

**Western Arctic Caribou Herd Working Group
DRAFT – 2014 Meeting Summary**

December 17-18, 2014
Hilton Hotel, Anchorage, AK

Approved by WACH Working Group at December 2015 meeting

The Western Arctic Caribou Herd (WACH) Working Group (WG) met in Anchorage on December 17-18, 2014 (agenda, Attachment 1). The WG's Technical Committee met in Anchorage on December 16, 2014 (Attachment 2). The following is a summary of meeting presentations and discussion. Motions passed at the meeting are shaded in gray below and listed in Attachment 3. Assignments are highlighted in yellow below and listed in Attachment 4.

Wednesday, December 17, 2014

I. Call to Order – 8:32 a.m.

- a. Invocation: Raymond Hawley offered the opening invocation.
- b. WACH WG Roll Call / Establish Quorum

Working Group Seat	Voting Chair	Alternate
1. Anchorage Advisory Committee	<i>George Jacoby</i>	<i>Neil DeWitt</i>
2. Buckland, Deering, Selawik	Ron Moto Sr	<i>Percy Ballott</i>
3. Anaktuvuk Pass, Nuiqsut.....	<i>Isaac Kaigelak</i>	<i>Esther Hugo</i>
4. Elim, Golovin, White Mountain	Charles Saccheus.....	<i>Morris Nakaruk</i>
5. Fairbanks Hunters	Allen Barrette	<i>Rod Arne</i>
6. Hunting Guides.....	Phil Driver	<i>Bob Hannon</i>
7. Kivalina, Noatak	Raymond Hawley	<i>Mike Adams</i>
8. Kotzebue	Cyrus Harris	<i>Willie Goodwin</i>
9. Koyukuk River.....	Pollock Simon, Sr.....	<i>Jack Reakoff</i>
<i>(Huslia, Hughes, Allakaket, Bettles, Wiseman)</i>		
10. Lower Kobuk River	Vern Cleveland, Sr (Vice Chair).....	<i>Robert Sampson, Jr.</i>
<i>(Noorvik, Kiana)</i>		
11. Middle Yukon River	Benedict Jones.....	<i>Micky Stiekman</i>
<i>(Galena, Koyukuk, Nulato, Kaltag)</i>		
12. Point Hope and Point Lay.....	<i>Steve Oomituk</i>	vacant
13. Nome.....	<i>Charlie Lean (2014 mtg. only)</i>	vacant
14. Conservationists.....	<i>Darcie Warden</i>	Tim Fullman
<i>(WG needs to vote to approve alternate at 2015 meeting)</i>		
15. Northern Seward Peninsula	<i>Elmer Seetot, Jr.</i>	Christine Komanaseak
<i>(Teller, Brevig Mission, Wales, Shishmaref)</i>		
16. Reindeer Herders Association	Tom Gray	<i>Alfred Karmun</i>
17. Southern Seward Peninsula	Morris Nassuk	<i>Leo Charles, Sr.</i>
<i>(Koyuk, Shaktoolik, Unalakleet, Stebbins, St. Michael, Kotlik)</i>		
18. Transporters	<i>Jared Cummings</i>	<i>Judy Jespersen</i>
19. Upper Kobuk River.....	<i>William Bernhardt</i>	vacant
<i>(Ambler, Shungnak, Kobuk)</i>		
20. Atqasuk, Barrow, Wainwright.....	<i>Oliver Peetook</i>	vacant

Italic print are members or officers voted in at the 2014 meeting (see below); Blue text = vacancies; strike-out text = not present.

Initial roll call showed 17 members present; quorum of >50% was met. One alternate member arrived late (due to inclement weather), for a final attendance of 18 out of 20 Working Group members.

- c. Introduction people in the audience (See Attachment 5)
- d. Approval of Agenda: Motion to approve agenda as presented, by Ron Moto, Sr., seconded by Cyrus Harris. Motion carried unanimously.
- e. Member Appointment: Motion by Tom Gray, second by Allen Barrette, to accept nomination of Charlie Lean to Chair 13 (Nome) for the 2014 Working Group meeting. Motion carried unanimously.

II. Guest Elder – Mrs. Minnie Gray, Ambler (verbatim, as translated)

Mrs. Minnie Gray from Ambler spoke to the Working Group as a guest elder. Ms. Helena Jones, her niece, assisted with translation.

My name in Inupiat is Aliitchak. I grow up and live at Shungnak and then later on we moved to Ambler. When we were growing up there was hardly any caribou around our area. They were distant. But later on they start coming around and we have caribou.

We try to have meat like porcupine or ducks and geese and once in a while caribou arrive but not very often, very few in our area.

When the caribou start arriving Inupiat culture said don't block the caribou that is about to cross or coming in because the migration is not to be interrupted. The first one cross and then after the first one cross then it's okay to hunt.

When the caribou finally arrive nobody wastes anything. The fur is saved and dried for winter use and long ago before the caribou started to come around, men used to go up on the north side and walk after the caribou and they would have dogs, maybe one or two to pack the meat that they would bring back from the north. And they dry them up there and bring them and in summertime when you get the caribou they dried everything, no waste, and that would be for winter use.

When they bring the fur leggings and everything they make them for mukluks and everything is not wasted. Summertime you know they dry the meat and the fat and that's used in wintertime. When Christmas time come around they make Akutuk, fat, and the dry meat is used year round when they bring it from the north. That's when caribou was not abundant in our area but they have to go north.

When we were young we camped and it's not easy, we have a hard time. We don't waste anything. So all the leggings and fur is used we don't throw them out in the country to waste. Everything is taken home and nothing is wasted. You don't leave things out in the country, everything is taken home. Our elders always tell us don't throw anything out to be wasted.

(The part that she's talking about), you know when you get it in the fall time and you dry, that's for winter use. When they come around in the springtime you take the bones and you smash them and boil them and the fat goes up on the surface and you collect the bone fat. And then you dry caribou stomach inside out. Clean it, dry it, and you put the bone fat in there and you eat it with dried meat, dry fish. Yoy! Good meat! Good eating!

The caribou skin is used in many ways. You could use it for a sleeping bag, for a mattress. The winter fur is better than the springtime because it doesn't shed as much, so all the time winter fur is better even for mukluks, for waterproof mukluks. And that's how we lived way back in my days.

Our elders always advised us not to be wasteful. You take everything home and you dry it. But nowadays it seems the young ones would kill and just leave them out and that is wasteful. And our elders, our culture, we were told that's not a thing to do. The climate will change. The stories were told way back that things will start changing, including the climate.

Nowadays there's no respect from mostly young ones and our children are not respecting or learning as much as they should. We heard way back that weather from the south will go to our area and our area climate will go to where there used to be nice weather, warm weather, kind of reversed. I heard it when I was young.

Fishing in summertime: We used to seine on the eddies or when they stop where there's a hole by the sand bar. And we would dry the fish. Nowadays the seine net is easy, buy it and you have a seine net. Way back we used to use willows. We twisted the willows and make nets and we used spruce roots for the rope. Of course we make floaters out of wood, and add sinkers, and that used to be our seining net way back. And we kept the willow net wet in the river so it won't dry.

Long ago in our area the Kobuk River there was no moose, no beaver, but they start coming in from the south, or more like maybe from Yukon way. When the beaver arrived, it's so abundant and started building dams on our fishing sloughs and they're all over now. When the people, the Inupiaq, says when they eat the beaver they throw the bones in the river, they *should* have thrown them in the lake, and that's why Inupiaq say they've become abundant.

Q – How about the story about when you were 73 and you hunted caribou?

When my cousin Sarah and I were camping, the caribou come around. I was 73 and I shot three caribou, and when I didn't shoot them well my cousin Sarah made sure they are dead and then they took them to the camp, cut them up dry them, and that's how we had them when I was 73. We dried the skins. But now today I am not able to do what I used to do when I was 73. And I want to thank the Lord for providing all these years and I am happy I am here today.

Q – How far north are the beaver now? Are they around Barrow?

I think that it's the whole Kobuk River. The beaver was thrown in the river and that was "no, no" ... they should have thrown in the lake.

Q – What do you think about the Ambler mining project, the road?

I approve of the road because nowadays the airplane is getting more and more expensive. It would be cheaper. It is my thought that the road would be a good thing to do.

Vern Cleveland noted that Mrs. Gray moved from Shungnak to Ambler in 1961. Helena Jones added that the first village move was in 1958 and then people started coming in after that.

III. Caribou Roundtable (p. 21 in WG Binder)

The WG divided into four small regional groups for Caribou Roundtable discussions and then came back in a large group to share what they had discussed. The notes from each small group are included in Attachment 6 and were summarized in presentations to the full group. The US Fish and Wildlife Service (USFWS) Selawik Refuge staff enters the roundtable notes into a

database each year to document this shared traditional and local knowledge. The Caribou Roundtable questions are sent to Working Group members in advance of the meeting each year, so they can circulate them to others in their communities and collect additional traditional and local knowledge to share during the roundtable.

IV. School Presentations – Nome and Unalakleet Schools

Students from the Nome and Unalakleet High Schools participated in caribou collaring at Onion Portage in September 2014, collaring animals from the middle of the migration. Unalakleet High School students Kirstian Haugen and Bobbi Storms presented a slide show of their activities and expressed thanks to the Working Group and agencies for the opportunity (handed in written thank you notes from students who couldn't attend the WG meeting). They noted the following:

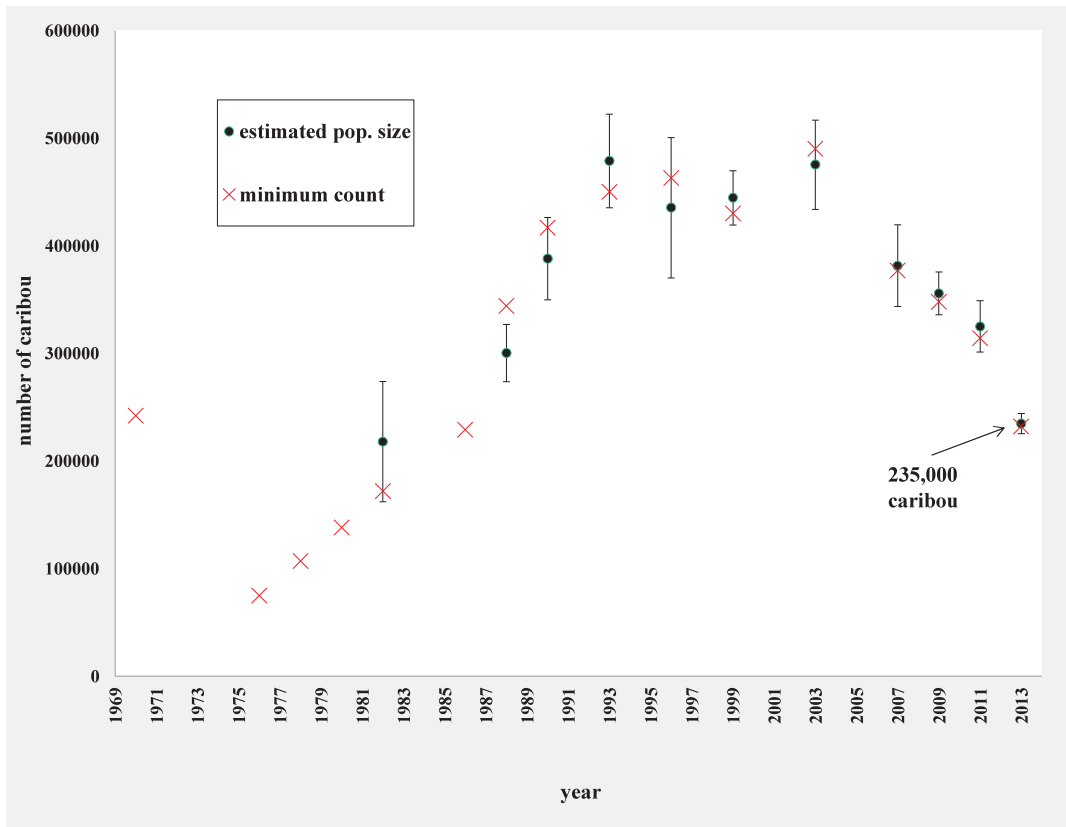
- It was a once in a lifetime opportunity. They helped with taking data about and collaring the caribou, working from a boat while the caribou were crossing.
- For most of the students from Unalakleet, it was their first time seeing caribou. For many, it was their first time camping.
- Amazed to find out that the caribou crossing and hunting at Onion Portage has been there for thousands of years.
- The students noted that they loved eating fresh caribou and also tried pike, which was a new food to them.

V. Herd Biology and Population Status (p. 35 in WG Binder)

Western Arctic Herd (WAH) Overview: Report by Jim Dau, Alaska Department of Fish and Game (ADF&G), Division of Wildlife Conservation. Key points in presentation included:

- Seasonal distribution and movements – Satellite tracking of collared caribou show they are widely distributed within their range. The PowerPoint presentation (WG binder p. 36) show distribution and movements for 1988-2014 during calving, post-calving, summer, late summer, fall, winter and spring. ADF&G tries to have 100 caribou collars out at end of every year (start year with 150 collared). NPS has additional collars. Mostly collar the cows; have about 15 adult bulls collared each year, mostly to be able to determine if they are seeing the bulls correctly in the photo census.
- Population size – The most recent count in July 2013 is 235,000 caribou in the WAH. The herd peaked at 490,000 in 2003, declined by 4-6% per year, to 325,000 in July 2011, and then has declined more steeply to the 2013 level. Previously, there had been 13% annual population growth in the 1980's, followed by 1-3% annual growth from 1990-2003. The long-term data (1969-2013) demonstrates that the herd size fluctuates. Age data does not show any "holes" in the age structure and there are still 18-20 year old cows.
- The population is now below 265,000 and is declining, which means that it is in the "Conservative Management Level" in the 2011 WAH Cooperative Management Plan (see Table 1 of the Plan). Appendix 2 of the plan provides recommended guidelines regarding population monitoring by agencies and harvest management by the Board of Game and Federal Subsistence Board. (Prior to the 2013 census count, the WAH was in the "Liberal Management Level.") The Plan can be found online at www.westernarcticcaribo.org under "The Group" tab).

