a different representative. Because ABWC representatives report and discuss matters related to beluga hunting, communities are strongly encouraged to appoint beluga hunters as their representatives.

Section 3. Withdrawal

Withdrawal from the Committee by a community, region or agency automatically relieves its member(s) or alternate member(s) from voting privileges and office (service or eligibility).

Section 4. Removal

Members will be removed for willfully disregarding the Committee's Management Plan or any agreements made with other parties by majority vote of Committee Members in a meeting. Members will be automatically removed from the Committee for felony convictions in local, state, or federal courts.

Section 5. Voting

Each member shall have one vote on all matters except for hunting matters defined in this paragraph. Alternates may vote at meetings in the absence of regular Committee members but shall not be eligible to hold office. Only native (1/4 native or tribal definition of native) representatives shall vote on matters relating to hunting. Votes on hunting matters related to specific beluga whale stocks which include limitations on take, issues relating to struck and loss rates, and other such matters as determined by the Committee shall be done by those affected.

Section 6. Addition of Members

Upon request, the Committee may consent to the seating of new members. A new member may be seated upon a majority vote of the members present and eligible to vote.

ARTICLE III. OFFICERS

Section 1. Election of Officers

Committee officers shall include a Chairman, Vice-Chairman, Secretary, and two Officers-at-Large. Officers shall be elected by a majority vote of the Committee members. Committee Officers shall compose the Executive Committee.

Section 2. Term of Office

Each officer shall serve for a two-year term or until the end of their appointment to the Committee. Officers may serve for consecutive terms. The Chairman and Secretary shall be elected the same year, and the remaining officers in the alternate year to ensure continuity.

Section 3. Replacement of Officers

If there is a vacancy of an office for any reason, that vacancy shall be filled at the next scheduled meeting of the Committee. If the Chairmanship becomes vacant, the Vice-Chairman shall assume the duties of Chairman until the next scheduled meeting.

Section 4. Removal of Officers

Officers may be removed from office by a two-thirds vote of a quorum of Committee members (refer to Article 4).

Section 5. Power of Officers

A. The Chairman shall have the following powers:

- 1) to call and preside at all meetings of the Committee or the Executive Committee;
- 2) to speak on behalf of the Committee and the Executive Committee;
- 3) to authorize statements of Committee positions;
- 4) to sign documents on behalf of the Committee; and
- 5) to perform the duties of the office as prescribed by the Committee or the Executive Committee.

B. The Vice-Chairman shall have the following powers:

- 1) in the absence of the Chairman or in the event of his or her inability or refusal to act, the Vice-Chairman shall perform the duties of the Chairman; and
- 2) to perform other duties as prescribed by the Chairman, the Committee, or the Executive Committee.

C. The Secretary shall have the following powers and duties:

- 1) to keep the minutes of all meetings of the Committee and Executive Committee and to make sure they are typed and distributed to all Committee members;

- 2) to attest to the action of the Committee and the Executive Committee; and
 - 3) to perform other duties as prescribed by the Chairman, the Committee, or the Executive Committee.
- D. The Officers-at-Large shall perform duties as may be assigned by the Chairman, the Committee, or the Executive Committee.
- E. The Executive Committee shall consist of the Chairman, Vice-Chairman, Secretary, and the two Officers-at-Large. The Executive Committee shall have the power to act on matters that cannot be brought before the entire Alaska Beluga Whale Committee because of lack of time or funding. A majority vote of the members of the Executive Committee shall be required for action. On urgent matters, the Executive Committee may take action on the basis of a telephone conference or poll or by electronic mail. An attempt must be made to contact each Executive Committee member. The minutes from any Executive Committee meeting shall be presented at the next scheduled meeting of the Alaska Beluga Whale Committee.

Section 6. Hearing Committee

The ABWC Hearing Committee shall consist of the ABWC Executive Committee and appropriate regional and hunter representatives as determined by the Executive Committee. The Hearing Committee will hold special hearings, as necessary, to resolve any infractions of the ABWC Management Plan that cannot be resolved at a local or regional level. A majority vote of the members of the Hearing Committee shall be required for action. The minutes from any special hearing by this committee must be made available to the full ABWC unless there is a compelling reason not to do so.

ARTICLE IV. MEETINGS

Section 1. Scheduling

Meetings shall be called as least once a year by the Chairman at times and places convenient to the Committee members. Meetings shall be preceded by no less than 14 days advance notice. Every effort should be made, given financial considerations, to convene the meetings at a variety of locations to allow local users or other interested parties to participate.

Section 2. Quorum.

A quorum for meetings shall require the presence of at least two-thirds of the committee members. A majority vote of the Committee members present at a meeting shall be required for Committee action.

ARTICLE V. ADMINISTRATION

Section 1. Administration

A Liaison Officer may be appointed by the Committee from its membership and shall coordinate with the Committee to implement the directives of the Committee.

Section 2. Office

The registered office of the Alaska Beluga Whale Committee shall be c/o North Slope Borough, Department of Wildlife Management, Box 69, Barrow, AK 99723.

Section 3. Records

The official books and records of the Committee shall be maintained at the registered office of the Committee in Barrow, Alaska.

ARTICLE VI. ADOPTION AND AMENDMENTS

These bylaws of the Alaska Beluga Whale Committee shall be considered in effect when they are adopted by the Committee.

These bylaws may be amended by a majority vote of the Committee members present at the annual meetings. Members must receive prior notice that proposed amendments will be considered as an agenda item. Notice of the meeting must be mailed at least 30 days prior to the meeting at which the amendments are proposed and a copy of the proposed amendments must be included. If the required 30-day notice is to be waived, it must be waived in writing by each member in attendance at the meeting at which the action is taken without the required notice period.

CERTIFICATION

We do hereby certify that the foregoing Alaska Beluga Whale Committee Bylaws were adopted as amended at a duly convened meeting of the Alaska Beluga Whale Committee on November 15, 2018. A quorum was present, and the Bylaws were approved by a unanimous vote in favor of adoption.



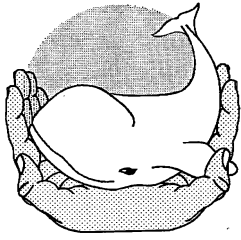
Tom Gray
Chairman

11/15/2018



Attested by: Kathryn J. Frost
Secretary

11/15/2018



Alaska Beluga Whale Committee

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ALASKA BELUGA WHALE MANAGEMENT PLAN INTRODUCTION

Beluga whales in Alaska belong to two populations, one that spends the entire year in the Cook Inlet area and one that winters in the Bering Sea. The Cook Inlet population is made up of one stock while the Bering Sea population is made up of four stocks that migrate to traditional summering areas in Bristol Bay, the Yukon Delta and Norton Sound, the eastern Chukchi Sea, and the Beaufort Sea. Further studies are needed to document the movements, relationships, and accurate estimates of the size of these stocks.

Belugas are hunted in coastal Alaska from Cook Inlet to the Beaufort Sea. Belugas are an important traditional subsistence resource in many villages. In the village of Point Lay, for example, as much as 60% of the subsistence food can come from beluga whales in some years.

Beluga hunters and researchers have recently become concerned because of several events: organizations such as the International Whaling Commission have shown increased interest in managing Alaska beluga whales; large numbers of belugas have died in ice entrapments; increasing boating traffic seems to be keeping belugas from areas where they were once traditionally hunted; and reports of environmental contamination raise concerns about the health of belugas and the people eating them.

Representatives of beluga hunting villages and government agencies met in 1988 and formed the Alaska and Inuvialuit Beluga Whale Committee to address these concerns. In 1994, the structure and name of the committee changed slightly to better address regional concerns. The new name is the Alaska Beluga Whale Committee (ABWC). The organization is dedicated to the conservation of beluga whales and their habitat, and preservation of the traditional beluga whale hunt. The best means to achieve these goals is through co-management of belugas between hunters and government agencies and self-regulation by groups of hunters. This management plan outlines the principles by which the members of the ABWC will manage beluga whales.

ALASKA BELUGA WHALE MANAGEMENT PLAN

PARTS OF THE PLAN

CONSERVATION: Maintain a healthy beluga whale resource for subsistence use and public enjoyment by future generations.

HARVESTING: Encourage the safe and efficient harvest, processing, and use of beluga whales and reduce the number of struck and lost whales through regional management plans.

USE: Ensure that belugas are used as fully as possible in a non-wasteful manner.

REPORTING AND MONITORING: Obtain accurate harvest information and biological samples from each region in order to provide information needed to make sound management decisions.

PUBLIC INVOLVEMENT: Educate and promote understanding about beluga issues among users, resource managers, and other interested groups.

RESEARCH: Obtain biological information necessary for sound management and conservation of beluga whales, and incorporate appropriate traditional knowledge.

ENFORCEMENT: Oversee enforcement of regional management plans and hunting guidelines, and promote enforcement of habitat protection laws, in order to maintain healthy populations of beluga whales for future generations and to ensure hunting opportunities for the subsistence users.

GOALS OF THE PLAN

- 1) To Maintain healthy populations of beluga whales in Alaskan waters.
- 2) Provide for adequate subsistence harvest of beluga whales and protect hunting privileges for Alaskan subsistence hunters.

I. CONSERVATION

Goal - Maintain a healthy beluga whale resource for subsistence use and public enjoyment by future generations.

A. Habitat Protection

1. Identify and protect areas that are important for calving, feeding, migrating, and other biological processes.
2. Identify concentration areas and suggest ways to mitigate impacts of industrial and commercial activities in these areas.

B. Establish a reasonable harvest level. The harvest level will be based on the number of animals in the populations and cultural and subsistence needs. In the absence of adequate biological information, the harvest will be based on current community needs.

C. Identify and monitor industrial and commercial activities which may adversely affect beluga whale populations and the ability of subsistence users to hunt belugas, and make recommendations to minimize the effect upon beluga whales and hunting.

D. Encourage the international exchange of information and development of joint management plans for shared beluga stocks.

E. Encourage and assist in developing regional management plans and co-management agreements with NOAA/NMFS.

II. HARVESTING

Goal - Encourage the safe and efficient harvest, processing, and use of beluga whales and reduce the number of struck and lost whales through regional management plans.

A. Subsistence hunting guidelines should be established for each stock of belugas by the villages hunting from that stock.

- B. Each region or village will include a section in their plans that shows steps needed to keep the number of struck and lost whales to a minimum.
- C. Subsistence uses of beluga whales in each region shall be determined by the affected region.

III. USE OF BELUGA WHALES

Goal - Ensure that belugas are used as fully as possible in a non-wasteful manner.

- A. Priority use shall be local consumption which includes traditional and customary use. This includes sharing, bartering, and customary trade of beluga products with other Alaska Natives that are non-commercial in nature.
- B. Other uses of belugas may be allowed as long as the subsistence priority is met, the use is legal under existing United States law, and only if the affected communities and the ABWC are consulted, involved, approve, and support the use. Such uses might include the following: 1) tourism, 2) live capture, and 3) take for scientific purposes.

IV. REPORTING AND MONITORING

Goal - Obtain accurate harvest information and biological samples from each region in order to provide information needed to make sound management decisions.

- A. Regional representatives will report all harvested and struck and lost belugas to the ABWC. This is to make sure that management decisions are made with correct and recent information. Whenever possible, forms will be filled out that will list the sex, length, color of the whale, area hunted, and information about hunting effort.
- B. Harvest monitors will be hired from villages whenever possible. They will collect harvest information, measure harvested belugas, and collect biological samples.
- C. Hunters will cooperate with the harvest monitors by providing harvest data and biological samples.

V. EDUCATION, INFORMATION, AND PUBLIC INVOLVEMENT

Goal - Educate and promote understanding about beluga issues among users, resource managers, and other interested groups.

- A. Promote hunter education to improve hunting and harvest methods and harvest reporting.
- B. Involve users and other interest groups in planning, prioritizing, and conducting research and in making regulations and management decisions.
- C. Provide information to the public, appropriate resource management agencies, or other interested parties and serve as a contact for exchange of information about beluga whales.
- D. Establish a training program to directly involve local people in harvest monitoring, sample collecting, and research.

VI. RESEARCH

Goal - Obtain biological information and traditional knowledge necessary for sound management and conservation of beluga whales.

- A. All beluga research should be done in consultation with the ABWC and representatives of local communities.
- B. The ABWC recommends the following types of biological research:
 - 1. Determine how many different stocks of belugas there are in Alaska.
 - 2. Develop population models for each stock of belugas. To create these models, the following information is required: population size, birth rate, sex and age composition, age of sexual maturity, and mortality.
 - 3. Determine effects of man-made disturbance and noise.
 - 4. Determine migration routes of all stocks.

5. Identify critical areas for calving, migration, and feeding.
6. Examine the interactions between fisheries and belugas.
7. Determine harmful contaminants in belugas.
8. Compile and incorporate traditional knowledge about beluga whales into research.

C. The ABWC recommends the following types of subsistence studies:

1. Document the use of belugas, how they are hunted, and their cultural and subsistence importance to beluga-hunting communities in Alaska.
2. Identify user groups.
3. Compile information from beluga whale harvest forms about where hunts take place, types of hunts, numbers of hours hunted, etc.
4. Conduct a feasibility study, upon request, on other potential uses of belugas including tourism and live capture.

VII. ENFORCEMENT

Goal - Oversee enforcement of regional management plans and hunting guidelines, and promote enforcement of habitat protection laws, in order to maintain healthy populations of beluga whales for future generations and to ensure future hunting opportunities for the subsistence users.

- A. Each region, through consultation with the ABWC, will establish the enforcement procedures for their regional plans and for any agreements entered into with management agencies.
- B. The ABWC Hearing Committee, consisting of the ABWC Executive Committee and appropriate regional and hunter representatives, will hold a special hearing if there is an infraction left unresolved at the regional level. The Hearing Committee will decide on the infraction in a timely manner.
- C. If a person willfully disregards the decision of the ABWC Hearing Committee, the ABWC will refer the infraction to the NMFS enforcement agency.

CERTIFICATION

We do hereby certify that the foregoing Alaska Beluga Whale Management Plan was adopted as amended at a duly convened meeting of the Alaska Beluga Whale Committee on December 1, 1995. The quorum was present, and the Plan was approved by a unanimous vote in favor of adoption.

Rosswell Schaeffer
Chairman

Attested by:
Kathryn J. Frost
Secretary

The following organizations and villages have accepted the Management Plan:

NSB Fish & Game Management Committee	7/14/94
Little Diomede	1994
Native Village of Hooper Bay	11/21/96
Native Village of Kotlik	11/21/96
Native Village of Dillingham (Curyung)	11/25/96
Native Village of Kotzebue	11/25/96
Native Village of Shaktoolik	11/25/96
Native Village of Manokotak	11/26/96
Native Village of Elim	11/27/96
Native Village of Noatak	11/29/96
Native Village of Buckland	12/2/96
Native Village of Kivalina	12/2/96
Native Village of Point Lay	12/2/96
Native Village of Saint Michael	12/2/96
Native Village of Scammon Bay	12/2/96
Native Village of Koyuk	12/3/96
Native Village of Unalakleet	12/3/96
Native Village of Stebbins	12/4/96
Native Village of Clark's Point	1/14/97
Native Village of Togiak	2/10/97
Native Village of Barrow	2/25/97
Native Village of Chevak	2/26/97
Native Village of Emmonak	10/14/97
Alakanuk Tribal Council	10/20/97
Native Village of Point Hope	11/17/97
Native Village of Levelock	11/18/97
Native Village of South Naknek	6/30/00

Updated CERTIFICATION

The following 35 communities and organizations have signed resolutions of support for the ABWC, the ABWC Management Plan, and the ABWC-NOAA Co-Management Agreement as of November 2019. Many communities signed support resolutions in 1994-1997 and recertified their support in 2016-2018.

