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)

2022 AGENDA

Wednesday – Thursday 9, 10 November 2022 Anchorage Hilton Hotel

Wednesday – Day 1

Meeting starts at 8:30

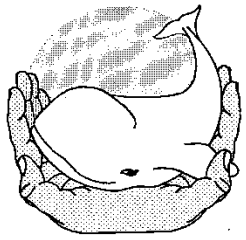
1. **Invocation**
2. **Introduction of members, guests, and students**
3. **Minutes and agenda -** Review, correct, and approve minutes from November 2021 meeting and the agenda
4. **Funding, partner, meeting and committee reports**
   A. NOAA funding report (John Citta)
   B. NMFS Alaska Region report (Anne Marie Eich)
   C. NMFS Marine Mammal Lab (Robyn Angliss or John Bengtson, or briefly by both))
   D. International Whaling Commission (John Citta, Robert Suydam)
   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, 2012-2021 (Kathy Frost)
   B. North Slope (Barrow, Wainwright, Point Lay, Point Hope, Kaktovik, Nuiqsut, Diomede)
   C. Kotzebue Sound (Buckland, Deering, Kivalina, Kotzebue/Sisualik, Noatak)
   D. Norton Sound (Nome, Elim, Shaktoolik, Koyuk, Unalakleet, St. Michael, Stebbins, Golovin, White Mt.)
   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, Manokotak, Bristol Bay overall report – Levelock, Clark's Point)
6. **ABWC projects**
   A. Tagger training and tagging
      i. Kotlik tagging 2022 (Tom Gray, Robert Suydam, Marvin Okitkun, Brandon Kameroff)
      ii. What next? (Tom Gray, Kathy Frost)
   B. Beluga stomach analysis and diet projects (Lori Quakenbush)
   C. Bristol Bay aerial surveys by ADFG 2022 (Lori Quakenbush)
   D. EBS aerial surveys by NMFS 2022 (Megan Ferguson)
   E. Student beluga hunting guide, EBS and NSB (Lori Quakenbush)
      i. Update and timeline
      ii. Artwork, recipes, stories
7. **Other beluga projects and research**
   A. History of beluga commercial harvests (John Burns)
   B. Beaufort Sea beluga aerial survey analysis (Megan Ferguson)
   C. North Slope Borough beluga projects – genetics, tagging, harvest monitoring, age estimation (John Citta)

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

Alaska Beluga Whale Committee
Thursday - Day 2

Meeting starts at 8:30 am

8. **ABWC Research Plan draft**
   A. Draft Plan (Robert Suydam)
   B. What is missing?
9. **Samples for stock Identification and other questions**
   A. Skin samples for stock ID, others for specific projects (stomachs, kidneys, teeth, etc.)
   B. What samples show us (Greg O'Corry-Crowe)
   C. NMFS sampling white paper about regulations (Barbara Mahoney, Verena Gill)
   D. Is there a better way to do this?
10. **Beluga Management**
    A. Co-Management with NMFS
       i. NMFS-ABWC meetings Nov 2021 (Tom Gray, Kathy Frost)
       ii. NMFS-ABWC meetings May 2022 (Tom Gray, Robert Suydam, etc.)
    B. Kotzebue Sound belugas
       i. Background - plan status, harvest (Kathy Frost)
       ii. Kotzebue belugas as a separate stock (Greg O'Corry-Crowe)
       iii. Is Kotzebue Beluga Plan being followed? (Cyrus Harris)
       iv. Marine Mammal Commission viewpoint (Vicki Cornish)
       v. Designating Kotzebue Sound as a separate stock – the process (John Bengtson or Robyn Angliss)
       vi. Ways NMFS may be able to help: samples & harvest reporting, other ideas (Anne Marie Eich)
    C. Eastern Bering Sea belugas
       i. SAR update and strategic status, changes for engaging co-management groups (Anne Marie Eich, Tom Gray, Kathy Frost, John Citta)
       ii. Eastern Bering Sea beluga plan (Tom Gray, Kathy Frost)
       iii. Winter meetings (Lori Quakenbush)
11. **Research Questions for 2023** (Tom Gray, Kathy Frost, John Citta)
    A. What projects are high priority for 2023?
    B. Do we need to submit a proposal for additional funds in 2023?
12. **Elections (time for normal reelection and/or rotation)**
    A. Election for Chairman (now Tom Gray)
    B. Election for Secretary (now Kathy Frost)
13. **Youth reports**
14. **Other issues**
15. **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**

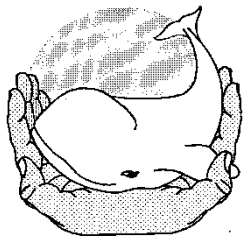
In 2018, the ABWC changed its bylaws to replace the positions of Treasurer and Sergeant-at-Arms with two Officers-at-Large. Below are the persons who held the offices of Treasurer and Sergeant-at-Arms through 2018.

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
2022 ABWC Delegates

North Slope
Barrow (Joe Leavitt)
Point Hope (Leonard Barger; Young hunter Michael Tuzroyluk)
Point Lay (Warren Lampe)
Wainwright (Raymond Aguvluk)

NANA
Buckland (Raymond Lee, Jr.)
Deering (Beverly Moto)
Kivalina (Oran Barger)
Kotzebue (Cyrus Harris; Young hunter Leon Toomer)
Noatak (Thurston Booth)

Norton Sound
Elim (Morris Nakarak, Sr.)
Koyuk (Archie Ervin)
Nome (Tom Gray)
Saint Michael (Joe Akaran)
Shaktoolik (Raymond Hunt)
Stebbins (Cylas Okitkun)
Unalakleet (Jacob Ivanoff)

Yukon Delta
Alakanuk (Ken Lee)
Emmonak (Brandon Kameroff; Young hunter Ronald Waska)
Hooper Bay (Albert Simon)
Kotlik (John Tonuchuk)
Mountain Village (Kevin Thompson)
Nunam Iqua (Edwards Adams, Sr.; Young hunter Todd Chikigak)
Pilot Station (Rex Nick, not attending)
Pitka's Point (Stephen Micah Sergie)
Saint Mary's (Duncan Okitkun)
Scammon Bay (Wybon Rivers)

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

Bristol Bay
Aleknagik (Ben Tinker)
Manokotak (Andrewski Toyukak; Young hunter John Slim)
BBNA (Renee Roque)

North Slope Borough
Billy Adams
John Citta

National Marine Fisheries Service
Alaska Region (Anne Marie Eich)
Alaska Region (Barbara Mahoney)
Marine Mammal Lab (Robyn Angliss)
Marine Mammal Lab (Megan Ferguson)

Alaska Department Fish & Game
Lori Quakenbush
Anna Bryan (not attending)

Charter and other Members
John Burns
Kathy Frost, Secretary
Robert Suydam

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:

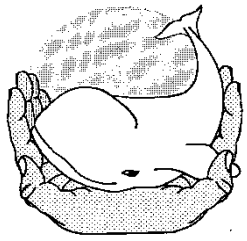
1) **If you cannot get out of your village or return home after the meeting due to flight delays or cancellations caused by weather**, ABWC will cover your change ticket fees and hotel expenses. Please go to the airport for your flight and if it is canceled, contact Tom Gray (907-304-2003) or Kathy Frost (808-987-0001). If approved by Tom or Kathy, contact the North Slope Borough travel agent at their 24-hr number (907-885-9105) to make ticket and hotel changes. The 24-hr number is only for emergencies, they do not make ticket or hotel changes for personal reasons. 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 the 24-hr number if making ticket changes for personal reasons.
3) If you have an emergency and there are problems with the 24-hour number, call John Citta (NSB Wildlife) 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 TC 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

10-11 November 2021 - Anchorage, Alaska

People attending the meeting were:

Billy Adams	NSB Wildlife, Box 69, Barrow, AK 99723	852-0350 billy.adams@north-slope.org
Edward Adams, Sr.	Box 9, Nunam Iqua, AK 99666	(907) 498-2001 cell edadamssr53@gmail.com
Raymond Aguvluk	Box 35, Wainwright, AK 99782	319-8926 aguvlukraymond@gmail.com
Camille Augline	Box 130, Alakanuk, AK 99554	238-2078 cell camille_augline@yahoo.com
Leonard Barger	Box 152, Pt. Hope, AK 99766	368-1379 labarger2020@gmail.com
Anna Bryan	ADF&G, 1300 College Rd, Fairbanks, AK 99701	347-3085 anna.bryan@alaska.gov
John Burns Sr.	Fairbanks, AK 99709	474-2671 jburnssr@gci.net
John Citta	NSB Wildlife, Box 69, Barrow, AK 99723852-0350	699-3224 cell John.citta@north-slope.org
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
Jasen Haugen (youth)	Unalakleet, AK 99684	625-1983 jaysenhaugen@icloud.com
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
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
Heidi Kritz	Box 350, Dillingham, AK 99576	Phone 843-0613 hkritz@bbna.com
Jon Kurland	NOAA/NMFS Box 21668, Juneau, AK 99802	586-7638 jon.kurland@noaa.gov
Joe Leavitt	Box 503, Barrow, AK 99662	852-2258
Raymond Lee, Jr.	Box 62, Buckland, AK 99727	494-5303 raymond.lee@gmail.com
Barbara Mahoney	NMFS, 222 West 7th Ave, Anchorage, AK 99513	271-3448 barbara.mahoney@noaa.gov
Beverly Moto	Box 73, Deering, AK 99736	363-5020 cell beverlymoto@yahoo.com
Greg O'Corry-Crowe	Harbor Branch Oceanographic Institution, FL 34946	772-766-5793 gocorryc@fau.edu
Marvin Okitkun	Box 20142, Kotlik, AK 99620	899-2233 cell marvinokitkun@yahoo.com
Donovan Okitkun (youth)	Box 20208, Kotlik, AK 99620	899-2228 cell donovanokitkun@yahoo.com
Duncan Okitkun (youth)	Box 201, St. Mary's, AK	899-2118 duncanokitlun@gmail.com
Lori Quakenbush	ADF&G, 1300 College Rd, Fairbanks, AK 99701	987-2760 lori.quakenbush@alaska.gov
Wybon Rivers (youth)	Box 44, Scammon Bay, AK 99662	536-2073 cell ybunn_ar_2006@yahoo.com
Stephen Micah Sergie	Box 103, St. Mary's, AK 99658 (Pitka's Point)	438-6172 cell m.sergie23@gmail.com
Albert Simon	Box 91, Hooper Bay, AK 99604	758-2355 cell albertsimon380@gmail.com
Robert Suydam	NSB Wildlife, Box 69, Barrow, AK 99723	559-313-4652 cell robert.suydam@north-slope.org
Eddie Teeluk	Box 63, Quinhagak, AK 99655	556-2065 eteeluk.coq@gmail.com
Benjamin Tinker	Box 61, Aleknagek, AK 99555	843-1508 cell bennytinker@icloud.com
Pius Washington	Box 59037, Saint Michael, AK 99659	933-0137 piuswashington3@gmail.com
Staff		
Larinda Danner	NSB Wildlife, Box 69, Barrow, AK 99723	852-0350 Molly.Spicer@north-slope.org
Visitors		
Stephania Alvarez	900 1st ST., Apt. 15, Douglas, AK 99824	219-789-1753 stephanie.m.alvarex@uscg.mil
Caroline Brown	ADF&G, Fairbanks, AK 99701	978-8516 caroline.brown@alaska.gov
Hunter & Katya Gray	Nome, AK 99762	

Cordelia Kellie	610 L. Street, Anchorage, AK 99508	317-0808 cordelia_kellie@murkowski.senate.gov
Sonia Kumar	Juneau	303-570-9898 svkumar@alaska.edu
Alena Naiden	Arctic Sounder/AND	206-419-0398 anaiden@adn.com
Jared Nayakik	Box 1917, Barrow 99723	319-7708 jarednayakik@gmail.com
Kayla Scheimreif	Box 137, Barrow, AK 99723	855-1181 kayla.scheimreif@north-slope.org
Suzanne Steinert	Box 1452, Girdwood, AK 99587	210-7329 Suzanne@belugawhalealliance.org
Mary Weinard	Deering, AK 99736	363-5020

Wednesday, 10 November 2021

Tom Gray, ABWC Chairman, called the meeting to order at 8:40 am. Edward Adams Sr. from Nunam Iqua gave the invocation. Introductions were made. The agenda (motion Edward Adams, second Albert Simon) and the minutes (motion Billy Adams, second Robert Suydam) were approved unanimously. Delegates were asked to sign up for the banquet, which is provided by the North Slope Borough Department of Wildlife. Kathy Frost showed a slide with the names of ABWC delegates serving for more than 10 years.

Three youth delegates attended this year's meeting. The youth were: Donovan Okitkun (Kotlik), Jasen Haugen (Unalakleet), Wybon Rivers (Scammon Bay).

FUNDING AND PARTNER REPORTS

ABWC Funding Report – Robert Suydam passed out and gave the annual ABWC funding report. Covid delayed many projects. There are funds remaining in the 2019-20 (about $10,000) and 2020-21 grants (about $104,000). The ABWC received no-cost extensions so the funds can be spent in 2021 and 2022.

The ABWC will receive $204,556 for 2021-2022, with $187,577 available to be spent on projects after overhead is subtracted. As of this meeting, the funds have not been received from NOAA. All are available to be spent next year (2022-2023), with $141,000 designated for the June 2022-2023 aerial surveys in Bristol Bay.

The ABWC's 2022grant proposal is for three years (2022-2025) and is due to NOAA on February 11th. Tom Gray said he thought that funds for surveys should not reduce the funds ABWC gets for other activities because the surveys are a NMFS responsibility. Most other ANOs hire Executive Directors and pay for stand-alone offices, which is very expensive. The ABWC has chosen to do projects. We must compete for ANO (section 119) funding with all ANOs. Kathy Frost pointed out there is a tradeoff between having a paid Executive Director or conducting science projects. John Citta said that the ABWC gets better information when directly involved in the science projects. Tom Gray noted that the Polar Bear ANO (Alaska Nannut Co-Management Council) receives $600,000-$700,000 annually, but none of this is for research projects. These funds are for staff, office support, and meeting travel. Robert Suydam said the ABWC could request funds from Congress, but no NMFS funds can be used for travel to meet with members of Congress in Washington D.C. The ABWC needs to think about how it would approach Congress.

Tom Gray thinks NMFS should fund aerial surveys to estimate abundance. Raymond Hunt said Shaktoolik would like funds for a camp to teach the youth about hunting. Kathy Frost suggested they request these funds from Kawerak. Albert Simon supports more tagger training. Jon Kurland pointed out that as of this year, requests for 3-year funding are possible, but the second and third years are contingent on funding from Congress. He also said if the ABWC has unused funds due to Covid, they can repurpose those funds, not just spend them as originally proposed. Tom Gray pointed out that the ABWC team of hunters, scientists, and managers works very well together.