Census Results



Red 'X' = minimum counts of population size

Black dots = population estimates based only on collared caribou

Vertical bars = ±95% confidence intervals for the population estimates

Alaska Dept. Fish & Game

WAH Overview: Slide 4

- Forecasted population trend – ADF&G is forecasting that the herd will continue to decline, but it is uncertain if and when the herd might start to naturally rebound. There is no model that can predict this. Generally, there are more adults dying than calves surviving. From 2004 to 2014, adult cow mortality has been high and female calf survival has been low.
- Adult cow mortality – Since 1985 there has been a trend of increasing adult cow mortality. However, the last two years cow mortality has been lower due to easier winters.
- Female calf survival – Since 1985, there has also been a trend of decreased survival for female calves (although there is a lot of year to year variability).
- Bull-Cow Ratio – The 2011 WAH Management Plan recommends a bull:cow ratio of 40:100 be maintained for the herd. However, many herds are lower than this and the Board of Game would likely view this ratio as higher than needed.
- Proportion of Bulls & Cows Harvested – Harvests have not declined as the herd size has declined. Cow harvests have likely already exceeded the harvestable surplus for several

years. Taking more cows can impact herd size since they are the reproducers. Bull harvests will probably exceed the harvestable surplus in 2015.

- Factors driving WAH decline – Jim suggests that weather and predators are the main factors. He suggests that icing events started the herd into decline; predator populations are still going up, so are putting pressure on the herd size. Weather conditions have changed, with more icing events that occasionally prevent caribou from accessing food that is present. Three localized mortality events near Cape Thompson (1994-95, 1999-2000, 2011-12) found caribou with poor body condition as they left summer range. Observations indicate that predators may be more abundant and taking more WAH caribou now than 20 years ago, but there is not quantitative information.
- Harvest data– Characteristics of harvest are shown in the PowerPoint slides on pages 44-46 of the WG binder. 95% of the harvest is by subsistence users; 5% by non-local hunters, including nonresidents of Alaska. (WG members noted that while subsistence harvest of caribou is highest in Unit 23, villages in other Units would have higher harvests if caribou were in their area and they had opportunity.)
- Management / Regulation Changes – Caribou hunting, even for subsistence users, will likely be restricted by the State of Alaska within the next 1-2 years. The State is required to act when the harvestable surplus falls below 8,000-12,000. In March 2015, the Board of Game will consider Proposal 202 that would change some seasons and bag limits for caribou hunting (discussed later in the Working Group meeting, below).
- Summary – ADF&G is asking hunters to voluntarily reduce their harvests of WAH caribou, especially cows, and has been talking about this with Advisory Committees. Reducing harvests will not necessarily stop or reverse the decline, since other factors (weather, predators) are also influences. However, reducing harvest is necessary to avoid making the decline even worse. Proposal 202 being considered by the Board of Game would also change harvest.

Working Group discussion and Q/A regarding this presentation:

- Q – Is there data showing harvest by boat hunting, vs. aircraft hunting? A – No firm data, but expects about 98% are harvested by boat, snow machine or 4-wheeler (local ground access).
- Point made that non-local hunters may not be harvesting many caribou, but their activities are affecting the migration (e.g., by disturbing the lead caribou) and changing the distribution (e.g., away from villages where the caribou used to be common).
- Noted that the WAH and TCH mingle most in the fall (about 1/3 of the TCH comes down into Unit 23 in the fall). In summer, they are farthest apart – this is when WAH census occurs.
- Suggest that it would make sense to have no harvest of cows that have calves.
- Q – Have there been wolf counts in Unit 23? A – most recent 1993.
- Q – Is predator control being considered? A – ADF&G is preparing a feasibility assessment for Intensive Management for Unit 23 to present to the BOG at its March 2015 meeting. (Management could not be done on federal lands.)

VI. Technical Committee Report

Peter Bente reviewed the report from the Technical Committee, which met on December 16, 2014 (see Attachment 2). Key results of the meeting:

- Herd Status & Management Level – The TC finds that the WAH is at the low end of the “Conservative” Management and Harvest Level (2011 Management Plan) and expects it will drop to the “Preservative” level within the next several years. It is important to educate the public about herd status and listen to their ideas for possible solutions. The TC recommends that the Working Group members communicate directly with local hunters about the need to change hunting to help slow or reverse the herd’s decline.
- Subsistence Harvest Information – The TC recommends that the Working Group support research on subsistence harvest (such as work by ADFG Subsistence Division).
- Research Needs - The Technical Committee identified the top priorities for research (from a longer list developed in 2011 and updated in 2013):
 - Continue to use satellite collars (or other improved technology) to collect data about the herd’s movements
 - Subsistence harvest information
 - Snow/weather/climate data and effects of these factors on the herd
 - Effect of predation on the herd
 - Cumulative effects of roads and other infrastructure development on the herd and its habitat

Assignment – Update research priority list per TC recommendations. (Jan Caulfield)

- Assignment – A subgroup of the TC will review snow/weather/climate data for the herd’s range and local knowledge about changes in these conditions. The purposes of the review are to assess whether the additional effort that the agencies have put into collecting this data since 2006 is providing the information needed, and to evaluate the affect that the factors of snow, weather, and changing climate may be having on the herd. (Subgroup led by Jennifer McMillan, BLM).

Working Group members’ comments on TC report:

- Suggestion that State devise a method that would require local hunters to report their caribou harvest. However, noted that in rural areas, the paper harvest ticket/report system doesn’t work well or provide accurate information, so the State uses household interviews conducted by the ADF&G Subsistence Division to gather data on subsistence use of a wide range of resources.
- Recommended that the Subsistence Division always contact (phone, letter) the Tribal governments at each community that they are visiting and the purpose of the interviews. Explain that the surveys are anonymous, confidential, are not used for enforcement, and are important to demonstrating the community’s use of resources. ADF&G noted that they make these contacts and also hire and train local people to conduct the surveys.

VII. Proposed State of Alaska Regulation Changes Related to Wildlife Harvest & Management (begins on p. 71 in WG Binder)

ADF&G submitted an “agenda change request” to the Alaska Board of Game to consider Proposal 202, a proposal to change caribou harvest regulations for all game management units (GMU)¹ associated with the Western Arctic caribou herd (WAH) and Teshekpuk caribou herd (TCH). The text of Proposal 202 was included in the WG meeting binder and is posted on-line at

¹ Affected GMUs are: portions of GMU 21D, GMU 22, GMU 23, portions of GMU 24A, portions of GMU 24B, GMU 24C, GMU 24D, GMU 26A, and portions of GMU 26B.

the Board of Game website.² Proposal 202 will be heard (out-of-cycle) at the Southcentral Region Board of Game meeting in March 2015. Comments on the proposal are due to the Board of Game staff on February 27, 2015. Oral comments will be taken at the Board meeting.

Peter Bente, ADF&G, presented information about Proposal 202 to the Working Group. The proposal would make the following changes to hunting the Western Arctic Herd:

- Shortened nonresident season (affecting hunters who are not residents of Alaska)
- One bull bag limit for nonresidents
- Close nonresident cow season
- Prohibit the take of calves by all hunters
- Stop same day airborne hunting in Unit 22
- No changes to resident season for WAH

The presentation showed maps of each GMU and portion of units that would be affected by the proposal and summarized the changes to seasons, bag limits and other regulations in each. ADF&G also indicated that they will continue to explore and evaluate measures to reduce harvest and conserve the herds, will meet with Advisory Committees prior to the public comment deadline to discuss Proposal 202, and will be presenting to the Board of Game an Intensive Management feasibility assessment for the WAH and TCH at the March 2015 Board meeting. (See also presentation by Jim Dau, ADF&G, regarding herd status, beginning on p. 4 of this meeting summary.)

Day 1 of the Working Group meeting adjourned at 5:10 p.m. on December 17, 2014, after this presentation and some initial discussion. Discussion continued and motions were passed on Day 2 (see below).

Thursday, December 18, 2014

I. Call to Order – The meeting was called to order at 8:30 a.m. Quorum confirmed.

II. Working Group Discussion & Recommendations on Herd Management Level and Proposed State Regulation (*continued from Day 1*)

Working Group consideration of Proposal 202 continued on December 18, 2014.

Points raised by individual Working Group members during initial discussion of Proposal 202:

- Concern with change in nonresident season to August 1-September 30, in “Map B: Reindeer Zones with Short Season” and “Map C: Season to Be Announced (Reindeer Areas)”. Caribou are not present on the Seward Peninsula at that time (but reindeer are present). Recommend no change to the nonresident season dates in Unit 22.
- Need to protect cows and calves to see rebound in the herd’s population. Nonresident hunting of adult bulls is not at a high enough level to be causing the herd’s decline.
- Concern that Proposal 202 still allows cows to be taken when they are pregnant or are nursing calves.³ Need to improve calf survival.

² See website at: <http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.proposalbook> and click on “Additional Proposals (Proposals 201-206).”

- Concern that changing nonresident harvest to August 1-September 30 in “Part A: Majority of WAH Range” would conflict with the National Park Service’s commercial use authorization (CUA) stipulation that delays entry of commercial transporters and guides into the western portion of the Noatak Preserve until after September 15 each year. The delayed entry provides time for the vanguard of the caribou migration to pass through the Preserve without disturbance from commercial hunting activity.
- Concern that pushing WAH harvest into October is too late and that bull meat will be low quality due to rut.
- The WG’s mission is to make sure there is long-term conservation of the WAH. Need to make sure the herd numbers come back up, since people in the region depend on the herd for food. Important for next generations.
- Need to consider effects of proposals on different communities/regions within the range, since not all communities harvest during the same times of the year and their use of cows and young bulls also differs (depending on availability during different times of the year).
- It is important for local communities to understand and be able to consider the proposed changes in hunting regulations and how it would affect subsistence harvest opportunities.

The Gates of the Arctic National Park Subsistence Resource Commission and the Western Interior Alaska Subsistence Resource Advisory Council sent letters to the WG regarding WAH harvest. They suggest no harvest of adult bull caribou from October 1 to at least November 15, and no harvest of cows from March 1 to October 1 (no harvest until most of the fall migration has taken place). (WG meeting binder, pages 53-56)

Enoch Mitchell from Noatak (audience member) spoke about the importance of sport hunters allowing lead caribou to cross the Noatak River during migration without being hunted. For the past three years, Noatak has not been able to harvest caribou near the village, but has had to travel far upriver (very costly). Noatak is very concerned about the impacts of sport hunters and their camps on the caribou migration.

Chris McKee from the US Fish and Wildlife Service (USFWS), Office of Subsistence Management (OSM), noted that there is an up-coming 45-day proposal submission period for changes in federal subsistence management regulations (January 14-March 25, 2015) for the 2016-2018 regulatory years.

Suggestion by Allen Barrette to go through Proposal 202 “map by map” (referring to the organization of ADF&G presentation materials) and make motions. WG agreed to this approach.

MOTION by Tom Gray and seconded by Allen Barrette to make the following comments regarding Proposal 202 for UNIT 22. (This area is shown on Part B and Part C maps, pp. 87-88 of the meeting packet.)

- Make no change to existing season dates.
- Allow no calf harvest. (*Support this provision of Proposal 202*)
- Allow no nonresident cow harvest. (*Support this provision of Proposal 202*)
- Limit nonresident harvest to one bull. (*Support this provision of Proposal 202*)

In WG discussion of this motion, Morris Nassuk questioned whether nonresident hunting should be eliminated, rather than just restricted. Tom Gray noted that the WG’s management plan for the

³ In response to this concern, Kyle Joly, NPS, noted a study that showed that calves orphaned in September experienced 50% survival, while calves orphaned in November had 75% survival. Jim Dau, ADF&G, also noted that calves need six months with the cow (November-December).

herd provides a balanced approach for restricting different types of hunting if the herd declines further, but it is not necessary to eliminate nonresident hunting at this point. Charlie Lean emphasized the importance of slowing/stopping the herd's decline, including restrictions that would improve calf survival.

Motion passed 17 to one (roll call vote). Results of roll call: Yes – George Jacoby, Ron Moto Sr., Charles Saccheus, Allen Barrette, Phil Driver, Raymond Hawley, Cyrus Harris, Pollock Simon Sr., Vern Cleveland Sr., Benedict Jones, Steve Oomituk, Charlie Lean, Darcie Warden, Christine Komanaseak, Tom Gray, Morris Nassuk, Oliver Peetook. No – Billy Bernhardt. (Note: Esther Hugo and Judy Jespersen were absent from meeting.)

MOTION by Cyrus Harris and seconded by Allen Barrette to make the following comment regarding Proposal 202 for UNIT 23. (This area is shown on Part A map, p. 86 in meeting packet.)

- Change the season date for nonresident hunters to September 15 – October 10.

In WG discussion of this motion, Cyrus Harris noted that the purpose of the date change would be to give the first caribou in the migration the chance to cross the Noatak River, and to match the September 15 date used in the NPS's CUA stipulation for the state of guide and transporter operations. It would not change the season for resident hunters. Allan Barrette questioned whether a 25-day nonresident season was sufficient to meet the interest in this caribou hunt. Phil Driver noted that the shorter season will reduce the number of days available to commercial service providers (e.g., transporters) and may increase crowding during the open dates. Billy Bernhardt noted that Labor Day weekend is a popular time for nonresident hunters.

Motion passed 16 to one, with one abstention (hand vote).

Assignment – Provide data to Working Group on how many nonresident hunters who hunted and harvested caribou in Unit 22 and in Unit 23 each year. (Requested by Tom Gray)

NOTE – At this point in the meeting, the WG moved to other agenda topics. However, they returned to discussion of Proposal 202 later in Day 2. Notes and actions from the later discussion continue here.

Chair Vern Cleveland, Sr., asked the WG if they had any additional comments regarding Proposal 202.

MOTION by Steve Oomituk and seconded by George Jacoby to make the following comment regarding Proposal 202 for the southern portion of UNIT 26A. (This area is shown on Part A map, p. 86 in meeting packet).