<u>Community</u>	<u>ABWC Mngt Plan</u>	<u>Co-Mngt resolution</u>	<u>Updated Resolution</u>
Beaufort Sea stock			
NSB Fish & Game Mngt Comm	7/14/1994		
Barrow	2/25/1997	11/13/2000	
Diomedede	1994		4/29/2017
Kivalina	12/2/1996	11/10/2000	6/15/2017
Point Hope	11/17/1997		10/3/2018
Eastern Chukchi stock			
Point Lay	12/2/1996	11/21/2000	11/14/2016
Wainwright			2/27/2017
Kotzebue Sound			
Buckland	12/2/1996	11/2/1999	10/31/2016
Deering			12/14/2017
Kotzebue	11/25/1996	11/23/1999	1/26/2017
Noatak	11/29/1996	11/10/1999	10/28/2016
Eastern Bering Sea stock			
Norton Sound			
Council/Nome			11/9/2016
Elim	11/27/1996	11/2/1999	10/5/2018
Golovin			5/25/2017
Koyuk	12/3/1996	11/5/1999	12/8/2016
Saint Michael	12/2/1996	11/8/1999	1/6/2017
Shaktoolik	11/25/1996	11/8/1999	9/25/2017
Stebbins	12/4/1996	11/5/1999	1/4/2017
Unalakleet	12/3/1996	12/8/2000	1/19/2017
White Mountain		11/30/1999	1/27/2017
Yukon			
Alakanuk	10/20/1997	8/11/2000	11/7/17
Chevak	2/26/1997		
Emmonak	10/14/97		
Hooper Bay	11/21/1996	11/4/1999	10/26/2016
Kotlik	11/21/1996	12/5/2000	12/20/2016
Mountain Village			1/24/2017
Nunam Iqua (Sheldon Point)		11/9/2000	1/24/2017
Scammon Bay	12/2/1996	11/7/2000	1/11/2017
Kuskokwim			
AVCP			3/3/2017
Bristol Bay stock			
Aleknagik		12/20/1999	10/2/2017
Clark's Point	1/14/1997		11/2/2016
Curyung (Dillingham)	11/25/1996	1/11/2000	2/14/2017
Levelock	11/18/1997	11/8/1999	2/10/2017
Manokotak	11/26/1996	11/13/2000	11/16/2016
Naknek	6/30/1997		2/1/2017
Togiak	2/10/1997	11/9/2001	9/28/2017

AGREEMENT
between the
NATIONAL MARINE FISHERIES SERVICE
and the
ALASKA BELUGA WHALE COMMITTEE
for
CO-MANAGEMENT OF THE WESTERN ALASKA BELUGA WHALE POPULATION

I. PARTIES

This document constitutes an agreement between the National Marine Fisheries Service (NMFS) and the Alaska Beluga Whale Committee (ABWC), otherwise referred to as the Parties.

The ABWC is an association which represents Alaska Native beluga whale subsistence hunters within the State of Alaska who hunt from the Western Alaska beluga whale population and who are registered with the ABWC through registration with their Management Regions. It also includes Federal, State and local government representatives, and charter members as set forth in the ABWC Bylaws. The Western Alaska beluga population includes beluga whale stocks occurring in the Bering (including Bristol Bay), Chukchi and Beaufort seas and is referred to in this agreement as “Western Alaska beluga whales” or “the Western Alaska population.”

II. AUTHORITIES

A. NMFS has the authority to enter into this Agreement with the ABWC under Section 119 (16 U.S.C. 1388) of the Marine Mammal Protection Act of 1972, as amended (MMPA), and the Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. 1531 *et seq.*). Additional guidance is provided by Executive Order #13084 of May 14, 1998 (“Consultation and Coordination with Indian Tribal Governments,” 63 FR 27655), Presidential Memorandum of April 29, 1994 (“Government-to-Government Relations with Native American Tribal Governments,” 59 FR No. 85). U.S. Department of Commerce Memorandum “American Indian and Alaska Native Policy of the U.S. Department of Commerce” of March 30, 1995, and the “Memorandum of Agreement for Negotiation of Marine Mammal Protection Act, Section 119 Agreements” of August, 1997.

This agreement is between
ABWC and NMFS.

The ABWC represents beluga whale
subsistence hunters. It also includes
government representatives and charter
members who were at the first meeting.

The Western Alaska beluga population
includes belugas in Bristol Bay and the
Kuskokwim, the eastern Bering Sea (Yukon
and Norton Sound), and the Chukchi and
Beaufort seas.

NMFS can be a part of this agreement
because of the Marine Mammal Protection
Act and other federal laws.

Other federal agreements
also allow NMFS
to be part of this agreement.

- B. The ABWC has the authority to enter into this Agreement under authorizing resolutions from those tribes and tribally-authorized organizations listed in Appendix A.

III. PURPOSES

The purposes of this Agreement between NMFS and the ABWC are to conserve the Western Alaska beluga whale population; protect Alaska Native beluga whale subsistence hunting traditions and culture; promote scientific research on beluga whales, whale stocks and their environment; and effectuate provisions of the Marine Mammal Protection Act that are relevant to aboriginal subsistence hunting of beluga whales. To achieve these purposes, this Agreement provides for:

- A. Cooperation between members of the ABWC and NMFS in the conservation and management of Western Alaska beluga whales for the year 2000 and thereafter; and
- B. The development of Regional Beluga Whale Management Plans to be entered into under this Agreement between the ABWC and the ABWC Management Regions.

IV. BACKGROUND

In 1972, the Marine Mammal Protection Act was passed by Congress and provided for an exemption on the taking of any marine mammal by Alaska Natives provided such taking is for subsistence purposes or done for purposes of creating and selling authentic Native articles of handicraft and clothing. Such taking may not be accomplished in a wasteful manner.

In 1988, the ABWC was established to facilitate cooperation and communication among beluga whale subsistence hunters, scientists, and the government regarding the conservation and management of beluga whales. The ABWC is composed of regional and village representatives from areas where hunting of the Western Alaska population of beluga whales takes place; beluga whale scientists; and members of Federal, State and local governments. On December 1, 1995, the ABWC adopted Bylaws and a Management Plan to conserve and manage the subsistence hunting of the Western Alaska beluga whale population. The Bylaws of the ABWC specify that only Alaska Native beluga hunters may vote on matters pertaining to hunting.

Twenty-four villages have authorized the ABWC to represent them in getting a co-management agreement for belugas

The purposes of the Agreement are to:

- 1) conserve belugas
- 2) protect subsistence hunting
- 3) promote scientific research
- 4) make sure parts of the Marine Mammal Act affecting subsistence hunting are followed

To do these things:

- 1) The ABWC and NMFS will cooperate in conserving and managing beluga whales.
- 2) Prepare Regional Management Plans for local management of belugas

The Marine Mammal Act was passed in 1972. It states that Alaska Natives may harvest marine mammals for subsistence or to make and sell Native clothing and handicraft things. Taking cannot be wasteful.

The ABWC was formed in 1988 to encourage cooperation and discussions among the hunters and the scientists and the government.

ABWC members include: 1) hunter representatives, 2) beluga whale scientists, 3) government representatives

The ABWC Beluga Management Plan says that only Alaska Native beluga hunters can vote on hunting matters.

In April 1994, the Marine Mammal Protection Act was amended to include Section 119 "Marine Mammal Cooperative Agreements in Alaska." Section 119 formalizes the rights of Alaska Native Organizations to participate in conservation-related co-management of subsistence resources and their use. Section 119 also authorized the appropriation of funds to be transferred by NMFS to Alaska Native Organizations to accomplish these activities.

In 1994, the Marine Mammal Act was changed to recognize the right of Alaska Native Organizations to participate in co-management of subsistence resources.

These changes in also authorized NMFS to spend money for co-management activities.

V. MANAGEMENT OF WESTERN ALASKA BELUGAS WHALES WITHIN THE STATE OF ALASKA

A. RESPONSIBILITIES OF THE ABWC

ABWC has responsibilities under this Agreement.

1. Management of the Western Alaska Beluga Whale Subsistence Hunt

The ABWC Management Plan sets forth principles governing conservation, subsistence harvesting, use, reporting and monitoring, research, public involvement, and enforcement as they relate to beluga whales. Under this Agreement, the ABWC, through the ABWC Management Regions and in cooperation with NMFS, will manage the beluga whale subsistence harvest conducted by all member beluga whale subsistence hunting villages within the State of Alaska who hunt from the Western Alaska population of beluga whales. Any necessary enforcement of ABWC or Regional Management Plans will be accomplished according to the provisions of these plans. The authority and responsibilities of the ABWC and of each ABWC Management Region are contained in and limited by this Agreement, the ABWC Management Plan and the Regional Management Plans, as amended from time to time, to the extent the ABWC Management Plan and the Regional Management Plans are not inconsistent with this Agreement.

The ABWC will manage the subsistence hunt for belugas according to its Management Plan.

The ABWC will do this through the Management Regions. This means that decisions about management will be made on a local basis.

The ABWC and the Management Regions will cooperate with NMFS.

If any enforcement is necessary, it will be done according to Regional Management Plans, with help from the ABWC if necessary.

This Agreement, together with the ABWC and Regional Management Plans, will be used to manage belugas

2. Inspection and Reporting.

The ABWC shall obtain accurate harvest information and biological samples from each Management Region in accordance with the Regional Management Plan and in agreement with the ABWC Management Plan. NMFS personnel may participate in such data collection. All information collected under this section shall be shared between the ABWC and NMFS.

The ABWC will collect accurate harvest information and samples from each Management Region.

Information will be shared with NMFS.

3. Research

The ABWC, in consultation with NMFS, may conduct research on the biology, natural history and traditional knowledge of the Western Alaska population of beluga whales. NMFS personnel may participate in such data collection. All information collected under this section shall be shared between the ABWC and NMFS.

The ABWC may do research on belugas. They will keep NMFS informed about what they are doing. NMFS people can take part in the research. The information will be shared.

3. Funding

Pending the appropriation of Section 119 funds by Congress, the ABWC shall be responsible for costs incurred by its representatives participating in activities under this Agreement. Once Section 119 funds become available, ABWC may voluntarily, at its sole discretion, elect to support the goals of this Agreement by supplementing Section 119 funds with non-Section 119 funds that are available from other sources. No financial commitment on the part of the ABWC is authorized or required by this Agreement.

Until Congress provides additional funding, the ABWC will pay its own bills for co-management.

The ABWC always has the right to spend its own money on things it thinks are important.

This Agreement doesn't require ABWC to spend money.

B. RESPONSIBILITIES OF NMFS

1. Management of the Western Alaska Beluga Whale Subsistence Hunt

NMFS has primary responsibility within the United States Government for management and enforcement of programs concerning beluga whales. NMFS may assert its federal management authority to enforce any existing provisions of the Marine Mammal Protection Act that are applicable to the Native harvest of beluga whales. Such assertion of federal management authority will be preceded by consultation with the ABWC as specified in V.B.2 below.

NMFS is the government agency responsible for beluga whales.

NMFS has the right to enforce existing parts of the Marine Mammal Protection Act, but it must consult with the ABWC before it does this.

2. Research

NMFS, in consultation with the ABWC, may conduct research on the biology, natural history and traditional knowledge of the Western Alaska population of beluga whales. ABWC personnel may participate in such data collection. All information collected under this section shall be shared between the ABWC and NMFS.

NMFS may do research on belugas. They will keep the ABWC informed about what they are doing. ABWC people can take part in the research. The information will be shared.

3. Funding

NMFS shall provide funding, as available, pursuant to Section 119 of the Marine Mammal Protection Act, or in-kind support, for the beluga whale Inspection

and Reporting and Research responsibilities identified in sections V.A.2 and V.A.3, and other co-management responsibilities of the ABWC as set forth in this Agreement. Pending the appropriation of Section 119 funds by Congress, NMFS shall be responsible for costs incurred by its representatives participating in activities under this Agreement. Once Section 119 funds become available, NMFS may voluntarily, at its sole discretion, elect to support the goals of this Agreement by supplementing Section 119 funds with non-Section 119 funds that are available from other sources. No financial commitment on the part of the NMFS is authorized or required by this Agreement.

VI. CONSULTATION

The ABWC and NMFS shall consult on an as-needed basis concerning matters related to management of Western Alaska beluga whales which either party believes are suitable for such consultation. This will include matters which have the potential to affect any Western Alaska beluga whale stock or the Native subsistence hunting of Western Alaska beluga whales. The Parties agree that they will consult on issues that may include but are not limited to any possible change in designation or status of Western Alaska beluga whales under any provision of the Marine Mammal Protection Act or the Endangered Species Act, or any changes in regulations or agreements that are applicable to Western Alaska beluga whales.

REGIONAL MANAGEMENT PLANS

Each Management Region within the ABWC shall have responsibility for preparing, in consultation with the ABWC, a Regional Management Plan for the management of the beluga whale subsistence hunt within that region. The Regional Management Plans shall be consistent with the provisions of the ABWC Management Plan and shall be submitted to the ABWC for approval. Any individual Regional Management Plan will be consistent with the Memorandum of Agreement for Negotiation of Marine Mammal Protection Act Section 119 Agreements.

When Congress makes the money available, NMFS will provide funding to help the ABWC meet its responsibilities to monitor the harvest, do research, and do other co-management activities.

Until Congress provides additional funding, NMFS will pay its own bills for co-management.

NMFS always has the right to spend its own money on things it thinks are important.

This Agreement doesn't require NMFS to spend money.

The ABWC and NMFS will consult about anything that either group thinks should be discussed about beluga management.

This includes things that might affect belugas or beluga hunting - such as decisions about the status of stocks and any proposed listings as depleted or endangered.

Each Management Region will make a Regional Management Plan. The ABWC will help.

This Plan must agree with the ABWC Management Plan, and be approved by the ABWC.

VII. REGULATION AND ENFORCEMENT

NMFS recognizes the existing tribal authority to regulate tribal members during the conduct of the subsistence harvest of beluga whales. The ABWC recognizes the Secretary of Commerce's authority to enforce the existing provisions of the MMPA applicable to the Native harvest of beluga whales.

NMFS recognizes existing tribal authority to regulate tribal members during subsistence hunting of belugas.

ABWC recognizes the authority of NMFS to enforce the MMPA.

VIII. OTHER PROVISIONS

- A. Nothing in this Agreement shall be construed to support or contradict an extension of the jurisdiction of the International Convention for the Regulation of Whaling, 1946, or the Whaling Convention Act of 1949 with respect to aboriginal subsistence beluga whale hunting by Alaska Natives.
- B. Nothing herein is intended to conflict with current NOAA or NMFS directives. If the terms of this Agreement are inconsistent with existing laws, regulations, or directives of either of the Parties entering into this Agreement, then those portions of this Agreement which are determined to be inconsistent shall be invalid, but the remaining terms and conditions not affected by the inconsistency shall remain in full force and effect. At the first opportunity for review of the Agreement, all necessary changes will be accomplished by either an amendment to this Agreement or by a new Agreement, whichever is deemed expedient to the interest of both Parties.
- C. Should disagreements arise over the provisions of this Agreement, or amendments or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each Party and presented to the other Party for consideration. If agreement on interpretation cannot be reached within a reasonable time, a special meeting or teleconference shall be held to resolve the issues. This meeting shall include representatives of NMFS, the ABWC Executive Committee and the affected Region(s) as appropriate.

Nothing in this Agreement affects or changes the involvement of the International Whaling Commission in beluga whale subsistence hunting issues.

This Agreement can't conflict with regulations of either the ABWC or NMFS. If it does, the part that disagrees will be thrown out and must be changed as soon as possible.

The rest of the Agreement stays in effect.

If there are disagreements that are hard to work out, they will be stated in writing. Then, a special meeting will be held to work on a solution.

Meetings to work out disagreements will involve NMFS, ABWC and the Region that is affected, if appropriate.

IX. ADOPTION, DURATION, AND MODIFICATION

This Agreement will become effective when signed by both Parties, and may be amended at any time by written agreement of both Parties. Either Party may terminate this agreement by giving 45 days prior written Notice of Termination to the other Party.

X. SIGNATORIES

The Parties hereto have executed this Agreement as of the last written date below:

National Marine Fisheries Service

Alaska Beluga Whale Committee

Steve Pennoyer 12/23/99
Date
Steve Pennoyer
Administrator, Alaska Region
National Marine Fisheries Service
U. S. Department of Commerce
P. O. Box 21668
Juneau, Alaska 99801

Roswell Schaeffer 11/09/99
Date
Roswell Schaeffer
Chairman
Alaska Beluga Whale Committee
P. O. Box 293
Kotzebue, Alaska 99752

Ron Berg 11/19/99
Date
Ron Berg
Deputy Administrator, Alaska Region

Marie Adams Carroll 11/09/99
Date
Marie Adams Carroll
Vice Chairman

Douglas DeMaster 11/9/99
Date
Douglas DeMaster
Director, National Marine Mammal Lab

Kathryn Frost 11/9/99
Date
Kathryn Frost
Secretary

Barbara Mahoney 9 Nov 99
Date
Barbara Mahoney
ABWC Representative, Alaska Region

Molly Chythlook 11/9/99
Date
Molly Chythlook
Treasurer

Charles Saccheus 11/9/99
Date
Charles Saccheus
Sergeant at Arms

Cooperative Agreement between the Alaska Beluga Whale Committee and the National Marine Fisheries Service Entered into Pursuant to Section 119 of the Marine Mammal Protection Act of 1972, As Amended

Appendix A

List of Tribally-authorized Organizations Providing Authorizing Resolutions to the Alaska Beluga Whale Committee. This list may be amended from time to time if additional authorizing resolutions are received from tribally authorized organizations representing villages with a history of hunting Western Alaska beluga whales, and with ABWC approval.

