

## Western Arctic Caribou Herd Working Group DRAFT – 2017 Meeting Summary

**December 13-14, 2017**  
 Anchorage, AK

**DRAFT** for review & approval by WAH Working Group at December 2018 meeting

The Western Arctic Caribou Herd (WACH) Working Group (WG) met in Anchorage on December 13-14, 2017 (Agenda in Attachment 1). The WG’s Technical Committee met in Anchorage on December 12, 2017 (TC report in Attachment 2). The following is a summary of meeting presentations and discussion. Motions passed at the meeting are shaded in gray and listed in Attachment 3. Assignments are highlighted in yellow and listed in Attachment 4. The WG Meeting Binder (including copies of presentations) is posted on the WG’s website at [www.westernarcticcaribou.net](http://www.westernarcticcaribou.net)

### Day 1 – Wednesday, December 13, 2017

#### **I. Call to Order – 8:30 a.m.**

- A. Invocation: Mrs. Christine Westlake offered the opening invocation, at the request of Working Group Chair Vern Cleveland.
- B. WACH WG Roll Call / Establish Quorum – Quorum requirements were met.

<b>Working Group Seat</b>	<b>Voting Chair</b>	<b>Alternate</b>
1. Anchorage Advisory Committee .....	Neil DeWitt .....	<del>Kenny Rodgers</del>
2. Buckland, Deering, Selawik .....	Ron Moto Sr .....	<del>Percy Ballott</del>
3. Anaktuvuk Pass, Nuiqsut .....	<del>Esther Hugo</del> .....	<del>Eli Nukapigak</del>
4. Elim, Golovin, White Mountain .....	Charles Saccheus .....	<del>Morris Nakaruk</del>
5. Fairbanks Hunters .....	Allen Barrette .....	<del>Rod Arno</del>
6. Hunting Guides .....	<del>Jake Jacobson</del> .....	<del>John (Thor) Stacey</del>
7. Kivalina, Noatak .....	Enoch Mitchell .....	<del>Daniel Foster, Sr.</del>
8. Kotzebue .....	Cyrus Harris (Vice Chair) .....	<del>Willie Goodwin</del>
9. Koyukuk River .....	Pollock Simon, Sr. ....	<del>Jack Reakoff</del>
(Huslia, Hughes, Allakaket, Bettles, Wiseman)		
10. Lower Kobuk River .....	Vern Cleveland, Sr (Chair) .....	<del>Kirk Sampson</del>
(Noorvik, Kiana)		
11. Middle Yukon River .....	Benedict Jones .....	<del>Micky Stickman</del>
(Galena, Koyukuk, Nulato, Kaltag)		
12. Point Hope and Point Lay .....	<del>Steve Oomittuk</del> .....	<b>vacant</b>
13. Nome .....	Charlie Lean .....	<del>Jacob Martin</del>
14. Conservationists .....	Tim Fullman .....	David Krause
15. Northern Seward Peninsula .....	<del>Elmer Seetot, Jr.</del> .....	<del>Christine Komanaseak</del>
(Teller, Brevig Mission, Wales, Shishmaref)		
16. Reindeer Herders Association .....	Tom Gray .....	<del>Harry Karmun</del>
17. Southern Seward Peninsula .....	Morris Nassuk .....	<del>Leo Charles, Sr.</del>
(Koyuk, Shaktoolik, Unalakleet, Stebbins, St. Michael, Kotlik)		
18. Transporters .....	Julie Owen .....	<b>vacant</b>
19. Upper Kobuk River .....	William Bernhardt .....	<del>Oscar Griest, Sr.</del>
(Ambler, Shungnak, Kobuk)		
20. Atqasuk, Barrow, Wainwright .....	<del>Oliver Peetook</del> .....	Wanda Kippi

*Italic* print indicates members voted in at the 2017 meeting (see Motions, Attachment 3)

**Blue** text = vacancies                      Strike-out text = not present

- C. Audience Attendance: Audience attendance is listed in Attachment 5.
- D. Review Agenda: The WG reviewed the agenda (Attachment 1) and recommended no changes. Facilitator Jan Caulfield noted that there would not be a “Caribou Roundtable” discussion at this meeting. However, WG members were encouraged to fill out the Caribou Roundtable questionnaire provided in the binder and return those to Jan. Responses are included in Attachment 6 and will be entered into the database maintained by the National Park Service (NPS).
- E. Member Appointment: MOTION by Tom Gray, second by Cyrus Harris, to accept nomination of Working Group primary and alternate members: Seat 3 Alternate Eli Nukapigak; Seat 6 Primary Jake Jacobson and Alternate John (Thor) Stacey. Motion carried unanimously.