- For resident hunters, change to “cow caribou may not be taken April 1 – July 31”.

Motion to amend by Billy Bernhardt and seconded by George Jacoby, to apply this comment to UNIT 23, in addition to the southern portion of UNIT 26A. Motion to amend approved by voice vote (none opposed).

AMENDED MOTION – For Unit 23 and the southern portion of Unit 26A, for resident hunters, change to cow caribou may not be taken April 1 – July 31. (These areas are shown on Part A map, p. 86 in meeting packet.)

In WG discussion of the motion (as amended), Billy Bernhardt questioned whether the July 31 end date for the cow harvest restriction is long enough to improve calf survival (he would suggest

mid-October). Jim Dau, ADF&G, and Tom Gray emphasized the importance of educating resident hunters about the importance of not harvesting cows with calves. Start with more education, rather than a more restrictive regulation.

Motion passed 16 to zero by roll call vote. Results of roll call: Yes – George Jacoby, Ron Moto Sr., Charles Saccheus, Phil Driver, Raymond Hawley, Cyrus Harris, Pollock Simon Sr., Vern Cleveland Sr., Benedict Jones, Steve Oomituk, Charlie Lead, Christine Komanaseak, Tom Gray, Morris Nassuk, Billy Bernhardt, Oliver Peetook. No – none. Absent for this vote – Allen Barrette, Darcie Warden. (Note: Esther Hugo and Judy Jespersen were absent from entire meeting.)

Assignment – Prepare comment letter from the WG to the Board of Game regarding Proposal 202 (submit by February 27, 2015). Copy the Federal Subsistence Board on this letter, but do not submit a proposal to the FSB.

III. Proposed Federal Regulation Changes (NPS regulations begin on p. 93 in WG Binder)

Frank Hayes, Superintendent of the Western Arctic Parklands, explained that the National Park Service is proposing changes to their regulations for sport (or “general”) hunting and trapping on national preserves in Alaska. No restrictions are proposed for federal subsistence harvest. These regulation changes are summarized on p. 93 of the WG meeting binder. The Working Group’s Executive Committee reviewed the proposed regulations and submitted a comment letter to the NPS on December 2, 2014 (p. 103 in meeting binder).

Heather Tonneson and Susan Georgette from the USFWS explained that the agency is working on proposal to change hunting and trapping regulations on National Wildlife Refuges (including the Selawik and Koyukuk Refuges in the WAH range). The proposal would not change any federal subsistence regulations, but would affect some of the ways that subsistence users may take game, such as: take of bear cubs or sows with cubs; take of brown bear over bait; take of bears using traps or snares; take of wolves and coyotes during spring and summer denning season; engaging trapping activities as the employee of another person; and taking bears, wolves or wolverines from aircraft. The USFWS is in initial stage of drafting proposed regulation changes, is consulting with Tribal governments and communities, and invites comments. Expect to propose the regulations in March 2015 and provide a 60-day public comment period.

IV. Proposed Ambler Mining District Industrial Access Road

Proposed Ambler Access Project – Mark Davis and John Springsteen from the Alaska Industrial Development and Export Authority (AIDEA) and Maryellen Tuttel, AIDEA Ambler Access Project Manager from Dowl Engineering, presented information about the Ambler Mining District Industrial Access Road. Key points presented included:

- The purpose of the project is to evaluate an industrial road to the Ambler mining district to support exploration and development of mineral resources. The project would promote economic development and job opportunities in the region and the State.
- Project work to date has included route reconnaissance (started in 2010), community outreach, preliminary engineering, baseline environmental research, and identified feasible routes.
- AIDEA has determined that the most feasible route is the East Corridor. It is the shortest route (approx. 200 miles). Most of the corridor is on state lane, but it does transect the Gates of the Arctic National Park and Preserve. A specific provision was written into the Alaska National Interest Lands Conservation Act (ANILCA) to allow access to the Ambler Mining District through the preserve portion of the conservation unit.

- Tasks in progress include:
 - Community outreach/meetings
 - Additional reconnaissance studies
 - Preliminary engineering
 - Environmental documentation / permitting – including applications to initiate the Environmental Impact Statement (EIS) process and ANILCA Title XI reviews (required for Transportation & Utility Systems). AIDEA is expecting the Corps of Engineers to lead the EIS process, with a third-party contractor preparing the EIS. The ANILCA 810 analysis would also be done as part of the EIS process.
- Community Input – Over 30 meetings have been held in local communities in the past four years. There is much public interest. Most comments/concerns center on:
 - Economics (employment, cost of living, etc.)
 - Subsistence (access, resource impacts)
 - Access (restricted vs. public) and number of vehicles
 - Environmental issues (wilderness, asbestos, acid rock drainage)

The following points were raised in comments, questions and discussion:

- Q – State funds spent to date? A – AIDEA received \$17M, prior to that Alaska Department of Transportation & Public Facilities received \$6-8M. Not all has been spent. Noted that State funding would not be spent for road construction, since that would be financed through a public/private partnership. Estimated \$200-\$300M to construct the road. (Noted that railroad would be much more expensive option.)
- Q – Who would cover maintenance costs? A – The project would be bonded and that funding would be used to maintain the road. Maintenance costs have not yet been estimated.
- The road would be one-way, industrial access road, with pilot cars.
- Regarding potential for the road to reduce cost of living in communities – It would be up to communities to determine whether they would want to connect to the road, through a permanent connection or ice road. But there would be opportunities and economic benefits to some communities.
- In addition to the ANILCA 810 analysis, which focuses on federally-qualified subsistence users, it is important to also analyze impacts of the project on hunters that qualify under State subsistence definition. (AIDEA noted that the EIS process would look at socioeconomic effects, which would address this.)
- The WAH migration path is different in different years, but they usually migrate west of Ambler. More likely to be wintering around the proposed road route than migrating in that area.
- Concern about invasive plants, including aquatic invasives on the Kobuk River.
- Remind WG that there will be future opportunities to be involved in the EIS and permit process.
- Haul road, constructed in 1974, has affected the caribou. They stay farther to the west of the haul road. Concern that this road would affect WAH migration.
- Q – Connection with liquid natural gas (LNG)? A – The route would not be used for a future LNG line, but noted that mines in Canada are shifting to supplying their energy through LNG. This mine may too. AIDEA is also looking at constructing a LNG plan on the North Slope to bring lower cost power.
- Q – A lot of wetlands on the route. How addressed? A – Yes, would require a lot of wetland fill. Corps permit would require the project to avoid and minimize impacts, and to mitigate for impacts.
- Q – Status of health impact assessment? A – AIDEA is working with the State's Department of Health and Human Services on that assessment.

V. Western Arctic Herd – Study of Vital Signs, Diet, Hormones (begins on p. 109 in WG Binder)

Kyle Joly, NPS, summarized data from various WAH caribou studies. (See WG meeting binder, p. 109):

- Collar data
 - Most recently, ten collars were deployed from September 2013-August 2014. The NPS works to have 40 collars on animals each year (replacing 10 each year). The NPS intends to continue, to develop a long-term data set. (Noted that ADF&G also has ~100 collared caribou.)
 - The distribution of caribou crossing of the Noatak River in the fall migration has shifted from year to year, with a majority crossing at a “central” location on the Noatak River in 2013, farther to the east (upriver) in 2010 and 2012, and then far to the west (near the coast) in 2011.
 - Timing of the crossing of the Kobuk River is quite steady around October 10 each year, but the time when the first caribou arrive and cross has gotten later each year from 2010-2013.
 - The spring migration in 2014 was about one month earlier than in 2012 and 2013.
- Fecal pellet samples (Over 300 individuals from 58 sampling sites; collected March-April):
 - Diet averages 68% lichen (even those lichen availability is declining). Pellets collected farther north contained less lichen. There was no difference in diet by gender.
 - Bull:cow ratio for samples collected was 62:100.
 - 82% of the cows sampled were pregnant.
 - Collected baseline data on stress hormones (pre-industrial development baseline).
- Summer range study, 2013-2014 (USGS-UAF-NPS) – Study is evaluating forage quality and phenology. No results yet (samples being analyzed).
- Potential impacts of proposed Ambler Road on caribou winter range (with USGS and USFWS) – Have looked at the alternate routes to analyze differences in impact to the WAH’s habitat. They have not found substantial differences between the alternate routes. The authors are also writing a paper regarding the impacts of the Red Dog Road on caribou migration.
- Predators – NPS is trying to conduct more studies regarding predators, including a grizzly bear project near Bettles.

In discussion, WG members questioned why there are only 40 collars on WAH caribou, but more than 30 collars on grizzlies in the Bettles study. Kyle replied that ADF&G and BLM also have collars on WAH caribou. NPS would like to have more caribou collared, but doesn’t have the funding.

VI. Community Harvest Assessments

Nikki Braem from the ADF&G Division of Subsistence presented information about the Northwest Harvest Monitoring Program: 2013, with surveys conducted in Kotzebue and Deering. Nikki emphasized that the Subsistence Division contacts Tribal and local governments in each community before they begin a study. They hire local residents to work with them on the surveys; surveys are anonymous and confidential. Results from the 2013 surveys in Kotzebue and Deering:

- Kotzebue – In 2013, Kotzebue harvested 1,680 caribou (76% bulls, 20% cows, 4% unknown). Kotzebue residents harvest 0.5 caribou per person/year, or 2.0 caribou per household/year.
- Deering – In 2013, Deering harvested 393 caribou (19% bulls, 45% cows, 36% unknown). Caribou make up 60% of the diet. Deering residents harvest 3.0 caribou person/year, or 8.9 caribou per household/year. 97% of the households use caribou. (Ron Moto Sr. noted that Deering used to get a lot of moose, but now eat a lot of caribou.)
- The survey in Deering also includes data about the community's use of other subsistence resources: salmon, other fishes, land mammals, marine mammals, birds, eggs, berries and plants.

VII. Noatak Caribou Traditional Knowledge Project

Gabriela Halas from the University of Alaska Fairbanks (UAF) described the traditional knowledge project. The objective of the project is to document traditional knowledge related to caribou behavior and migration, human activity, and hunting. The project focuses on the community of Noatak. Gabriela has interviewed 62 hunters and conducted an in-depth mapping project with 20 local experts. She will be presenting findings to Noatak residents for feedback and preparing a complete report (thesis). Contact: gshalas@alaska.edu Key interview findings:

- Noatak hunters are experience some significant changes to caribou hunting in the last 5 years – 72% are harvesting fewer; 52% are traveling farther to hunt; 47% say the hunt is later in the fall; 54% see more people while out hunting
- Most hunters perceive that over the last 10 years the caribou migration has changed “a lot” and the population is generally “fewer”
- A variety of ecological and human activities are seen as changing caribou migration and affecting caribou hunting – the main impacts mentioned are planes and non-local hunters, followed by wolves, bears, climate change, and habitat change.
- Noatak hunters experienced a number of encounters with other hunters and people on the land.
- Noatak hunters had agreement between what they perceived to impact their hunting, and what actually influenced their success.

VIII. Executive Committee Report (p. 147 in WG Binder)

The Executive Committee report in the WG binder listed 11 actions in 2014, regarding: representing the WG in public comment opportunities related to Board of Game and NPS regulatory proposals, land management planning processes, comments on oil and gas lease sale, approval of the *Caribou Trails* newsletter, and development of the 2014 WG meeting agenda. Copies of letters written to the Board of Game are in the WG Binder.

IX. Resource Development Committee (p. 149 in WG Binder)

Working Group member Darcie Warden described the work of the Resource Development Committee in 2014 (chaired by Wendy Loya, no longer on the WG). Copies of letters from the Working Group about resource development issues are in the WG Binder, pages 149-167, regarding the BLM Bering Sea-Western Interior Management Plan (scoping comments), BLM Central Yukon Resource Management Plan (scoping comments), and BLM Oil and Gas Lease Sale in the National Petroleum Reserve – Alaska.

X. Communication Committee Report (p. 168 in WG Binder)

Meghan Nedwick, ADF&G staff to the Communication Committee, addressed the following points:

- The Education management actions in the 2011 WACH Cooperative Management Plan are all underway. ADF&G, BLM, USFWS and NPS all contribute to outreach and education efforts. Vern Cleveland chairs the Communication Committee.
- In 2013, the WG asked the committee to more actively use existing agency Facebook sites to post information about the WAH. The agencies are working to do this – and have linked the WAH website to their agency web pages.
- At its 2012 and 2013 meetings, the WG asked that there be more outreach to the public about herd size, the declining trend, and the potential need to change management in the future. In 2014, these messages were delivered to the public through community meetings in GMUs 22, 23 and 26A; *Caribou Trails*; a mail out with news on the WAH; school programs and teacher workshops; hunter information; Public Service Announcements; a WAH caribou communication plan; and request to the Board of Game to consider regulatory changes for the WAH and TCH. NPS has also done some newsletters and presentation on herd status (Bettles), and USFWS has worked with school groups, hosted a community meeting (Selawik), posted updates on social media, and distributed a newsletter.
- Website - The WACH WG website is up and running and actively visited. The NPS has agreed to cover the annual website hosting fee for the WG.
- *Caribou Trails* – The most recent issue was mailed in July 2014, with copies sent to box holders, schools, universities, government agencies, non-profits, and others. The newsletter was also posted on the WAH website. The WG discussed the topics for the 2015 issue:
 - Information on herd size, declining trend, bull:cow ratio, population management, and what changes might mean for local hunters.
 - The importance of conserving cow caribou to rebuild herd – use data. Include a field guide on how to identify cows at different seasons of the year.
 - Article on elder (Mrs. Minnie Gray)
 - Updates from 2014 WG meeting
 - Onion Portage (Nome, Unalakleet students)
 - Taikuu to retiring WG members
 - Cumulative effects of development map – Meghan to contact Darcie Warden for additional information to add (e.g., Chukchi Sea pipeline through NPR-A)
 - Article about how the WAH affects different areas/communities within the region, as their migration routes and numbers change. (Contact Tom Gray for more information on this idea)
 - Update on Board of Game regulatory changes – Proposal 202
 - Advertise website and Facebook pages that are being used to post WAH information
 - Caribou roundtable quotes

XI. Management Agency Reports - ADF&G, BLM, NPS, USFWS

The text of the agency reports is provided in Attachment 7. Key points are summarized here.