NMFS Alaska Region Report – Jon Kurland said that the ABWC and NMFS are working together on the potential designation of Eastern Bering Sea (EBS) belugas as a "strategic" stock. He attended the EBS workshop and applauded the group for its work. It is great to see a hunter-directed program and see the hunters thinking ahead about a management plan. Tom Gray noted that Jon – and NMFS – is our co-management partner.

REGIONAL REPORTS

Statewide Harvest – Kathy Frost reported on the last five years of ABWC harvest data, 2016-2020. The information comes from ABWC delegates, harvest studies (such as at Point Lay), and organizations like ADFG, AVCP, BBNA, Native Village of Kotzebue, and the North Slope Borough. The total harvest for the Beaufort Sea stock in 2020 was 51 belugas, taken by 3 communities (5-yr average is 27 per year). The eastern Chukchi Sea stock harvest (does not include Kotzebue Sound) in 2020 was 6 belugas, taken by one village (5-yr average 30 per year). Kotzebue Sound harvested 7 belugas in 2020. The belugas were harvested by 2 communities (5-yr average is 8 per year). The EBS stock had the

largest beluga harvest in 2020, with 245 belugas harvested by 19 villages (5-yr average harvest 193 per year). The harvest was split about evenly between Norton Sound and Yukon villages. The 2020 Bristol Bay harvest was 17 belugas (5-yr average 14 per year), taken by 6 villages. Struck and lost information is inconsistently reported.

Tom Gray told everyone how important it is to bring good harvest reports to the meeting. It also very important to have good abundance information to use when evaluating if harvests are sustainable.

Beaufort Sea Stock

Barrow (Utqiaġvik) – Joe Leavitt reported that Barrow harvested about 5 belugas in summer 2021. Billy Adams said Barrow ended up getting 12 belugas total. He said the first belugas coming in are thinner and later they are fatter. They saw kidney worms in the belugas this year. Billy reported that **Kaktovik** harvested 3 belugas for sure and maybe 4 in 2021. **Nuiqsut** took 0 belugas in 2021.

Point Hope – Leonard Barger reported that Point Hope harvested 15 total belugas in 2021, plus 4 struck and lost. Nine belugas were harvested in spring, 4 in summer, and 1 was hooked and salvaged.

Diomede –Anna Bryan contacted the Diomede IRA. They harvested no belugas in 2021.

Eastern Chukchi Sea Stock

Wainwright – Raymond Aguvluk reported that Wainwright landed 50 belugas in 2021. The harvest was poor the previous three years. Wainwright rarely shoots gray belugas and if they do, they shoot the mother too. There was no struck and lost. The harvest occurs in shallow water and hunters use hooks to retrieve the belugas.

Point Lay – Robert Suydam reported that Point Lay landed 15 belugas in 2021 (14 + 1 struck and lost that was later salvaged). This is a drive hunt.

Kotzebue Sound

Buckland – Raymond Lee reported that Buckland took 1 beluga in 2021. They saw several hundred, but did not harvest any of these belugas.

Deering – Both Beverly Moto and Raymond Lee reported that 1 beluga was harvested and 1 struck and lost by Deering in 2021. Beverly said there were many beluga sightings through the season of larger groups. In June through August, about 7-8 killer whale groups were seen.

Kivalina – There was no delegate from Kivalina. Leonard Barger said Kivalina harvested 3 belugas in summer 2021.

Kotzebue & Noatak – Cyrus Harris reported that Kotzebue harvested the 2nd highest number of belugas since 2007 in 2021. Kotzebue and Noatak together harvest 16 belugas (12 by Kotzebue). There were 13 white and 3 gray. Twelve were netted in spring/summer. Three white belugas were shot from shore at Sisualik in October and retrieved by hook. Some beluga sightings were very early this year. A group of about 200 belugas passed by in October, but none were harvested. DNA samples from 7 belugas, and 1 stomach were sent to ADFG. There were no killer whale sightings. Noatak netted 4 male belugas (included in Kotzebue report).

Shishmaref – Leonard Barger said that Shishmaref harvested 1 beluga in summer 2022. Tom Gray heard that 2 were taken.

Eastern Bering Sea Stock – Norton Sound

Elim – There was no delegate from Elim and no harvest report.

Golovin – Charlie Brown reported to Tom Gray that Golovin harvested 4 gray belugas in 2021, 1 in spring and 3 in the fall.

Koyuk – There was no delegate from Koyuk. At least 3 belugas were harvested by Koyuk in 2021 . One of these was netted.

Nome/Council – Tom Gray said 3 belugas were harvested by Nome in 2021. Two were netted and 1 beluga was shot. In 2020, Nome hunters got 16 belugas.

Saint Michael – Pius Washington reported that many belugas passed by in 2021, but Saint Michael hunters were busy and belugas were not harvested.

Shaktoolik – Raymond Hunt reported that 22 belugas were harvested by Shaktoolik hunters in 2021 (20 white, 2 gray; 18 males, 4 females). He said none were struck and lost. Twenty-one were shot from boats and 1 was netted. Seventeen were harvested by boat in deep water in May-June (16 white, 1 gray). This spring harvest was about normal. None were taken in summer. In fall, there was bad weather with lots of wind. Very few belugas were seen. The fall harvest during September-November was low, with only 5 belugas taken (4 white, 1 gray; 4 by boat, 1 by net). No killer whales were seen in 2021 and there were no unusual events. The belugas were eating tomcod.

Stebbins – Pius Washington reported that Stebbins harvested 9 belugas in 2021. None were reported struck and lost. One was netted and 8 were caught by boats.

Unalakleet – Jason Haugen reported that Unalakleet took 4 belugas in 2021 (3 white, one gray). Three were caught in spring and 1 gray beluga was netted in fall.

White Mountain – Tom Gray reported that White Mountain harvested at least 2 belugas in 2021.

Eastern Bering Sea Stock – Yukon

Alakanuk – Camille Augline reported that Alakanuk harvested 18 belugas by boat in 2021 (13 white, 5 gray). He said five were harvested in June, 6 in July, and 4 in the fall. Some upriver hunters came down to hunt late in the season. They are included in the Alakanuk total. No one reported seeing killer whales.

Chevak – Albert Simon said Chevak harvested 7 belugas in 2021. They hunt near Hooper Bay and Albert Simon collects data for Chevak and Hooper Bay.

Emmonak – Brandon Kameroff reported that Emmonak harvested 13 belugas in 2021, including 10 white and 3 gray, with 1 struck and lost. There were 8 males. About half were harvested in summer and half in the fall (none in spring). Killer whales were not seen and the belugas were healthy. They saw many belugas going up the Yukon eating salmon. Emmonak does not use nets. They hunt by boat in shallow water.

Hooper Bay – Albert Simon reported that Hooper Bay and Chevak together harvested 42 belugas in 2021, plus 4 struck and lost (18 white, 9 subadult, 15 gray). There were 27 captains. Eight boats were from Chevak and 7 belugas were harvested by Chevak. Thirty-three belugas were taken in spring and 9 in the fall.

Kotlik –Donovan Okitkun reported that Kotlik harvested about 22 belugas in 2021. Most of the 10 taken in spring were white, but there were some young. In fall about 12 belugas were taken in shallow water and most were white. There was no struck and lost information. Donovan said there were many belugas in the Yukon River this year. There were many females with calves swimming in the river.

Marshall – Donovan Okitkun said Marshall harvested 3 belugas in 2021, 2 white and 1 gray.

Mountain Village – There was no delegate from Mountain Village. Mathew Peterson reported to Kathy Frost that Mountain Village harvested 9 belugas in 2021.

Nunam Iqua – Edward Adams Sr. reported that Nunam Iqua harvested 3 belugas in spring (2 white, 1 gray) and 2 in the fall (1 white, 1 gray), for a total of 5 in 2021 (4 males and 1 female). All were taken by boat. Nunam Iqua hunters harpoon before they shoot so there was no struck and lost.

Pilot Station – There was no delegate from Pilot Station. Marvin Okitkun said Pilot Station took 2 belugas in 2021.

Pitka's Point – Micah Sergie reported that Pitka's Point harvested 6 belugas in 2021. There were 4 white males, 1 female gray, and 1 male gray. There was no struck and lost. There were unusually high numbers of belugas up the Yukon River in 2021. On July 4th, there were 15-20 belugas in front of Pitka's Point. In August there were belugas 20-30 miles upriver. Micah was able to harvest a white male in the river. l A hunter from Marshall harvested 1 beluga 30 miles upriver. An adult male beluga had eaten 4 humpy salmon and 1 burbot.

Russian Mission – Russian Mission harvested 2 belugas in 2021, 1 white male and 1 gray.

Saint. Mary's – Micah Sergie said that St. Mary's harvested 7 belugas in 2021 plus 1 struck and lost. Two were white males.

Scammon Bay – Wybon Rivers said Scammon Bay harvested 29 belugas in 2021 (18 males and 11 females; 14 white, 10 gray-white; 5 gray) plus 3 struck and lost. The migration was late and started slow. They harvested 6 belugas in June, 14 in summer, and 9 in fall, all by boat. There were killer whales around.

Kuskokwim – Jennifer Hooper said she sent surveys out for the Kuskokwim communities and also reached out by phone. She received 4 surveys back. **Kwigillingok** rarely sees belugas and said did not harvest belugas in 2021. Eddie Teeluk said 1 beluga was harvested across the river from there in October. **Tununak** harvested 5 belugas in spring 2021 in shallow water. They saw a large pod of more than 50 belugas. In the fall they saw killer whales. **Goodnews Bay** did not hunt in 2021. Frank James said they saw a young gray beluga, and also saw a few belugas coming out of the river. Belugas have not been harvested in the last 3 years. **Tuntutuliak** did not harvest belugas in 2021. They rarely harvest. They sent in a DNA sample in 2020. Frank James said that **Platinum** did not harvest belugas in 2021. In 2021, belugas were around in March. Belugas are showing up near the village more often (Frank James hunts belugas in Bristol Bay).

Toksook Bay –Norman John said they harvested 13 white belugas in shallow water in 2021 (12 in May and 1 in October) with no struck and lost. All belugas were harvested by boat and the hunters harpoon before they shoot. Killer whales were not reported. **Newtok** has become a "hot spot." West of Nelson Island they spotted belugas in October. If belugas don't go into Toksook Bay, they go into Hazen Bay. No samples were collected this year. They saw belugas between Quinhagak and Platinum, in Jackson Bay.

Quinhagak – Eddie Teeluk reported that Quinhagak harvested 4 belugas in 2021, plus 1 white beluga struck and lost in spring. There were 2 white belugas harvested in spring. One beluga calf washed up alive after a storm in August and was harvested, and 1 white beluga was harvested in late August (Eddie thought this could have been the mother). Belugas used to be seen only in the spring and fall, but now they are more regular and common. They may see a herd of more than 100 belugas.

Bristol Bay Stock – Heidi Kritz reported the Bristol Bay harvest. The total known harvest for Bristol Bay in 2021 was 10. There was no reported beluga harvest from the east Bristol Bay region in 2021. **Levelock** harvested 0 belugas in 2021. There was no delegate and no information reported for **Naknek, Iliamna,** and **Igiugig** for 2021.

The west Bristol Bay region harvested 10 belugas in 2021. **Dillingham** harvested 4 belugas by boat in spring (1 white male, 2 gray males, 1 gray female) in 2021. Ben Tinker and Heidi Kritz reported that **Aleknagek** harvested 2 white male belugas plus 1 struck and lost gray whale. **Manokotak** harvested 4 belugas in 2021. **Clark's Point** did not harvest belugas 2021. Killer whales were seen in 2021 during commercial fishing.

Tom Gray said that struck and lost belugas is a hard thing to address. He thanked the delegates who reported this important information. It is an important part of the management number. Albert Simon said that struck and lost is sometimes increasing due to young hunters who have no experience. When Albert was young, the kids were taught about hunting. We need to address the next generation of young hunters. Albert thought the Point Lay harvest was really professional. They drive the belugas, then harpoon first before they shoot. We need to teach the youth about beluga hunting. John Burns said that before contact, all belugas were taken in drive hunts. Then they started being sold commercially. There were big beluga drives in the lower Kuskokwim, below Kotlik and in Kotzebue Sound.

Tom Gray pointed out that there are several difficult issues. If too many EBS belugas are harvested (more than results in a sustainable harvest), it will be necessary to reduce how many belugas are taken. Drives can only occur if there are enough whales. It is really important to teach the youth about good hunting practices. Hunters should harpoon before they shoot. Struck and lost animals are a problem in deep water: when they sink they can't be retrieved. Tom said, "It is super, super important to train our youth. Not everyone has been taught by a father." Billy Adams asked "When is a man going to become a man?" We have to watch him grow and become a good man. We have to look forward and expect something good to happen.

Billy Adams really appreciated hearing from John Burns. Most of our older generation is gone, and we need to learn from our elders. They have lots of knowledge. We need to listen to the words they say and put them in our minds like a movie. Villages started out for a reason, to get together for hunting big animals. Villages are closer together to the south because there are more resources there. Billy said we have a lot to learn from our partners. The animals are still in a healthy state and animals are resilient. We're going to feel a shift moving forward; we have to do things together and learn from our elders.

Billy Adams thought the ABWC should think carefully about the decision to have an Executive Director. It will cause a change. We want the ABWC to keep doing science.

MEETING AND COMMITTEE REPORTS

International Whaling Commission–Robert Suydam reported that the North Slope Borough sends people to the International Whaling Commission (IWC) each year. Robert became chairman of the IWC Scientific Committee in 2018. The IWC has no authority to regulate beluga hunting, but it does periodically review the status of beluga stocks. The IWC

is on the verge of going bankrupt. It has become strongly anti-whaling. The IWC needs to reinvent itself to deal with more than commercial whaling (things like the impacts of climate change, pollution, and whale watching). Albert Simon said that for the EBS stock not to decline, we have to address the harvest level. Local management is better

Inuvialuit-Inupiat Beluga Whale Committee– Robert Suydam told the ABWC about this committee. The ABWC was originally the Alaska and Inuvialuit Beluga Whale Committee and the Canadians were members until the early 1990s. The Canadians withdrew because of concerns about the IWC. They formed a new Beaufort-Sea-specific beluga group, the Inuvialuit-Inupiat Beluga Whale Committee. They meet annually, alternating between Canada and Alaska. The last population estimate for the Beaufort Sea stock was 40,000 belugas in 1992. Surveys were conducted in 2019 but analysis is still underway. The ABWC is helping. There was a successful Canadian tagging effort in 2018. In 2019, more tags were attached to belugas but many stopped transmitting soon after, and some belugas were found dead. It is unknown what happened to the belugas or why it happened.

The Inuvialuit-Inupiat committee is making an effort to standardize sample collection and analysis. If this is done, it will be possible to compare spring belugas from Point Hope with summer belugas from the Mackenzie River Delta.