<u>Tribally Authorized Organization</u>	<u>Resolution Date</u>
Alakanuk Traditional Council	20 October 1997
Native Village of Barrow	25 February 1997
Buckland I.R.A. Council	2 December 1996
Chevak Traditional Council	26 February 1997
Native Village of Clarks Point	14 January 1997
Dillingham Native Village Council	25 November 1996
Native Village of Elim IRA Council	27 November 1996
Emmonak Tribal Council	14 October 1997
Native Village of Hooper Bay	21 November 1996
Kivalina City Council	2 December 1996
Native Village of Kotlik	21 November 1996
Kotzebue IRA Council	25 November 1996
Native Village of Koyuk IRA Council	3 December 1996
Native Village of Levelock	18 November 1997
Native Village of Manokotak	26 November 1996
Native Village of Noatak IRA Council	29 November 1996
North Slope Borough Fish and Game Management Committee	14 July 1994
Native Village of Point Hope	17 October 1997
Native Village of Point Lay IRA Village Council	2 December 1996
Native Village of Scammon Bay	2 December 1996
Native Village of Shaktoolik	25 November 1996
Native Village of South Naknek	30 June 2000
Native Village of Stebbins	4 December 1996
Native Village of St. Michael	2 December 1996
Traditional Council of Togiak	10 February 1997
Native Village of Unalakleet	3 December 1996

Updated CERTIFICATION

The following 35 communities and organizations have signed resolutions of support for the ABWC, the ABWC Management Plan, and the ABWC-NOAA Co-Management Agreement as of November 2018. Many communities signed support resolutions in 1994-1997 and recertified their support in 2016-2018.

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NSB Fish & Game Mngt Comm	7/14/1994		
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Diomede	1994		4/29/2017
Kivalina	12/2/1996	11/10/2000	6/15/2017
Point Hope	11/17/1997		10/3/2018
Eastern Chukchi stock			
Point Lay	12/2/1996	11/21/2000	11/14/2016
Wainwright			2/27/2017
Kotzebue Sound			
Buckland	12/2/1996	11/2/1999	10/31/2016
Deering			12/14/2017
Kotzebue	11/25/1996	11/23/1999	1/26/2017
Noatak	11/29/1996	11/10/1999	10/28/2016
Eastern Bering Sea stock			
Norton Sound			
Council/Nome			11/9/2016
Elim	11/27/1996	11/2/1999	10/5/2018
Golovin			5/25/2017
Koyuk	12/3/1996	11/5/1999	12/8/2016
Saint Michael	12/2/1996	11/8/1999	1/6/2017
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Stebbins	12/4/1996	11/5/1999	1/4/2017
Unalakleet	12/3/1996	12/8/2000	1/19/2017
White Mountain		11/30/1999	1/27/2017
Yukon			
Alakanuk	10/20/1997	8/11/2000	11/7/17
Chevak	2/26/1997		
Hooper Bay	11/21/1996	11/4/1999	10/26/2016
Kotlik	11/21/1996	12/5/2000	12/20/2016
Mountain Village			1/24/2017
Nunam Iqua (Sheldon Point)		11/9/2000	1/24/2017
Scammon Bay	12/2/1996	11/7/2000	1/11/2017
Kuskokwim			
AVCP			3/3/2017
Bristol Bay stock			
Aleknagik		12/20/1999	10/2/2017
Clark's Point	1/14/1997		11/2/2016
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Naknek	6/30/1997		2/1/2017
Togiak	2/10/1997	11/9/2001	9/28/2017



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, AK 99802-1668

April 10, 2023

Dear Mayor Harry Brower,

The National Marine Fisheries Service (NMFS) recognizes the unique importance of marine mammals to Alaska Native tradition, culture and diet. NMFS values our longstanding co-management relationship with Alaska Native Organizations (ANO) to conserve, protect, and recover marine mammal species. At the request of the Alaska Congressional Delegation and subsequent deliberations with the ANO community, NMFS Alaska Region developed the Alaska Native Co-Management Funding Program, a priority and merit-based grant process under the authority of the Marine Mammal Protection Act, Section 119 to support ANO participation in the co-management of marine mammals. Your proposal was submitted under this program and has been selected for funding. **The approved funding amount is \$150,610.**

A merit review panel consisting of MMPA Section 119 subject matter experts recently concluded three days of deliberations on proposals submitted to this program. The Regional Administrator decided to fund your proposal after considering the panel's comments and funding recommendations. We are preparing the documentation for electronic submission to NOAA's Grants Management Division (GMD) for Department of Commerce clearance and review procedures. The total reduction requested for this proposal is \$50,000. Prior to forwarding the application package to the GMD, we request the following revisions to your proposal:

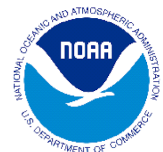
Requested Revisions:

1. Reduce total project amount by \$50,000.
2. Signatures on all SF424 forms must match the listed authorized representative.

Total reduction is \$50,000.

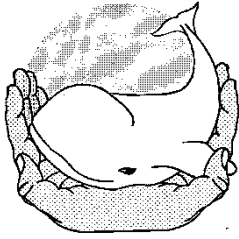
As in past years, any changes to the Award amount and item costs associated with this project will require a revised SF424, SF424A, proposal narrative, budget detail and justification (again please note that the requested Federal Funds on these documents for the year at \$150,610).

Enclosed are the technical reviewers' consolidated comments following the criteria outlined in the 2023 Federal Funding Opportunity Announcement under Evaluation Criteria. They should be viewed as constructive comments on the proposed work, and as an explanation of the requests listed above. Where applicable, please use these comments to edit this proposal and to strengthen future submissions to this program.



Please send your response and all associated paperwork directly to me via email by **May 5, 2023**.
If you have any questions, please contact me at 907.586.7273 or Kristin.Cieciel@NOAA.gov.

Sincerely,
Kristin Cieciel
Program Officer
Alaska Region Program Office



Alaska Beluga Whale Committee

c/o North Slope Borough

Box 69

Barrow, Alaska 99723

Phone (907) 852-0350 Email: john.citta@north-slope.org

Proposal

SUPPORT FOR ALASKA BELUGA WHALE COMMITTEE BELUGA CO-MANAGEMENT AND RESEARCH ACTIVITIES, 2023-2024:

Population and Trend Assessment of the Eastern Bering Sea Beluga Stock

Submitted under the FY 2023 Alaska Native Organization Co-Management Funding Program

Submitted to:
National Marine Fisheries Service
Juneau, AK

Submitted by:
North Slope Borough
Box 69
Barrow, AK 99723

For the
Alaska Beluga Whale Committee

Project Duration: 1 November 2023 to 31 October 2024

Project Manager: John Citta
North Slope Borough, Box 69
Barrow, AK 99723
John.Citta@north-slope.org
(907) 852-0350
(907) 852-0351 (fax)

Total Grant Request
to the NSB for ABWC: \$ 150,610 Federal Funds

Date Submitted: 10 February 2023

SUPPORT FOR ALASKA BELUGA WHALE COMMITTEE BELUGA CO-MANAGEMENT AND RESEARCH ACTIVITIES, 2023-2024:

Population and Trend Assessment of the Eastern Bering Sea Beluga Stock

PROJECT SUMMARY

The Alaska Beluga Whale Committee (ABWC) is the co-management partner with the National Marine Fisheries Service (NMFS) for four officially recognized stocks of beluga whales (Bristol Bay, eastern Bering Sea, eastern Chukchi Sea, Beaufort Sea) and one that is being reviewed for designation as a stock (Kotzebue Sound). ABWC, formed in 1988, encourages conservation and informed management of belugas, conducts scientific research on belugas, and works to involve Alaska Native subsistence hunters in the management of this important research. ABWC is seeking funding for 2023-2024 to continue its efforts to allow for sustained beluga harvests and to collect information needed for informed decision making.

Funds are requested to conduct aerial surveys of beluga whales in Norton Sound and the Yukon Delta in June 2024 to estimate the population size of the Eastern Bering Sea (EBS) beluga stock. These surveys will be conducted in collaboration with ABWC's Co-management partner, the NMFS Alaska Fisheries Science Center Marine Mammal Laboratory (NMFS-MML) with support from ABWC. ABWC co-management funds will be used for survey aircraft time and fuel. NMFS-MML will cover all other survey costs, including personnel to conduct and analyze surveys, travel and per diem, aircraft availability, and any other miscellaneous expenses. This project has been identified as one of ABWC's highest co-management priorities since 2019, and delegates consider the information provided by these surveys to be essential for developing an EBS management plan and managing the beluga subsistence harvest.

This project has one component: (1) plan and conduct aerial surveys in the EBS in June 2024 to provide updated abundance and trend estimates of the EBS stock of belugas.

The Marine Mammal Co-Management Priorities and specific objectives are:

- **RESEARCH PROJECTS** – Conduct aerial surveys of belugas in Norton Sound/Yukon Delta during a 14-day period in mid- to late-June 2024; cooperate with NMFS-MML to estimate the abundance and trend of the EBS stock of belugas; collaborate with NMFS-MML to prepare a manuscript for publication after analysis is complete.
- **FOOD SECURITY** – Provide the abundance estimate based on 2024 aerial surveys to subsistence beluga hunters so they can manage their harvest so it remains a viable food resource in the future.
- **COOPERATIVE MANAGEMENT** – Collaborate with NMFS-MML to prepare a presentation and report for the ABWC annual meeting that summarizes the results from these surveys; share the updated EBS beluga abundance estimate with Kawerak, Alaska Village Council Presidents, Tribal Councils in the EBS region, ABWC hunter delegates, and others.

Surveys will result in an up-to-date abundance estimate for the EBS stock that can be used to inform the EBS Beluga Management Plan, to develop and refine harvest guidelines, to estimate trend by comparing 2024 results with previous EBS abundance estimates, and to evaluate the impact of current subsistence harvests on the EBS beluga stock. Abundance information estimated from surveys is required for updating/revising the EBS beluga Stock Assessment Report (SAR).

ABWC is asking for support from the FY23 Alaska Native Co-Management Funding Program in the amount of \$150,610. The North Slope Borough (NSB) will administer funds for ABWC.

Population Assessment: Eastern Bering Sea				Total	
Personnel					
Subtotal					\$0
Fringe					
Subtotal					\$0
Travel - NSB Only					
Subtotal					\$0
Supplies					
Subtotal					\$0
Contractual	Units	#	Cost/Unit		
BB Aerial Surveys (contract with Clearwater Air for aircraft)					
Aircraft (40 hrs dry)	59.5		\$1,782	\$106,029	
Fuel (gallons)	59.5	75	\$8.8136	\$39,331	
Clearwater Subtotal				\$145,360	
Subtotal					\$145,360
Total Direct					
ABWC Direct Costs					\$145,360
Total Indirect					
ABWC Direct Costs				\$145,360	
NSB Indirect Rate (indirect on max of \$25,000/contract)	1	25,000	0.21		
Total Indirect Costs					\$5,250
TOTAL					
Total new funds requested					\$150,610
* The ABWC is pursuing other funds in the amount of \$50,000 for conduct of the 2022 EBS surveys, to be applied to the request for contractual services of \$145,360. It is not known at this time whether those funds will be received.					

ABWC budget update; submitted by John Citta (27 November 2023)

ABWC currently has funds in **three** grants. Two of the grants are old and were one-year in duration. In 2021, NMFS went to a three-year grant system. We are in the second year of the three-year grant. In 2022, we also applied for and received a supplemental grant for aerial surveys in Norton Sound.

1. Support for the Alaska Beluga Whale Committee 2020-2021 (3605.G062101 NA20NMF4390062)

Original amount (2020): \$235,330

Award period (after grant extensions): 1 August 2020 to 31 January 2025

Total remaining: **\$57,413**

Existing commitments: \$14,699 (PO 20231687 ADFG – Eastern Bering Sea Village meetings for the management plan)

Funds available for aerial surveys: \$42,714

Notes: This grant must be spent out in January 2025 or the funds disappear. I recommend we spend all remaining funds in this grant, including the village meeting funds, on the 2024 EBS aerial survey.

2. Support for the Alaska Beluga Whale Committee 2022-2023 (3605.G062203 NA21NMF4390026)

Original amount (2021): \$204,500

Award Period (after grant extensions): 1 November 2021 to 31 January 2025

Total remaining: **\$48,606**

Funds available for aerial surveys: \$48,606

Notes: This grant must be spent out in January 2025 or the funds will disappear. I recommend spending all we can on the 2024 EBS survey.

3. Support for the Alaska Beluga Whale Committee 2021-2022 (3605.G062201 NA22NMF4390175)

Original amount (2021): \$656,951 + 150,610 (supplemental funds for EBS surveys) = \$807,561

Award period: 1 August 2022 to 31 July 2025

Year 1: \$223,806

Year 2: \$225,390 + \$150,610

Year 3: \$207,755 (not yet allocated)

Total remaining (Just Year 1 and Year 2): **\$427,399**

Notes: We are mostly on-track for spending out what is needed for meetings, but are falling behind on spending for science projects.



Community _____

Alaska Beluga Whale Committee

2023

Beluga Harvest Report

Reporter _____ Phone _____ Email _____

1) **TOTAL belugas harvested in your community in 2023, all seasons combined?** _____

Number of whites? _____ Number of grays? _____ number unknown color? _____

How many by boats? _____ How many in nets? _____ How many at the lead? _____

Do you know How many Males? _____ How many Females? _____

2) **SUNK: How many belugas were sunk and lost in 2023? This is important!** _____

To make sure the harvest is at a safe level, we need to know how many total belugas were killed.

3) **WINTER:** Were any belugas harvested in winter (January-March)? _____ How many?

4) **SPRING:** Number harvested in SPRING? _____ What months (circle) Apr May Jun

_____ whites _____ grays _____ STRUCK & LOST

_____ by boat _____ by netting _____ from the lead/ice edge ___ shallow water ___ deep water

5) **SUMMER:** Number harvested in summer? _____ What months (circle) Jul Aug

_____ whites _____ grays _____ STRUCK & LOST

_____ by boat _____ by netting _____ from shore ___ shallow water ___ deep water

6) **FALL:** Number harvested in fall? _____ What months (circle) Sep Oct Nov

_____ whites _____ grays _____ STRUCK & LOST

_____ by boat _____ by netting _____ from shore ___ shallow water ___ deep water

7) **If no belugas were harvested this year, why not** (write a comment about why no hunting)

8) Were there unusual beluga deaths or belugas washed up on the beach?

9) Did anyone see **Killer Whales** this year? If so, when and how many?

10) If you looked in any stomachs, **what were the belugas eating this year?**

11) **Is there anything interesting or unusual to report about belugas this year?** Write a comment about this year's hunting (write more on back)

12) If you know **harvest information about another village**, please write it.