ADF&G (p. 174 in WG Binder) – Steve Machida, ADF&G Regional Supervisor, indicated that in Region 5 approximately 30% of the budget goes toward caribou management for the Teshekpuk and Western Arctic herds. Field activities include biennial photo census, fall composition surveys, spring recruitment surveys, caribou collaring at Onion Portage, animal collection for

disease and body condition assessment, range-wide telemetry surveys, and harvest assessment surveys. ADF&G has hired a biometrician who will spend ½-time on data analysis for the WAH and TCH. In 2013, the WG expressed its support for funding for new digital photo census cameras; ADF&G will demonstrate them at the 2015 meeting. ADF&G's Education Associates leads and assists with WAH caribou wildlife education efforts and public outreach. ADF&G provides comments to other agencies about potential impacts of road and development projects on the WAH. ADF&G has submitted Proposal 202 to the Board of Game to address population changes in the WAH and TCH herds.

BLM (distributed at meeting, see Attachment 7) – Alan Bitner, BLM Anchorage Field Office Manager, noted that there is a potential change in office boundaries, with responsibility for northwest Alaska going to the Anchorage field office. The BLM report addressed a variety of land management plans and Rapid Ecological Assessments that BLM is preparing or has completed in the herd range. The BLM agency report also addresses reindeer grazing, wildlife projects, recreation, mining, and realty work done by the agency.

NPS – Frank Hays, Western Arctic Parklands Superintendent, addressed the following:

- In 2014/2015 the park will continue to manage transporters through commercial use authorizations (CUA). CUA holders are authorized to transport hunters seeking caribou into specified areas in the western Noatak after September 15, unless authorized by the Superintendent to provide services earlier (based on the status of caribou migration).
- NPS Western Arctic Parklands has hired Enoch Mitchell as a tribal liaison in Noatak and has also hired another wildlife researcher (Hillary Robinson) who will start in March 2015.
- NPS has been looking for funding to conduct additional traditional ecological knowledge (TEK) studies in Kiana, Kobuk and Ambler. They have been involved in a number of education and outreach projects regarding the WAH and other resource issues.

In comments, Working Group member Charlie Lean is concerned that there are different hunting regulations for hunters who are federally-qualified subsistence hunters and those who are not regarding taking caribou in the water. If they are hunting together, the “general” or sport hunter would be illegal. In response to a question, Frank Hays indicated that federal regulations allow hunters to use snow machine to access a hunt area, but not to pursue/chase an animal.

USFWS (p. 190 in WG Binder) – Susan Georgette, new Selawik National Wildlife Refuge Manager, introduced new Refuge Fisheries Biologist Bill Carter, and described the Refuge's activities and projects related to caribou (snow monitoring, culture camps, WG web page and newsletter), teacher training, meeting in Selawik regarding WAH population status, school presentations, Caribou Roundtable database (additions from 2013 WG meeting), funding support for the WG's annual meeting.

Donald Mike, from USFWS Office of Subsistence Management, said OSM is seeking applications for the agency's Subsistence Regional Advisory Councils. Applications are due January 23, 2015. Orville Lind is the new Tribal Liaison at OSM and will be initiating tribal consultation.

XII. Business Meeting

Approval of Meeting Summary – December 2014 (p. 191 in WG Binder): Motion to approve the Executive Summary and complete minutes for December 2013, by Ron Moto Sr. and seconded by Morris Nassuk, with correction to “Pollock Simon Jr” (not “Sr.”), on p. 204. Motion carried unanimously.

Membership/Committees: The following actions were taken to update WG membership and committees:

- Membership – Motion by Ron Moto Sr. and seconded by Charles Saccheus to approve new members for Chairs 1, 12, 14, 19, 20 and the alternate for Chair 1 (as listed below). Motion carried unanimously.
 - Chair 1 – George Jacoby, alternate Neil DeWitt
 - Chair 12 – Steve Oomituk (need to contact communities for alternate)
 - Chair 13 – (need to contact Nome groups again, for recommended representative and alternate)
 - Chair 14 – Darcie Warden (need to contact conservation groups for alternate)
 - Chair 19 – William Bernhardt (need to contact communities for alternate)
 - Chair 20 – Oliver Peetook (need to contact communities for alternate)
- Committees – Peter Bente reviewed the WG committee lists (p. 10 of WG Binder) to determine if any need for changes. The new members above will take their respective seats on the committees. Motion by (unknown) and second by Morris Nassuk to add Charlie Lean (Chair 13) to the Technical Committee. Motion passed unanimously.

New Business:

- Youth delegate – Motion by Darcie Warden, seconded by Ron Moto Sr. to add a youth delegate to the Working Group. Discussion – Vern Cleveland noted there might be additional cost if a chaperone needed. Darcie indicated she was thinking of a delegate who would be a young adult and able to travel on their own. Darcie indicated that she would ask the organization that she works for to pay for her travel to the WG meeting, so that would free up travel funding for another member. Cyrus Harris noted that one group that he worked with defined “youth” as less than 29 years old. Pollock Simon Sr. expressed his support for bringing younger people into the process. Benedict Jones noted that the Alaska Federation of Natives has youth meet with elders on the day before the Convention. Phil Driver suggested tabling the idea and having further discussion at the next meeting. Tom Gray indicated that he supports youth participation, but there should be more thought to the details (see Assignment). Vote on the motion – Yes 4, No 9, abstain 4. The motion failed.
Assignment – So they can consider this idea further in 2015, the Working Group asked Darcie Warden to work with a few other WG members to think about how a youth delegate would be brought into the group. What would be expected of them? How would they be selected? Would they vote? Who could cover the costs? Recommend an individual older than 18, so no chaperone required.
- ADF&G Community Harvest Surveys – Motion by Charles Saccheus, seconded by Morris Nassuk, to send a letter of support for funding for ADF&G community harvest survey projects. Motion passed unanimously.
Assignment – Send letter of support for funding for ADF&G community harvest survey projects.
- Proposal 202 Comments - Assignment – The Working Group asked staff to send a copy of the WG’s comments on Proposal 202, copy to Office of Subsistence Management, but not to submit a companion regulatory proposal to the Federal Subsistence Board.
- Working Group comments to AIDEA – Darcie Warden wondered if the Working Group had every submitted comments to AIDEA about the proposed Ambler Mining District Road. Jan

Caulfield noted that the WG had sent a comment letter to the Alaska Department of Transportation and Public Facilities, before AIDEA took over as project lead.

Assignment - Darcie Warden indicated that the Resource Development Committee will look into writing a letter, to be on the record about the project with AIDEA.

Assignments: List of assignments made during meeting, see Attachment 4.

Next Meeting Date: Motion to schedule next WG meeting on December 16-17, 2015 in Anchorage, with Technical Committee meeting on December 15, made by Benedict Jones, seconded by Pollock Simon Sr. Motion carried unanimously.

XIII. Closing Comments: WG members offered the following brief closing comments:

- George Jacoby – appreciate vote on reducing cow harvest and not harvesting calves; glad to see that Ambler Road may not proceed
- Pollock Simon Sr. – enjoyed the meeting, good to have meeting room in hotel where group is lodging.
- Darcie Warden – an honor to be a part of this Working Group and will do her best here.
- Christine Komanaseak – happy to be at the meeting as an alternate member.
- Ron Moto Sr. – Thanks to all; have a safe Holiday.
- Steve Oomituk – Looking forward to being part of the Working Group; hope we can determine by the herd numbers are declining.
- Raymond Hawley – Taikuu and Merry Christmas.
- Billy Bernhardt – Interesting to participate; looking forward to next meeting.
- Oliver Peetook – Thank Working Group for having me; safe Holidays.
- Charles Saccheus – Thank you; unhappy about our caribou hunt this year and hope by April we can get some; Merry Christmas and safe trip home.
- Charlie Lean – First time participating and it was an education. Could the USFWS video with elders processing a caribou be put on a Facebook page?
- Tom Gray – Thank agencies that support the Working Group and are dedicated to seeing this herd survive. Thank Working Group member; sometimes decisions are hard and it's going to get harder, but the WG will be needed in the future.
- Morris Nassuk – Hope in the future people will still be subsisting. Thank those who presented to the Working Group and Technical Committee members.
- Phil Driver – The Working Group has gone along way toward conserving cows and calves at this meeting. Thank Peter Bente for organizing the material and presentations.
- Benedict Jones – Good discussion; welcome new members.
- Cyrus Harris – Welcome new members. Thank agencies. All around good meeting.
- Vern Cleveland – Thanks for putting up with him (as a new Chair). Thanks to all Working Group members and the agencies.

XIV. Adjournment: Meeting adjourned at 5:01 p.m. on December 18, 2014.

Western Arctic Caribou Herd (WACH)

Working Group Meeting

December 17-18, 2014

8:30 am – 5:00 pm each day

Hilton Hotel, Denali Room
500 W. 3rd Avenue, Anchorage

DAY 1 – WACH Working Group, December 17

8:30 Call to Order

Invocation

WACH Working Group Roll Call / Establish Quorum

Introductions

Approval of Agenda – Preview of Meeting Binder

“How Working Group Operates” (Peter Bente, Agency Representative)

Member appointment – Chairs 13 and 19; Alternate Chairs 13 and 19

Thank you’s

8:50 Guest Elder – Ms. Minnie Gray, Ambler

9:40 Break

10:00 Caribou Roundtable

- Roundtable Discussion in small groups by region (60 minutes)
- Small groups report briefly back to large group (45 minutes)

11:45 – 1:00 LUNCH

1:00 School Presentations – Nome and Unalakleet Schools

1:45 Herd Biology and Population Status

1:45 Jim Dau, Alaska Department of Fish and Game (ADF&G), Division of
Wildlife Conservation

3:00 Working Group Photo / BREAK

3:20 Technical Committee Report - Peter Bente, ADF&G, Agency Representative to the Working Group

The 2011 Cooperative Management Plan (p. 17) states that each year, the Working Group “will review the Technical Committee’s recommendations [on herd management], consider traditional ecological knowledge and knowledge of all users, and seek consensus on the appropriate management strategy to recommend” for the herd (see Management Levels in Table 1 and Appendix 2 of the Plan).

Time for Working Group discussion of the herd status and recommended management strategy is scheduled at the end of Day 1, after presentations regarding proposed State and Federal wildlife management regulations. There is also time provided on the morning of Day 2.

3:30 Proposed Regulation Changes related to Wildlife Harvest & Management

The 2011 Cooperative Management Plan (p. 23) states that the Working Group will provide recommendations regarding proposed regulations affecting caribou and caribou hunting to advisory committees/councils and regulatory boards.

3:30 Proposed State Regulations

- Peter Bente & Jim Dau, ADF&G, Division of Wildlife Conservation

3:50 Proposed Federal Regulations

- Frank Hays, NPS, Western Arctic Parklands
- Heather Tonneson, US Fish and Wildlife Service (USFWS)
Susan Georgette, USFWS, Selawik National Wildlife Refuge

4:10 Working Group Discussion & Recommendations on Herd Management Level and Proposed Regulations (continues on morning of Day 2)

5:00 ADJOURN DAY 1

Western Arctic Caribou Herd (WACH) Working Group Meeting

Day 2 – WACH Working Group, December 18

8:30 Call to Order / Announcements

8:40 Continue Working Group Discussion & Recommendations on Herd Management Level and Proposed Regulations – (continued from Day 1)

9:45 BREAK

10:00 Proposed Ambler Mining District Industrial Access Road

10:00 Update on status of project; how comments from the WACH Working Group and the region are being addressed – Mark Davis, John Springsteen, Maryellen Tuttell – Alaska Industrial Development and Export Authority (AIDEA)

10:20 Working Group Discussion & Recommendations

10:40 Research & Technical Reports

10:40 Western Arctic Herd – Study of Vital Signs, Diet, Hormones – Kyle Joly, NPS

11:00 Community Harvest Assessments - Nikki Braem, ADF&G, Subsistence Division

11:20 Traditional Knowledge Project, Noatak – Gabriela Halas, University of Alaska Fairbanks

11:45 – 1:00 LUNCH

1:00 Working Group Committee Reports

1:00 **Executive Committee**

1:15 **Resource Development Committee**

1:30 **Communication Committee** – *Caribou Trails*, website, other outreach efforts related to Cooperative Management Plan and caribou management issues – Meghan Nedwick, ADF&G

1:50 Management Agency Reports regarding WAH-related topics

1:50 Alaska Department of Fish and Game – Steve Machida

2:10 Bureau of Land Management – Alan Bittner

2:30 BREAK

2:50 Continue Agency Reports

2:50 National Park Service – Frank Hays

3:10 US Fish and Wildlife Service – Susan Georgette

3:30 Business Meeting

Approval of WG Meeting Summary – December 4-5, 2013

Membership – Review / reconfirm committee memberships

New Business (Action Items)

Assignments

Next Meeting: Date _____ Location _____

4:40 Closing Comments – Working Group members

5:00 ADJOURN

**Western Arctic Caribou Herd Working Group
Technical Committee Report
December 16, 2014 – Anchorage, Alaska**

The Technical Committee (TC) met on December 16, 2014 at the Hilton Hotel in Anchorage. Present were the Working Group (WG) Chair and Co-Chair, several other WG members, and agency staff to discuss technical issues related to conservation and management of the Western Arctic Caribou Herd. The following is a list of meeting highlights and TC recommendations for consideration by the WG.

Technical Committee Recommendations

1. Status and Condition of the Western Arctic Caribou Herd (WACH)

- The last herd census in July 2013 counted 235,000 caribou
- Next census will be in July 2015
- The declining population is expected to continue into the future
- Bull:cow ratios have declined to 40:100

Based on the census from 1.5 years ago, **the herd is at the low end of the “Conservative”** Management and Harvest Level and is declining (see WACH Cooperative Management Plan, 2011, Table 1, pg. 17). At this level, the management plan recommends voluntary reduction of cow harvest, and the Technical Committee encourages this voluntary approach to maximize local control and stewardship.