Port access route study (PARS) – Stephanie Alvarez from the US Coast Guard gave an update on the Alaskan Arctic Coast Port Access Study (PARS). The US Coast Guard is working with others to develop shipping lanes for the Beaufort and Chukchi seas. Robert Suydam said most villages want the ships to stay offshore, outside their hunting areas. The shipping corridor includes the shelf break, which is an important area for belugas. Robert thinks the ABWC should request that the shipping corridor be north of the shelf break. Robert said he would help to draft an ABWC letter commenting on the draft PARS report. Hannah Shoal needs special consideration as a marine mammal hot spot. It is now along the preferred route or alternate route, depending on the sea ice. Compliance with any PARS recommendations is voluntary since it is outside of the 12-mile US jurisdiction. The study makes recommendations to the International Maritime Association. Even though it is voluntary, there will be economic "enforcement" by insurers. Vessels that stay inside the access route will be covered by insurance. If they do not, they will not have insurance.

ABWC PROJECTS

Ocean Leadership Award 2020 – Kathy Frost told the group that the ABWC received the Ocean Leadership Award in 2020 from the Alaska SeaLife Center. This award is given annually. In 2020, the Awards Committee named two recipients for the Marine Research Award: Carin Ashjian and the Alaska Beluga Whale Committee. This honor is given to a scientist, team of scientists, or an institution that is acknowledged by peers to have made an original breakthrough contribution to the awareness and sustainability of the state's marine resources. It can be in any field of scientific knowledge about Alaska's oceans.

Scientific papers published by ABWC authors – ABWC affiliated authors published 8 scientific papers between the end of 2019 and 2021. ABWC delegate co-authors (past or present) included Anna Bryan, John Burns, John Citta, Megan Ferguson, Kathy Frost, Willie Goodwin, Tom Gray, Greg O'Corry-Crowe, Lori Quakenbush, Ross Schaeffer, and Robert Suydam. The titles of the papers were: 1) Beluga whale stewardship and collaborative research practices among Indigenous peoples in the Arctic; 2) Alaska Beluga Whale Committee – a unique model of co-management; 3) Genetic history and stock identify of beluga whales in Kotzebue Sound; 4) Beluga dive behavior relative to fronts and stratified layers near Barrow Canyon; 5) Abundance of the Eastern Chukchi Sea Stock of Beluga Whales, 2012-2017; 6) Group structure and kinship in beluga whale societies; 7) Whale tear glands in the bowhead and the beluga whales: source and function; 8) Marine mammal ecology and health: finding common ground between conventional science and indigenous knowledge to track arctic ecosystem variability.

Tagging – Robert Suydam reported on beluga tagging at Point Lay. The first successful tag was put on at Point Lay in 1998. Since then, about 30 belugas have been tagged. Some belugas traveled way north; others used the shelf break in the Beaufort and Chukchi seas. One beluga was tagged at Point Lay in 2021. This beluga went northeast, mostly along the coast to Utqiaġvik, then northwest along the shelf break in the Chukchi Sea, and then made several big loops south of the shelf break.

Tom Gray reported that belugas were not tagged in Norton Sound in 2021. He is still trying to tag belugas as of early November. Kathy Frost suggested that more team work is needed. Wybon Rivers said there are six delegates from the Yukon, all young guys who hunt together. He recommended group tagger training; Tom and others should come help train these hunters.

Stomach analysis – Anna Bryan reported that 14 beluga stomachs were received in 2021: 9 from Point Lay, 4 from Barrow, and 1 from Kotzebue. Anna showed pictures to explain the sorting process. One Cook Inlet male beluga, collected in 2020, had a starry flounder stuck in its throat. Wybon Rivers said he wanted to collect stomachs.

Bristol Bay beluga surveys – Lori Quakenbush said that ADFG would be conducting aerial surveys of Bristol Bay for the ABWC in July 2022. The funds are from the ABWC's NOAA Co-management grant. John Citta asked whether the ABWC would consider conducting EBS surveys in 2022 and deferring Bristol Bay surveys until 2023. Kathy Frost said this would require agreement by ADFG since they have already planned the surveys for this year.

Correction Factor project summary – John Citta reported about his ABWC correction factor project. When observers count belugas during aerial surveys, they don't see all belugas in the area because some belugas are underwater. John explained that it is possible to correct for these unseen belugas by using the average surface and dive intervals from the satellite tags, and the amount of time a strip of water is visible to the observer. This will vary by the aircraft's altitude and speed.

The best correction factor (CF) for Bristol Bay is 2.9 with an "uncertainly range" of 1.3-5.4. For the Eastern Chukchi Sea belugas, the CF estimate is 2.3. It is more difficult to calculate an estimate for the EBS based on the satellite tags because fresh water from the Yukon River causes problems with how the tags identify a beluga dive. Kathy Frost asked why the Bristol Bay CF wasn't applied to EBS, since the habitat is similar. John Citta said that it could – and perhaps should be. Kathy pointed out that this CF does not account for dark gray calves that are not seen at all during the aerial surveys.

Student beluga hunting guide – Lori Quakenbush said the ABWC is funding a Beluga Student Guidebook that is modeled after the Ice Seal Student Guidebook for AVCP. Lori, working with the ADFG Information and Education division, will create this Guidebook. ADFG will start with the EBS schools and if the communities like the Guidebook, ADFG will create a Guidebook for the other areas. The Student Guidebook will be for 4th and 5th graders. ADFG will need help with content from the ABWC delegates and also from elders. The plan is to interview elders and beluga hunters when ADFG conducts village meetings on the EBS Beluga Management Plan. The Student Guidebook will include artwork, stories, and information about beluga biology and hunter safety.

Tom Gray said this Student Guidebook is needed as a school curriculum. Lori said it will be written to conform to school curriculum requirements. A school curriculum is one way to make sure people become familiar with important information about belugas and beluga hunting.

Cook Inlet update – Barbara Mahoney reported that there is a lot happening with Cook Inlet belugas. NMFS has volunteer observers for some projects, as well as MML research activities. Tom Gray pointed out that NMFS is spending a large amount of money on a population of 275 belugas, but funds are needed elsewhere to keep beluga populations safe and abundant.

Tom Gray encouraged the ABWC hunters to see Cook Inlet as an example of what could go wrong and to not let other Alaska beluga populations decline to such a low abundance. From 1994 to 1998 there was a 50% decline from about 660 to 345 whales due to high harvests. A harvest of 0-2 belugas per year was allowed from 2000-2006, and no harvest has been allowed since then. It is important to manage the belugas we have. John Burns said we have to start before the law requires it.

A banquet was held at the Hilton for ABWC delegates following the meeting on Tuesday. The banquet was paid for by the North Slope Borough, Department of Wildlife Management (NSB). The NSB staff obtained door prizes for the banquet.

Thursday 11 November

Tom Gray called the meeting to order at 8:40 AM. Tom thanked the NSB for the banquet on Wednesday night and for their help getting door prizes.

There was a slide show by Kathy Frost with pictures provided by many hunters. The pictures showed belugas, beluga hunting, and communities.

Tom announced that Jerry Ivanoff is retiring from the ABWC board. Kathy read his texted concerns about the environment. Jerry's Ravn flights were canceled Monday-Wednesday and he couldn't get to Anchorage until Friday.

OTHER BELUGA PROJECTS AND RESEARCH

Beaufort Sea beluga surveys – Robert Suydam reported that MML flies aerial surveys for bowhead whales as a way to replace counts from the ice perches, due to changing and worsening ice conditions. In 2019, NMFS used three aircraft for the bowhead population surveys and covered a lot of the Beaufort Sea, including the eastern Beaufort Sea, in Canada. It was an excellent survey, and MML also saw a lot of belugas. This was the same summer the Canadians flew dedicated belugas surveys to update their 1992 population estimate. Megan Ferguson has t6aken the lead in analyzing the MML survey to produce an estimate of the Beaufort Sea belugas. MML's estimate might be a stand-alone estimate or it might be combined with the Canadian population estimate. Megan has been busy with other tasks and has been unable to get to this analysis. Robert suggested the ABWC pass a motion for MML to make the Beaufort Sea beluga abundance estimate a priority.

John Citta noted that the US surveys were more successful than the Canadian surveys. John suggested the ABWC thanks MML for collecting the data and encourage them to analyze it soon. Billy Adams said that MML surveys have been very important. He wondered about payment for the beluga analysis. The ABWC has grant funds for the analysis. Tom Gray supported the idea of a letter to MML. Jon Kurland pointed out that MML has many priorities right now.

A motion was made (Robert Suydam moved, Marvin Okitkun 2nd) stating that the **ABWC strongly encourages MML to analyze beluga data collected during 2019 bowhead surveys.** The motion was approved unanimously.

Robert Suydam thought it would be a good idea for the ABWC to have a Beluga Research Plan specifying the frequency of aerial surveys, tagging studies, and other general work that should be conducted. The Beluga Research Plan could be short, but approved by the ABWC and on ABWC letterhead. Tom Gray thought it would be beneficial to have the ABWC priorities identified. Robert volunteered to develop the draft Plan.

Kaktovik beluga study – Carolyn Brown, ADFG, Subsistence Division, described a Kaktovik beluga harvest study they hope to conduct with BOEM funding. ADFG is currently consulting with the community to get formal approval. If approved, the study will describe beluga subsistence hunting practices and if, how, and why they have changed with time. ADFG will conduct interviews and prepare maps. There will be a community panel to design how the study will move forward. A report will be produced in 2023 or 2024. Billy Adams said they are trying to document the use of resources.

Puget Sound beluga – Barbara Mahoney reported that during October, there were 25 sightings of a beluga in Puget Sound, around Seattle and Tacoma. Environmental DNA (e-DNA) identified this beluga as most likely from the Beaufort Sea stock. There was also a recorded beluga sighting in 1940 near Tacoma. John Burns said a beluga was sighted near Sitka. A beluga was sighted off San Diego in 2020 and later seen dead in Mexico.

Greg O'Corry-Crowe reported that Yakutat has a long history with belugas. Yakutat belugas are not connected to the Cook Inlet belugas. These belugas forage near the glaciers and calves are regularly seen.

ABWC MANAGEMENT PLANNING

Kotzebue Sound beluga plan – Kathy Frost summarized the Kotzebue Sound beluga situation. Belugas were overharvested in Kotzebue Sound in the late 1970s and early 1980s. John Burns said the hunters need to take a "time out" and close the area to hunting from June 15-September 15. Cooperation hasn't worked so far. We need to try this and see what happens. Cyrus Harris said he was raised in Sisualik. He can only speak for himself, not for other hunters. Cyrus harvested an offshore beluga in the fall. Belugas can be secretive and hard to see. Billy Adams said that time is needed for conservation matters. Heidi Kritz mentioned the need for relationship building. Tom Gray said the world is changing, tradition can't keep up. The resources don't have a chance with modern technology. Times have changed. Other things may impact belugas, but the responsibility of the traditional users is to manage their resources. The hunters must find the tools to do this. Tom thought perhaps there should be mandatory sampling of all harvested belugas. This would provide information about age, sex, and stock ID. We have the right to harvest, but we also have an obligation to take care of our resource. Greg O'Corry-Crowe suggested the youth might get involved in genetics analysis. Greg is working with a biotech company to set up remote labs. Cyrus said they haven't had good results or information return for genetics samples. Cyrus wants to know what belugas are being harvested in Kotzebue Sound. Tom reiterated that samples can answer a lot of questions. Good things don't happen overnight.

Greg O'Corry-Crowe summarized the genetics information on beluga stocks and the movements into Kotzebue Sound. Mitochondrial DNA (mtDNA) can look at the movements of belugas over time. Modern Kotzebue Sound harvests differ from historical harvests. The problem with mtDNA is that it is an analysis of frequencies. It's not possible to know what stock an individual beluga belongs to using mtDNA. Modern studies are using nuclear DNA, which can identify an

individual beluga to a stock. Greg thinks a future Kotzebue Sound study could be designed **us**ing a variety of methods. Cyrus Harris thanked Greg for the genetics results. Cyrus requested Greg's PowerPoint presentation for his T**ribal** C**ouncil**. Cyrus would like Greg to go to Kotzebue and present the information about Kotzebue Sound beluga genetics.

Jon Kurland asked what NMFS could do to help. He said that MML is looking at the stock status for Kotzebue Sound. Jon anticipates that MML will agree with Greg's analysis that this stock was historically different. Jon said when Cook Inlet belugas were still being hunted and no decision had yet been made about its endangered or depleted status, NMFS required biological samples from all harvested animals (lower jaws). NMFS could write a similar regulation for Kotzebue Sound belugas, working together with ABWC to define and publish the policy, and to fund shipping and analysis. Geographic scope would need to be defined. NMFS would only do this in cooperation and as a partnership with ABWC. Having a requirement like this in place could be very helpful.

Albert Simon said we should work together to understand the situation. Tom Gray said we need sampling tied to conservation concerns. We should look into whether to require sampling in all areas, or only in problem areas. We can identify the types of information samples can provide. If sampling is implemented, there would need to be funds for analysis. Barbara Mahoney said that NMFS couldn't fund a complicated sampling program. Robert Suydam said this could backfire. We don't want law enforcement arresting people for not providing samples. Tom said that hunter buy-in would be necessary.

Jon Kurland proposed a potential path forward. He suggested that ABWC ask NMFS to investigate the feasibility. NMFS could look at issues like enforcement. NMFS would "go slow, gather information." This would not be a fast process, no matter what. Albert Simon said "regulation" is a very strong word. Robert Suydam pointed out that regulations are a stick. What would be a carrot approach? It was suggested there could be a prize for the village that collected the most samples. Tom Gray said that samples can really help with management planning. A list of what we can get from samples would really help. Billy Adams thought regulations would make things harder. Punitive actions cause a downward spiral. Tom said that regulations tell us what to do. We could explore this process, both the positives and the negatives, and revisit this subject in 2022.

John Citta said that samples might provide more information than tagging in Kotzebue Sound. There are not enough belugas in Kotzebue Sound to have a successful tagging program, but the hunters can collect samples from every beluga they harvest to learn about Kotzebue Sound belugas. Norman John said that a sampling regulation will scare the hunters. They will quit talking and reporting about their harvest.

Robert Suydam asked the delegates to think about the issue of sampling when they go home. Regulations should be the last resort. The scientists need to provide a statement about what information we get from samples and what is needed. Tom Gray suggested we put our ideas together over the next year and revisit sampling at the 2022 meeting. It will be good to see what NMFS proposes about sampling. Jon Kurland said NMFS would not move forward without the support of the ABWC. The ABWC must determine what it wants and how to improve the current situation. Jon said that if ABWC requests it, NMFS would come up with recommended options: what samples to collect, how to get them, how a program would be funded. NMFS could produce a "report" on this investigation at the 2022 meeting. The ABWC would have the option to say "thanks but no thanks." Robert thinks it is a good idea to get NMFS to put some options on the table. It is the ABWC's option to accept or reject. Cyrus Harris suggested we continue what we are doing, but stress sample collection more.