Please mail to Kathy Frost, Alaska Beluga Whale Committee, 73-4388 Paiaha Street, Kailua Kona, HI 96740
Phone (808) 987-0001. email kjfrost@hawaii.rr.com OR Bring to the ABWC meeting in November

Reported landed harvest of beluga whales from western and northern Alaska, 2013-2022. Data provided by the Alaska Beluga Whale Committee. Numbers highlighted in gray are estimates based on average of other years. (Kathy Frost, ABWC Secretary, 4-13-23)

Beaufort Sea stock	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Barrow	0	0	3	4	6	2	2	1	12	14
Diomedes	1	0	0	0	0	0	0	0	0	0
Kaktovik	1	0	0	2	2	0	9	0	3	2
Kivalina	1	0	5	0	0	0	0	6	0	0
Point Hope	31	24	35	37	2	11	7	44	20	51
TOTAL	34	24	43	43	10	13	18	51	35	67
Chukchi Sea stock	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Point Lay	26	16	48	0	33	52	29	6	15	7
Wainwright	55	34	23	14	5	13	0	0	50	51
TOTAL	81	50	71	14	38	65	29	6	65	58
Kotzebue Sound	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Buckland	0	2	0	4	0	1	0	0	1	3
Deering	0	0	0	1	0	2	0	3	1	1
Kivalina	0	2	0	0	0	3	4	0	3	12
Kotzebue	6	5	1	4	1	8	2	4	17	9
Noatak	0	1	0	0	1	1	0	0	4	1
Shishmaref									2	1
TOTAL	6	10	1	9	2	15	6	7	28	27

Eastern Bering Sea stock	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Norton Sound										
Brevig Mission										7
Elim	27	33	22	31	28	35	36	30	25	14
Golovin	5	2	4	4	0	3	4	5	4	2
Koyuk	3	3	6	0	2	5	0	0	3	4
Nome/Council	6	19	6	6	2	7	4	16	3	9
Saint Michael	8	11	7	4	7	8	3	20	0	2
Shaktoolik	11	14	8	10	17	17	20	30	22	35
Stebbins	10	9	6	8	9	8	8	12	9	18
Unalakleet	17	20	25	23	21	2	8	2	4	4
White Mountain	5	5	6	1	5	2	3	0	2	0
Norton TOTAL	92	116	90	87	91	87	86	115	72	95
Yukon										
Alakanuk	11	4	11	3	10	7	7	4	18	6
Chevak	1	4	2	4	1	2	8	10	8	2
Emmonak	16	12	9	16	4	8	8	5	13	7
Hooper Bay	28	30	14	12	31	12	31	35	34	24
Kotlik	37	23	27	8	13	14	20	26	22	22
Marshall	nd	3	1	7	1	2	2	4	3	3
Mountain Village	4	5	2	5	5	13	7	6	9	1
Nunam Iqua	4	5	3	1	5	6	4	0	5	3
Pilot Stn	8	3	6	4	0	4	2	3	2	2
Pitka's Pt	3	4	10	3	1	1	1	3	6	2
Saint Mary	5	6	5	8	1	7	7	5	7	5
Scammon Bay	4	21	11	18	20	25	29	28	29	45
Russian Mission	nd	nd	nd	nd	0	0	1	1	2	1
Yukon Total	121	120	101	89	92	101	127	130	158	123
Eastern Bering Sea TOTAL	213	236	191	176	183	188	213	245	230	218

Skin samples for genetics

Skin samples are valuable for genetics studies to learn what population or stock a harvested beluga belongs to. This information is important for learning how to make sure the harvest is at a safe level and sustainable.

Stock identity is quite well known for belugas harvested in the Beaufort Sea, eastern Chukchi Sea (Point Lay & Wainwright), the eastern Bering Sea and Bristol Bay. However, major questions remain for belugas harvested in Kotzebue Sound and the Kuskokwim. Both of these areas once had unique stocks. The current status of these stocks is now unclear.

Hunters from the ABWC made the first genetics studies possible. They collected more than 2000 samples. Without the samples they collected, we would know very little about how the different groups of belugas are related to each other and which ones make up separate populations.

You can help! PLEASE COLLECT skin samples.

We only need a small piece of skin, about the size of the end of your finger.

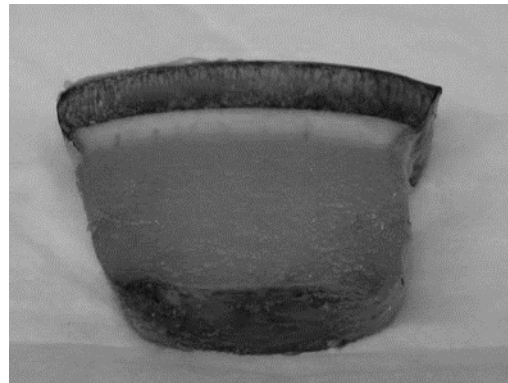
You can put the sample in a Ziploc or wrap it in foil and freeze it. Or you can ask for us to send you small sample bottles to put the samples in.

For each beluga sample we need to know:

- Village where harvested
- Date (or at least month) harvested
- Color of beluga
- Length of beluga (if possible) from end of nose to notch in the tail, straight line
- Sex if you can tell

Bring the samples to the ABWC meeting OR contact Lori Quakenbush about shipping.

Lori Quakenbush, ADF&G Wildlife
1300 College Rd., Fairbanks, AK 99701
907 459-7214 lori.quakenbush@alaska.gov



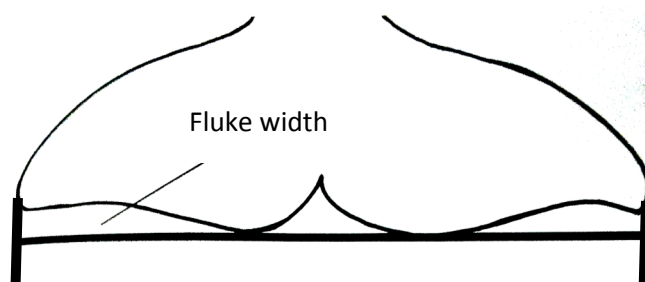
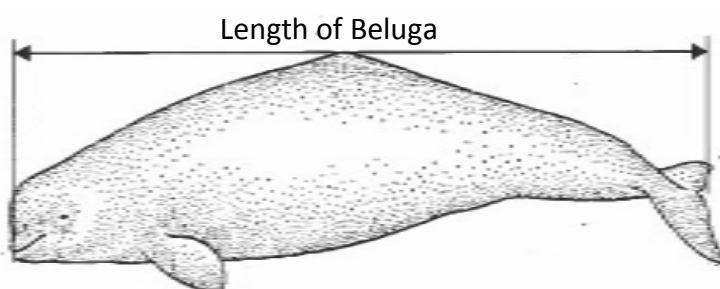
Beluga Samples

DATE HARVESTED: _____ LOCATION OF HARVEST: _____

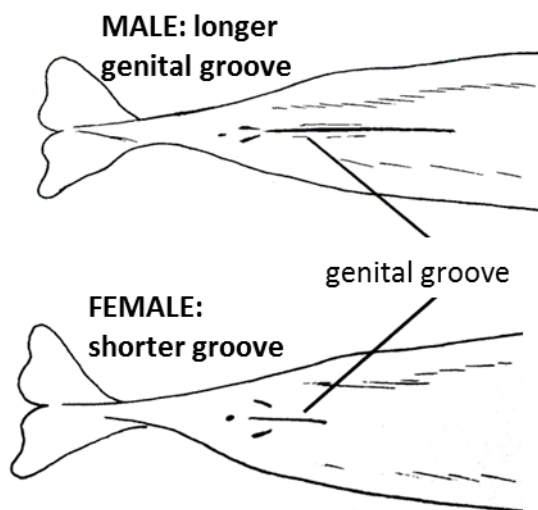
BELUGA COLOR (circle one): White Gray-white Gray Dark-gray

BELUGA LENGTH (measure from the lips to notch of tail in a straight line see drawing

Below): _____ feet _____ inches OR _____ cm FLUKE WIDTH: _____ cm



BELUGA SEX (circle one):



SAMPLES: (please circle all collected)

Jaw Skin Stomach

Stomach: Place in garbage bag in tote. Try to not let any of the contents spill out.

Jaw: Cut through middle of lower jaw and take one whole half with the teeth. Place in tote.

Skin: Cut a piece of skin (size of your thumb nail) and place in vial with DMSO solution. Put vial in plastic bag.

COMMENTS:

Ship to:

Lori Quakenbush—ADF&G
Arctic Marine Mammal Program
1300 College Rd.
Fairbanks, AK 99701
(800) 478-7346

Village _____ **YEAR** _____

Hunter names

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
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31. _____
32. _____
33. _____
34. _____

Beluga study in lower Yukon

Yukon beluga hunters saw more belugas than usual in the lower Yukon River last summer. At the Alaska Beluga Whale Committee in November, they recommended there should be a study to learn more about this.

That study got off the ground in summer 2023 week. The World Wildlife Fund, in cooperation with the ABWC, funded a pilot project to learn more about how belugas use the lower Yukon River. The core team included two hunters – Brandon Kameroff from Emmonak and Marvin Okitkun from Kotlik, and two scientists - Manuel Castellote and Chris Garner (they have also studied belugas in Cook Inlet and Kotzebue Sound). The team got outstanding help in Emmonak, especially from David Roland, Timothy Weidensee, Paul Lamont, and Gregory Fratis.

The team put out instruments at two locations: east of Emmonak in the Yukon River mainstem, and south of the middle mouth. These “echolocation loggers” scan for sounds belugas send out when they are navigating and searching for food, a lot like sonar. Because the river water is so muddy, the belugas need to echolocate almost constantly. This makes it very efficient to use the echolocation loggers to detect them.

The team put the instruments out in the river by attaching them to a line and cable anchored to the river bank, and marked with a buoy. Brandon and Marvin visited the instruments every two weeks to keep the lines clean from vegetation and entanglements. The instruments were recovered on September 13th. In the lab, the scientists will download the data to see when belugas were present at these two Yukon River locations, in what direction they were moving, and if they were just transiting or also feeding.

This study is the first of its kind in the Yukon River. If it produces good information, there could be a full-scale project in the future to describe the use of the lower Yukon by beluga whales. That study would use more instruments placed at more locations.



Beluga study in lower Yukon

- Yukon beluga hunters saw more belugas than usual in the lower Yukon River last summer.
- At the Alaska Beluga Whale Committee in November, they recommended there should be a study to learn more about this.
- The World Wildlife Fund, in cooperation with the ABWC, funded this pilot project.

Locations of Instruments

The team put out “echolocation loggers” on June 21st at two locations.

They listened for sounds belugas send out when they are navigating and searching for food. The river water is muddy, so the belugas need to echolocate almost constantly. This makes it very efficient to use the echolocation loggers to detect them.



The team put out the instruments by attaching them to a line and cable.

There were 2 ground anchors and a branch driven into the ground in a triangle set at the edge of the river bank.

Marvin and Brandon visited the instruments every two weeks to keep the lines clean.

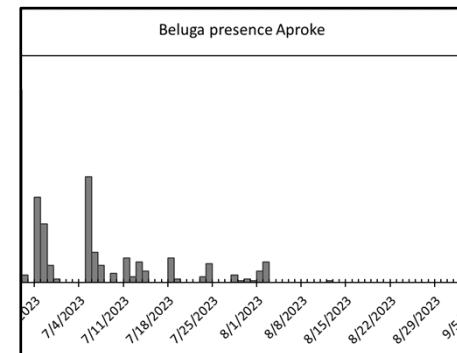


The gear was pulled out in mid-September.



Aproke

- Presence seems higher earlier in the season.
- By August, we detected few belugas at Aproke.
- No belugas were detected after the middle of August

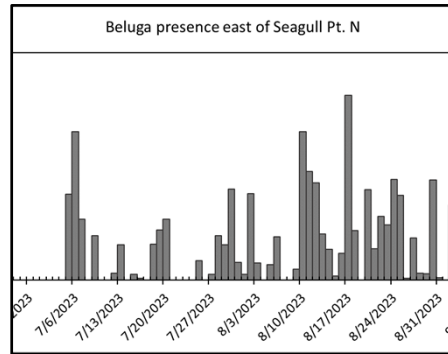


Seagull Pt. North

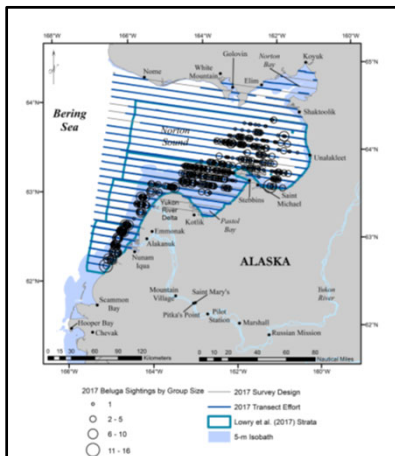
Belugas used the Seagull Point area the entire time, but more in August.

There were more belugas at Seagull Point than Aproke.

We were still detecting belugas when the instruments were pulled out in early September.



- We don't know if we hear the same belugas at both places.
- It could be different groups.



- Belugas are using the lower Yukon when NMFS flies their aerial surveys offshore.
- We don't know how many belugas are in the river when we hear them.
- If it is only a small number, it won't affect the survey results if they are not counted.

The Team

Two hunters

Marvin Okitkun - Kotlik
 Brandon Kameroff - Emmonak

Two scientists

Manuel Castellote
 Chris Garner

The team got outstanding help in Emmonak, especially from David Roland, Timothy Weidensee, Paul Lamont, and Gregory Fratis.



Summary of:

Alaska Beluga Whale Committee-National Marine Fisheries Service Co-Management Meeting

11 November 2022

Minutes: Robert Suydam with input by Kathy Frost & Megan Ferguson

Introduction

The Alaska Beluga Whale Committee (ABWC) and the National Marine Fisheries Service (NMFS) have been meeting periodically to facilitate communication and coordination for the co-management of beluga whales in western and northern Alaska. Typically, they meet immediately following the annual ABWC and at least once during another time of the year. On 11 November 2022, six members of the ABWC's Executive Committee and some of their scientists and five NMFS employees met to discuss several topics including the designation of Kotzebue Sound belugas as a unique stock and aerial surveys of the Eastern Bering Sea stock of belugas.

Participants

ABWC - Tom Gray, Billy Adams, John Citta, Kathy Frost, Lori Quakenbush, Robert Suydam,
NMFS - Robyn Angliss, John Bengtson, Anne Marie Eich -virtual, Megan Ferguson, Barbara Mahoney

Kotzebue Sound belugas

Background

- Belugas numbers in Kotzebue Sound had decreased substantially by the mid-1980s. Correspondingly, the number harvested dropped from about 100 per year in the late 1970s and early 1980s to less than 10 per year in 26 of the 37 years since, with periodic larger harvests.
- High harvests likely caused the decline but other factors may have contributed as well.
- Genetics studies indicate that belugas harvested in the late 1970s and early 1980s were different from all other Alaska beluga stocks, including neighboring stocks in the Chukchi and Eastern Bering seas.
- Genetic studies after the mid-1980s showed that in some years, particularly years of higher harvest (>50 belugas), animals from the Beaufort Sea likely ventured into Kotzebue Sound and were harvested. Genetic and other information suggest that belugas unique to Kotzebue Sound are still in the Sound.

Discussion

- The ABWC asked what NMFS is doing to designate Kotzebue Sound belugas as a distinct stock due to their greatly reduced abundance and failure to recover in the last 40 years. Designation as a stock will help with implementation of the Kotzebue Sound Tribal Beluga Plan. This plan has been adopted by the five Tribal Councils in the Kotzebue Sound area that harvest belugas, but hunting continues and in 2021 was the highest in 10 years. The management plan's aim is conserve and recover Kotzebue Sound belugas.
- Robyn Angliss clarified NMFS's distinction between a Demographically Independent Population (DIP) and a stock. She described the NMFS process for determining whether a population is a DIP and the subsequent process for declaring the population a separate stock. She updated ABWC on NMFS's progress to date in the Kotzebue Sound beluga DIP investigation. MML has created a Working Group to investigate this issue. Ferguson is the lead biologist for the investigation. The other WG members are Angliss, Manolo Castellote, Kim Parsons, and Nancy Young with input from Barb Mahoney from NMFS's Alaska Regional Office. The WG's first goal was to schedule a meeting with Greg O'Corry-Crowe to give him an opportunity to present information on KS beluga genetics and to give NMFS an opportunity to ask him questions. That meeting could not be scheduled until October 2022. Ferguson sent the meeting notes to the ABWC. In determining whether a DIP exists,

the WG will consider all available lines of evidence including genetics, Indigenous knowledge, and beluga harvest data. Frost said that she will summarize Kotzebue Sound harvest information for use in the investigation.