The Technical Committee expects that the herd will drop to the “Preservative” Management and Harvest Level within the next several years.

It is important to continue to **educate the public about the herd status and to listen to the public about possible solutions**. Topics to discuss might include information regarding the herd’s status (recognizing that caribou herds naturally fluctuate), how hunting methods can influence the status of the herd (such as avoiding wounding loss, cow/calf separation, etc.), and possible need for changes in management in the future. The agencies will continue with education and listening sessions – and also **recommend that the Working Group members communicate directly with local hunters** (try schools, radio, public meetings).

2. Subsistence Harvest Data

The Technical Committee recommends that the Working Group support improving and increasing the collection of information about subsistence harvest.

3. Weather and Climate Data

The Technical Committee recommends that a subgroup of the TC review snow/weather/climate data for the herd’s range, and local knowledge about changing snow/weather/climate conditions. The purposes of the review are to assess whether the additional effort that the agencies have put into collecting this data since 2006 is providing the information needed, and to evaluate the affect that the factors of snow, weather, and changing climate may be having on the herd. The Bureau of Land Management (BLM) is offering to coordinate the work of this subgroup, which will report back to the TC and WG.

4. Prioritize Top Research Needs related to WACH

The Technical Committee identified the top priorities for research (from a longer list developed in 2011 and updated in 2013):

- Continue to use satellite collars (or other improved technology) to collect data about the herd's movements
- Subsistence harvest information
- Snow/weather/climate data and effects of these factors on the herd
- Effect of predation on the herd
- Cumulative effects of roads and other infrastructure development on the herd and its habitat

Other TC Agenda Topics

In addition to the topics described above, the Technical Committee agenda included the following topics:

- Western Alaska Landscape Conservation Cooperative (LCC) – The LCC is identifying priority research topics related to terrestrial ecosystems in Western Alaska and, in Fall 2015, will issue a call for proposals to fund research.
- Arctic Council's Circumpolar Based Monitoring Program: Terrestrial Expert Monitoring Group – Overview of the Arctic Council of the Inuit Circumpolar Council-Alaska (ICC)'s Conservation of Arctic Flora and Fauna workshop group. The intent of the program is to collaborate with partners on long-term monitoring of terrestrial ecosystems in the Arctic.
- The Wilderness Society presented information about environmental variables that influence the fall and spring migration routes of the WACH.
- TC discussion of how it can support the WG's communication with people in the region about the status of the herd, things that can be done locally to exercise stewardship, and future management. (This will be discussed again with the full WG on December 18 during the Communication Committee report.)
- Agreement that the National Park Service will pay the annual fee for hosting of the WACH WG website, while other agencies assist the WG by providing content for the site.

Motions Acted Upon at WACH WG Meeting
December 17-18, 2014

Call to Order & Introductory Sections

- Motion to approve agenda as presented, by Ron Moto, Sr., seconded by Cyrus Harris. Motion carried unanimously.
- Motion by Tom Gray, second by Allen Barrette, to accept nomination of Charlie Lean to Chair 13 (Nome) for the 2014 Working Group meeting. Motion carried unanimously.

Proposed Regulation Changes / Board of Game Proposal 202

- UNIT 22 – Motion by Tom Gray and seconded by Allen Barrette to make the following comments regarding Proposal 202 for Unit 22:
 - Make no change to existing season dates.
 - Allow no calf harvest. (*Support this provision of proposal*)
 - Allow no nonresident cow harvest. (*Support this provision of proposal*)
 - Limit nonresident harvest to one bull. (*Support this provision of proposal*)Motion passed 17 to 1 (roll call vote).
- UNIT 23 – Motion by Cyrus Harris and seconded by Allen Barrette to make the following comment regarding Proposal 202 for Unit 23:
 - Change the season date for nonresident hunters to September 15 – October 10.Motion passed 16 to 1, with one abstention (hand vote).
- UNIT 26A – Motion by Steve Oomituk and seconded by George Jacoby to make the following comment regarding Proposal 202 for the southern portion of UNIT 26A (near Point Hope and Point Lay in the WAH range):
 - For resident hunters, change to “cow caribou may not be taken April 1 – July 31”.
- Amended to UNIT 23 and UNIT 26A – Motion to amend the prior motion by Billy Bernhardt and seconded by George Jacoby, to apply to UNIT 23 and the southern portion of UNIT 26A (near Point Hope and Point Lay in the WAH range). Motion to amend approved by voice vote (none opposed).
- Vote on Amended motion – For Unit 23 and Unit 26A, for resident hunters, change to cow caribou may not be taken April 1 – July 31. Motion passed 16 to zero by roll call vote.

Business Meeting / 2013 Meeting Summary

- Motion to approve the Executive Summary and complete minutes for December 2013, by Ron Moto Sr. and seconded by Morris Nassuk, with correction to “Pollock Simon Jr” (not “Sr.”), on p. 204. Motion carried unanimously.

Business Meeting / Membership/Committees:

- Membership – Motion by Ron Moto Sr. and seconded by Charles Saccheus to approve new members for Chairs 1, 12, 14, 19, 20 and the alternate for Chair 1 (as listed below). Motion carried unanimously.
 - Chair 1 – George Jacoby, alternate Neil DeWitt
 - Chair 12 – Steve Oomituk (need to contact communities for alternate)

- Chair 13 – (need to contact Nome groups again, for recommended representative and alternate)
- Chair 14 – Darcie Warden (need to contact conservation groups for alternate)
- Chair 19 – William Bernhardt (need to contact communities for alternate)
- Chair 20 – Oliver Peetook (need to contact communities for alternate)
- Motion by (unknown) and second by Morris Nassuk to add Charlie Lean (Chair 13) to the Technical Committee. Motion passed unanimously.

New Business / Youth Delegate

- Motion by Darcie Warden, seconded by Ron Moto Sr. to add a youth delegate to the Working Group. Motion failed: yes 4, no 9, abstain 4.

New Business / ADF&G Community Harvest Surveys

- Motion by Charles Saccheus, seconded by Morris Nassuk, to send a letter of support for funding for ADF&G community harvest survey projects. Motion passed unanimously.

New Business / Next Meeting Date

- Motion to schedule next WG meeting on December 16-17, 2015 in Anchorage, with Technical Committee meeting on December 15, made by Benedict Jones, seconded by Pollock Simon Sr. Motion carried unanimously.

Assignments Made at WACH WG Meeting December 17-18, 2014

Technical Committee Assignments

- A subgroup of the TC will review snow/weather/climate data for the herd's range and local knowledge about changes in these conditions. The purposes of the review are to assess whether the additional effort that the agencies have put into collecting this data since 2006 is providing the information needed, and to evaluate the affect that the factors of snow, weather, and changing climate may be having on the herd. (Subgroup lead: Jennifer McMillan, BLM)
- Update research priority list (Jan Caulfield)

Proposed Regulation Changes related to Wildlife Harvest and Management

- Provide data to Working Group on how many nonresident hunters hunt in Unit 22 and in Unit 23 each year. (Requested by Tom Gray)
- Prepare comment letter from the WG to the Board of Game regarding Proposal 202 (submit by February 27, 2015). Copy the Federal Subsistence Board on this letter, but do not submit a proposal to the FSB. (Executive Committee)
- The Working Group asked staff to send a copy of the WG's comments on Proposal 202, copy to Office of Subsistence Management, but not to submit a companion regulatory proposal to the Federal Subsistence Board. (Jan Caulfield)

Proposed Ambler Mining District Industrial Access Road

- Darcie Warden indicated that the Resource Development Committee will look into writing a letter, to be on the record about the project with AIDEA.

Research & Technical Reports / Community Harvest Assessment

- Send letter of support for funding for ADF&G community harvest survey projects. (Executive Committee)

Business Meeting / Membership

- The Working Group asked Darcie Warden to work with a few other WG members to think about how a youth delegate would be brought into the group, for consideration at the 2015 meeting. What would be expected of them? How would they be selected? Would they vote? Who could cover the costs? Recommend an individual older than 18, so no chaperone required.

WACH Working Group Meeting Attendance - 2014 (Agency, Public)

List	First	Last	Organization
Agency	Peter	Bente	ADF&G Wildlife Division
Agency	Geoff	Carroll	ADF&G Wildlife Division
Agency	Jim	Dau	ADF&G Wildlife Division
Agency	Maria	Gladziszewski	ADF&G Wildlife Division
Agency	Steve	Machida	ADF&G Wildlife Division
Agency	Meghan	Nedwick	ADF&G Wildlife Division
Agency	Brandon	Saito	ADF&G Wildlife Division
Agency	Nicole	Braem	ADF&G Subsistence Division
Agency	Lisa	Olson	ADF&G Subsistence Division
Agency	James	Simon	ADF&G Subsistence Division
Agency	Alan	Bittner	BLM, Anchorage Field Office
Agency	Bruce	Seppi	BLM, Anchorage Field Office
Agency	Cara	Staab	BLM
Agency	Laurie	Thorpe	BLM
Agency	Dave	Yokel	BLM, Arctic Field Office
Agency	Shelly	Jacobson	BLM, Central Yukon Field Office
Agency	Tim	Hammond	BLM, Central Yukon Field Office
Agency	Ken	Adkisson	National Park Service
Agency	Hannah	Atkinson	National Park Service
Agency	Frank	Hays	National Park Service
Agency	Jim	Lawler	National Park Service
Agency	Jeff	Rasic	National Park Service
Agency	Enoch	Mitchell	National Park Service
Agency	Bud	Rice	National Park Service
Agency	Bill	Carter	USFWS, Selawik National Wildlife Refuge
Agency	Susan	Georgette	USFWS, Selawik National Wildlife Refuge
Agency	Brittany	Sweeney	USFWS, Selawik National Wildlife Refuge
Agency	Chris	McKee	USFWS, Office of Subsistence Management
Agency	Donald	Mike	USFWS, Office of Subsistence Management
Agency	Tom	Evans	USFWS, Office of Subsistence Management
Agency	Trevor	Fox	USFWS, Office of Subsistence Management
Agency	Orville	Lind	USFWS, Office of Subsistence Management
Agency	Eva	Patton	USFWS, Office of Subsistence Management
Agency	Heather	Torneson	USFWS
Facilitator	Jan	Caulfield	Jan Caulfield Consulting
Local Govt	Qaiyaan	Harcharek	North Slope Borough
Local Govt	Charlie	Gregg	Northwest Arctic Borough, Planning Dept.
Media	Jillian	Rogers	Arctic Sounder
Media	Laurie	McNicholas	Nome Nugget

List	First	Last	Organization
Organization	Rosemary	Ahtuangularuk	Alaska Wilderness League
Organization	Lindsey	Hajduk	Conservation Lands Foundation
Organization	Joan	Frankevich	National Parks Conservation Association
Organization	Jill	Yordy	Northern Alaska Environmental Center
Organization	Lois	Epstein	The Wilderness Society
Organization	David	Krause	The Wilderness Society
Organization	Nicole	Whittington-Evans	The Wilderness Society
Public	John	Springsteen	Alaska Industrial Development and Export Authority
Public	Maryellen	Tuttell	Dowl Engineering
Public	Elia	Gomez	NANA Corporation
Public	Lance	Kramer	NANA Corporation
Public	Cal	Craig	Nova Copper
Public	Scott	Petsel	Nova Copper
Public	Helena	Jones	
Public	Earl	Kingik	
Public	John	Trent	
University	Gabriela	Halas	University of Alaska Fairbanks
University	Molly	Murphy	University of Alaska Fairbanks

WACH WG Meeting 2014
Caribou Roundtable Discussion
Responses to Questionnaire on Observations about Caribou

North Slope Region

Working Group members: Oliver Peetook (Wainwright), Steve Oomituk (Point Hope).

Others attending small group: Rosemary Ahtuanguaruak, Earl Kingik, Geoff Carroll (ADF&G)

Note takers: Dave Yokel (BLM), Lincoln Parrett (ADF&G)

Physical Environment

1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?

- Point Hope – Lots of changes. Rain in mid-winter. All snow recently blew away.
- Wainwright – Rain after the first snows.

2. What did you notice about snow depth and icing?

- Point Hope – Sea ice is connecting to land later and later. Ice cellars are no longer cold enough for storage. Snow depth is thinner (worse than last year); ice is thinner. For river ice, strong currents are eroding the ice from underneath and making it thinner.
- Wainwright – could travel on ice on lakes in late October 2014. Used to be earlier.
- Barrow/Nuiqsut – Snow consistency is different than in past, not moving with winds the way that it used to. Creating ice sheets. A lot of frost events. Up to 6” of hoar frost. Problems with people breaking through ice during fall fishing.

3. What were winds like in winter? In summer?

- Point Hope – Very strong winds; winds coming more from east and southeast, used to come more from the west.

4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)

- Point Hope – Rain in mid-winter, after first snows. Still no sea ice on south side of Point Hope and even on the north side it is five miles offshore. A lot of erosion due to this, threatening airstrip.
- Wainwright – Rain after first snows.
- Some of the old ways to predict weather may not work anymore. Changing weather patterns are interrupting the hunting cycles. It is hard to adjust to changes in weather cycles and behavior of animals.

5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)

- Icing on vegetation is getting heavier; impacts to shrubs (which caribou eat).

Caribou

6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?

- Point Hope – Used to get caribou in July, but now coming later. It has been 10 years since caribou have come near town. Have to go nearly to Kivalina to get caribou.
- Wainwright – Herd from south was late this year (late October, early November). Getting caribou now (December).
- Barrow/Nuiqsut – Last year Barrow had caribou, but this year they have to go more than 40 miles to hunt. Since people are having to travel further, community sharing gas, etc.

7. How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?

- Point Hope – Not many near town anymore, especially in fall.
- Wainwright – Quite a few caribou, both TCH and WAH, but not as close to town as before. Saw a lot of calves this fall, similar to previous years. Hardly any bulls; proportion of bulls to cows is lower than usual. Bulls were large antlered.
- Barrow/Nuiqsut – Decrease in number of bulls to cows this year. There were lots of caribou around town last winter, but this year they are more than 40 miles away and not numerous.