Tom Gray said the ABWC wants to make beluga science better. Jon Kurland has offered to "show his hand." Tom thinks the ABWC may decline, but would like to see NMFS' plan. Joe Leavitt said that sampling is very important but the hunters don't want harvest regulations. Greg O'Corry-Crowe offered to draft a document about samples and sampling. Tom Gray said we need a sampling goal. Kathy Frost reminded everyone this discussion is about sampling, not about hunting regulations. Billy Adams said the delegates need to go to their communities and explain the need for samples. If a committee makes a decision for a community before it is informed, they have gone separate ways and are getting ahead of themselves. John Burns said that sampling is like a personal health checkup. The doctors sample a person to learn about community health. Biological sampling is the same thing. This is a search to determine the health of belugas. Tom said that however this turns out, our sampling will be better. Robert liked John's input and would like Greg's input on sampling, including costs. Frank James said that 95% of the hunters probably don't know how important it is to get samples.

There was a motion (Robert Suydam moved, Billy Adams 2nd) for **Jon Kurland and NMFS to develop a white paper to present at the 2022 ABWC meeting about regulations requiring sampling of all harvested belugas for all geographic regions**. Jon Kurland said that ABWC can take or leave any of the ideas; the white paper will be for

informational purposes only. Kotzebue Sound and the EBS belugas would be the highest priorities. The motion passed by voice with no dissenting votes.

Eastern Bering Sea beluga planning – Tom Gray explained that the ABWC EBS beluga planning process is underway. The goal of this Management Plan is to keep the beluga population healthy and the harvest sustainable. The ABWC is hoping to have a draft Management Plan in place before there is a problem. Tom told everyone, "This will benefit our people. We need to plan ahead and think into the future. We need a plan in place so a problem doesn't happen." Kathy Frost asked how we get information about the draft Management Plan to the hunters. Billy Adams said there needs to be outreach.

Albert Simon said more tagging is needed in the EBS. He said the world is changing fast. "Hunting is fun" but we have to teach the youth how to hunt the right way. Raymond Hunt said it is important to prepare for the worst. Beluga numbers go up and down. It is wise to think ahead and plan for what happens if the belugas numbers get low. This way there would be minimal restrictions if the time comes. Tom Gray said that the ABWC does not want to manage each village individually. There need to be regional guidelines. If the time comes when the harvest needs to be reduced, the villages will deal with how this is done and any allocation.

Strategic status of Eastern Bering Sea belugas – Jon Kurland explained what happened about EBS belugas being designated as strategic in the draft NMFS Stock Assessment Report (SAR). NMFS didn't coordinate with and inform the ABWC, its co-management partner, about identifying EBS belugas as "strategic" in the SAR. The draft SAR was withdrawn from public review until NMFS consults with the ABWC about this matter. "Strategic" means that human caused mortality is higher than what is considered safe based on the current abundance. NMFS, the ABWC Executive Committee, and scientists will meet about this the day after the ABWC meeting. NMFS will discuss whether there is additional information to be considered. Tom Gray said the ABWC is already working on this. Kathy Frost described the upcoming meeting with NMFS and what will be discussed.

Robert Suydam said the ABWC asked a scientist friend of ABWC (Doug DeMaster) to assist with this issue. **Robert moved (Leonard Barger 2nd) for the ABWC to approve Doug's participation and assistance in ABWC's response to the draft SAR and in making suggestions for how to proceed.** The motion passed unanimously. Albert Simon said the hunters don't always know the safe harvest level. They are hunting in the traditional way, but they don't know what the "safe" level is. Kathy Frost said the scientists spend a lot of time discussing what a safe level of take is. A strategic designation is an early warning system. It means we should all pay attention and try not to let the harvest get too high. Marvin Okitkun asked if there is beluga bycatch in offshore trawl fisheries. Jon Kurland said federally managed trawl fisheries carry NMFS-trained observers and report all interactions with marine mammals, and those are reported in the marine mammal stock assessment reports. Jon doesn't think there have been any reports of belugas taken in trawls.

Winter Eastern Bering Sea meetings – Lori Quakenbush said ADFG and others were ready to begin the village meetings to discuss the EBS beluga planning process when Covid hit. ADFG had airline tickets bought and hotels arranged, but everything was canceled. They planned to visit Elim, Unalakleet, Saint Michael, Stebbins and Shaktoolik on one trip and Scammon Bay, Hooper Bay and Kotlik on another trip. ABWC Executive Committee members would also attend these meetings. ADFG is hoping to try again in spring 2022, perhaps in March. This time all meetings will occur in one trip.

DRUM MAKING FROM BELUGA STOMACHS

Duncan Okitkun, Marvin Okitkun's son, gave an excellent presentation about making traditional drums from beluga stomachs. Marvin said he started bringing his sons to meetings 5-6 years ago. Duncan said he bought a couple of traditional drums from someone in Togiak, and that person agreed to teach him. He was involved in Eskimo dancing and expanded that to drumming. Duncan is now a teacher in St. Mary's, teaching Yupik skills. He makes his own drum frames and has a steam box to bend them. He cleans and scrapes a stomach, then stretches and dries it on a frame. He received several stomachs from other ABWC hunters. Duncan has experimented with other organs, like the liver, for drum making. Duncan sang and drummed for the group, and asked several women to dance while he drummed.

ELECTIONS

Elections were held for the Vice Chairman and two Members-at-Large. Elections for Chairman and Secretary alternate with elections for the Vice Chairman and Members-at-Large. Marvin Okitkun was elected as Vice Chairman. Billy Adams and Cyrus Harris were elected as Members-at-Large.

Tom Gray thanked Jerry Ivanoff (outgoing Member-at-Large) and Albert Simon (outgoing Vice Chairman) for their service.

Robert Suydam is retiring from the North Slope Borough Department of Wildlife Management. He participated in ABWC as the NSB representative. **Jennifer Hooper moved (Marvin 2nd) to approve Robert Suydam as an at-large ABWC member.** The motion was approved unanimously.

PRIORITIES AND FINAL ROUND TABLE

Albert Simon thanked everyone for their participation. We collaborate and work together to make this work: scientists, agencies, hunters, and our elder John Burns.

Joe Leavitt thanked Robert Suydam for all he has done.

Edward Adams, Sr. said that culture is a very important part of what we do.

John Burns said the ABWC is the only meeting he still attends. He is passionate about belugas. There will be difficult problems ahead for this group to work on together.

Micah Sergie said we need a better sampling system.

Heidi Kritz said this is her first year. She liked learning about the Port Access Study to guide shipping lanes.

Wybon Rivers thought there was good information about tagger training.

Raymond Hunt stressed that youth education and sampling are really important. Shipping lanes should go offshore.

John Citta said the NSB is committed to supporting the ABWC. He thanked Albert Simon for his service and Duncan Okitkun for his drumming.

Billy Adams thanked the ABWC for electing him. He thanked Duncan for his drumming, and Duncan's family for bringing him up right. He hopes the ABWC finds a way to help Kotzebue. We should listen to the elders, like Edward Adams. Tags have shown us a lot, but we must also remember what the elders say.

Lori Quakenbush thought the highest priorities should be sampling, aerial surveys (especially EBS), the Beluga Student Guide, village meetings about the EBS management plan, supplemental hunter-tagger training, and a beluga diet publication.

Eddie Teeluk supported tagging in the EBS and Kuskokwim.

Raymond Aguvluk stressed the importance of youth training.

Jon Kurland said the ABWC and NMFS have tested their relationship the last few months. It will be stronger in the end**.**

Leonard Barger said the elders are really important. They were our scientists. We are losing our elders. He was amazed to learn about making drums.

Cyrus Harris thought learning about beluga habitat, the ecosystem, and the food chain are important. He would like Greg O'Corry-Crowe to come to Kotzebue.

Cordelia Kellie said she learned from Tom Gray that we should "listen to what the animals say."

Jennifer Hooper said it is her personal goal to get more data. She thinks the Beluga Student Guide is very important.

Camille Augline said we have to take care of our own whales, not the federal or state government. We need to do it.

Donovan Okitkun hopes that more youth get involved.

Marvin Okitkun thanked everyone for his election as Vice Chairman. He thinks samples are very important and we need more. We should have a presentation about what samples are used for and what they can tell us.

Kathy Frost prioritized EBS abundance surveys, samples, and tagging. She thought it was good to have so many young hunters at the meeting, and such a mix of ages and affiliations.

Tom Gray thanked Robert Suydam and welcomed John Citta as the new NSB representative. He supports tagging and more sampling as a tool to manage our resource. Tom thought a beluga cook book might be a good idea!

OTHER

Tom encouraged everyone to take their meeting materials home, talk to other hunters about the ABWC and what it is doing, and collect samples from harvested belugas.

This is a good time for the annual meeting. We should try to have the meeting about the same time in 2022.

The meeting was adjourned at 5:59 pm.

These minutes were prepared and submitted by Kathy Frost, ABWC Secretary.

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.

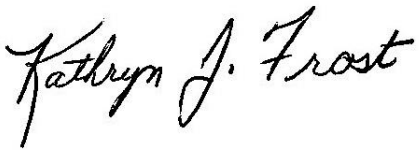
ARTICLE VI. ADOPTION AND AMENDMENTS

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

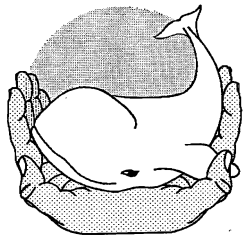
These bylaws may be amended by a majority vote of the Committee members present at the annual meetings. Members must receive prior notice that proposed amendments will be considered as an agenda item. Notice of the meeting must be mailed at least 30 days prior to the meeting at which the amendments are 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 11/15/2018 Attested by: Kathryn J. Frost 11/15/2018
Chairman Secretary



Alaska Beluga Whale Committee

P. O. Box 293
Kotzebue, AK 99752
Phone (907) 442-3733 Fax (907) 442-2764

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.

Community	ABWC Mngt Plan	Co-Mngt resolution	Updated Resolution
Beaufort Sea stock			
NSB Fish & Game Mngt Comm	7/14/1994		
Barrow	2/25/1997	11/13/2000	
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
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.

This agreement is between ABWC and NMFS.

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."

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.

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.

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.

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

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:

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

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.

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

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.

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.

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.

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.

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.

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.

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.

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.

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.

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

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.

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.

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.

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

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

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

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

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

Alaska Beluga Whale Committee

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

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

11/9/99
Kathryn Frost — Date
Secretary

11/9/99
Molly Chythlook — Date
Treasurer

11/9/99
Charles Saccheus — Date
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.

Tribally Authorized Organization	**Resolution Date**
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.

Community	ABWC Mngt Plan	Co-Mngt resolution	Updated Resolution
Beaufort Sea stock			
NSB Fish & Game Mngt Comm	7/14/1994		
Barrow	2/25/1997	11/13/2000	
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
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		
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

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

May 18, 2022

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 three year funding amount is $659,079.**

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 approved funding amount for your organization was determined after consideration of the panel's comments, funding recommendations, and review by the Administrator, NMFS Alaska Region. 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 $19,047. Prior to forwarding the application package to the GMD, we request the following revisions to your proposal:

1. Cut $15,742 from Travel in Year 1.
2. Recalculate indirect cost rate for Year 1.
3. Comment-Need justification for subaward to ADF&G.
4. Request-please provide information on outreach student selection process.
5. Request-please consider prioritizing genetic skin sampling in areas of Kotzebue Sound and the Eastern Bering Sea.
6. Comment-All federal forms need signatures to match the authorized representative.

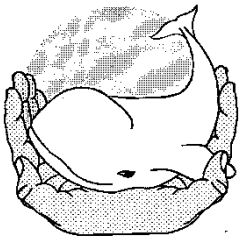
As in past years, any changes to the Award amount and item costs associated with this project will require a revised SF424, SF424A, proposal narrative, budget detail and justification (again please note that the requested Federal Funds on these documents for year 1 will be $225,934, year 2 $225,390 and year 3 $207,755).

Enclosed are the technical reviewers' consolidated comments following the criteria outlined in the 2022 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 directly to me via email by **June 1, 2022**. 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.cita@north-slope.org

Proposal

SUPPORT FOR ALASKA BELUGA WHALE COMMITTEE BELUGA CO-MANAGEMENT AND RESEARCH ACTIVITIES, 2022-2025, submitted under the FY 2022 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 August 2022 to 31 July 2025
Project Manager:	John Citta North Slope Borough, Box 69 Barrow, AK 99723 John.Citta@north-slope.org (907) 852-0350 (907) 699-3224 (cell) (907) 852-0351 (fax)
Total Grant Request to the NSB for the ABWC:	$ 658,984 Federal Funds

Date Submitted: 25 May 2022

ALASKA BELUGA WHALE COMMITTEE 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 has not yet been officially designated a stock (Kotzebue Sound). The ABWC encourages conservation and informed management of belugas by involving Alaska Native subsistence hunters in management and research and by conducting research on belugas to address management needs.

The ABWC is seeking funding for three years (2022-23, 2023-24 and 2024-25) to continue its efforts to conserve beluga whales, support sustainable harvests, and collect information needed for informed decision making. Projects are conducted in cooperation with beluga hunters and state, federal, tribal, and local agencies in a cost-effective manner. The North Slope Borough (NSB) administers ABWC funds.

The goals of this program are to provide for participation of beluga hunters in the management of beluga whales for subsistence use; provide for sustainable use of belugas for subsistence purposes; involve beluga hunters in research; and promote conservation of belugas. The ABWC is proposing three 3-year projects: 1) harvest data collection and other co-management activities, 2) regional management planning in the eastern Bering Sea, and 3) satellite tagging to describe habitat use of eastern Bering Sea belugas.

1. ***Harvest Data Collection and Other Co-Management Activities***: The annual ABWC meeting is a focal event for this project. The Co-Management Priorities and specific objectives are:

- HARVEST MONITORING - Document beluga harvest, methods of take, and estimate number struck and lost for approximately 50 Alaska beluga-hunting villages; distribute beluga harvest information to ABWC, NMFS and others; encourage sample collection for genetics and diet studies by distributing sampling kits and developing a pilot program for sampling in high-harvesting EBS villages.
- RESEARCH PROJECTS - Review ABWC and other pertinent beluga research at the annual meeting; recommend and prioritize research projects needed to improve management of belugas.
- EDUCATION AND OUTREACH - Invite four young hunters to attend the ABWC annual meetings so they can learn more about beluga research and management; maintain ABWC Facebook page where newsletter and other information will be posted; produce an annual newsletter about belugas and beluga management in Alaska.
- THREATS TO SUBSISTENCE RESOURCES - Record concerns about belugas and their habitat and commercial activities in western and northern, coastal Alaska; document delegate reports of environmental changes and beluga behavior; comment as appropriate on permits or activities that may affect belugas or subsistence hunting.
- COOPERATIVE MANAGEMENT - Facilitate communication among the ABWC Executive Committee, ABWC hunter delegates and NMFS co-managers through information exchanges at ABWC meetings and ABWC-NMFS meetings.