- All agreed that the genetics data from before the decline showed that Kotzebue Sound belugas were different than those in the Chukchi Sea and the Eastern Bering Sea. Angliss stated that the MML WG also has no question about whether there once was a historic beluga DIP in Kotzebue Sound. However, there are lingering questions about the genetics of belugas harvested since the decline and whether the historic DIP still exists.
- Angliss noted that the MML WG has assumed that NMFS requires designation of a DIP before determining Kotzebue Sound belugas were historically a stock. The WG is considering all available lines of evidence, including genetics, Indigenous knowledge, and beluga harvest data. ABWC does not think the question of whether the historic Kotzebue Sound beluga DIP still exists needs to be answered before the original Kotzebue Sound belugas are designated as a separate stock. They are independent questions.
- Suydam stated that the question of whether to designate a Kotzebue Sound beluga DIP should be based on the best available science and the precautionary principle. NMFS agreed.
- NMFS outlined some scientific questions from NMFS geneticist Kim Parsons about genetic samples collected since the mid-1980s. If those questions are pursued, the studies might take several years. Further, the process for designating a DIP and separate stock might take some time as well.
- The ABWC argued that there is evidence that belugas from the original stock in Kotzebue Sound are still present and that for the sake of conservation and attempts to recover the stock, designating them as a separate stock is necessary.
- NMFS agreed that the present issue of DIP designation is a special case because it involves subsistence-hunted animals and all available evidence indicates that the historic Kotzebue Sound population was severely reduced. The case of belugas in Kotzebue Sound should be considered a “conservation crisis.” John Bengtson and Anne Marie Eich agreed to discuss the situation with NMFS headquarters to see if there is a way to designate Kotzebue Sound belugas as a separate stock without waiting several years for additional information about genetics and without prior designation as a DIP. NMFS will report back to the ABWC Executive Committee by 1 December 2022.
- The ABWC appreciates that effort and looks forward to discussing a way forward.
- Tom Gray stressed that we need to move forward on this. The ABWC has done what it can. It has consulted with the elders, facilitated the adoption of a Kotzebue Sound beluga management plan and supported genetics studies. NMFS should declare Kotzebue Sound belugas a separate stock and later work on the current DIP question. Stock designation should help to focus funding and research. There are concrete conservation advantages to designating Kotzebue Sound as a separate stock, and a strong downside to inaction.
- The ABWC and NMFS all agreed that skin samples should be collected from all belugas harvested in Kotzebue Sound, efforts should be explored for collecting other samples (e.g., eDNA), and genetic analyses should be expanded (i.e., more markers should be analyzed).
- There was a discussion about communication with Tribal Councils (TC) and beluga hunters. NMFS will explore and determine if there are options and opportunities for formal government-to-government consultation and the ABWC will again reach out to the TCs to encourage implementation of the beluga management plan. Bengtson agreed that NMFS should do Tribal Consultations before the final decision is made about whether a Kotzebue Sound beluga DIP exists. A future workshop with TCs, hunters, the ABWC and the NMFS should be encouraged. The ABWC will send a letter out to the Tribes with a status update about Kotzebue Sound belugas. At

present, the Native Village of Kotzebue has “walked away from the table.” All parties agree we need to bring them back.

- In summary, the Kotzebue Sound stock of belugas is very small and likely at considerable conservation risk. NMFS and the ABWC agree actions should be taken soon to help conserve and recover that stock of belugas.

Eastern Bering Sea belugas

Background

- In 2021, NMFS designated Eastern Bering Sea (EBS) belugas as “strategic” in a Stock Assessment Report (SAR). That designation was based on an abundance estimate based on 2017 aerial surveys 2017 and harvest estimates for several years before 2017. Based on those numbers, the harvest exceeded the Potential Biological Removal (PBR).
- The ABWC expressed a great deal of concern about this situation because NMFS had not consulted with the ABWC and because the strategic designation might make the ABWC’s efforts to implement an Eastern Bering Sea beluga management plan more difficult.
- ABWC was concerned that the 2017 abundance estimate used in the SAR was substantially biased low and needed to be revised before it was used for a strategic designation.
- NMFS Alaska worked with NMFS headquarters to rescind the SAR while the 2017 estimate was revised, which was greatly appreciated by the ABWC.
- In 2022, NMFS, with support from the ABWC, flew a new survey for EBS belugas. Weather made that survey very difficult and flights occurred on only 4 days. Fortunately, the weather was quite good on those days and two surveys were flown on each day. Much of the area was surveyed, including an area in the south not flown on previous surveys. Three large groups of belugas were observed on those new transects. There was also an area in Norton Sound west of Unalakleet that was not covered. Many belugas had been seen in that area in previous surveys.

Discussion

- The ABWC asked NMFS when the 2022 survey data would be analyzed and the results known.
- NMFS responded that initial draft results might be available in early 2023; however, NMFS was concerned that the results might be again criticized by the ABWC for several reasons: a) more progress was needed for correction values for availability and for young, dark belugas; b) methods or approaches for analyzing the data are different between initial and later estimates (e.g., a traditional line-transect method vs. a spatial model).
- Citta, Ferguson, and Frost stated that it is very unlikely that we can make significant progress on the correction factors within 1-2 years. The ABWC and NMFS agreed that they should get together and choose the most likely values for the near-term, but continue to work on improving the correction factors. The dark/small animal issue is the most difficult to address. We are likely to make the most progress on the availability bias issue. It would be useful to conduct a global review of correction factors used for belugas. Ferguson stated that DFO expects to make public a new report on Beaufort Sea beluga availability bias in the next couple of months.
- The ABWC assured NMFS that they would not criticize the 2022 estimate produced by NMFS with regards to the correction factors or analytical methods but asked NMFS to keep the ABWC informed about progress on analyses and results of the 2022 estimate.
- The ABWC did express concern that the area west of Unalakleet received little survey coverage in 2022.

- The ABWC is concerned that the missed survey area and the several large groups of belugas seen on southern transects might result in a large Coefficient of Variation (CV), resulting in an unreliable estimate.
- Both NMFS and the ABWC agreed that review(s) of the survey analytical methods and results would be helpful in assessing reliability of the 2022 survey results for making management decisions. NMFS will conduct an internal review and will ask the ABWC and the Alaska SRG for a review. ABWC and NMFS agreed that having the International Whaling Commission’s Scientific Committee (IWC SC) review and hopefully endorse the beluga abundance estimates going forward is a good step.
- There was discussion about timing of review(s) and release of the initial results of the 2022 surveys. Ferguson will proceed with the development of a spatial model to analyze the 2022 EBS beluga survey data and will present the manuscript to the ABWC and Alaska SRG to review as soon as it is available. NMFS believes that the estimate will be available within the next 6 months. The estimate will go to the IWC SC for review after the ABWC has had the opportunity to review it.
- Suydam suggested that we might not need to conduct an EBS beluga aerial survey in 2024 if the abundance estimate from the 2022 survey is “good enough”, which he defined to mean that it has sufficient precision and low enough bias to pass the IWC SC review process. NMFS and ABWC agreed that planning for a 2024 EBS beluga survey should proceed now because deadlines for some funding opportunities may occur before we will know whether the 2022 abundance estimate is “good enough”.
- If the EBS 2022 survey results are reliable with an acceptable CV, survey funding planned for EBS belugas could instead be used for other beluga surveys. One possibility would be the eastern Chukchi Sea which was last surveyed in 2016.

Other Issues

Funding

- NMFS and ABWC recognized the need and agreed that both organizations should work together to seek funding for future surveys (and possibly other beluga studies).

SARs

- All parties reiterated that all new draft SARs for belugas will be sent to the ABWC for review and comment *before* they are submitted to NOAA HQ.
- ABWC and NMFS agreed that there is a need to discuss how or even if PBR should be applied to subsistence-harvested species. All agreed that IPCOM may be the most appropriate to initiate this discussion because it applies to all subsistence-harvested species.
- NMFS requested that the ABWC help with revising the Guidelines for Assessing Marine Mammal Stocks, particularly with regard to sections related to drafting SARs for subsistence-harvested species. Further discussion about this topic will need to wait for another time.
- NMFS agreed to have the ABWC review future SARs before those SARs are submitted to NMFS Headquarters.

ABWC and NMFS agreed to meet in May 2023 to discuss updates on EBS surveys result, Kotzebue Sound belugas, 2024 EBS survey planning, the application of PBR to subsistence-harvested species, and other issues as necessary).

Alaska Beluga Whale Committee-National Marine Fisheries Service Co-Management Meeting

Date: 18 May 2023

Location: James M. Fitzgerald Courthouse and Federal Building, Anchorage

Participants

ABWC: Tom Gray (Chair), Marvin Okitkun (Vice-Chair), Billy Adams (Member-at-Large), Cyrus Harris (Member-At-Large), Robert Suydam (Member, technical support), John Citta (Member, technical support)

NMFS: John Bengston (Director, Marine Mammal Laboratory (MML), Alaska Fisheries Science Center), Robyn Angliss (Program Manager, Cetacean Assessment and Ecology, MML), Anne Marie Eich (Protected Resources Division, Alaska Regional Office), Barbara Mahoney (Protected Resources Division, Alaska Regional Office), Megan Ferguson (MML; virtual participant).

Introduction

The Alaska Beluga Whale Committee (ABWC) and selected individuals from the National Marine Fisheries Service (NMFS) meet periodically to facilitate communication and coordination for the co-management of beluga whales in western and northern Alaska. Typically, they meet immediately following the annual ABWC meeting and again in the spring. On 18 May 2023, six ABWC members (four Executive Committee and two scientist members) met with five representatives from NMFS: two from the Division of Protected Resources Alaska Regional Office and three from the Marine Mammal Laboratory of the Alaska Fisheries Science Center. They discussed aerial surveys of belugas in the Eastern Bering Sea stock, the designation of Kotzebue Sound belugas as a unique stock, and the status of several Stock Assessment Reports for belugas in Alaska (Bristol Bay and Eastern Chukchi Sea). The agenda is attached to this summary.

Aerial Surveys of Eastern Bering Sea belugas:

Background

- In 2022, NMFS, with support from the ABWC, flew an aerial survey for EBS belugas. Foggy and windy weather made that survey difficult and flights occurred on only 4 days. On those four days two surveys were flown on each day. Much of the study area was surveyed, including an area in the south-west not flown on previous EBS surveys. Three large groups of belugas were observed on those new transects. There was an area in Norton Sound west of Unalakleet that was not covered. Many belugas had been seen in that area in previous surveys.
- The ABWC was concerned that the missed survey area and the several large groups of belugas seen on southern transects might result in a large Coefficient of Variation (CV), resulting in an unreliable abundance estimate.

Discussion

- Gray expressed his concern over the spatial coverage of the 2022 survey and also questioned the reliability of new methods being applied by Ferguson.
- Suydam and Citta emphasized that even though the survey was not perfect, the data should be analyzed to estimate population abundance.
- Ferguson, Citta, and Suydam agreed that the new analytical methods are acceptable and noted that in other circumstances they have been approved of by the International Whaling Commission (IWC). Citta also noted that the line-transect methods used in the prior surveys are not easily understood and what is most important is to have good survey coverage and to have surveys repeated on a regular basis.
- Ferguson, Angliss, and Bengston agreed that the 2022 survey was not perfect, but had acceptable coverage. Ferguson noted that it won't be known whether the survey is acceptable for management until the analysis is complete and the CV(N) has been determined. Bengston noted that he thought the survey was 'pretty good'. Suydam thought that the 2022 survey was 'good enough' and that a review would likely survive scrutiny from the IWC Scientific Committee.
- Gray was concerned that NMFS might not fly the survey in 2024 if they thought the 2022 survey was good enough. Angliss and Bengston reassured everyone that NMFS is committed to flying a survey in 2024, even though they have not yet identified funds to do so.
- Gray and Citta informed NMFS that they had applied for a no-cost-extension to prior co-management grants and that the \$50,000 they supplied for the aerial survey in 2022, which was not used, will hopefully be available in 2024. Also, ABWC was awarded supplemental co-management funds in 2023 to contribute an additional \$145,000 towards the EBS survey (for flight hours and fuel). Hence, the ABWC intends to contribute \$195,000 to conduct the 2024 survey. In return, ABWC expects to have a meaningful role in survey design and consultation during the survey.
- Angliss and Ferguson suggested that developing a set of requirements that could result in success for the next survey was important and everyone agreed. NMFS committed to drafting a study design and measures of performance to be reviewed by ABWC and NMFS together. Measures of performance would include things such as 'what percentage of flight lines were flown' and 'how many flight lines need to be flown with good observation conditions'.
- Gray wanted to know when the 2022 estimate would be available and expressed frustration over why it takes so long to get an estimate. Ferguson stated that she is finalizing a publication on the analysis of the 2017 data and that she is working on the code for 2022 analysis. The code for the 2022 analysis is for estimating abundance using spatial models and the last part of the code to be worked-out is to correct for what is known as 'detransformation bias', which has not routinely been applied to marine mammal estimates but has been regularly addressed in fisheries estimates. Once the code is complete, it can be applied to all the survey data and will significantly speed-up future analyses.
- Okitkun noted that belugas were in the Yukon River, as far as 20-30 miles from the ocean, and were not part of the survey. Ferguson appreciated that observation and said that Manolo

Castellote (NMFS), in cooperation with ABWC, is deploying hydrophones in the Yukon to better understand how belugas use the Yukon.

- NMFS committed to developing the next survey plan for Norton Sound and committed to distributing the plan prior to the ABWC Annual Meeting in December, so that hunter delegates can see and comment upon the plan.

Kotzebue Sound belugas

Background

- Belugas numbers in Kotzebue Sound decreased substantially in the early 1980s. Correspondingly, the number harvested dropped from about 100 per year in the late 1970s and early 1980s to less than 10 per year in 26 of the 37 years since, with periodic larger harvests.
- High harvests in the 1970s and 80s likely caused the decline. Other factors may have contributed as well, but are unlikely to have been the primary cause of the decline.
- Genetics studies indicate that belugas harvested in the late 1970s and early 1980s were different from all other Alaska beluga stocks, including neighboring stocks in the Chukchi and Eastern Bering seas.
- Genetic studies after the mid-1980s showed that in some years, particularly years of higher harvest (>50 belugas), animals (mostly males) from the Beaufort Sea likely ventured into Kotzebue Sound and were harvested. Genetic and other information suggest that belugas unique to Kotzebue Sound are still present in the Sound.
- In 2022, based on genetics and other information, ABWC asked NMFS to designate Kotzebue Sound belugas as a distinct stock. Designation as a stock should help with implementation of the Kotzebue Sound Tribal Beluga Plan which was developed by the beluga hunting elders of Kotzebue Sound to conserve and recover Kotzebue Sound belugas. The Plan recommends reduced hunting of belugas during June and July when the Kotzebue Sound stock of belugas was traditionally present, reduced hunting of females and calves, and “safe areas” where belugas should not be hunted. This plan has been adopted by the five Tribal Councils in the Kotzebue Sound area that harvest belugas, but hunting continues. The harvests in 2021 and 2022 were the highest in 10 years.

Discussion

- The ABWC asked what NMFS is doing to designate Kotzebue Sound belugas as a distinct stock.
- In 2022, Bengston suggested that Kotzebue Sound belugas could be designated as a stock while NMFS was evaluating whether they are a Demographically Independent Population (DIP). He conveyed that NMFS headquarters had clarified that marine mammal populations, including belugas in Kotzebue Sound, first have to be designated as a DIP before getting stock status. DIPs are distinct populations that are (mostly) reproductively isolated from other populations. Eich clarified that designation as a DIP depends upon the biology of the species and this science decision is made at the Alaska Fisheries Science Center (AFSC) by the Marine Mammal Laboratory (MML). It would be helpful if NMFS were to involve its co-management partner, the ABWC, in this process. If designated as a DIP, then the decision of

designating it as a management stock occurs at the NMFS Alaska Regional Office. Bengston expected a decision on the DIP over the next few months.