8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?

- Point Hope – Not as fat as they used to be; maybe a function of how people harvest, since they are traveling so far they may be willing to take the skinny ones.
- Wainwright – Expecting to see more blood on caribou hooves caused by bleeding from rain/ice storms.
- Barrow/Nuiqsut – Mostly fat caribou brought in. Some caribou still have lots of fat in November. Think this may be due to less sea ice and more moisture in the air in the fall.

9. Were there any other notable changes regarding caribou compared with past years?

- Point Hope – No trails developed during the migration.

Other Animals

10. What did you notice about bears and wolves in your area?

- Point Hope – Good wolf and wolverine hunting, as well as lynx. May be due to high population of lemmings. Lots of bears.
- Wainwright – Good wolf and wolverine hunting this year.
- Barrow/Nuiqsut – Not as many predators as usual (bears, wolverines, wolves), but still plenty.

10-A. How did these predators affect caribou in your area? (New question in 2013)

- Affect caribou movement and causes caribou to not use parts of range, as caribou avoid areas with more wolves.

11. Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you do not see much of any more, or changes in behavior or body condition)

- Point Hope - Seeing some lynx, muskrat and river otters. When they go egging, they are seeing murre and other birds that are not usual in the area; more and larger crabs and different fish species.
- Wainwright – Grasshoppers and beavers in Wainwright area. Lots of snowy owls (may be related to lemming population). Porcupine as far north as Wainwright.
- Barrow/Nuiqsut – Bowhead whales coming by earlier (February), using the open water, even before the belugas.

Other Comments

12. How do people in the communities use caribou, other than for meat (e.g., clothing)?

- Need to educate younger hunters about how to use caribou.
- Still use tendons to sew sealskins together to make boats; need to butcher properly to preserve tendons. It takes tendons from 15-20 bulls to sew skins for one boat.
- Skin for mukluks.
- Still using skins for blankets and sleeping pads.
- Important to be efficient with the parts from the caribou and share; more competition for caribou.

13. What types of exploration and development or other activity have you noticed in the region that may be impacting caribou?

- Planes and helicopters associated with development and research activities disturb caribou, but do not disturb wolves and bears.
- Concern about disturbance from seismic activity on caribou. Not enough enforcement on effects of development and research activities on caribou and the herds' reproductive cycles.
- Expecting more roads around western North Slope that would impact caribou.

14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?

- Airplanes scare the caribou away. More personal airplane use. Mostly an issue in August and September.
- Sport hunting causes disturbance of migration by getting in front of the herd leaders and disturbing their movements/routes.
- More conflict from sport hunting based out of Kotzebue than in other areas.

15. Is there anything else that you have seen this year that you would like to mention?

- Younger hunters from the region tend to stay out to hunt for 12-hour day and then return home, rather than staying out for several days or a week.
- Even younger hunters from the region need to be reminded to let the first caribou go through without disturbance.

Seward Peninsula

Working Group members: Morris Nassuk (Koyuk), Charlie Lean (Nome), Tom Gray (Nome, Reindeer Herders Assn.), Charles Saccheus (Elim)

Contributed to notes: Kyle Joly (NPS), Nikki Braem (ADF&G)

Physical Environment

1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?

- Chukchi Sea is just now freezing up and isn't complete (as of December 17, 2014). This late freeze-up is similar to last year.
- Nome – River freeze-up about October 10. Ocean freeze-up seems about a month late. Changes in freeze-up interferes with juvenile salmon.
- Spring breakup 2014 was early – water everywhere by the last week of April.
- Koyuk – In 2014 there wasn't a typical "breakup" on the rivers. Spring runoff was low and gradual, and didn't lift the river ice and cause it to move out; rivers held their ice and it just melted in place.

2. What did you notice about snow depth and icing?

- Nome – Snow is inconsistent. Not much snow last spring.
- Elim – Not much snow. Don't get any caribou because cannot travel to hunt.
- Lack of snow makes it difficult to travel.
- No mention of icing events or ice on snow.

3. What were winds like in winter? In summer?

- Nome – Strong winds. However, not as strong as the "hurricane force" winds 2013 and not as much property damage.
- Elim – Severe winds this fall (2014), mostly in Norton Bay.
- Koyuk – North winds at Koyuk during beluga hunting time in the bay.

4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)

- Weather is less predictable. Elders used to be able to predict. Lately found out that magnetic north is off; tilting in some fashion. This may have something to do with what we are seeing in our area.
- Think that with north wind there isn't as much precipitation (less rain in 2014 than in 2013).
- Think north wind coming across the open water leads to warmer air temperatures (above zero degrees Fahrenheit).
- Some lightning around Unalakleet.

5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)

- There is bare ground from Golovin to Darby Mountains.
- On south side of Seward Peninsula, already have only spotty permafrost. North side of peninsula, it is thinning and disappearing. Pingos disappearing on north side of Seward Peninsula.
- Koyuk, Unalakleet – Seeing sinkholes from melting permafrost.
- Koyuk had 3-4 fires; Unalakleet had 2-3 fires (lightning started). Not significant. No fires

- in Nome area.
- Erosion events in spring have much less impact than in fall, when the ground is soft and erodes more easily.
- Very little auffs along rivers (not big piles of ice)..

Caribou

6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?

- Nome – At Serpentine, 100,000 caribou on Seward Peninsula since late October 2014. Nome hunters driving to end of road to hunt them there. They are arriving a bit later than average, in mid- to late-October.
- Koyuk – Started getting caribou in November.
- Elim – Caribou are 20-25 miles NE of Elim, but can't use snow machine to get to them due to lack of snow. No caribou hunted yet in 2014.
- Golovin – Not able to hunt because no snow.
- White Mountain – Got about 13 caribou from hot springs area.
- Herd up in Darby Mountains that stay there year round.

7. How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?

- Nome – ADF&G says there is approximately 100,000 caribou on Seward Peninsula now, near Serpentine (Dec. 2014). As he has hunted, the most he has seen is about 500 animals. Least seen on a hunt is about 25 animals.
- Emphasizing that caribou matter to people that live in the winter range, just as they do to people living farther north.
- In early October, there were many north of the Darby Mountains, heading west.
- Koyuk – mixed age and sex ratios (cows, bulls, calves). One report of about 300 in a bunch north of Koyuk.

8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?

- Nome – Of the five harvested in late October/November, there were a lot of warble flies. All were skinny (no fat), but that is typical for this areas.
- They improve in condition over the winter. If you get them in October, they are skinny. However, if you get them before they go north in the spring (e.g., March), they are better.
- Koyuk – Some with fat but mostly lean. Few warble flies. Lesion on liver of one animal (harvested in August).
- Elim – In good condition.

9. Were there any other notable changes regarding caribou compared with past years?

- None

Other Animals

10. What did you notice about bears and wolves in your area?

- Wolves weren't all that common 50 years ago, but came to the area with the caribou and now wolves are staying there year-round. Wolves are impacting moose, muskox and reindeer.
- Bears and wolves are increasing in numbers. There are now fewer people who hunt and trap these predators.

- Reindeer herders are having more trouble/concern with wolves.
- Noticed bear predation on muskox having more impact than on caribou. Bears have learned to take muskox.
- Noted, however, that when guiding for bear in Nome area, it has been harder and harder to find one to take.

10-A. How did these predators affect caribou in your area? (New question in 2013)

- In last 4-5 years, predators have increased; impact may be greater on moose than caribou.
- Seeing more wolves but personally have not that evidence of wolf kill of caribou.
- Concern that while caribou are declining, the predator populations are still relatively high and will have a disproportionate impact on the herd size.

11. Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you do not see much of any more, or changes in behavior or body condition)

- Elim - Last summer (2014) was the best fishing the community had ever had.
- Several muskoxen herds near Nome (think they are coming to town to avoid predators), but virtually no young of the year survived (conflicts with people and dogs).
- Noted that moose arrived on Seward Peninsula in about 1950. Bears were not super common then.

Other Comments

12. How do people in the communities use caribou, other than for meat (e.g., clothing)?

- Blankets/bedding.
- By the time the caribou get to this region the hair is too long for parkas.
- No one uses caribou leggings anymore.
- Skins with warble flies don't keep.

13. What types of exploration and development or other activity have you noticed in the region that may be impacting caribou?

- Cell phone tower went in near Koyuk, but don't know if it affected caribou. Construct in summer, which is not when we hunt caribou.
- Proposal for Graphite mine near Teller; road built, but is in an area that doesn't have caribou.

14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?

- No comments about user conflicts.
- Koyuk – Noted that they don't mind Unalakleet hunters coming to their area.

15. Is there anything else that you have seen this year that you would like to mention?

- No comments.

Koyukuk and Middle Yukon Region

Working Group members: Benedict Jones (Koyukuk), Pollock Simon (Allakaket), Allen Barrette (Fairbanks).

Contributed to notes: Tim Hammond and Jenifer McMillan (BLM)

Physical Environment

1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?

- Fairbanks – First snow late October, but couldn't use trails until after Thanksgiving.
- Koyukuk – First snow November 10, but got rain about two weeks ago (early Dec.).
- Allakaket – Only 4-5" of snow so far this year; can't run snow machines yet.
- Breakup is changing. It used to be that the Koyukuk River went out before the Yukon River. In 2014, ice moved out fast but hung up.

2. What did you notice about snow depth and icing?

- Koyukuk – last year just 2-3 feet of snow; used to be 4-5 feet.

3. What were winds like in winter? In summer?

- No comments about wind conditions.

4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)

- Rain last January. In middle Yukon, one freezing rain event in mid-winter.
- Weather changing – wet summer, cold spring, not as much snow in winter. Hard to travel now with snow machine.

5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)

- Permafrost isn't freezing as deep as in past.
- Because of rainy summer, there were not many berries.
- Ground water was really high; froze as ice among the tussocks.
- Icy rain in winter.
- Rain kept mosquitoes down last year.
- Mudslides between Nulato and Koyukuk; a rockslide between Hughes and Allakaket broke the river ice and that open water disrupted safe travel on the river.
- Rainy summer made willows grow; this will help moose habitat.
- Fires burn up caribou feed / habitat.

Caribou

6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?

- No caribou yet in any of these communities in fall/winter 2014.
- Allakaket – Prior to 1974, there were caribou a few miles out of Allakaket every year. Now there are none.

7. **How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?**
 - No responses.
8. **If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?**
 - No responses.
9. **Were there any other notable changes regarding caribou compared with past years?**
 - No responses.

Other Animals

10. **What did you notice about bears and wolves in your area?**
 - Seeing lots of grizzlies. Grizzlies and black bears were out late in fall due to warm weather. Saw grizzly tracks on track-line at Livengood on December 3, 2014. Late.
 - Flats (wetlands) full of water pushed bears and moose to higher ground; moose hunters did better in higher ground (and low amount of snow hasn't pushed them back to lower ground).
 - Grizzlies are eating black bears.
 - No coyotes now. Coyotes used to be in the region, but moose came in, followed by wolves. Wolves killed off the coyotes in the 1930s.
- 10-A. **How did these predators affect caribou in your area? (New question in 2013)**
 - No response to this question.
11. **Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you do not see much of any more, or changes in behavior or body condition)**
 - Fewer furbearers; low cycle (even squirrels). No mink or muskrats.
 - Koyukuk - More moose, but still low numbers.
 - Koyukuk – Saw one muskox about 4-5 years ago.
 - Birds - Weather in Lower 48 is affecting waterfowl; no geese this year. Not many owls.
 - Fish - Higher river water temperature affecting fish (affecting survival in spawning beds and affecting chum migration); king salmon are now smaller. No whitefish after August. Lots of pike, which are eating blackfish. No kings this year. Whitefish numbers are low; some sheefish; lots of chum salmon.

Other Comments

12. **How do people in the communities use caribou, other than for meat (e.g., clothing)?**
 - No response to this question.
13. **What types of exploration and development or other activity have you noticed in the region that may be impacting caribou?**
 - Concerned that the proposed road to the Ambler mining district will also impact caribou movement. Vehicle traffic will be a problem.
 - Road realignment around Livengood disturbed a trap-line, as road trappers came to the area.

14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?

- In past, hunters did not throw bones into the river.
- Concerned that sport hunters in Gates of the Arctic are changing the caribou migration, by disturbing the leaders of the migration (“chase them back west”). Very few caribou coming through Atigun Pass in recent years.
- Wildlife managers need to listen to elders.
- Don’t leave caribou meat to rot or caribou won’t come back through that way.

15. Is there anything else that you have seen this year that you would like to mention?

- All caribou herds are down in numbers.
- Moose numbers are down in numbers.
- Furbearers are down in numbers.
- Can’t explain it all – think its habitat related.

Kotzebue Sound / GMU 23 Region

Working Group members: Vern Cleveland (Noorvik/Kiana), Cyrus Harris (Kotzebue), Phil Driver (Anchorage, Unit 23 guide), Raymond Hawley (Kivalina/Noatak), Billy Bernhardt (Kobuk/Shungnak), Ron Moto Sr. (Deering)

Many other group participants (names not recorded)

Contributed to notes: Jim Dau and Brandon Saito (ADF&G)

Physical Environment

1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?

- Freeze-up – Started in time in 2014, but then warmed up. Kotzebue Sound is still open – lots of open water.
- Noatak River freeze-up about October 6, not as late as in 2013.
- River ice thin on upper Kobuk River.
- Warm temperatures = no ice at Kivalina. Also tundra thawing.
- Very little snow, even at this date (December 17, 2014). Has warmed to rain – a few rain events.

2. What did you notice about snow depth and icing?

- Very little snow so far this winter; none in many areas.
- Glare ice on ground in some areas.
- Thick ice on snow in Noorvik.
- River ice thick when beaver trapping; maybe kill the muskrats.

3. What were winds like in winter? In summer?

- Winds generally more from the east or southeast.
- Wind direction is less variable.
- Southeast wind isn't bringing moisture / snow like in the past; snow blows away.
- Not as windy as 2013.

4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)

- No big storms this year, which would usually arrive and bring snow.
- Dry around Noatak.
- Very warm.