## II. Guest Elder – Mr. Larry Westlake, Alaska (verbatim remarks)

Mr. Larry Westlake from Kiana opened the meeting, sharing information about his family’s and community’s subsistence use of caribou from the Western Arctic Herd. Mr. Westlake’s remarks will be presented verbatim in the WG Meeting Summary and featured in the 2018 edition of *Caribou Trails*.

“Good morning. I am proud to be in front of you this morning, with some stories of my life, of hunting caribou. Before I start I’ll introduce my partner, my buddy, my loving wife, Christina. When we talk about caribou, we talk about our dinner table, our clothing, and our survival. That’s the importance of the caribou herd. When I first was on a caribou hunt—I had two older brothers, they took me out of school with my parents’ consent—I was fourteen years old, and in March and April there wasn’t any problem getting out of school towards the end of the year. People went to fish camps, muskrat camps, and hunting camps. The caribou herd was I’d say 100 miles up from where I live in Kiana, on the Noatak valley. It takes a couple days to get there with a dog team—our only transportation those days. But the first day was always the longest day, probably a 12-hour trip, where we would get to the end of the tree line. After that, you get over that point there wasn’t any trees out there in the Noatak valley up in the direction. We’d camp out there, prepare to get poles for our tent, little branches for our floor, and things like that, and gave the dogs a good rest before we got to the hunting ground. When we got to the edge of the Noatak, especially a creek named Sapun, there are quite a few willows in the mouth of that creek, where we would have enough wood to burn. And they were willows, and most of you know how willow wood is, it’s just like burning a newspaper if it’s dry, you don’t get much heat out.

But all those conditions were important. How we just didn’t burn up our wood to keep the wood stove going all day. We had to use it for breakfast and get along without it during the day, and then dinner. Lunches were always out in the hunting ground. Maybe a cup of tea or whatever we had – a piece of meat to go along, cooked meat if we had it, or a leftover pancake in the morning. These were times when survival was real important on all aspects. The caribou wasn’t a very big herd at that time, but with the help of our elders and knowledge of the land and the herd and everything – they were the, I say, the best managers on earth because they knew that the herd had to survive so they could survive themselves, and their only transportation, the dogs, had to survive. So I could tell you that they [the elders] were a big part of the growth of our caribou herd. In the 80’s it came up to over 500,000. In my mind, I think they had a big part of that management and the growth of the caribou and also the fish.

Our people had to have the best just like you have to have the best part of the beef when you eat it. Or the fish today that do not come out of the spawning grounds. They were people that had to have prime meat. They didn’t kill any caribou, unless needed, when they’re rutting or when they’re fawning in the spring. When we campout out there, we let the dogs rest and we walk to hunt the caribou.

The coffee came in a one-pound can, two-pound can, pretty soon a three-pound can, but those little cans had a little lid in it, and you opened it up with a key. They were a good coffee pot and teapot with the

little cover on it. You put your tea and your sugar in there, whatever you had, and if there was any willows around you could have a cup of tea. That was a daily pack that we had. Of course we had snowshoes. And then we had the elder people stay at the camp to gather wood and whatever the chores were—get ice for drinking water, and so on.

While the herd started their growth, they start migrating south, and that was a pretty fast migration as far as I could remember, and the growth was gaining pretty good. So I think it was in the early 60's, we had a decline of caribou also, and at that time they blamed most of it on brucellosis. There was a lot of sign of growth on their legs, on their feet and things like that, but that's all I know that they recommended what was happening to them, but they were dying off right on the mountains, and quite a few of them when they got, I'd say, 20-30 miles out of Kiana, north of Kiana. So even those days we couldn't get a study of any kind to see what was really happening to the herd. When they finally came to the edge of the Kobuk river, at Kiana, we could see them. North of us the mountains come right to the edge of the river about four miles from the town. At Kiana we're at a fork in the river. The Squirrel River goes up towards northwest, towards the Red Dog Mine and Noatak River. And then we have the [Kobuk] river go up towards Ambler, Shungnak and Kobuk. And downriver we have Noorvik, Kotzebue. And it came to that point, the elders from their knowledge—now, we're still in the Territory of Alaska in those days—the elders called a meeting. They had their meeting, and we had a traditional council that controlled the village in those days. And they came back to the hunters for us to wait two days when the caribou came to the shoreline, the north shorelines of the Kobuk. And told us that if we let the caribou cross without hunting them for two days, we'll have caribou for the rest of our lives. And they were so right. All through the years we had enough caribou. They get to the shoreline of the Kobuk and they, no hesitation, they crossed. We respected the elders, we respected their guidelines, and we did what we were told. You know it's hard to sit there in those days to watch the caribou herd just migrating over to that point, but the respect was there.