- Angliss noted that during the last meeting, NMFS did not know if a DIP could be designated primarily from historic data. NMFS was uncertain that a 'Kotzebue DIP' still existed. NMFS was informed by the NOAA that historic data was sufficient if it was the best available data. Hence, historic data could be sufficient to designate DIP in Kotzebue Sound and once it is designated to address making it a stock.
- Adams wanted a reminder of why stock designation was important. Gray, Citta, and Suydam said that stock designation was a tool to help with beluga conservation. Citta noted that NMFS did not even have the framework to discuss belugas in Kotzebue Sound unless they were a stock. Citta noted that the Alaska Scientific Review Group (an independent group of experts providing advice to NMFS), which reviews Stock assessment Reports (SARs), has tried to discuss Kotzebue belugas with NMFS in the past and the response has been "there is no stock there". Kotzebue Sound belugas must be designated as a separate stock for NMFS to be involved and assist in their management.
- Harris, Adams, and Gray wanted to conserve beluga whales, but were concerned regarding how designation as a stock may lead to outside enforcement of beluga harvesting. Adams did not want to turn beluga hunters into criminals. Gray noted that any enforcement should be local.
- Mahoney and Angliss stressed that there needs to be a clear discussion of what steps go into stock designation and a clear description of the possible consequences, especially issues that may affect local people, of designating Kotzebue Sound belugas as a stock.
- Gray reiterated that conserving belugas that are harvested by Alaska Natives is the primary role of the ABWC. Suydam noted that the management plan that exists for Kotzebue Sound was developed because the people of Buckland asked for help in recovering belugas so their youth can again participate in a community beluga hunt and that the plan was ratified by the five primary beluga-hunting communities.
- Gray stated that sampling of belugas, to determine their stock membership among other information, is critical. Harris agreed that sampling was important and noted that he and others were able to sample some belugas harvested by members of the Native Village of Kotzebue. Many belugas harvested elsewhere in Kotzebue Sound are not routinely sampled but should be. Everyone agreed that sampling skin from harvested belugas was important.
- Harris noted that in spite of past community meetings and the development and ratification of a beluga management plan, most hunters in Kotzebue Sound were unaware of the possible designation of a beluga stock in Kotzebue Sound. Harris wanted communities in Kotzebue Sound to know that stock designation was being considered and wanted them to understand what consequences there may be for local people. Gray acknowledged Harris' immense responsibility and difficulty, being a representative from Kotzebue. Gray also noted that it is mainly supporters of the management plan that attended meetings in Kotzebue Sound. Suydam reminded people that a letter was sent to each village informing them that ABWC was seeking stock recognition. However, everyone agreed that continuation of public meetings and consultation was important especially if Kotzebue belugas were designated a DIP and then, presumably, a stock.

- Bengston asked how best to consult with local people. Specifically, what is appropriate consultation? Harris said that NMFS has to come to the communities in-person for meetings. Suydam clarified that formal consultation is between governments (i.e., NMFS with local IRAs) and was primarily the responsibility of NMFS. ABWC should be present during consultation but has no official role when consultation is between governments. Bengston asked if informal consultation should be between ABWC and the local governments and if the co-management process allows for this. Suydam stated that co-management is a separate process from government-to-government consultation, but that ABWC could participate if the governments are willing. Mahoney stated that NMFS has a responsibility to consult directly with local communities and governments, that the decision to designate a stock belonged to NMFS and, therefore, NMFS must do the consultation. Mahoney further stated that there are only 5 tribes in Kotzebue Sound, so consultation was not insurmountable and that consultation should be comprised of: 1) public meetings; and 2) formal consultation with native governments. Harris suggested that both NMFS and ABWC be involved with consultation. Suydam suggested that NMFS should also send a letter to each community regarding stock designation.
- Bengston also asked when consultation should occur. Tom wanted some form of consultation after the designation of a DIP, but before the designation of a stock. Suydam noted that community meetings and formal government-to-government consultation should occur as frequently as possible but formal consultation could be complicated, including logistically, thus might happen after stock designation. Bengston noted that stock designation is a management decision, so some form of consultation was appropriate prior to stock designation.
- Mahoney re-introduced the question of what happens after a stock is designated? Specifically, she asked ‘what happens if NOAA has to regulate the harvest’? Gray thought that management could be flexible, that hunters should limit hunting in June and early July when they think Kotzebue belugas are present, but be allowed to hunt in late July through the fall when data suggests Beaufort Sea belugas are present. Gray also thought that enforcement should be local. Mahoney thought that local enforcement may not be possible or allowed. NMFS committed to providing a document that describes the process of stock designation and the possible consequences. NMFS will try to have this document available for review at the next annual meeting (December 2023) of the ABWC.

Bristol Bay belugas

Background

- A survey of Bristol Bay belugas was flown in 2023 by ADFG with support from the ABWC.

Discussion

- NMFS decided to not update the SAR for Bristol Bay belugas in 2023; Ferguson stated that this was because the availability correction factors (used to correct for how many belugas were diving and not available to be counted) used for the 2022 survey were out-of-date and potentially unreliable. Angliss suggested that the methods used in Bristol Bay may not be appropriate, given what they have learned in Cook Inlet.

- Gray noted that because harvest is low in Bristol Bay, there is less of a management issue in Bristol Bay than in other regions. Gray suggested that surveying the Bristol Bay stock in the near future was not a high priority for the ABWC.
- Citta noted that the correction factors for Bristol Bay are as good as or better than those available for most stocks of belugas in Alaska. Because of this, Citta did not think that holding-off on updating the SAR was worthwhile. Improvements will be made to correction factors over time, but no time soon. Ferguson disagreed. Angliss suggested that NMFS organize a conference call with some key persons (e.g., Quakenbush, Citta, Ferguson, Frost) to discuss future surveys in Bristol Bay.
- Gray and Citta noted that ABWC wanted to encourage regular surveys in Bristol Bay, regardless of who does them. Citta suggested that the surveys that ABWC has funded have been cost effective and that a survey flown by NMFS will likely cost much more. As such, the costs and benefits of different methods and agencies should be considered.

Eastern Chukchi belugas

Background

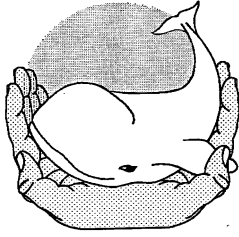
- A draft Stock Assessment Report (SAR) was written in 2023 and this was reviewed by the ABWC.

Discussion

- Angliss announced that the 2023 SAR for Eastern Chukchi Sea (ECS) belugas was going to be withheld for the following reasons:
 - ABWC and the SRG noted that harvest in Kotzebue Sound should not be added to the harvest of ECS belugas; these are distinct regions with distinct stocks. There is no evidence that ECS belugas are harvested in Kotzebue Sound.
 - During the SRG meeting, it was noted that some belugas harvested at Utqiagvik *could* be Beaufort Sea belugas.
 - There is a possibility that some Beaufort Sea belugas *could* overlap with ECS belugas in ECS beluga surveys.
- Citta suggested that it was not necessary to hold-off on the ECS SAR; the harvest in Kotzebue Sound can easily be removed from the harvest of ECS belugas. Furthermore, while there could be some belugas from the Beaufort Sea stock harvested at Utqiagvik or some belugas from the Beaufort Sea stock mistakenly counted as ECS belugas during aerial surveys, the information we have is the best available information and as good or better information than what we have for belugas world-wide. Furthermore, these questions would not be resolved soon. Angliss stated that they were still deciding what to do with the ECS SAR.
- Citta asked if there were plans to survey ECS belugas again in 2025, when Bering-Chukchi-Beaufort (BCB) bowhead whales are scheduled to be surveyed. Angliss responded that NMFS was considering the feasibility of adding the ECS survey to the BCB bowhead survey and that it would add relatively little effort or cost to the survey. Angliss thought it was likely that ECS belugas would be surveyed with bowheads in 2025.

Other topics:

- Gray wanted to know if it was possible for him to pay hunters \$1,000 to tag belugas that they would otherwise put in their freezers. Angliss and Bengston suggested that the issue was likely related to permits. Gray emphasized that he did not want to jeopardize the permit that he tags under, which belongs to the Alaska Department of Fish and Game (ADFG). Bengston stated that he would look into the issue.
- Ferguson was asked what the status of the 2019 Beaufort Sea beluga estimate was. She responded that both the Canadian and US governments flew surveys for Beaufort Sea belugas in 2019. Ferguson will use the same code to analyze survey data that will be used from EBS belugas; hence, the estimate will not be complete until later this summer. Ferguson reported that the Canadian estimate will also likely be available later this summer.



Alaska Beluga Whale Committee

Tom Gray, Chairman
tom@akadventure.com 907-304-2003

30 October 2023

Kimberly Damon-Randall, Director
NOAA Fisheries Office of Protected Resources
1315 East-West Highway, Silver Spring, MD 20910

Dear Kim:

I am writing to thank you and others on the NMFS delegation for traveling to Nome last month to meet with me about the Alaska Beluga Whale Committee. It is always good to get to know people face-to-face. My wife Bee Jay and I were pleased to share a traditional meal and information about our subsistence lifestyle with you.

I thought it would be good to summarize several of the important points we discussed when you were in Nome:

1) **Kotzebue Sound belugas designated as a stock**

The ABWC strongly believes that NMFS should designate Kotzebue Sound belugas as a separate stock (i.e., distinct from the Eastern Chukchi Sea stock) and has repeatedly requested that NMFS do so. The ABWC has done what it can towards this end. We worked with local hunters over several years to develop a Kotzebue Sound beluga management plan. This plan has been ratified by the five beluga harvesting communities in the Sound. The ABWC has supported genetics studies to clarify the status of Kotzebue Sound belugas, and made sure that information was presented in a peer-reviewed publication. Newsletters describing the status of Kotzebue Sound belugas and presenting the management plan to regional beluga hunters have been distributed to hunters in the region. The next step is for NMFS to designate Kotzebue Sound belugas as a stock and proceed with actions that will help to conserve and bring this stock back. This stock experienced a major decline 40 years ago, and no action has taken place by NMFS to date to help it recover. The ABWC needs NMFS help to convince the tribes and local hunters this is a serious matter. NMFS needs to consult directly with the Kotzebue Sound tribes about the conservation status and stewardship concerns of beluga whales in this region.

2) **Hunter-tagger training and tagging**

NMFS should develop a less bureaucratic research permitting process specific to subsistence harvested co-management species. Subsistence hunters are expected to jump through the same hoops as a science researcher, despite the fact that they co-manage belugas with NMFS and would otherwise harvest the animal. We encourage NMFS to support involvement of

subsistence hunters in research to improve the management and conservation of belugas by simplifying permitting of subsistence hunters to participate in research activities.

3) Funding

The ABWC realizes that money is always an issue and there is never enough to do everything. However, to really DO co-management, not just talk about it, requires substantial funding to develop and implement management plans and conduct the research needed to support management. \$200,000 a year from our co-management grant funds a few small programs, but not serious research or management.

4) Proposal process

The co-management grant proposal process needs to be simpler AND cooperative. It should not require 70+ page proposal for co-management funding. ANOs should be treated like partners, not through a competitive proposal process. ANOs are not allowed to request co-management grant funds to prepare these elaborate proposals, yet most do not have other sources of funds to support grant preparation. The ABWC expects reviewers to make comments on its proposed work, but we should have the opportunity to respond and to determine how final budget decisions are made. The current process does not reflect co-management. It is no different than a standard academic proposal process.

5) Updated abundance estimates

The ABWC encourages NMFS to prioritize and fund regular aerial surveys for harvested beluga stocks and to get the results to ABWC in a timely manner. Current abundance estimates for beluga stocks harvested by Alaska Native subsistence hunters are essential for determining sustainable harvests and for responsive management. Although ABWC has obtained funding through our co-management grant to assist with surveys, we think it is a NMFS responsibility to fund these surveys so that ABWC can use its co-management funds for activities like management planning.

The ABWC requests that preliminary abundance estimates from aerial surveys be available to the ABWC within a year after the survey was conducted. We are asking hunters to manage their harvest based on the best available information. This information needs to be available to them in a timely manner.

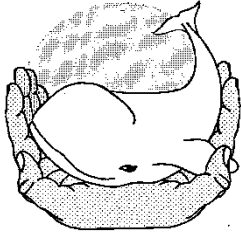
The ABWC has a strong record of encouraging sustainable use of belugas. We are working hard to develop management plans to safeguard belugas for future generations to harvest and enjoy. We believe it is important for subsistence hunters and scientists to work together to make sure the harvest of belugas is sustainable. We encourage NMFS to support us in our efforts.

Sincerely,



Tom Gray, Chairman
Alaska Beluga Whale Committee

cc: Bob Foy, NMFS AFSC
Jon Kurland, NMFS Alaska Region



Alaska Beluga Whale Committee

Tom Gray, Chairman

tom@akadventure.com

Phone 907-304-2003

9 January 2023

To: Native Village of Kotzebue

Subject: **Request to NMFS that Kotzebue Sound Belugas be Designated a Separate Stock**

At the recent Alaska Beluga Whale Committee (ABWC) annual meeting in November 2022, the ABWC delegates, ABWC Executive Committee, NMFS, U.S. Marine Mammal Commission representatives discussed the declining status of Kotzebue Sound belugas and **requested that NMFS officially designate Kotzebue Sound belugas as a separate stock.**

The Tribal Kotzebue Sound Beluga Plan has been adopted by the Tribal Councils from the Kotzebue Sound beluga hunting communities. The Plan was developed by elders and beluga hunters from each of the Kotzebue Sound communities that hunt belugas. Despite adoption of the Plan by your Tribal Council, the harvest has increased from 4 belugas per year to more than 20 per year since the Plan was finalized in 2020.

Therefore, there is great concern about the future of Kotzebue Sound belugas.

We need skin samples from every beluga harvested in Kotzebue Sound. These skin samples will help us better understand what belugas are being harvested so we can better manage our own harvest of Kotzebue Sound belugas.

The Kotzebue Sound elders and participating hunters worked hard to make the Tribal Kotzebue Sound Beluga Plan. They hoped to decrease harvest and collect skin samples to manage belugas so that the government would not take over managing belugas in Kotzebue Sound, like it does in Cook Inlet where belugas are classified as endangered. But unless Kotzebue Sound hunters follow the plan and do the hard work themselves, outsiders will be forced to step in.

Our traditional values include respect for others, for nature, and for elders; love for children; and sharing. If we do not take care of Kotzebue Sound belugas now, we are not respecting others or looking out for our children. There will be little left to share.

As Native people, we have always taken care of the animals we depend on for our food and cultural practices, even if requires difficult decisions and hard work. Making sure that belugas are here for future generations is more important than harvesting belugas for our freezers this year and next. Managing our own resources instead of having a government agency do it is very hard work. But if we are not willing to do the work, the decisions will not be made by local people who understand the situation.

The ABWC has requested that NMFS officially designate Kotzebue Sound belugas as a separate population or stock. This is based on traditional knowledge about the distribution, timing and

movements of the belugas and on genetics studies conducted on skin samples from belugas collected in Kotzebue Sound since the 1980s. The evidence is very clear that Kotzebue Sound belugas are distinct from all other belugas in Alaska. In some recent years, belugas from other areas (particularly the Beaufort Sea) have also come into Kotzebue Sound, usually later in the summer and fall. But they are visitors, they are not the resident Kotzebue population. Only through skin samples can we better understand how many of the harvested belugas are from the Kotzebue population or from other areas.

Once Kotzebue Sound belugas have been designated a separate stock, then the federal government is required to do a review of the status of the stock called a "stock assessment report." The review will include recommendations of how to manage Kotzebue Sound belugas to reduce the harvest so that numbers can increase. If Kotzebue Sound hunters do not follow their own Tribal Kotzebue Sound Beluga Management Plan, then NMFS will likely propose more restrictive actions.

To avoid this outcome, we need hunters to follow the Tribal Kotzebue Sound Beluga Plan and collect skin samples to answer important questions about whether and when other beluga stocks are sometimes coming into the Sound. If they are, it might be possible (as the Tribal Kotzebue Beluga Plan recommends) to stop harvesting what is left of the original Kotzebue Sound belugas when they are present in early summer, but harvest belugas from another more abundant stock later in the year. Or, the hunters could take a break from hunting for a few years. If belugas from another stock are not chased and hunted, they could decide to make Kotzebue Sound their future home.

Please help us bring belugas back to Kotzebue Sound and to keep management of our Kotzebue Sound belugas in local hands by encouraging your hunters to follow the Tribal Kotzebue Sound Beluga Plan and to collect skin samples from every beluga that is harvested.

Sincerely,

A handwritten signature in cursive script that reads "Tom Gray".

Tom Gray
Chairman Alaska Beluga Whale Committee



Kotzebue Sound Beluga Newsletter

July 2023

What's up with Kotzebue Sound belugas?

Until the early 1980s, belugas were abundant in Kotzebue Sound. Subsistence hunters from Deering, Buckland, Noatak, Kotzebue and Kivalina harvested belugas every year. The annual harvests of belugas at Sisualik and Elephant Point were highlights of the year. Young people grew up learning how to harvest and process belugas.