Products and anticipated accomplishments will include harvest data from approximately 50 beluga-hunting communities; DNA and stomach contents samples; prioritization of research and other projects at the ABWC meeting; and better communication between the ABWC and its co-management partner NMFS.

2. ***Regional Management Planning: Eastern Bering Sea***: This project includes regional management planning in the eastern Bering Sea (EBS) and addresses the following Co-Management Priorities:

- HARVEST MANAGEMENT - Discuss hunting guidelines and sustainable harvest levels at EBS management planning workshops and village meetings in 2023-2025; prepare and distribute annual

EBS newsletters about sustainable harvest levels, the importance of protecting female belugas, and management planning.

- COOPERATIVE MANAGEMENT - Hold management planning workshops to support adoption and implementation of an EBS Beluga Management Plan; discuss how abundance data and harvest levels are used to calculate sustainable take; facilitate meetings in EBS beluga hunting communities to discuss sustainable harvest and the EBS Beluga Management Plan; conduct joint meetings with ABWC and NMFS to discuss co-management issues, the status of stocks, and strengthen the ABWC-NMFS co-management partnership.
- EDUCATION AND OUTREACH - Invite young hunters to attend EBS management planning workshops to learn about beluga management; distribute EBS newsletters about the EBS planning processes.

Products will include: text and adoption procedures for an EBS Beluga Management plan; meetings in Norton Sound and Yukon coastal communities to discuss EBS management planning; attendance of delegates and young hunters at EBS workshops; and EBS newsletters.

3. ***Habitat Use, Migration Routes, and Overwintering Areas of Eastern Bering Sea Beluga Whales: Hunter-Tagger Training and Tagging:*** This project has two components: (1) train hunter-taggers from the EBS, and (2) conduct opportunistic tagging of belugas in the EBS. In 2021, ABWC members again identified this project as one of their highest priorities. The Marine Mammal Co-Management Priorities and specific objectives are:

- COOPERATIVE MANAGEMENT - Train hunter-taggers from Norton Sound/Yukon Delta in methods for capturing, restraining, and tagging belugas involving previously trained ABWC hunter-taggers and ABWC researchers.
- RESEARCH PROJECTS - Attach satellite tags to belugas in the EBS; map/analyze movement data; collect data suitable for estimating availability correction factors for aerial surveys; make data and maps available to ABWC members, scientists, NMFS managers, and others.

Tagger training will build capacity for local participants to independently catch and tag belugas. Tagging will help to document distribution, migration routes, and overwintering areas of EBS belugas. Locations of tagged belugas will be used to plan and interpret EBS aerial surveys. The cost of tagger training is modest, and the payoff high if sample size of tagged animals can be increased. As more hunter-taggers are trained and more belugas tagged, local capacity to conduct science and collaborate with scientists will increase as will knowledge about these belugas.

Budget Request 2022 -2025	Federal Yr 1 2022-23	Federal Yr 2 2023-24	Federal Yr 3 2024-25	Total 2022-2025
Personnel				
Harvest & ABWC Support	$9,352	$9,633	$9,922	$28,907
Regional Planning	$0	$0	$0	$0
Research Hunter Training Tagging	$0	$0	$0	$0
				$28,907
Fringe Benefits				
Harvest & ABWC Support	$5,985	$6,165	$6,350	$18,500
Regional Planning	$0	$0	$0	$0
Research Hunter Training Tagging	$0	$0	$0	$0
				$18,500
Travel, NSB Only				
Harvest & ABWC Support	$5,454	$5,594	$5,738	$16,786
Regional Planning	$299	$306	$313	$918
Training/Tagging	$0	$0	$0	$0
				$17,704
Supplies				
Harvest & ABWC Support	$1,150	$1,185	$1,220	$3,555
Regional Planning	$700	$721	$742	$2,163
Research Hunter Training Tagging	$18,844	$27,794	$10,603	$57,241
				$62,959
Contractual Costs/Other				
Harvest & ABWC Support	$19,630	$17,956	$17,962	$55,548
Regional Planning	$23,397	$23,452	$23,508	$70,357
Research Hunter Training Tagging	$25,000	$18,000	$18,000	$61,000
				$186,905
Non-NSB travel				
Harvest & ABWC Support	$66,158	$64,602	$66,279	$197,039
Regional Planning	$8,835	$8,970	$9,109	$26,914
Research Hunter Training Tagging	$1,840	$1,895	$1,952	$5,687
				$229,640
Total Direct Costs	$186,644	$186,273	$171,698	$544,615
Total Indirect Costs	$39,195	$39,117	$36,057	$114,369
TOTAL REQUEST	**$225,839**	**$225,390**	**$207,755**	**$658,984**

Community _____

Alaska Beluga Whale Committee

2022
Beluga Harvest Report

Reporter _____Phone_____Email _____

1) **TOTAL belugas harvested in your community in 2022, 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 2022? 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, 2011-2020. Data provided by the Alaska Beluga Whale Committee. Numbers highlighted in gray are estimates based on average of other years. (Kathy Frost, ABWC Secretary, 4-21-22

Beaufort Sea stock	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Barrow	5	0	0	3	4	6	2	2	1	12
Diomede	0	1	0	0	0	0	0	0	0	0
Kaktovik	0	1	0	0	2	2	0	9	0	3
Kivalina	2	1	0	5	0	0	0	0	6	0
Point Hope	84	31	24	35	37	2	11	7	44	20
TOTAL	**91**	**34**	**24**	**43**	**43**	**10**	**13**	**18**	**51**	**35**

Chukchi Sea tock	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Point Lay	14	26	16	48	0	33	52	29	6	15
Wainwright	34	55	34	23	14	5	13	0	0	50
TOTAL	**48**	**81**	**50**	**71**	**14**	**38**	**65**	**29**	**6**	**65**

Kotzebue Sound	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Buckland	0	0	2	0	4	0	1	0	0	1
Deering	0	0	0	0	1	0	2	0	3	1
Kivalina	1	0	2	0	0	0	3	4	0	3
Kotzebue	3	6	5	1	4	1	8	2	4	17
Noatak	0	0	1	0	0	1	1	0	0	4
Shishmaref										2
TOTAL	**4**	**6**	**10**	**1**	**9**	**2**	**15**	**6**	**7**	**28**

Eastern Bering Sea stock	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Norton Sound										
Elim	23	27	33	22	31	28	35	36	30	25
Golovin	1	5	2	4	4	0	3	4	5	4
Koyuk	1	3	3	6	0	2	5	0	0	3
Nome/Council	8	6	19	6	6	2	7	4	16	3
Saint Michael	8	8	11	7	4	7	8	3	20	0
Shaktoolik	15	11	14	8	10	17	17	20	30	22
Stebbins	7	10	9	6	8	9	8	8	12	9
Unalakleet	19	17	20	25	23	21	2	8	2	4
White Mountain	4	5	5	6	1	5	2	3	0	2
Norton Total	**86**	**92**	**116**	**90**	**87**	**91**	**87**	**86**	**115**	**72**
Yukon										
Alakanuk	5	11	4	11	3	10	7	7	4	18
Chevak	5	1	4	2	4	1	2	8	10	8
Emmonak	4	16	12	9	16	4	8	8	5	13
Hooper Bay	57	28	30	14	12	31	12	31	35	34
Kotlik	8	37	23	27	8	13	14	20	26	22
Marshall	nd	nd	3	1	7	1	2	2	4	3
Mountain Village	2	4	5	2	5	5	13	7	6	9
Nunam Iqua	4	4	5	3	1	5	6	4	0	5
Pilot Stn	4	8	3	6	4	0	4	2	3	2
Pitka's Pt	3	3	4	10	3	1	1	1	3	6
Saint Mary	0	5	6	5	8	1	7	7	5	7
Scammon Bay	7	4	21	11	18	20	25	29	28	29
Russian Mission	nd	nd	nd	nd	nd	0	0	1	1	2
Yukon Total	**99**	**121**	**120**	**101**	**89**	**92**	**101**	**127**	**130**	**158**
Eastern Bering Sea TOTAL	**185**	**213**	**236**	**191**	**176**	**183**	**188**	**213**	**245**	**230**

Kuskokwim	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Eek	nd	nd	nd	nd	0	nd	nd	nd	nd	
Goodnews	0	0	0	0	0	nd	0	0	0	0
Kipnuk & Kwethluk	nd	nd	0	nd	0	nd	nd	nd	nd	
Kongogonak & Kwig										2
Nightmute	nd	nd	nd	nd	2	nd	0	nd	nd	
Platinum	nd	nd		0	0	1	0	1	0	0
Quinhagak	2	2	1	2	2	1	2	5	5	3
Toksook Bay	3	6	1	4	4	0	0	5	6	13
Tununak+mek	1	1	1	1	0	1	0	0	nd	5
TOTAL	**6**	**9**	**3**	**7**	**8**	**3**	**2**	**12**	**11**	**23**

Bristol Bay stock	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Aleknagek	1	3	1	1	5	3	0	3	3	2
Clark's Point (+Ekuk)	5	8	5	4	4	2	0	2	1	0
Dillingham	3	2	1	3	5	1	5	3	4	3
Egegik	0	0	0	0	0	0	0	0	0	0
Igiugig	1	1	0	1	1	0	0	0	0	0
Iliamna	7	2	5	2	0	0	0	2	0	2
Levelock	2	1	1	0	0	0	2	0	0	0
Manokotak	2	5	6	4	1	2	3	3	4	4
Naknek/King S	1	4	3	1	2	0	0	0	2	**2**
Newhalen	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
New Stoyahok	nd	nd	nd	1	0	nd	nd	nd	nd	
Non-local hunters	5	1	4	5	1	2	1	6	0	1
Togiak	0	0	0	0	0	0	0	0	0	**0**
TOTAL	**27**	**27**	**26**	**22**	**19**	**10**	**11**	**19**	**14**	**14**

TOTAL, all stocks	**361**	**370**	**349**	**335**	**269**	**246**	**294**	**297**	**334**	**395**

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.

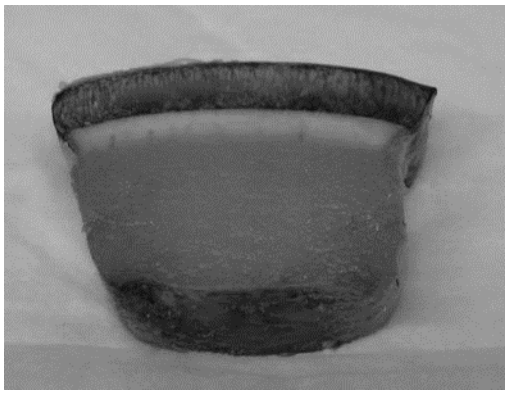
You can put the sample in a Ziploc or wrap it in foil and freeze it. Or you can ask for us to send you small sample bottles to put the samples in.

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

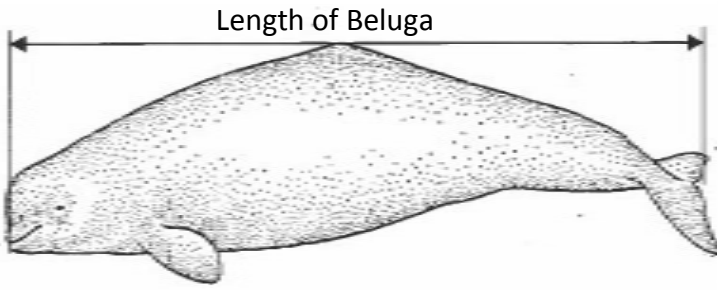


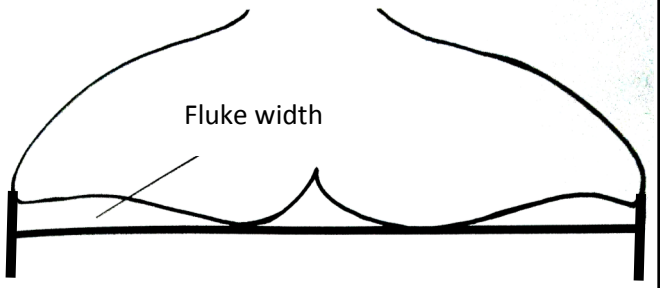
Beluga Samples

DATE HARVESTED:_____ **LOCATION OF HARVEST**:_____

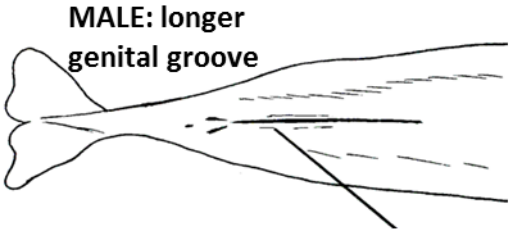
BELUGA COLOR (circle one) : White Gray-white Gray Dark-gray

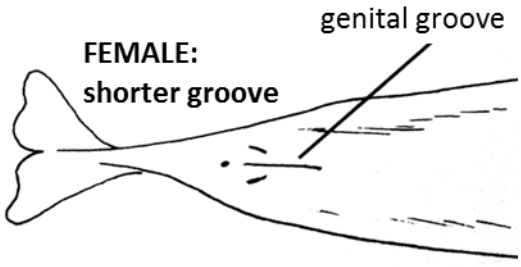
BELUGA LENGTH (measure from the lips to notch of tail in a straight line see drawing Below): ____feet _____inches OR _____cm **FLUKE WIDTH**: _____cm





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. _____
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7. _____
8. _____
9. _____
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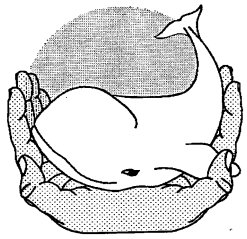


Alaska Beluga Whale Committee

Kotlik Hunter-tagger Training Report

The Alaska Beluga Whale Committee received funding to conduct hunter-tagger training and tagging in the Eastern Bering Sea during spring 2022.

Hunter-tagger training and tagging has been identified by ABWC delegates as one of the ABWC's highest priorities since at least 2009. At the 2019 ABWC annual meeting, the hunter-tagger project was identified by ABWC delegates as one of the most important projects to be included in the ABWC's 2020-2021 co-management proposal. Some comments from ABWC delegates: "Without information we can't make informed decisions. "We live in changing times, we need to understand our resource" *Tom Gray, ABWC Chairman.* "The world is changing. We don't have answers. We need information." *Jerry Ivanoff, ABWC delegate.* Obtaining movement data from belugas from the EBS is of great importance.