5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)

- No berries.
- Seems like Kobuk River water is warmer than usual. Kids (in Noorvik) are swimming earlier in the summer and still swimming in August, which is unusual.

Caribou

6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?

- Caribou migration late, but not as late as 2013.
- The migration is unpredictable now.
- First caribou came through when temperatures cooled off in late August; but then it warmed up again and they quit crossing for a long time.
- The fall migration path was farther east than in the past. No caribou in northwest Unit 23 (Kivalina River).
- Noatak hasn't gotten any caribou in their area for the past 5-6 years; not enough for their food needs. Many families (90%) have few or no caribou. Have to go way upriver to get them.
- In July, there were caribou near Kivalina.

7. How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?

- First caribou in the fall were mostly females and calves (early September); mostly bulls and cows in later September.

8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?

- Caribou are very fat and healthy. (Same as last year.)
- Big bulls – big body and fat.
- Meat very good.
- Kivalina – noticing caribou are smaller; perhaps hybrids with reindeer.

9. Were there any other notable changes regarding caribou compared with past years?

- Trail systems and summer snow on mountains direct the migration.
- Caribou go higher up into the mountains when the ground is frozen, without snow.
- Earthquakes scare caribou away?

Other Animals

10. What did you notice about bears and wolves in your area?

- Lots of brown bears and wolves. High cost of fuel is reducing hunting for bears and wolves.
- More brown bears than black bears.
- Bears breaking into cabins along the coast (Sisoalik). This used to be rare, but this year 12 of 13 cabins were broken into by bears.
- Noatak – Lots of bears and wolves. Bears in the village.
- Kobuk, Ambler, Shungnak – Wolves in villages. Also lots of bears in Upper Kobuk. People want to hunt black bear more than brown bear.
- Kivalina – Few bears, no marine mammals. Lots of wolves.
- Selawik – Bear and wolf tracks on every bar.
- Deering – Three wolf packs with pups near village; population expanding fast. About 40 bears near Deering.
- Kotzebue – Four wolves near Kotzebue all year.
- Traveling Kotzebue to Wulik River – saw 19 bears; lots of sows with three cubs. No moose. Heard wolves howling every night and tracks on every bar.
- Bear tracks a few weeks ago on lower Noatak River; maybe a polar bear.

10-A. How did these predators affect caribou in your area? (New question in 2013)

- Bears and wolves affecting moose more than caribou.

- Wolves following caribou.
- Upper Selawik River – caribou present; then heard wolves.

11. Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you do not see much of any more, or changes in behavior or body condition)

- Wolves are now in villages. Can't hunt or trap wolves without snow; hard to chase on tundra.
- More bears breaking into cabins and camps.
- Fish - Record chum salmon run in 2014.
- Fish die-off – would this affect bear numbers?

Other Comments

12. How do people in the communities use caribou, other than for meat (e.g., clothing)?

- No response to this question.

13. What types of exploration and development or other activity have you noticed in the region that may be impacting caribou?

- In the Upper Kobuk area, Nova Copper wasn't working this summer. More caribou were seen around Kobuk and Shungnak.

14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?

- Transported hunter and guide camps on Noatak River interfering with migration.
- Planes flying low on rivers make caribou slow to cross. These can be guide/transporter/private planes, but also can be enforcement officers observing hunting.
- Noted that local hunters customarily camp on or stage hunting from the south sides of rivers to avoid disturbing the caribou as they are approaching river from the north to cross. Guided and transported hunters are dropped on both sides of the river; those on the north side can disturb the migration.

15. Is there anything else that you have seen this year that you would like to mention?

- Local hunting activity is concentrating on the Kobuk River, because there are fewer caribou crossing near villages on the Noatak.
- Because it has been difficult for a number of villages to get caribou in recent years, there is more competition among local hunters in the middle Kobuk River area, where migration crosses the river (this is between local hunters, not involving non-local or nonresident hunters). On the rivers, boats race to get to the crossing caribou and there is more “combat hunting” as local hunters all try to get meat.
- Local hunting patterns – People from far away (Noatak, Shishmaref, Unalakleet) are coming to Kiana and Noorvik area to hunt for caribou.

Management Reports to the WACH Working Group, presented at the December 2014 meeting:

- Alaska Department of Fish and Game
- Bureau of Land Management
- National Park Service
- US Fish and Wildlife Service

ADFG Agency Report: Western Arctic Caribou Herd Working Group

- The Division of Wildlife Conservation (Region 5: Arctic/Western Region) within ADFG currently allocates about 30% of our operating budget for arctic caribou herd management and research. We have one full-time Wildlife Biologist based at Kotzebue who is assigned to conduct Western Arctic Herd (WACH) research and management activities, and biologists from our Nome, Kotzebue, Barrow and Fairbanks offices assist with the field work and data analyses. Region 5 also has one full-time Wildlife Biologist based at Fairbanks who is assigned to conduct research and management activities for the Teshekpuk Lake caribou herd on the North Slope.
- Field activities in our WACH program include a biennial photo census, fall composition surveys, spring recruitment surveys, caribou collaring at Onion Portage, animal collections for disease and body condition assessment, range-wide radio telemetry surveys and harvest assessment surveys. A review of this work is provided more in-depth in a separate report.
- Our Education Associate for Region 5 based at Kotzebue is assigned to assist with WACH caribou wildlife education efforts. These include school visits, preparation of the Working Group newsletter and coordinating high school student participation at the Onion Portage collaring effort.
- A significant activity of our staff is providing comments to DOT, BLM and other agencies regarding the potential impacts that road and development projects may have on caribou movements and distribution.
- ADFG submitted an Agenda Change Request to the Board of Game addressing the population changes we are seeing in the Western Arctic and Teshekpuk Lake caribou herds. The details are addressed more fully in our caribou status reports provided at this meeting.
- BLM has provided to ADFG a grant for \$13,000 to assist with meeting costs and travel for Working Group members for the next several meetings.

BLM Report to the Western Arctic Caribou Herd Working Group Winter 2014

Planning (Anchorage Field Office contact, Alan Bittner: 267-1246; Arctic Field Office contact, Donna Wixon: 474-2301; Central Yukon Field Office contact, Jeanie Cole: 474-2340)

- BLM Alaska has submitted a plan to change administrative office boundaries to the BLM Washington DC Office. If approved the BLM Anchorage Field Office will assume management responsibilities for lands around the Nulato Hills and within the NANA Corporation boundary. The Anchorage Field Office will have a more active role with the WACH WG in the future.
- The Arctic Field Office has completed a Final Supplemental Environmental Impact Statement (EIS) for the Greater Moose's Tooth Unit 1 (GMT1) petroleum development in the National Petroleum Reserve (NPR) just west of Nuiqsut. This development would consist of a single drill pad and either a road connection to the Alpine oil field facilities in the Colville River delta or an airstrip. The Record of Decision (ROD) has not been issued as of December 8, 2014. The impacts of the proposed development on the WACH would likely range from none to negligible since the development would be in the "outer range" of use by that herd. It would be in the zone of overlap between the Teshekpuk and Central Arctic herds. No other development has been proposed within the NPR since the ROD for the NPR Integrated Activity Plan/EIS was signed on February 21, 2013. For more information please visit http://www.blm.gov/ak/st/en/prog/energy/oil_gas/npra/GMTU_proposed_dev_proj.html
- BLM is in the alternative development phase of two Resource Management Plans (RMP) for the Bering Sea/Western Interior (BSWI) and the Central Yukon (CYRMP) Planning Areas. These plans will provide for future management of approximately 27 million acres of BLM-managed public lands in western, central and northern Alaska. These lands include the Nulato Hills, Dalton Highway Corridor and lands in the central Yukon River and central Kuskokwim watersheds. We hope to present the draft alternatives to the public in the spring of 2015. The planning process will take approximately four years. There will be additional opportunities for public input as the plan progresses. For additional information please visit <http://www.blm.gov/ak/st/en/prog/planning.html> (Contact: Jorjena Daly: 267-1317 or jdaly@blm.gov for BSWI and Jeanie Cole: 474-2340 or j05cole@blm.gov for the CYRMP)

Reindeer Grazing (Anchorage Field Office contact, Laurie Thorpe: 267-1208)

- The Anchorage Field Office is working under an assistance agreement with the University of Alaska Fairbanks (UAF) Reindeer Research Program to install range enclosure structures in the active grazing ranges of the Seward Peninsula. There are 24 enclosures on State and BLM land. Vegetation baseline data collection was done in 2013.
- The Anchorage Field Office, UAF and the Natural Resources Conservation Service (NRCS) developed a unified monitoring protocol to assess rangeland health for land managing agencies; this is being used at the new grazing enclosures and will provide useful information to reindeer herders for both short and long term range management needs. The data will also be valuable in assessing climate change dynamics on the tundra vegetation.
- The Anchorage Field Office is working with the UAF and reindeer herders to generate grazing management plans for the active reindeer ranges. These plans are currently under development as part of the High Latitude Range Management Curriculum at the UAF. The first plan expected to be completed is for the Davis range.
- A reindeer grazing proposal is being developed in the Stebbins/St. Michael area which would involve BLM lands east of these communities. This may involve areas that were historically used by the WACH. No formal proposal has been received yet.

Wildlife (Anchorage Field Office contact, Bruce Seppi: 267-1282; Arctic Field Office contact, Dave Yokel: 474-2314; Central Yukon Field Office contact, Erin Julianus: 474-2358 or Jennifer McMillan: 474-2308)

- The BLM continues to contribute to the monitoring of collared caribou in the Western Arctic Caribou Herd in cooperation with ADF&G, NPS, and USFWS.

- BLM CYFO biologists McMillan and Julianus contributed to the annual collaring effort for the herd at Onion Portage in 2014. BLM funded travel for 12 students from Unalakleet and Nome to Onion Portage, where they were able to spend three days with biologists and assist with the collaring project on the river. BLM also secured funding for the students to attend the WACH Working Group annual meeting in December, where they will share their experiences with the Group. Unfortunately, the Nome students had to cancel the Working Group meeting.
- The most recent round of Western Arctic Caribou Herd (WACH) winter habitat monitoring was completed in July, 2013; habitat monitoring will occur again in ~4 years. Data archiving and preliminary analyses and reports are available. Further data analysis will be forthcoming.
- The BLM has conducted scoping to inform the development of a WACH Caribou Winter Range Habitat Management Plan. The BLM is investigating additional research to aid in lichen/winter-range habitat identification to better inform the Habitat Management Plan.
- The BLM continues to be a partner in the GMU 23 Working Group. The group has decided to stay together for a couple of more years until the federal agencies complete their planning efforts and the group has time to review the effectiveness of education, law enforcement and regulatory measures put into place to reduce the user conflict issues.
- Several Rapid Ecological Assessments (REAs) are ongoing. REAs provide the BLM with information about current and projected resource condition which is used to prepare land use plans (especially the upcoming Central Yukon RMP) and in NEPA analyses. Two REAs have recently been completed; the Seward Peninsula/Nulato Hills/Kotzebue Sound Lowlands REA and the Yukon Lowlands-Kuskokwim Mountains-Lime Hills Rapid Ecological Assessment. The Central Yukon REA is ongoing; this REA area includes the Western Brooks Range and the Dalton Corridor and has been expanded to include a large area to the southeast of the former REA boundary. Participation in the REA process is encouraged by all interested parties. Data for completed REAs will be posted shortly at http://www.blm.gov/wo/st/en/prog/more/Landscape_Approach/reas.html

Fire

- *See handout* on fire perimeters within the WACH range.

Recreation (Central Yukon Field Office contact, Kelly Egger: 474-2242; Anchorage Field Office contact, Tom Sparks: 443-2177 or Jeff Kowalczyk: 267-1459; Arctic Field Office contact, Donna Wixon: 474-2301)

- As in 2013, the CYFO implemented a delayed start date for transporters taking caribou hunters into BLM managed lands in the Squirrel River drainage this year. Because the caribou migrated late, there was no opportunity to evaluate whether it helped reduce impacts to migration or conflicts with subsistence activities.
- The proposed Recreation Area Management Plan for the Squirrel River is in draft format. Until the plan is final, the BLM continues to renew transporter permits on an annual basis.

Mining (CYFO contact, Darrel VandeWeg: 474-2325, AFO contact, Joe Kurtak 267-1256)

- There is renewed interest in Klery Creek for mining at an existing placer mine. No mining plan has been submitted.
- There is interest in graphite mining on the Seward Peninsula north of the Kigluaik mountain range. No mining plan has been submitted.

Realty (Anchorage Field Office contact, Tom Sparks: 443-2177; CYFO contact, Robin Walthour: 474-2304)

- We are processing a right-of-way application from GCI/Unicom to erect six (6) new towers connecting to their existing projects. This phase would connect towers from Kotzebue southeast through Ruby to Galena. The work is scheduled to begin in the summer of 2015.