This all began to change in the early 1980s. Too many belugas were harvested. Fewer and fewer belugas came to Kotzebue Sound each year and almost none were harvested. Hunters at Elephant Point began to harvest bearded seals in the spring instead of belugas. Belugas were rarely seen near Sisualik where once the harvest was large enough to feed hundreds of visitors attending the annual trade fair. Now, young people seldom have a chance to participate in harvesting belugas and experience this part of their culture. Small children learn about belugas from story books, not by going to camp where they can see them.

For many years, people talked about what had happened to the belugas in Kotzebue Sound. They worried there weren't enough belugas to harvest but didn't know what could be done. Then, in 2016, led by the village of Buckland, elders from Kotzebue Sound began meeting to discuss the beluga situation. During the next four years, representatives from Buckland, Deering, Kotzebue, Kivalina, Noatak and the Alaska Beluga Whale Committee (ABWC) worked together to make a plan to help bring belugas back to Kotzebue Sound.

The Tribal Kotzebue Sound Beluga Plan was finalized in 2020, and has now been adopted by the five major beluga hunting communities. The Plan includes guidelines about harvesting, traditional knowledge and science, communication and education. It encourages hunters not to harvest in June and early July when Kotzebue Sound belugas were traditionally present. Hunting is OK later in summer and fall when belugas are more likely to be migrants from other stocks. The plan encourages no hunting of females with calves so the population can grow

and asks hunters to respect "safe zones" where belugas can come to recover. The Plan recommends collecting skin samples for DNA studies from every harvested beluga so we can learn more about what groups of belugas use Kotzebue Sound and when.

The Beluga Plan Team hoped that once the Plan was adopted by the Tribal Councils, the harvest would decrease. Instead, the harvest has increased from only 4 or 5 a year to more than 20 a year. Very few samples have been collected so there is little new information about what stocks of belugas are using Kotzebue Sound now.

As Native people, we have always taken care of the animals we depend on for our food and cultural practices, even if it requires difficult decisions and hard work. Kotzebue Sound hunters don't want Federal regulation or for the government to get involved in local management. To avoid this, Kotzebue Sound hunters must solve the problem locally. It is time to do what is needed and ask "What are we doing for the future of our Native people and for our cultural heritage of harvesting belugas?" If the hunters don't pull together and take action to help the belugas then nothing will improve.



Female beluga with a calf. Harvesting just one female beluga means there will be 16 fewer belugas 30 years later.

No one wants to see Kotzebue Sound belugas disappear forever.

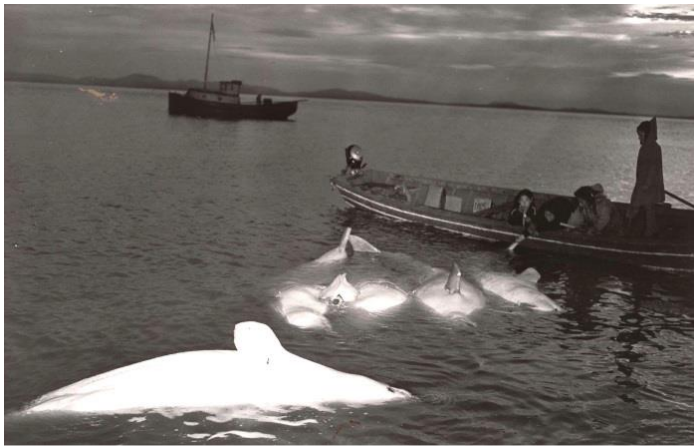


Photo 3-16. A nice catch of 5 belugas whales in northern Kotzebue Sound by Sam Ballot. Sam later moved with his family to Buckland, and was a proficient beluga hunter for many years to follow. Gladys Knight Harris Collection, 1951

Kotzebue Belugas a Separate Stock

In 2022, ABWC asked NMFS to designate Kotzebue Sound belugas as a distinct stock, separate from the other Alaska beluga stocks. This is based on analysis of many genetics samples collected in Kotzebue Sound in the 1970s and early 1980s showing that Kotzebue Sound belugas are different than belugas from other stocks. Belugas harvested in Norton Sound and at Point Lay and Wainwright do not have the same genetics as belugas that were harvested in Kotzebue Sound in the 1980s.

In some years, large groups of belugas have entered Kotzebue Sound later in summer. Samples from harvested belugas show us they are from other stocks. The Kotzebue Sound Beluga Plan encourages hunters to harvest from these large groups instead of from the original Kotzebue Sound belugas that are present earlier in June and July.

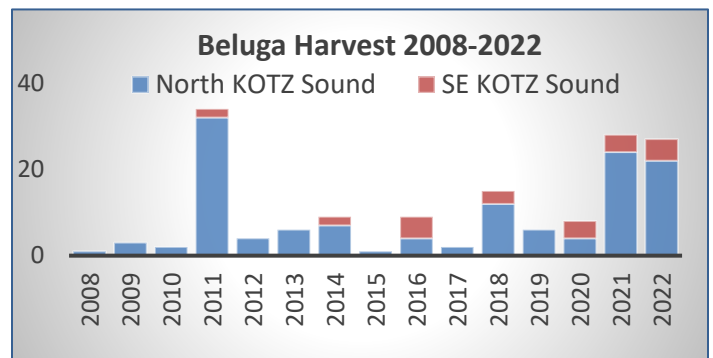
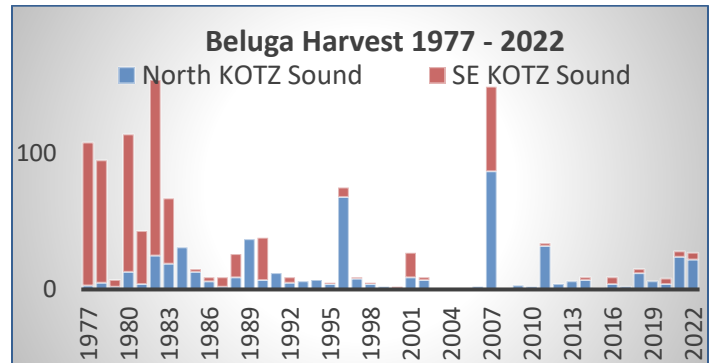
Knowing what stock is being harvested can help with beluga conservation. Collecting samples from every harvested beluga would help to understand when different stocks of belugas are present. It could be possible for hunters to avoid harvesting the greatly reduced Kotzebue Sound stock and let them recover. Instead, they could harvest later in summer from larger groups that are likely from other abundant stocks.



Elephant Point 1978.

Kotzebue Sound Beluga Harvest

The Kotzebue Sound beluga harvest declined rapidly in the early 1980s. It has stayed low since then, with occasional years of higher harvests when belugas from other stocks entered the Sound. The higher harvests in 1996 and 2007 were belugas from the Beaufort Sea stock.



There would have to be 500 belugas in the Kotzebue Sound stock for a harvest of 10 belugas to be sustainable and allow the population to stay the same size. There would need to be a population of 750 belugas if the harvest is 15. It is very unlikely there are this many Kotzebue Sound belugas.

Harvesting Females

One of the ways to help belugas increase their numbers is to avoid harvesting females. It seems like harvesting just one female shouldn't make a very big difference, and that it isn't much different than harvesting a male. But the truth is, it makes a surprisingly big difference! When a male is shot, you just lose that male. When a female is shot, you lose that female PLUS her future calves and grand-calves, too. The female calves would have had calves, too.

After 30 years:

1 female harvested means 16 fewer belugas

5 females harvested means 80 fewer belugas



Adult male belugas have a blocky square forehead. The front part on a beluga's head is called the "melon." There are special fats of different density in the melon. These fats were used in traditional medicine by people of Kotzebue Sound. They make it possible for the beluga to change the shape of its melon to help in echolocation ("beluga sonar").



Female belugas have a sloping or rounded forehead. It is easy to know it's a female if it has a calf with it. Looking at the forehead can also tell you if it's a female, even if there is no calf.



This adult white male beluga was harvested at Koyuk. You can see the square melon in this picture.

Status - Beluga Plan adoption

The Kotzebue Sound Beluga Plan was developed by the Kotzebue Sound Beluga Plan Team from Buckland, Deering, Kivalina, Kotzebue, Noatak, and the ABWC. The Plan has been adopted by the IRA Councils of the five communities that regularly harvest belugas: Buckland (5-3-2021), Deering (11-27-2020), Kivalina (3-31-2021), Kotzebue (11-17-2020) and Noatak (9-8-2022).

The Kotzebue Sound elders and participating hunters worked hard to make the Tribal Kotzebue Sound Beluga Plan. They hoped to decrease harvest of the Kotzebue Sound stock so it could begin to increase and return to its former abundance. That way, the federal government would not take over managing belugas in Kotzebue Sound,

like it does in Cook Inlet where belugas are classified as endangered. To avoid outsiders stepping in, Kotzebue Sound hunters must follow the Plan.

Even though the Plan has been adopted by the Tribal Councils, the harvest has increased from 4 or 5 belugas per year to more than 20 per year since the Plan was finalized in 2020.

Traditional values of the people who have lived for generations in Kotzebue Sound include respect for others, for nature, and for elders; love for children; and sharing. To respect others and look out for our children, we need to take care of Kotzebue Sound belugas now. Otherwise, there will be no belugas to share.



The Beluga Plan Team worked hard to develop the Kotzebue Sound Beluga Plan. They met over four years to come up with ideas and fine tune the plan.

Tribal Kotzebue Sound Beluga Plan

GOAL: Restore the Kotzebue Sound beluga population to a healthy level to provide for a sustainable beluga subsistence harvest throughout Kotzebue Sound in the future.

Hunting Guidelines:

1. Each village has their own way of doing things. Hunters should listen to and abide by local hunting traditions and practices.
2. Encourage people not to hunt belugas during June to mid-July to allow them to come back and not be disturbed.
3. An exception would be groups of belugas over 100 consisting mostly of large white belugas with no gray animals or calves nearby. These large groups are likely to be visiting belugas from the Beaufort Sea stock and usually show up after mid-July.
4. Encourage people not to hunt females with calves and young belugas.
5. Encourage people not to hunt or net belugas in the following "safe zones" at any time: Selawik Lake, Kobuk

Lake, Goodhope Bay, Kiwalik Lagoon and Eschscholtz Bay. These areas would be places where belugas can recover. The safe zones will be in effect for 2-5 years, and then be re-evaluated.



Female beluga with a calf. Harvesting just one female beluga means there will be 16 fewer belugas 30 years later.

6. Encourage people not to use subsistence beluga nets except for catching whales to be tagged for science because nets tend to catch females and young.
7. Encourage hunters to collect genetic tissue samples (skin), note color and sex, and other data from harvested belugas (work with your village Alaska Beluga Whale Committee representative).
8. Encourage hunters to include adequate hunting equipment (e.g., harpoons and markers) to minimize loss.
9. Secure support for Tribal implementation and monitoring, beluga hunter participation, and coordination with the Alaska Beluga Whale Committee and others.

Reduce Possible Human Impacts:

1. Reduce possible human-related noise and disturbance to belugas and beluga hunting.

Traditional Knowledge and Science:

1. Seek funding to continue to document traditional knowledge of belugas and beluga hunting in Kotzebue Sound and coastal villages, and to conduct cultural and educational projects.
2. Collect scientific information about belugas (e.g., tagging, acoustic monitoring, local and pilot observations, sampling of harvested belugas, drones or satellite counts of numbers of whales, etc.) with the involvement of local people whenever possible.
3. Improve our understanding of the presence and timing of beluga whales, harbor porpoises, and killer whales in Kotzebue Sound, including the impacts of climate change, especially through satellite tagging and acoustics studies.

4. When netting belugas to be tagged, use large mesh nets to prevent catching and accidental killing of calves and young belugas.
5. Designate a person in each village to record and document local sightings of belugas and killer whales.

Communication:

1. People need to work together; communication is the key.
2. Kotzebue Sound communities need to talk to each other regularly to coordinate hunters and implement efforts to increase the numbers of belugas.
3. Elders should provide youth with the knowledge needed to hunt and sustainably use belugas.
4. Youth and young adults should listen to elders and older hunters to learn more about belugas and hunting.
5. Elders and whaling boat captains should help direct what village hunters do and when hunting occurs. This may vary from one village to another.
6. Use technology (e.g., Facebook or iPhone APPS) to help with communication about beluga conservation issues.
7. Representatives from Kotzebue Sound beluga hunting communities should get together every year to discuss and update the Kotzebue Sound Beluga Plan, as funding permits.

Education:

1. Youth and young adults are the future leaders and hunters of the communities of Kotzebue Sound; they need to know more about belugas (particularly the calving areas and beluga hunting).
2. Youth and young adults should learn more from elders and older hunters.



Teaching youth about their culture at Elephant Point as part of the Buckland Beluga Project. Hunting bearded seals in spring has largely taken the place of beluga hunting now that belugas are rarely seen.

3. Incorporate belugas and beluga hunting into the school curriculum and lesson plans and bring students into the field so they get familiar with traditional hunting areas and hunting practices.
4. Utilize “Inupiat Days” in schools to support beluga education programs.
5. Increase the understanding of youth and young adults about how belugas use certain areas and about traditional hunting rules (e.g., the first belugas should not be hunted but let them come in to see that it is OK for the females and young belugas to also come into the area).
6. Involve youth in beluga meetings, the collection of beluga samples, beluga research, and related marine research.



Emma Thomas at Elephant Point, 1951



Processing belugas near Kotzebue, 2007.

“Belugas have been coming for hundreds of years, for a reason. They will come back in the future but it will take hard work. It is important to have a safe harvest level that the population can sustain. Walking away from beluga hunting for a few years could give belugas a chance to come back. The most important thing isn’t the freezer. It is bringing belugas back and respecting the resource.” Tom Gray, Nome (ABWC Chairman).

Samples

Collecting a sample from each harvested beluga can help us learn a lot about the stock structure of belugas and help us to know when belugas from different stocks may be present in Kotzebue Sound.



Beluga skin sample for genetics DNA analysis. It only needs a small piece. Samples can be frozen and sent to the ABWC.

If you collect a sample, contact Lori Quakenbush at 907-459-7214 or lori.quakenbush@alaska.gov for instructions about what to do with your sample.

In Memory of Ernie Barger

The Alaska Beluga Whale Committee wants to honor Ernie Barger for his persistent hard work to help bring belugas back to Kotzebue Sound so they could be harvested and enjoyed by future generations. Ernie first became the ABWC delegate for Buckland in 1999. For more than 20 years, he worked tirelessly to encourage hunters and scientists to work together to "Bring Belugas Back" to Kotzebue Sound. He was instrumental in getting hunters from Buckland, Deering, Noatak, Kotzebue and Kivalina together to create the Tribal Kotzebue Sound Beluga Plan. Ernie never gave up - he always believed the hunters could work together to return belugas in Kotzebue Sound to their former abundance. *“In the future, we want the young people to be able to hunt belugas. We have come a long way but there is still a lot of work to do.”* All of Ernie’s many friends in the ABWC will miss him.



Ernie Barger at a Kotzebue Sound Beluga Plan Team meeting.

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Alaska Beluga Whale Newsletter

This newsletter is produced by the Alaska Beluga Whale Committee. The ABWC is an organization with representatives from coastal beluga hunting villages in Alaska, from Bristol Bay to the Beaufort Sea. It also includes local, state, federal and other scientists who study belugas. The ABWC was formed to conserve beluga whales and their habitat, provide for adequate subsistence harvest of belugas, and protect subsistence hunting for belugas in Alaska. The ABCW is dedicated to the wise conservation, management and use of beluga whales.

"We all know that the beluga that usually come to Kotzebue Sound do not come in the numbers we are used to seeing. Thanks to the Native Village of Buckland the villages on the Sound have met and have come up with a plan to see if we can help recovery of the beluga. Please do your part as hunters to make this effort for our future generations. I feel good about future success. Kotzebue hunters will show the world we can do this ourselves." Willie Goodwin, Kotzebue

This newsletter was funded by a grant from NOAA to the North Slope Borough for the ABWC. The views expressed in the newsletter are those of the authors and do not necessarily reflect the views of NOAA or any of its sub-agencies.