Six belugas have been satellite-tagged in the EBS to date: five by a hunter tagger from Nome and one through a cooperative hunter-ADFG ABWC-funded project. These local efforts have provided the only tagging data on the movements, migration, and overwintering areas of EBS belugas and the degree of overlap with other stocks in winter. However, the data from so few belugas are not adequate to characterize behavior of this stock of more than 9,000 animals. For example, a beluga tagged at Stebbins in May 2019 spent two weeks north of Bering Strait in early December, the first tagged EBS beluga ever to do so and very unexpected. This reinforces how small the EBS sample size is, and how important it is to tag additional whales. No other agency or institution is conducting beluga tagging in Alaska, and needs for information about movements and habitat use are critical in a time of rapidly changing climatic conditions and changes in human activities in the Arctic and subarctic.

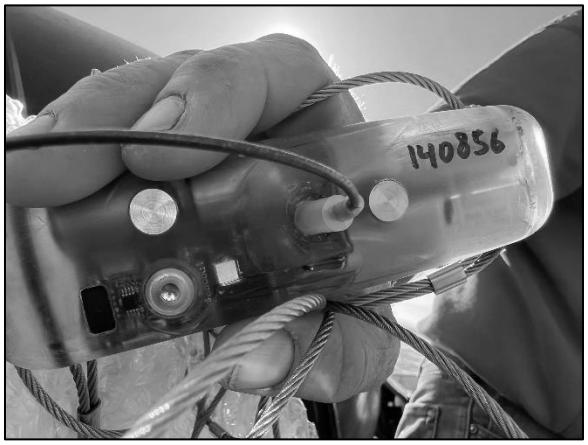
Cooperative ABWC-ADFG tagger training was scheduled to occur at Stebbins in May of 2020 and 2021. However, no tagger-training occurred in either year due to Covid-19. At the 2021 ABWC meeting, Eastern Bering Sea delegates suggested a revised approach to tagger-training. They noted that there were six delegates from the Yukon, all young hunters who often hunt together. It was recommended that the ABWC conduct group tagger training and develop a team of taggers who could work together in future years.

Kotlik is located on the southern shore of Norton Sound in an area where belugas are regularly present and harvested. Based on a successful ADFG-hunter tagging operation in Stebbins in 2019, hunters from the Yukon communities as well as an ABWC scientist experienced in tagging suggested Kotlik as a good location to conduct hunter-tagger training and attempt to tag one of more belugas. A custom beluga catching net designed by Tom Gray was ordered and delivered to Kotlik. The ABWC signed a contract with the Native Village of Kotlik for them to purchase food and fuel and pay travel and per diem for tagger-training participants. Part way through the project Kotlik made the decision not to fulfil the contract. Instead, the NSB was required to pay all expenses directly from the ABWC co-management grant.

Tagger training participants arrived in Kotlik on June 1st and remained until June 6th. The team camped near to the location where they hope to tag. Four boats participated: Tom Gray, Marvin Okitkun, Brandon Kameroff, Donovan Okitkun. Tagger-trainers included hunters Tom Gray, Marvin Okitkun and Donovan Okitkun and ABWC scientist Robert Suydam. Hunter tagger trainees included Brandon Kameroff and Grant Akaran. Three of the scheduled trainees had to cancel at the last minute, one due to work

obligations and two for medical reasons. Helper/crew members included Ronald Waska, Christina Paukan and Dana Okitkun.

Tagging efforts were plagued by bad weather and equipment failure. Few belugas were seen and no belugas were captured or tagged. This was the first attempt to capture and tag belugas near Kotlik; as such, it is not unexpected that no belugas were tagged. EBS delegates will discuss how to improve upon training and capture efforts in Norton Sound at the next ABWC annual meeting.



2022 Bristol Bay Aerial Surveys of Beluga Whales

Report to the Alaska Beluga Whale Committee

Lori Quakenbush, Justin Olnes, Anna Bryan
Alaska Department of Fish and Game

August 2022

Summary

Aerial surveys were flown by the Alaska Beluga Whale Committee and the Alaska Department of Fish and Game to count beluga whales in the Bristol Bay stock between 9 and 13 July 2022. A total of six surveys were completed. Each survey consisted of flying the coastlines between Dillingham and King Salmon, Alaska, as well as up rivers known to be used by belugas and across wide areas of Nushagak and Kvichak bays. Total survey counts ranged from 133 to 617 belugas. However, two surveys with low counts were not considered reliable due to poor observing conditions. The mean count of the remaining four surveys was 540 ± 91 whales (mean ± S.D). Applying correction factors for whales that were present but below the surface (2.62) and for calves that are difficult to see because of a lack of contrast between their color and that of the water (1.18), we estimate a minimum population of 1,669 whales. This number is slightly lower than the estimate determined by aerial surveys in 2016 using the same methods (n = 2,040 belugas).

Survey area and flights

Beluga whales of the Bristol Bay stock are known to occupy coastal areas within Nushagak and Kvichak bays and the lower parts of adjacent rivers in the summer months of June and July; very few belugas have been observed more than 0.9 km from shore (Lowry et al. 2008, Citta et al. 2016). Therefore, surveys to count belugas focused on the coastline from the Wood River near Dillingham west to the Igushik River and east along the coastline of Nushagak Bay into Kvichak Bay. The survey continued up the Kvichak River to the Alagnak (also known as the Branch) River, and then down the east coast of Kvichak Bay and up the Naknek River to the survey end at King Salmon (Fig. 1). The plane (an *Aero Commander* owned and operated by Clearwater Air Inc.) was positioned 0.9 km from the waterline at an approximate altitude of 304 m (1000'). In addition to the pilot and co-pilot, two observers and a recorder were present for each flight. One observer was positioned on each side of the airplane at bubble windows that allowed belugas to be counted within a 0.9 km strip on both sides of the plane simultaneously (Fig. 2).

Except for the first day (9 July) when a practice survey was flown from Naknek to Dillingham, two surveys were flown daily; the first departed Dillingham and arrived at King Salmon and the second departed King Salmon and arrived at Dillingham (Fig. 1, Table 1). Full surveys were flown on 10, 11, and 13 July; 12, 14, and 15 July were weather days with ceilings below survey altitude and 16 July was also forecast to have low ceilings. Surveys averaged 2.35 ± 0.23 hrs in duration and covered 567 ± 55 km (Fig. 3 and Table 1). Details of commuting, aerial survey, and refueling times are provided in Appendix A.

Belugas were mostly sighted within 0.9 km of the coastline and at the mouths of rivers and sloughs (Fig. 4). The largest groups were consistently observed at the mouths of the Snake and Wood rivers, as well as along the western coast of Kvichak Bay. Belugas were seldom observed farther up any of the surveyed rivers, and none were observed up the Naknek River. This distribution is the same as that described in previous aerial surveys (Lowry et al. 2008, Citta et al. 2019), and what was observed from satellite tagged beluga whales during the month of July (Citta et al. 2016).

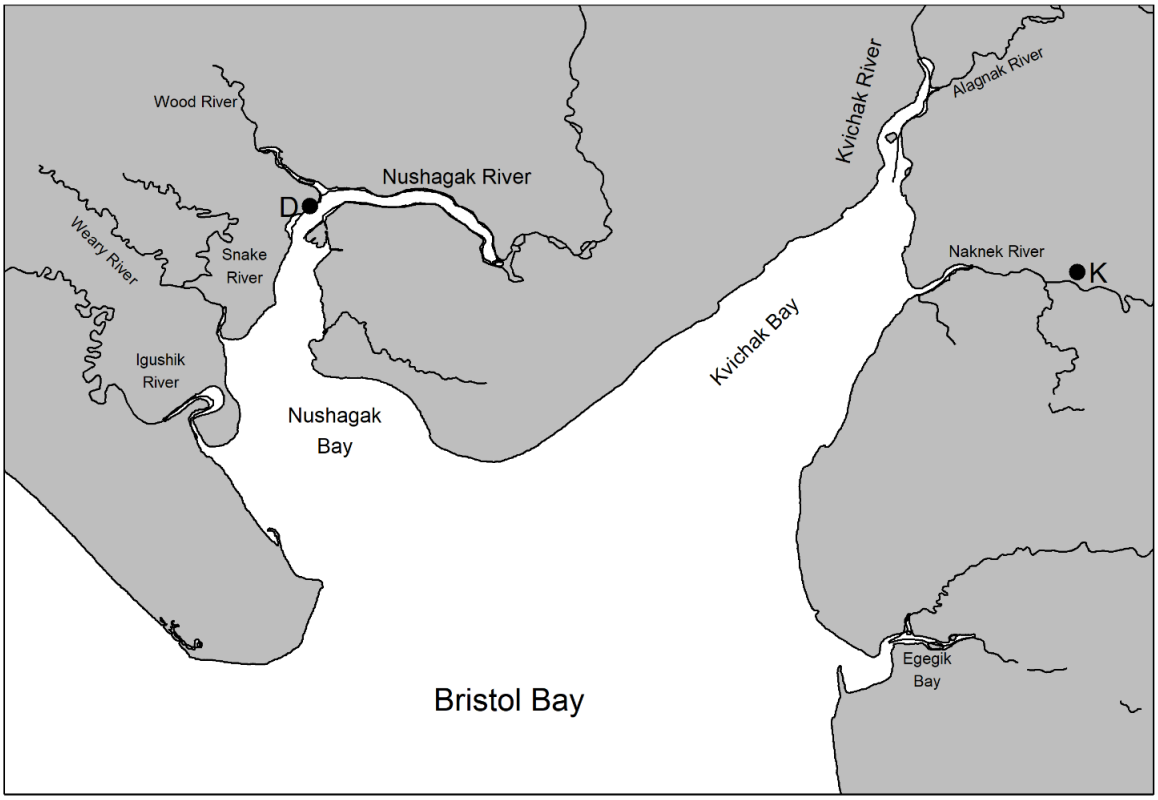


Figure 1. Map of Bristol Bay survey area. Surveys were flown along coastlines and rivers between Dillingham (D) and King Salmon (K).

Figure 2. Interior of Aero Commander from back to front showing recorder, left and right observers and pilot and co-pilot.

Table 1. Summary of survey flights during 2022 aerial surveys of Bristol Bay beluga whales.

Survey	Date and time	Duration (hrs)	Distance flown (km)	Viewing conditions	Whales counted
2	10 July 2022 09:54 – 12:17	2.38	593	Excellent, some glare, ripples	432
3	10 July 2022 13:15 – 15:25	2.16	503	Fair to excellent, ripples	616
4	11 July 2022 10:31 – 13:15	2.73	650	Good to poor, white caps	257*
5	11 July 2022 14:25 – 16:32	2.11	513	Fair to poor, white caps, fog	133*
6	13 July 2022 10:00 – 12:16	2.26	557	Good to excellent, some glare, flat water	496
7	13 July 2022 13:07 – 15:38	2.51	592	Good to excellent, some glare, flat water	617

*Surveys 4 and 5 from 11 July were not included in estimates of abundance.

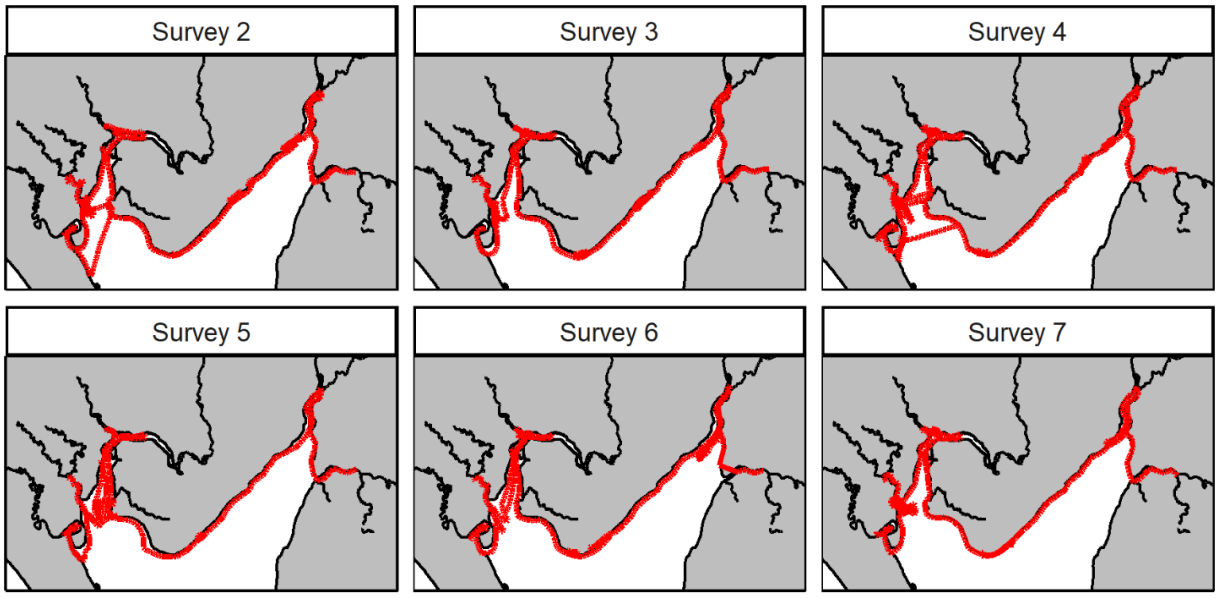


Figure 3. Flight paths for six aerial surveys of Bristol Bay belugas flown 10, 11, and 13 July 2022.

Beluga sightings and estimate of abundance

The two surveys on 11 July were not considered in the analysis due to poor observing conditions. High winds produced significant white caps and patches of fog below survey altitude, which made sighting belugas difficult. Therefore, counts from four surveys were available to estimate abundance. We counted an average of 540 ± 91 whales (mean ± S.D., CV = 0.17, range = 432–617). Two correction factors have been applied to produce previous estimates (see Citta et al. 2019). The first accounts for belugas that were present but below the surface (Frost and Lowry 1995) and the second accounts for gray-colored calves that are difficult to distinguish from the silty water of Nushagak and Kvichak bays (Brodie 1971). In applying these correction factors, our minimum population estimate is 540 × 2.62 × 1.18 = 1,669 beluga whales.