National Park Service
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Western Arctic Caribou Herd Working Group Update December 2014

National Park Service

2014 WACH WG Update

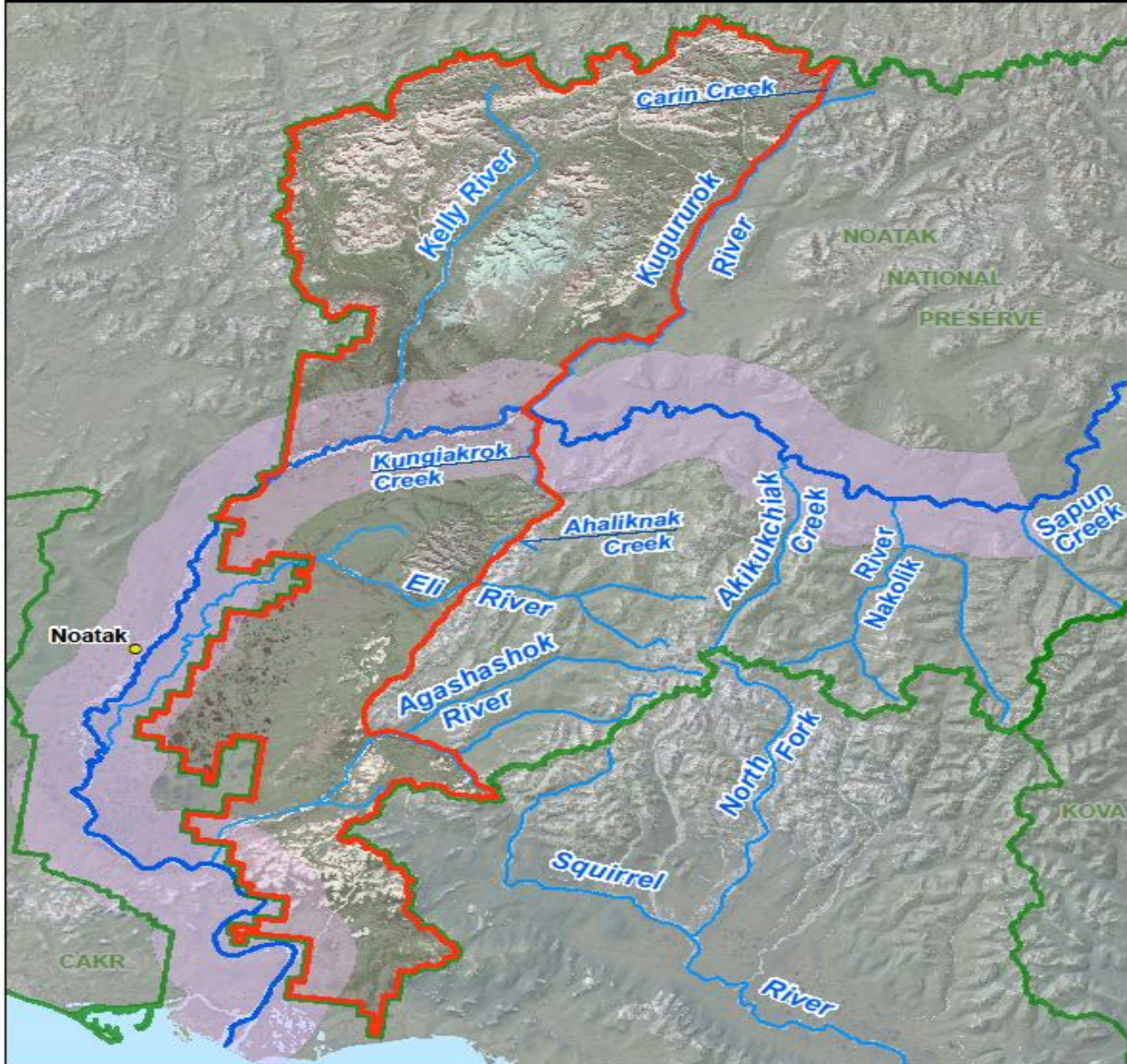
Commercial Use Authorizations (CUA's) for Commercial Transporter Visitor Services for the Noatak National Preserve

The National Park Service has issued Commercial Use Authorizations (CUA's) for Commercial Transporter Visitor Services for the Noatak National Preserve (NOAT) for 2014/15 that includes a delayed entry stipulation for the western portion of the Noatak Preserver.

Noatak National Preserve

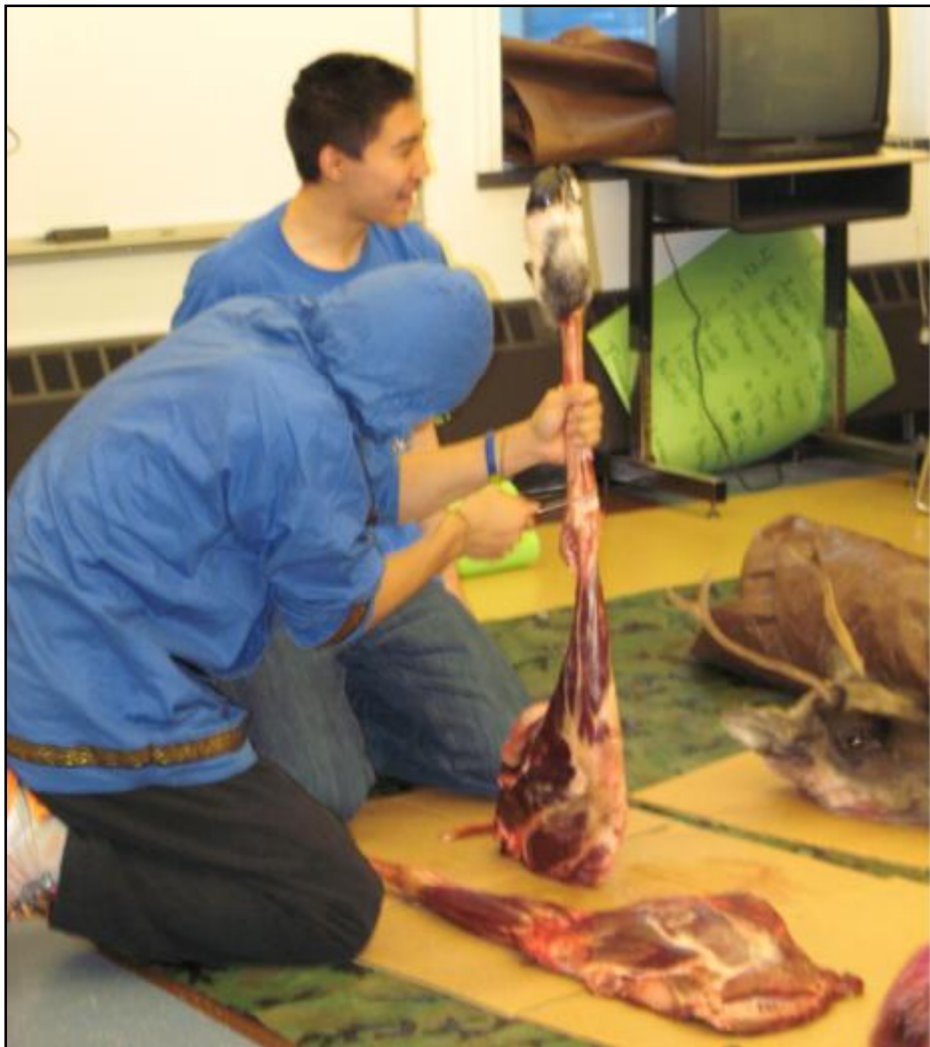
Transporter Map West

Alaska Region
National Park Service
U.S. Department of the Interior





Caribou Skeleton Project & Educational Exchange



Nunamiut School
Effie Kokrine School
National Park Service

November 2014 Anaktuvuk Pass, March 2015 Fairbanks

Working with students, teachers and elders to preserve a caribou skeleton for comparison with archaeological artifacts



Students also participated in classroom activities about archaeology and wildlife ecology

“I learned how to use an ulu and how to cut the skin of the caribou hoof...The last day we made Eskimo donuts and had the caribou stew ready for all the elders and students.” - Suleymi, Fairbanks student

*“I really enjoyed cutting the meat with elder Rachel Riley. She taught me a lot [about] the caribou, and my favorite part was giving the meat out to the elders!”
- T.J. , Anaktuvuk student*



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Youth Outreach



Interpretive staff gave programs at Camp Sivu (pictured left) and led eager participants to enjoy, learn about, and spend a night on the tundra at Camp Willow (right).

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NPS Wildlife Management Projects 2014/15



**Brown Bear Abundance Survey
BELA/Northern Seward Peninsula
(May-June)**



**Dall's Sheep Abundance/
Composition NOAT/KOVA (July)**



**Moose Abundance/Composition Survey
NOAT (November/April)**



**CAKR/BELA Muskoxen
Population Monitoring/Research**

Other NPS Sponsored Caribou Research

- An Integrated Study of Hunting Conflict in Noatak National Preserve
 - Traditional Ecological Knowledge

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Science Research Presentations

National Park Service

**Muskoxen in Western Alaska
Challenge or Success?**

Slide presentation by
Dr. Joel Berger
University of Montana
Wildlife Conservation Society

Muskoxen were reintroduced to western Alaska in the 1970's. Some groups have done well, but others have done poorly. The reasons are not always clear. However, there are many opinions about their future in the region. This talk will explain what the long-term studies have uncovered so far and help us with some of the hard questions.

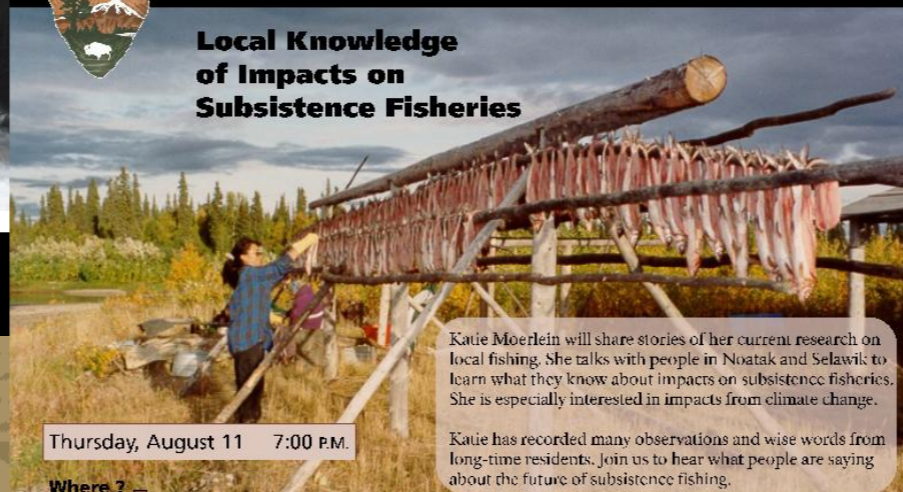


Thursday, March 29 7:00 P.M.

Northwest Arctic Heritage Center
171 Third Avenue
442-3890

National Park Service

**Local Knowledge
of Impacts on
Subsistence Fisheries**



Katie Moerlein will share stories of her current research on local fishing. She talks with people in Noatak and Selawik to learn what they know about impacts on subsistence fisheries. She is especially interested in impacts from climate change.

Katie has recorded many observations and wise words from long-time residents. Join us to hear what people are saying about the future of subsistence fishing.


Thursday, August 11 7:00 P.M.

Where ?

Northwest Arctic Heritage Center
171 Third Avenue
442-3890

National Park Service

**Science is COOL
And so are the tools**



Here's an awesome science tool: Dogs who can track bear anuk. (poop)
Join us to watch some amazing dogs show off their skills. They've been helping our park biologist Marci Johnson learn good information about bears in Kobuk Valley National Park. **Don't miss this one-time event!**

Saturday, August 20 4:00 P.M.

Where ?

Northwest Arctic Heritage Center
171 Third Avenue
442-3890

These programs of widely varying topics are given by scientists who conduct projects in the parklands and wish to share their findings with the public.

Public Outreach/Tribal Liaison

- Hired Tribal Liaison for Noatak to work closely with NPS on variety of issues including caribou.

Igliqtiqsiugvigruaq the “Big Site”: NAGPRA Monitoring (NPS & Brown University) Kobuk Valley National Park



~ NAGPRA is the Native American Graves Protection and Repatriation Act. Approved in 1990, the law and regulations “address the rights of lineal descendants to Native American human remains,

Excavation of house pit ruins at the Big Site

National Park Service
U.S. Department of the Interior



Barrier Island Coastal Lagoon System –
this region represents the largest, undisturbed coastal
barrier and coastal lagoon system in North America.
This is one of the great salt marsh systems of the
North American continent!

National Park Service
U.S. Department of the Interior



National Park Service continues work on maintaining shelter cabins mostly in Bering Land Bridge and working with local entities on snow machine trail staking.

U.S. Fish and Wildlife: Selawik National Wildlife Refuge
Agency Report to the Western Arctic Caribou Herd Working Group

2014

Refuge Personnel Changes:

- Susan Georgette accepted the Refuge Manager position in October. She has worked for Selawik Refuge in outreach and education since 2005. Prior to that, she worked for 15 years for the Alaska Department of Fish & Game, Division of Subsistence, in northwest Alaska.
- Deputy Manager Tina Moran recently moved to Fairbanks to work for the Kanuti National Wildlife Refuge. We will soon be recruiting to replace her.
- Bill Carter is our new fisheries biologist. He comes to us from the Fish & Wildlife Field office in Fairbanks where he has worked on fisheries projects throughout northern and central Alaska for 15 years.

Refuge Activities and Projects related to Caribou:

- Renewed efforts to monitor snow conditions on the herd's winter range
- Supported Selawik Science-Culture Camp where students learn to hunt, butcher, and process caribou
- Assisted ADF&G with the Working Group's web page and newsletter
- Assisted ADF&G in caribou-themed Project Wild training for NW Arctic Borough teachers
- Assisted ADF&G with community presentation in Selawik on Western Arctic herd population status
- Taught lessons on caribou to elementary classes in Kotzebue
- Updated a database to record Working Group member's comments on the status of the herd
- Provided 20K in funding for the annual meeting



Presentations and handouts distributed at the December 17-18, 2014 Working Group meeting (not included in meeting binder):

- PowerPoint presentation - Ambler Mining District Industrial Access Road, presentation by Alaska Industrial Development and Export Authority (AIDEA)
- PowerPoint presentation – NPS Arctic Inventory and Monitoring Network, Caribou Monitoring, 2011-2014 (presented by Kyle Joly, NPS)
- PowerPoint presentation – Caribou Harvest Assessment Program: 2014 – 2013 Preliminary estimates of caribou harvest by the communities of Deering and Kotzebue (Nikki Braem, ADF&G Subsistence Division)
- PowerPoint presentation – The Noatak Caribou Traditional Knowledge Project (presented by Gabriela Halas, UAF)

Presentations and handouts distributed at the December 16, 2014 Technical Committee meeting:

- National Park Service, Northwest Arctic Weather Summary 2013-2014
- US Fish & Wildlife Service, Western Alaska Landscape Conservation Cooperative
- Tim Fullman, The Wilderness Society, Environmental variables influencing fall and spring migration routes for the WACH (PowerPoint presentation)
- Carolina Behe, Inuit Circumpolar Council – Arctic Council, Terrestrial Expert Monitoring Group (PowerPoint presentation)