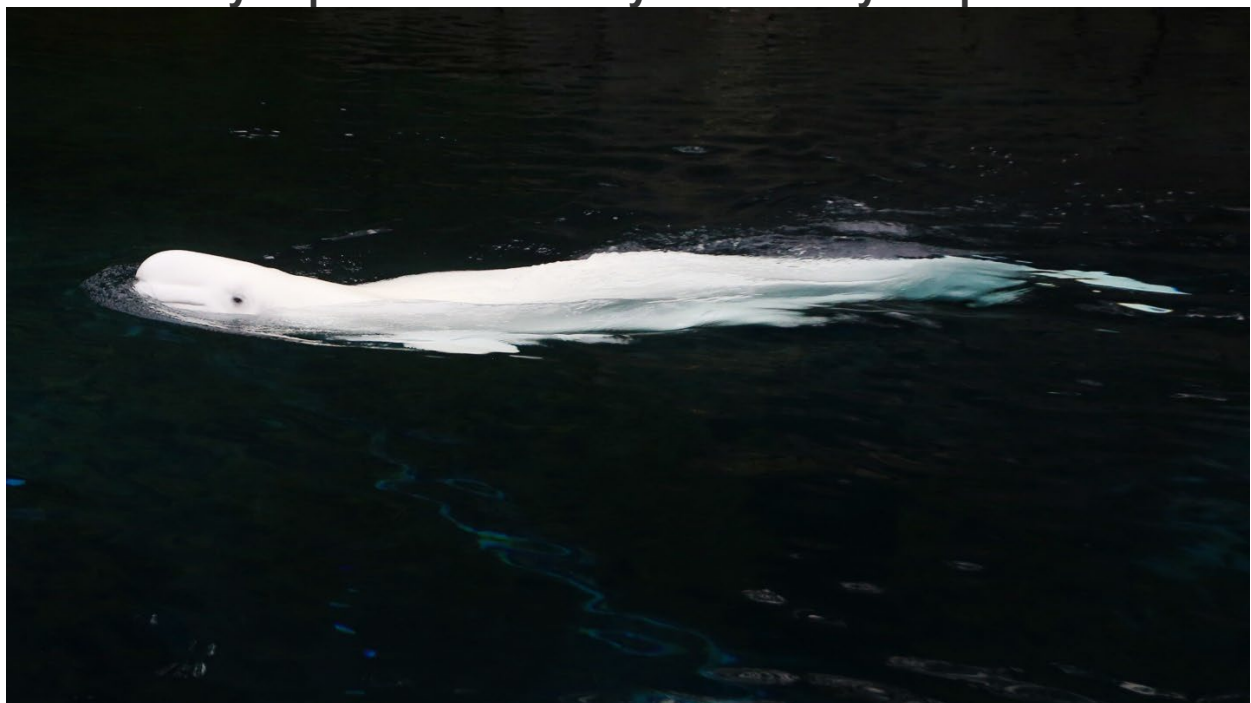


SAIMA MAY SIDIK

SCIENCE
DEC 3, 2022 8:00 AM

The Mystery of Alaska's Disappearing Whales

Belugas pass cultural knowledge across generations. Their survival may depend on how they collectively adapt.



PHOTOGRAPH: GETTY IMAGES

THIS STORY ORIGINALLY *appeared in Undark and is part of the Climate Desk collaboration.*

When Roswell Schaeffer Sr. was 8 years old, his father decided it was about time he started learning to hunt beluga whales. Schaeffer was an Iñupiaq kid growing up in Kotzebue, a small city in northwest Alaska, where a healthy store of beluga meat was part of making it through the winter. Each summer, thousands of these small white whales migrated to Kotzebue Sound, and hunts were an annual tradition. Whale skin and blubber, or muktuk, was prized, not only as a form of sustenance and a trading

commodity, but also because of the spiritual value of sharing the catch with the community.

Now, nearly seven decades later, Schaeffer is one of only a few hunters who still spend the late weeks of spring, just after the ice has melted, on Kotzebue Sound, waiting for belugas to arrive. Many people have switched to hunting bearded seals, partly out of necessity: There simply aren't enough belugas to sustain the community anymore.

In the 1980s, Kotzebue Sound's beluga population began to dwindle, from thousands to hundreds, and then to the dozens or fewer that visit the region now. Kotzebue is not alone.



Roswell Schaeffer Sr. holds a sculpture of two beluga whales that he carved out of walrus ivory. With only infrequent opportunities to hunt belugas, Schaeffer says young people are losing interest.

Visual: Saima May Sidik for Undark

Although some stocks are healthy, beluga numbers have fallen off in around a half-dozen regions over the last 50 years. Decades ago, hunting, commercial whaling, and other influences pushed the whales toward the brink. Now, even after hunting has ceased in some places, stresses such as climate change, increased ship traffic, and chemical pollutants are a gathering storm that threatens to finish the job.

But some scientists think that understanding how the whales respond to these stresses could end up being as important as understanding the stresses themselves. Belugas, like chimpanzees, birds, humans, and many other animals, create cultures by passing knowledge and customs from one generation to the next. With climate change and other human activities reshaping the world at an alarming rate, belugas will likely have to rely on innovative cultural practices to adapt—genetic adaptation is simply too slow to keep up.

Cultural practices can become rote, however, and just like humans, other animals can hold onto traditions long after they've stopped making sense. One key question, according to Greg O'Corry-Crowe, a behavioral ecologist at Florida Atlantic University,

is: Will culture carry the whales through? “When the change is so seismic, maybe, and so rapid, you’re trying to look for the innovators and the pioneers among the social conservatives,” O’Corry-Crowe said. At the same time, Indigenous people like Schaeffer are facing their own quandary. Continuing to hunt belugas may hurt the whales’ chance of rebounding, but if Indigenous groups give up the practice, they could lose knowledge that’s helped sustain them in the Arctic for thousands of years.

PHILOSOPHERS AND SCIENTISTS have long suggested that animals can learn. But even in the early 2000s, scientists debated the idea that animals accumulate knowledge over generations. One animal that helped popularize that notion is the killer whale.

Toward the end of the 20th century, scientists realized that killer whales living off the west coast of North America, between Puget Sound and Vancouver, had separated into communities with unique ways and customs. Vocalizations differed, for example. “It’s like some people speak English, some people speak French,” said Hal Whitehead, a biologist who specializes in social structures at Dalhousie University. Pods from the southern end of the range practiced a greeting ceremony, lining up opposite each other and bobbing their heads; those from the north did not. The northern whales, on the other hand, liked to rub their bodies against beaches, presumably to remove dead skin.

Some cultural practices, like which language whales speak, may not have much impact on survival. But others, like techniques for finding food, can be critical. When killer whales go through lean times, scientists can see long-term knowledge at play: Killer whales move in pods, and when food gets scarce, the oldest females move to the front. They’re likely using knowledge from times when conditions were similar—possibly decades earlier—to show younger whales where to find prey. “It’s called the grandmother hypothesis,” said Sam Ellis, a behavioral ecologist at the University of Exeter. He and his colleagues have shown that killer whales with living grandmothers are more likely to survive than those without.

Cultural adaptations have also helped species like belugas and killer whales survive, said O’Corry-Crowe, and behaviors can develop much faster than genes can be revamped. To cope with warming waters, belugas could learn to move to regions that are still cold enough for their bodies (as long as such regions still exist). Otherwise, they may need to evolve to dissipate heat more efficiently—a process that would take

at least a few generations and likely much longer. When resources are patchy, “it’s important to remember where they are, and to pass that knowledge on,” he said. But old practices can pose a problem if they don’t allow the group to adapt to new circumstances. When the world changes quickly, “suddenly, you’re let down,” Ellis said.

Whitehead uses the belugas of Hudson Bay, in northern Canada, as an example. At least three populations of belugas migrate to Hudson Bay in the summer, and Whitehead focuses on two: one that goes to the eastern side and one to the western side. Which side a whale goes to is a matter of family tradition that baby belugas learn from their mothers. Decades ago, commercial whalers overharvested the eastern population. Yet new generations of eastern belugas kept following their mothers to that more dangerous side of the bay. The eastern population became dangerously depleted while the western whales thrived.

Over the last few years, the quick pace of environmental change has sparked a string of scientific publications emphasizing the importance of animal culture for conservation. Some conservation groups have begun considering cultural traits to be as worthy of conservation as genetic signatures. The idea, O’Corry-Crowe said, is that maintaining diversity of animal knowledge optimizes opportunities for animals to figure out how to address new challenges, just as maintaining genetic diversity maximizes their opportunities to evolve new physical characteristics.

When a pocket of animals with specialized knowledge is lost, “it’s not like it’s immediately replaced. And so you start to blink out unique cultures,” he said. “And that is a loss of adaptive potential going forward.”

THE BELUGAS OF Cook Inlet, Alaska, are among those that are in danger of blinking out. That’s why, one sunny afternoon in September 2022, National Oceanic and Atmospheric Administration Fisheries biologist Verena Gill climbed into a roughly 7-foot-tall beluga costume, adorned with a scarf bearing the name Betty. Hiking up Betty’s tail, Gill waddled to the side of Seward Highway in Anchorage, Alaska, where she waved her flippers at passing motorists to generate support for the whales.

Cook Inlet reaches in from Alaska’s southern coast like an arm terminating in two talons that wrap around Anchorage, and it’s been a key area in the push to save belugas. Unlike some populations, Cook Inlet’s belugas do not undergo a widespread migration. Rather, they stay in the inlet, where they comprise a genetically distinct

population. Overharvesting—from commercial, sport, and subsistence hunting—almost certainly precipitated the decline of Cook Inlet’s belugas, from more than a thousand to around 279 that live there today.

In the early 2000s, the plight of the whales spurred action: The area’s Indigenous groups gave up hunting in 2005. And yet, the whales’ numbers continue to slowly drop. In 2008, the Cook Inlet belugas were listed as endangered. A multitude of threats, including noise pollution, chemical pollution, climate change, and prey declines, have likely swamped any benefit of curtailing hunting, and protections extended to the whales by the Endangered Species Act have not been sufficient. “It’s sort of death by a thousand cuts,” said Gill.

Betty Beluga comes out once a year to help. Locals do, too: For one day each September, Gill and other NOAA Fisheries scientists, volunteers from partner organizations, and members of the public descend on 14 sites in and around Anchorage to see how many belugas they can find. The data they generate could inform research on long-term trends, but the event mostly serves to engage the public in the beluga recovery effort.

The Seward Highway turnoff, called Windy Corner, was the last of five monitoring locations that Gill visited during this year’s beluga count. Passing drivers honked and waved as Gill wrapped up a long string of photo ops with kids, social media appearances—including a livestream from inside the Betty Beluga suit—and mimicking the caws, squeaks, and whistles belugas use to communicate for a local TV news story. The popularity of this event, and other outreach efforts, are part of what gives Gill hope that Cook Inlet’s belugas will recover. When the population was listed as endangered, local stakeholders got angsty about how the listing would affect the area, according to Gill. “It just seemed like a lot of anger and worry, and there wasn’t a love for belugas like there is now,” she recalled. Fourteen years later, many of these same groups partner with NOAA Fisheries in beluga recovery efforts.

But so far, love hasn’t been enough to save the belugas. Worse still, scientists have been unable to pinpoint a particular threat that’s causing them to keep declining, which Gill said makes her “a little despondent.”

She wonders if cultural fragmentation is a missing piece in the puzzle. Cook Inlet’s extreme tides can easily trap belugas on mudflats if the whales don’t know exactly when and where the water level is going to drop. “Maybe this knowledge is not getting

passed on,” she said. There’s some evidence she may be right: Jill Seymour, the Cook Inlet beluga recovery coordinator for NOAA Fisheries, pointed out that belugas are now occupying a smaller portion of Cook Inlet than they once did. Seymour thinks this could mean the whales have lost knowledge of how to use other portions, whereas Gill thinks this may be the remaining whales’ attempt to stick together and rebuild a social group.



NOAA Fisheries biologist Verena Gill, posing as Betty Beluga, waves to passing traffic along Alaska Route 1 during a beluga count event in September 2022. The popularity of events like this one help to give Gill hope that the region’s belugas will recover. *Visual: Saima May Sidik for Undark*

Belugas are following a similar trend off the coast of Svalbard, a Norwegian archipelago, said conservation marine biologist Kit Kovacs. Genetics show that Svalbard belugas used to mix with those from the southern Barents Sea, which lies between Svalbard and Scandinavia. But these days, Svalbard’s belugas stick close to the archipelago. One explanation is that when elders in the Svalbard beluga community died, migration routes went with them. “When you lose those matriarchal animals and patriarchal animals, with knowledge of where to go and how to do business, you’re just stuck with whatever knowledge is left,” Kovacs said.

There are some signs that belugas are inventing new cultural practices, and perhaps this mindset will help them survive. When O’Corry-Crowe and his colleagues conduct wide genetic surveys, they sometimes come across whales outside their normal range “and go, wait now, who the heck are these guys?” It seems the whales are exploring.

Similarly, Kovacs thinks Svalbard's belugas might be varying their diets as melting glaciers make their favorite Arctic cod harder to catch.

In Anchorage, the beluga count volunteers were packing up at Windy Corner when a pod of about a half dozen belugas emerged offshore from the eastern edge of the turnoff. As they surfaced for air and then descended again, they appeared to roll through the water like oversized porcelain bowling balls. "They're not feeding, they're just traveling," Gill said. A few minutes later, they were gone.

THE CONTINUED DECLINE of Cook Inlet's belugas angers some Indigenous people, who feel that others in the area have not reciprocated the sacrifice they made when they gave up hunting. According to Justin Trenton, the environmental coordinator for the Native Village of Tyonek and a member of the Tebughna Tribe, elders in his community "believe that we're the only ones that have actually stopped completely affecting them." After almost 20 years without hunting belugas, everyone who remembers how is starting to age. Trenton worries that the knowledge will be lost.

Up the coast from Anchorage, Kotzebue's hunters, like Roswell Schaeffer Sr., now face a similar dilemma: Should they also stop hunting belugas? A recent genetic study authored by O'Corry-Crowe and his colleagues shows that a genetically distinct population of belugas lived in Kotzebue Sound before their numbers declined. The authors wrote that the remnants of this group deserve legal protections. Roderick Hobbs, a NOAA Fisheries marine biologist who worked with Cook Inlet belugas before he retired, said he agrees.

In 2016, Indigenous members of the Alaska Beluga Whale Committee—a group of tribal delegates, scientists, government officials, and others—drafted a plan aimed at encouraging belugas to return to Kotzebue. The plan calls for limiting hunting during the early part of the summer, for example, when remnants of the original Kotzebue stock are most likely to visit nearby waters. It permits more leniency during the late summer, when belugas from the healthy Beaufort Sea stock are known to migrate past. "I think it was an outstanding approach," said Kathryn Frost, a founding non-Indigenous member of the committee and an author on the recent genetic study. But right now the plan is voluntary, she added, and "how you get people to follow the plan is a completely different issue."

Percy Ballot Sr., a subsistence hunter from Buckland, Alaska, and one of the plan's architects, said he and many hunters in his area are abiding by the guidelines, even

though they limit hunting opportunities that were few to begin with. Beluga hunts from years past—with their collaborative spirit and the joyous feasts that followed—are some of Ballot’s most cherished memories, but, nevertheless, he’s stopped hunting belugas. “You gotta walk the talk, I guess is probably the best way to put it.”

Not everyone thinks giving up hunting is worth the slim chance that belugas will return. If Kotzebue’s belugas were genetically isolated from neighboring populations—as Cook Inlet’s belugas are—then “it would be a clear-cut story,” said Alex Whiting, the environmental program director for the Native Village of Kotzebue and an author on the recent genetic study. But genetic analysis suggests that the remnants of the original Kotzebue belugas have hybridized with other stocks. Because of their slow generation time, rebuilding Kotzebue’s belugas could take decades if not longer, and the resulting population would likely differ from the original stock that scientists set out to save. “If you’re asking people to sacrifice a part of that cultural identity for some unknown benefit—some theorized benefit—I mean, it’s a pretty hard sell,” Whiting said.

In Schaeffer’s eyes, changes in the natural world are making the decision for his tribe. As opportunities to hunt belugas become scarce, young people are losing interest, and so their infrequent attempts are clumsy at best. “They get out in a boat, make a lot of noise, and that’s about it,” he said. It’s a change that he said, “bothers the hell out of me. Because the knowledge is being lost—and rapidly.”

Source: <https://undark.org/2022/11/30/in-alaska-a-mystery-over-disappearing-whales/>?

Source: <https://www.wired.com/story/the-mystery-of-alaskas-disappearing-whales/>