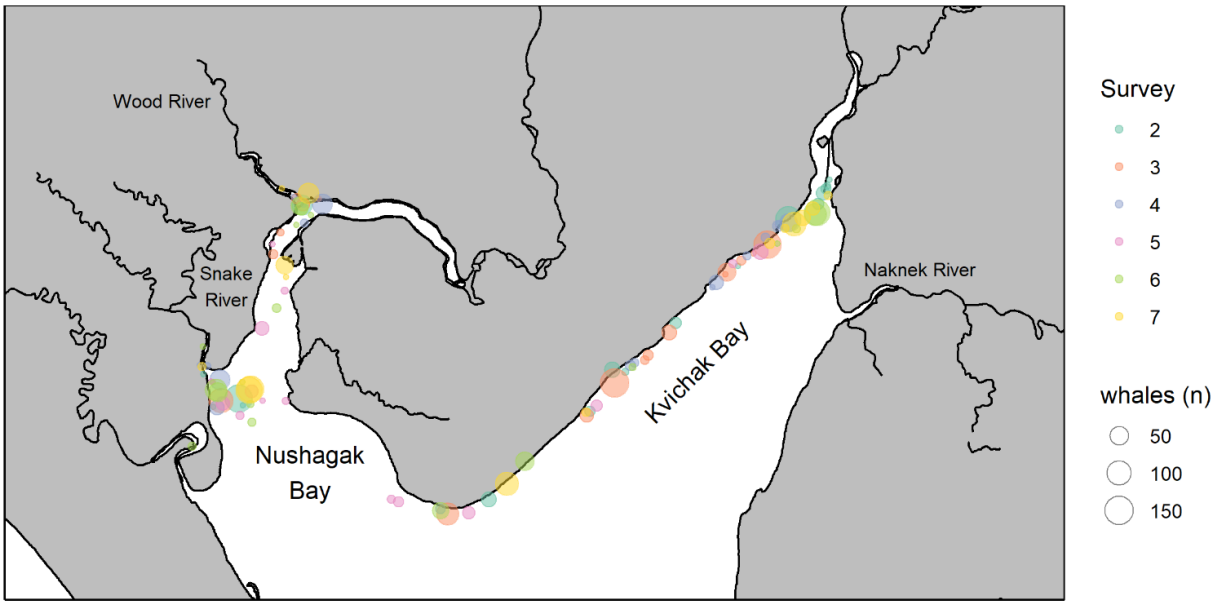


Figure 4. Locations of beluga whale sightings by group size and survey number during 2022 aerial surveys.

Using the same methods and correction factors, our 2022 estimate is lower than the estimate from aerial surveys in 2016, which was 2,040 belugas (Citta et al. 2019). Prior analyses of trend showed that aerial survey counts of belugas increased from 1993 to 2005 (Lowry et al. 2008). Growth appeared to plateau with the addition of count data for 2016, as counts for 2016 were similar to counts from 2004 and 2005. Citta et al. (2019) compared a simple linear trend model with a curvilinear trend model that would allow for the rate of growth to decline over time, as appeared to be the case, but the simple linear trend was the better fitting model. Including the 2022 count data, however, resulted in the curvilinear model as the better fitting model (likelihood ratio test, $F = 7.84$, d.f. = 1, 37, $p = 0.008$). This model suggests that between 1993 and 2005, the Bristol Bay population was growing, but this growth rate slowed between 2005 and 2016, eventually becoming negative (Fig. 5).

Discussion

Our 2022 abundance estimate of 1,669 suggests a possible decline in the Bristol Bay beluga stock. Mean counts for 2004, 2005, and 2016 were similar (637–660 belugas counted). Our mean count in 2022 was about 15–20% lower than these estimates (540 belugas counted). It is possible that the lower mean count we achieved is attributable to fewer useable surveys (n = 4), and that additional surveys would have provided more opportunities with good survey conditions to achieve higher counts. However, our counts for 2022 had a lower coefficient of variation (CV_{2022}=0.17) than other years (range 0.20–0.47). Because our counts were less variable than in prior years, it is unclear how much additional surveys would have affected our mean count. Our results suggest the Bristol Bay stock of belugas is not likely growing. An additional survey within the next few years is needed to determine whether the population has stabilized, or if a decline is occurring.

Interestingly, a population estimate from a genetic mark-recapture study conducted during 2002–2011 was 1,928 belugas (Citta et al. 2018). The two most recent population estimates from aerial surveys (2016 and 2022) are within the 95% confidence interval (CI) determined by this alternative method (95% C.I. = 1,611–2,337). Combined, both the aerial surveys and the genetic mark-recapture study suggest that Bristol Bay has supported ~1,600–2,000 belugas since the 2000s.

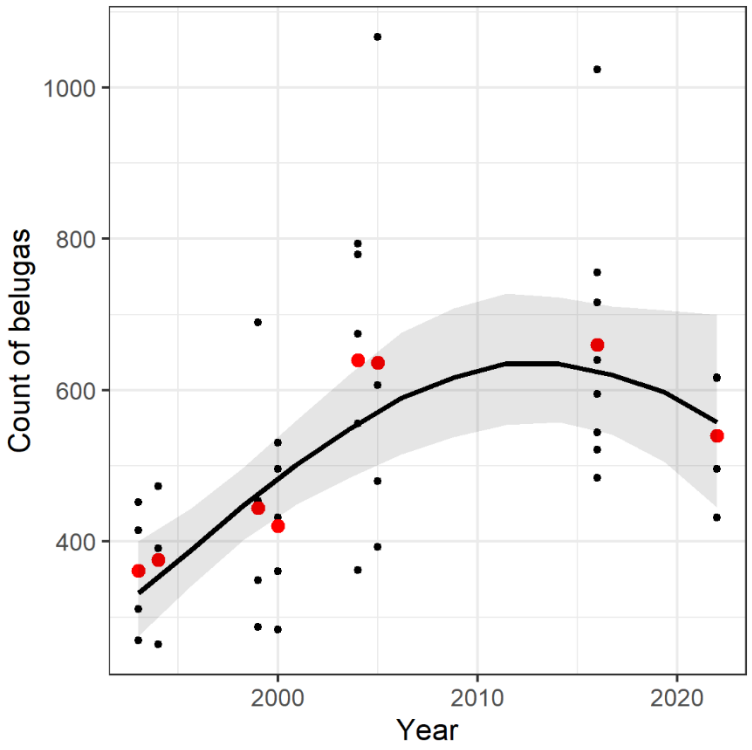


Figure 5. Trend in beluga counts from 1993 to 2022. Black points are actual counts, red points are the mean count for each year, and the black line is the fitted trend (± 95% C.I. gray shading).

Record breaking numbers of sockeye salmon (*Oncorhynchus nerka*) returned to Bristol Bay in 2022. It is unknown if this had any effect on the distribution of belugas in Bristol Bay during our survey. The abundance of this prey resource, however, may have allowed additional non-surveyed habitat to be available for foraging in 2022. Reports from local fishermen suggested that belugas are sometimes observed farther south at Egegik Bay during this time of year (Fig. 1). Future surveys should consider adding this area.

Acknowledgements

The survey was funded by a NOAA grant to the Alaska Beluga Whale Committee administered by the North Slope Borough, Department of Wildlife. Clearwater Air pilots Andrew Harcombe, Jacob Turner, and Dana McDonald provided safe and excellent survey support. We appreciate their patience and expertise in flying different approaches during multiple passes to best count large groups. We thank Kim Goetz and Kim Sheldon with NOAA Fisheries for providing the computer software used during the survey. This survey was conducted under a Marine Mammal Protection Act permit # 24334 issued to the Alaska Department of Fish and Game and is approved under ADF&G's Animal Care and Use Committee Protocol # 0027-2022-40.

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Lowry, L.F., Frost, K.J., Zerbini, A., DeMaster, D., and R.R. Reeves. 2008. Trend in aerial counts of beluga or white whales (*Delphinapterus leucas*) in Bristol Bay, Alaska, 1993–2005. Journal of Cetacean Research and Management 10: 201– 207.

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Table 2. Counts of groups for which at least one count was > 100 beluga whales. Notes for each count are provided. Final count is in bold text.

Survey	Group location	Count	Details
2	Mouth of Snake River at ~ 10:11	122	First pass, whales counted on both sides by AB + LQ
		104	Second pass, counted by LQ
		139	**Third pass, 138 counted by LQ and 1 from AB**
		130	Fourth pass, LQ count 130
	Along coast heading E from Nushagak to Kvichak at ~ 11:49	81	First pass, counted by AB
		102	Second pass, counted by LQ
		92	Third pass, counted by AB
		112	**Fourth pass, counted by LQ**
3	West coast of Kvichak Bay at ~ 13:39	120	First pass, counted by LQ
		137	**Second pass, counted by LQ**
	Along coast heading W from Kvichak to Nushagak at ~ 13:51	225	First pass, counted by LQ
		178	Second pass, counted by LQ
		95	Third pass, counted by AB
		150	Fourth pass, counted by LQ
		130	Fifth pass, counted by AB
		153	**Sixth pass, counted by LQ**
	Mouth of Snake River at ~ 14:57	47	First pass, counted by AB
		65	Second pass, 15 counted by LQ, 50 counted by AB
		83	Third pass, counted by AB
		103	**Fourth pass, counted by LQ**
4	Mouth of Snake River at ~ 10:47	118	First pass, counted by AB, poor conditions due to white caps and distance to belugas, likely overcount
		95	Second pass, counted by AB, white caps
		61	**Third pass, counted by LQ**
		28	Fourth pass, 2 counted by LQ, 26 counted by AB
		46	Fifth pass, counted by LQ
		46	Sixth pass, 6 counted by LQ, 40 counted by AB, while flying W transect
6	Mouth of Snake River at ~ 10:09	62	First pass, counted by AB
		73	Second pass, 21 counted by AB, 52 counted by LQ
		132	**Third pass, 54 counted by LQ, 78 counted by AB** (group was too spread out to fly around and so split by flying up the middle)
	Mouth of Kvichak River ~ 11:40	111	First pass, counted by LQ
		109	Second pass, counted by LQ
		198	**Third pass, 79 counted by LQ, 119 counted by AB**
		196	Fourth pass, 64 counted by LQ, 132 counted by AB
		187	Fifth pass, 122 counted by LQ, 65 counted by AB
7	Along W coast of Kvichak Bay at ~ 13:28	**141**	**First pass, 113 counted by LQ, 28 counted by AB**
		46	Second pass, 46 counted by LQ, too much glare
		113	Third pass, 109 counted by LQ, 4 counted by AB
	Mouth of Snake River at ~14:50	63	First pass, 18 counted by LQ, 45 counted by AB
		162	Second pass, counted by AB
		188	Third pass, 176 counted by AB, 12 counted by LQ
		162	Fourth pass, counted by LQ
		210	Fifth pass, counted by AB from higher altitude (1500') because group spread broadly
		238	Sixth pass, counted by LQ from higher altitude (1500')
		252	**Seventh pass, 125 counted by LQ, 127 counted by AB from higher altitude (1500')**

Appendix A. Commuting, aerial survey, and refueling times by date for 2022 Bristol Bay beluga whale surveys.

Date	Survey	Time	Duration	Action
9 July	1	11:44 – 12:57	1 hr 13 min	Commute Anchorage to Naknek River
		12:57 – 14:07	1 hr 10 min	Partial survey from Naknek to Dillingham.
10 July	2	09:50 – 09:54	4 min	Depart Dillingham
		09:54 – 12:17	2 hr 23 min	Survey 2
		12:17 – 12:21	4 min	Land in King Salmon
		12:21 – 13:06	45 min	Refuel in King Salmon
	3	13:06 – 13:15	9 min	Depart King Salmon
		13:15 – 15:25	2 hr 10 min	Survey 3
		15:25 – 15:35	10 min	Land in Dillingham
11 July	4	10:21 – 10:31	10 min	Depart Dillingham
		10:31 – 13:15	2 hr 44 min	Survey 4
		13:15 – 13:25	10 min	Land in King Salmon
		13:25 – 14:15	50 min	Refuel in King Salmon
	5	14:15 – 14:25	10 min	Depart King Salmon
		14:25 – 16:32	2 hr 7min	Survey 5
		16:32 – 16:45	13 min	Land in Dillingham
12 July	-	-	-	No surveys-low ceiling and high winds
13 July	6	09:42 – 10:00	18 min	Depart Dillingham
		10:00 – 12:16	2 hr 16 min	Survey 6
		12:16 – 12:25	9 min	Land in King Salmon
		12:25 – 12:57	32 min	Refuel in King Salmon
	7	12:57 – 13:07	10 min	Depart King Salmon
		13:07 – 15:38	2 hr 31 min	Survey 7
		15:38 – 15:50	12 min	Land in Dillingham
14 July	-	-	-	No surveys- low ceiling and high winds. Forecast for poor weather to continue for several days. Ended survey efforts for 2022.
	-	12:45 – 14:30	1 hr 45 min	Commute from Dillingham to Anchorage

Alaska Beluga Whale Committee

Draft RESEARCH PLAN

November 2022

INTRODUCTION

One of the main purposes of the Alaska Beluga Whale Committee (ABWC) is to "facilitate and promote wise conservation, management, and use of beluga whales based on the best available information and socioeconomic considerations." To this end, the ABWC regularly collects information about beluga whales needed to make informed decisions about conservation, management, and use. Since its inception in 1988, the ABWC has led the effort to collect data on belugas and beluga hunting in western and northern Alaska.

Below is a brief overview of the most important data needs, timing for data collection, and who should be responsible for collecting information about belugas and beluga hunting. The sections have been organized based on information needs as opposed to research methods. Some research methods are outlined in the sections but there may be other options for how to best collect data, especially as technology improves.

Highest Priority

STOCK STRUCTURE

Belugas occur in distinct geographical areas, especially during the early summer. Studies have shown that belugas in those distinct areas are genetically different from adjacent stocks, although related. This information resulted from the collection of tissue samples, primarily by hunters but also provided by scientists. Other information about distribution and movements also contributed to the understanding of stock structure of belugas. In western Alaska, there four stocks; Bristol Bay, eastern Bering Sea, eastern Chukchi Sea and Beaufort Sea (which summers primarily in Canadian waters). There is also likely a separate stock in Kotzebue Sound, which is now being investigated.

Understanding stock structure (i.e., the number of stocks, distribution, and when and where they overlap) is vitally important for sustainability of belugas. There are several examples where individual stocks were not identified and their abundance was not known. The stocks were overhunted because

they returned to the same areas year after year and too many belugas were harvested. Therefore, information for all aspects of beluga biology needs to be collected for each distinct stock.

Frequency of sample collection

Tissue samples from harvested belugas should be collected and archived annually. If possible, a skin sample should be collected from every beluga harvested in Alaska. Samples provide genetic information about the different beluga stocks and can be used to identify the sex of the beluga and can sometimes be used for other things (e.g., hormone and contaminant levels).

Continued collection and archiving of samples

Hunters and scientists associated with the ABWC have collected most of the beluga samples in Alaska. Collections need to continue and increased effort should be made by all hunters and researchers to collect samples from all belugas whenever the opportunity arises. To date, samples have been archived primarily at NMFS and Florida Atlantic University but also at NSB.

HARVEST LEVELS

Prior to the creation of the ABWC, there was little information on how many belugas were harvested in Alaska. What existed was focused on specific villages or regions with very specific research goals, often concerning the biology of belugas instead of the documentation of harvest. The ABWC implemented a system where hunters from beluga hunting communities and regions documented the annual harvest by village and reported that information at the annual ABWC meetings. This approach is on-going. Harvest data include information about the number of belugas landed and the number struck and lost.

Landed

Relatively complete harvest data for landed belugas have been collected and published for western and northern Alaska. Hunter representatives are the primary source of this information, but regional representatives and agency scientists also contribute information. Harvest data exist from 1988 to present and are readily available. In addition to numbers landed, the length or color (i.e., age) and sex of each landed beluga is also important and needed. That information is sometimes reported and is available, but only for a subset of the larger harvest data. A greater effort should be made to report length/color and sex of each landed beluga.

Struck and lost

Collecting information on struck and lost whales is important because some of those belugas are likely to have died and contribute to the overall human harvest. Unfortunately, collecting struck and lost data is difficult because there are many beluga hunters, hunting frequently occurs from individual boats or from the ice edge, and hunters do not routinely record or report that information.

In areas where there is a community hunt and it occurs in shallow water, it is much easier to document how many whales may have been struck and lost because beluga carcasses will often float 3 or 4 days after death and can be documented. Care must be taken, however, because sometimes the skin and blubber can be retrieved and used from those belugas, thus they may not actually be struck and lost. The ABWC has been making efforts to do a more complete job of collecting information about struck and lost belugas, but more is needed.

Frequency of data collection

Data on harvest, both numbers landed and those struck and lost, should be collected annually. Length (or color) and sex for each whale should also be recorded.

Continued collection and archiving of data

The ABWC has collected most of the harvest data for decades and is in the best position to continue doing so. The ABWC also compiles and archives these data annually and shares them with the NMFS and with the International Whaling Commission.

POPULATION ESTIMATION

A good estimate of the number of belugas in each stock is critically important for understanding how many belugas can be sustainably harvested from each stock. Aerial surveys have been the primary method for counting belugas for population estimates but other methods have also been used, such as genetic mark-recapture using skin biopsies of live belugas. The ABWC in collaboration with the Alaska Department of Fish and Game (ADFG), the National Marine Fisheries Service (NMFS), the North Slope Borough (NSB) and others have contributed to population estimates for most of the stocks of belugas in western and northern Alaska. The Canadian Department of Fisheries and Oceans (DFO) has had primary responsibility for collecting population estimates for the Beaufort Sea stock.

Frequency of data collection

New population estimates for each stock of belugas should be done every ~7 years. Seven years is the recommendation from NMFS because changes in population size (up or down) should be detectable in 7 years. Populations can change and regular monitoring of population size and trend, also known as status, is necessary to ensure sustainability of each stock. Because surveys are influenced by weather and other factors, it may be necessary to conduct surveys a few years in a row during a 7-year period to get a good estimate.

Collection and archiving of data

Although the NMFS has primary responsibility for funding these surveys, surveys have been conducted and supported by NMFS, ADFG, and NSB in collaboration with the ABWC. The ABWC has also helped to fund surveys and analyze survey data with additional support from the Bureau of Ocean Energy

Management (BOEM). Data are archived with the agency who conducted the survey but reports and sometimes data are shared with NMFS, ABWC and in some cases data and analyses are reviewed and endorsed by the IWC Scientific Committee.

Next Highest Priority

MOVEMENTS AND DISTRIBUTION

Documenting movements and distribution for each stock of belugas is important for several reasons, including to appropriately assign harvest to the correct stock, determine habitat use, and to understand and mitigate potential impacts to belugas, especially from human activities (e.g., shipping, oil and gas exploration and development, mining, etc.) and potentially from climate change. Some information has been documented through Indigenous Knowledge (IK)/Traditional Knowledge (TK) and aerial surveys, and genetics, however belugas in western and northern Alaska have been tracked with satellite-linked tags which resulted in a much better understanding of movements and distribution of each stock.

Frequency of data collection

Documentation of IK/TK, surveys, and tagging are not needed annually. Information may be needed periodically to determine possible changes in movements and distribution, as they relate to climate change or possible risks from human activities. The frequency of those efforts will be different for each stock depending on the size of the range of each stock and current understanding of variability in movements.

Collection and archiving of data

ADFG, NSB, and the ABWC have tagged belugas in western Alaska with support and assistance from the respective beluga hunting communities. NMFS assisted with tagging in Bristol Bay. DFO and their Inuvialuit partners tagged belugas from the Beaufort Sea stock. All organizations continue to be in a good position to work with communities for future tagging so long as appropriate research questions are explicit. Data from tagging has been shared broadly through presentations at ABWC and other meetings and through publications. Funding for tagging has been provided by ABWC, NMFS, BOEM, NSB, Office of Naval Research and others.

HEALTH, FOOD HABITS/DIET, REPRODUCTION, ETC.

Data and samples collected from harvested belugas can provide information about the health status, food habits, reproduction, ageing and other aspects of beluga biology. These types of information can be very helpful supplemental information to support population, stock structure, and harvest data. Long-term studies on health, diet, reproduction, and other specific questions can be very helpful for assessing possible impacts from climate change or as a surrogate for assessing population status.

Frequency of data collection

The frequency and duration of data collection for these types of studies depend on the specific study questions. One challenge with addressing these types of studies is obtaining enough samples per time-period.

Collection and archiving of data

No specific agency is responsible for these types of studies, however, the ABWC, the NSB and ADFG are well suited and experienced for collecting adequate numbers of samples and data over the necessary period. One important prerequisite will be the close coordination and communication among hunters, communities, and researchers.

SUMMARY

Stock structure, population size and trends, and harvest levels are the most important information to collect to ensure sustainable harvest of beluga populations. Other data are also important such as movements and distributions, health status, food habits and reproduction, but are of a lower priority. All studies undertaken by agencies, universities, and other researchers on beluga whales should be coordinated with the ABWC, local communities, and relevant regional organizations.

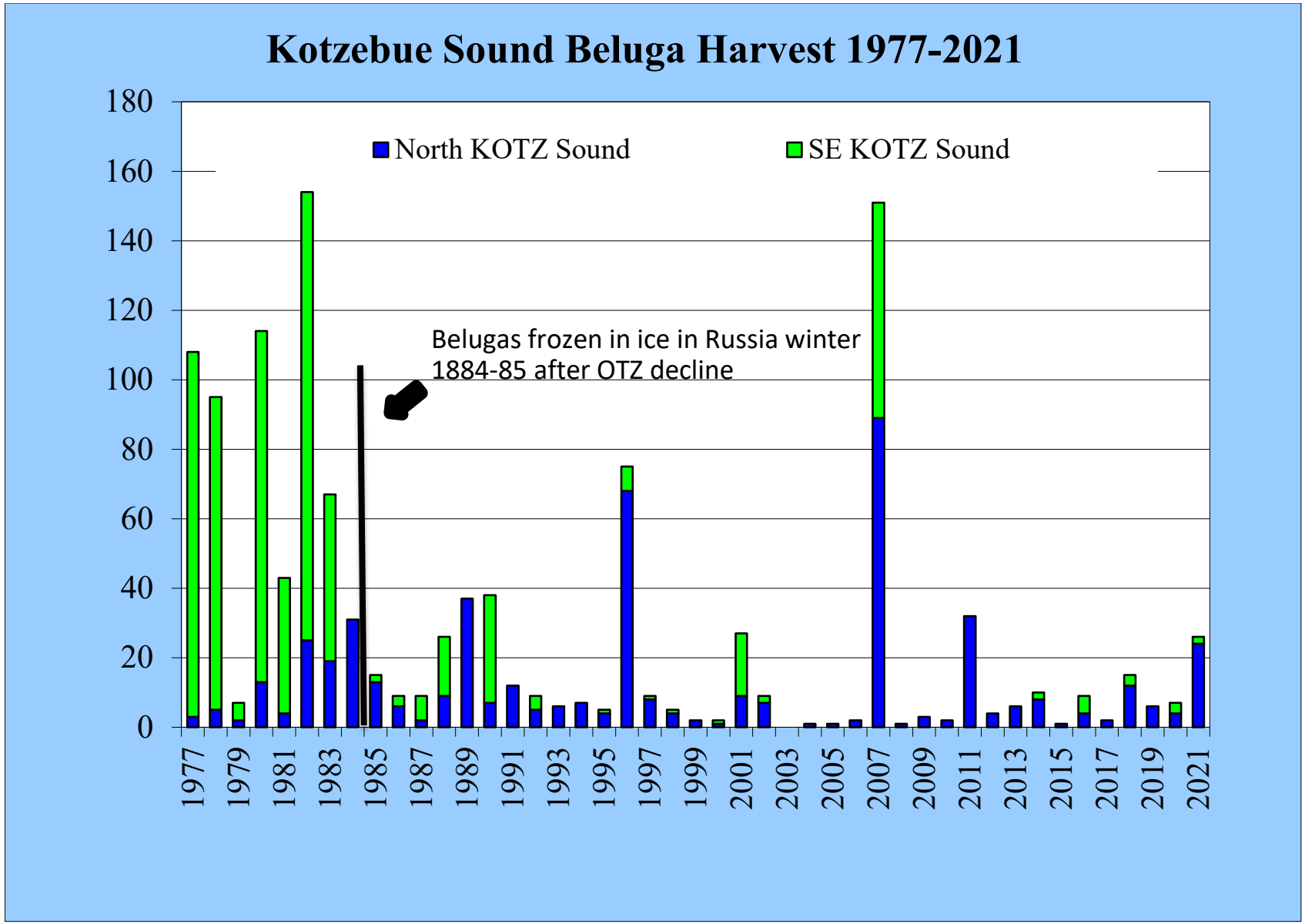
Funding for studies should in many cases come from the NMFS but other agencies and the ABWC should also pursue funding to collect the needed information.

Regular information about beluga stocks is needed by the ABWC, NMFS, and others to make informed decisions about the conservation, management, and use of beluga whales.

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. All of his many friends in the Alaska Beluga Whale Committee will miss him.


Kotzebue Sound Beluga Harvest 1977-2021
North KOTZ Sound
SE KOTZ Sound
Belugas frozen in ice in Russia winter 1884-85 after OTZ decline
180
160
140
120
100
80
60
40
20
0
1977
1979
1981
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2021

Kotzebue Sound beluga history

70s-83	High harvests.
1978-84	Harvest monitored, samples collected (teeth, stomachs, reproduction) by ADFG
1984	Eschscholtz Bay beluga harvest crashes.
1988	Aerial surveys of belugas in Kotzebue Sound (previously 1000, now less than 200) (ADFG). Nathan Hadley notes many fewer belugas.
1989	Nathan Hadley, Buckland, recommends beluga management plan. Concerned about increasing boat traffic and that hunters no longer leave Chamisso Island and Choris Peninsula alone to protect females with young.
1990	Nathan Hadley, Buckland, concerned about disturbance of beluga females with calves near Chamisso Island and Franky Scott's cabin. Now young hunters go where they should not.
1992	ABWC genetics study begins
1996	Ross Schaeffer, ABWC Chairman, and Willie Goodwin, Kotzebue ABWC delegate, said the Kotzebue hunters will hold meetings (and include other Kotzebue Sound beluga hunters) to make proposals about the hunt and to discuss values, respect, etc.
1996	Aerial surveys of Kotzebue Sound (ABWC), few belugas seen.
1998	Aerial surveys of Kotzebue Sound (ABWC), one beluga seen. Genetics samples needed.
2001	Aerial surveys of Kotzebue Sound (Willie Goodwin + Kivalina people with Cominco funds), few belugas seen.
2001-03	Enoch Shiedts and ABWC Chairman Ross Schaeffer propose Regional Beluga Plan for Kotzebue Sound. To include guidelines about methods, appropriate ways of hunting, avoid females with young, etc. Visited Kivalina, will go to Buckland, Noatak. The plan is to start a local Marine Mammal Committee in Kotzebue and make it so others can join at a later date. Buckland also wants to join. Progress very slow. Guidelines are needed for young people.
2002	O'Corry-Crowe scientific paper indicates Kotzebue Sound belugas are genetically distinct from belugas harvested at Point Lay.
2005-06	ABWC recommends Kotzebue Sound develop a regional management plan for belugas. Willie Goodwin encourages Maniilaq to help. If belugas come back, harvest must stay small so belugas can increase.
2006	Samples from Kotzebue Sound for genetics badly needed.
2007	First pilot beluga acoustic study Kotzebue Sound.
2008	Kotzebue Sound beluga newsletter (abundance, harvest, genetics, acoustics study), 600 copies.
2013-16	Beluga acoustics study in Kotzebue Sound (Castellote et al.)..

2013-15 The Buckland Beluga Whale Traditional Ecological Knowledge (TEK) Project; included TEK interviews and Wisdom Keeper Workshop in Buckland (funded by Buckland IRA; Buckland plus scientists). Recommended regional management plan, with plan put together by hunters.

2016 Native Village of Buckland received Tribal Wildlife Grant from FWS to develop a youth education program and a Kotzebue Sound Beluga Management Plan. Meetings (Buckland, Deering, Kivalina, Kotzebue, Noatak).

2016 Kotzebue Sound Wisdom Keeper Workshop (provide beluga information, develop draft management plan). Buckland, Deering, Kivalina, Kotzebue, Noatak, scientists, ABWC.

2016-17 Noatak Beluga Whale Traditional Knowledge Project. Draft Kotzebue Sound Beluga Plan developed.

2017 Kotzebue Sound Workshop (ABWC funded). Revise draft plan. Buckland, Deering, Kivalina, Kotzebue, Noatak, scientists, ABWC.

Kotzebue Sound beluga newsletter (draft plan, planning process, biology) – 600 copies mailed

2018 Kotzebue Sound Workshop. Finalize draft plan. The draft plan encourages no hunting in June or July, no hunting of females with calves, no use of nets, and no hunting in safe zones in Selawik and Kobuk lakes, Goodhope Bay, Kiwalik Lagoon, and Eschscholtz Bay. Genetics samples are badly needed to understand stock structure. Harvest highest since 2011.

2020 Kotzebue Sound beluga newsletter (draft plan, planning process, biology) – 225 copies mailed to TCs and Kotzebue Sound hunters.

Bring Belugas Back poster to TCs, posted in Buckland, Deering, Kivalina, Kotzebue, Noatak.

2020-22 Resolutions to Adopt Tribal Beluga Management Plan signed by Buckland, Deering, Kivalina, Kotzebue, Noatak.

2021 Greg O'Corry-Crowe and ABWC publish scientific paper on status of Kotzebue Sound belugas as a separate stock.

2022 Native Village of Kotzebue declines ABWC plan to hold Beluga Plan implementation workshop prior to hunting season.

Tribal Kotzebue Sound Beluga Plan

March 2020

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.

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.

3. Incorporate belugas and beluga hunting into the school curriculum/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 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 and in the collection of beluga samples, beluga research, and related marine research

IX. ADOPTION, DURATION, AND MODIFICATION

This Agreement will become effective when signed by the Tribal Councils of Kotzebue Sound (Buckland, Deering, Kivalina, Kotzebue, Noatak), and may be amended at any time by written agreement these Parties.

X. SIGNATORIES

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

Tom Gray, Chairman Alaska Beluga Whale Committee	Date	Kathryn Frost, Secretary Alaska Beluga Whale Committee	Date

Name	Village	Date
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