So through the years the herd starts getting bigger and bigger and we start getting more hunters to that point. I would say that would be anywhere from four to six mile area, and [caribou] getting spread out a little bit more as they find places to cross because of the hunters there. We brought back the knowledge that we got from the elders [the guidelines *Iñupiat Ilitqusiat, Anunialguliq: Hunter's Success for Caribou Hunting*, see p. 170 in the WG Binder] and presented it to the Tribe Council and also the City Council. When those two councils OK'd it we moved forward with it and I know some of the Working Group and the group that's around the Kotzebue area with the caribou concerns, we presented to the elders and then start getting it out to the people and the groups that we work with.

I'm so happy that when I presented it to the Krusenstern Monument Committee [Cape Krusenstern Subsistence Resource Commission] that they accepted it and we started working together to educate the other groups that we have in the area. Each time they wanted a little change in it, I had to bring it back to the Kiana elders to get the OK for the change. You know, there's no way else to be concerned for our caribou herd and our survival, our food. And for the rivers, and the ocean. We can't do it without working together. And that goes for other things in our lives. We have to work together and I'm so proud of the groups that support our initiative. I don't know if you got a copy of it, but it speaks of respect for people's private property. And the best thing about this is supporting the migration of the caribou. If you have a camp, we recommend you camp on the south side [of the Kobuk River] but there's already traditional camps that are on the north side. But I believe the camps that are on the north side have better chances of making this work out, because all they have to do is follow the migration and hunt. Those of us that are camping on the south side, we have to get around the herd and support the migration and hunt as they cross.

The initiative speaks of sharing. That's one of the most important traditions that we have in our Native life, is sharing. We grew up with sharing everything we have to needy people. When I was a young man,

there was one outboard motor in Kiana. We never dreamed of snow machines or four wheelers or anything like that. Our dream was having our dogs survive so we'd have transportation. And we young men learned how to do a lot of things from our uncles and from the elders. Because when someone was building a log cabin, we were over there helping them. If someone was building a sled, we were there helping them. When people ran out of wood that didn't have a dog team in the winter, we hauled the wood for them. That is responsibility and sharing. You don't see much of that anymore. We just have to bring our culture back and use some of these important guidelines that we grew up with.

Many times I think about how we get our food today. The chain that we have supplying our food. We live inside the Arctic Circle, about 60 miles. Most of our food starts from the United States, outside someplace and it comes on ships to Anchorage, a lot of it. A lot of it flies. Just imagine what would happen if that chain is broken, and our children, our grandchildren, don't know our traditional ways. It's important that they at least have the basic idea of hunting and fishing. If you know the basics things, you could very well build on it.

Another important guideline is to use small caliber rifles. Like I said we have so many people coming out of the villages now to hunt, sometimes there's four or five boats out there. And in a standing position in a boat, you don't want any bullet to ricochet off a horn or anything. We recommend that. And of course to keep the land and water clean of trash. We live on the land and we drink the water from the river. And also with that we support the caribou [registration] permits and reporting your harvest because we have to know what the herd is doing. And I thank you all for supporting that.

Another thing I'd like to bring up is in 1971 we had our [Alaska Native] Land Claims Settlement Act. All those that qualified got 160 acres of land. A lot of people my age knew the best hunting and fishing areas, where our ancestors were, where they lived and survived. So we all went out and claimed those areas. [Bureau of Land Management] BLM had a problem with that. They couldn't find any evidence of our ancestors living there. If you're looking for a tin can you're not going to find it anyway. But that showed that our ancestors, our grandfathers and grandmothers, they were clean people. They respected the land and also they used every little bit of what they had. Now in some areas they could find where they had their fires, a burnt area, with some bones and stuff, so we finally started getting our lands with a little evidence of where they lived.

In those days when we had caribou we used every little bit of it. The only thing I think of is the foot and very little things like that wasn't used. We used the skin off of everything. Even the head skin with the little seat that we would use—a cushion. We used the legs for mukluks and yearlings would be for parkas in the fall time when the hair is short. The bones and most of that went to the dogs, but also we saved the bones that had big knuckles in them like the legs and arms. We'd save them and they'd come out of soup or boiled meat. We saved those. My mother had two rocks. One was kind of egg-shaped—they picked those up from waterfalls, I was told, where the water had made them smooth. She would have me in a spring camp crush those bones on those two rocks and then she would cook them in a dishpan with water enough to be right over the bone. Then as they come to a boil, she would get out her big spoon and start skimming the fat, putting it in another container, and then save that as a dip with our dry meat. They called it Puiñiq, means it's something that came up from the bottom, rise up to the top. What a wonderful dip. These rocks in some areas could be found on the old historical sites along the Kobuk River.

My last item would be on the climate change that we are going through now inside the Arctic Circle—this year especially. I remember when December used to be 50-60 [degrees] below and not for a day or two. It used to be a week, 10 days of that. When I was running down to Noorvik with my dog team to see my girlfriend, just imagine. I realize through the years that hauling around such a beautiful woman with a dog team, and here in the United States you're doing it with a limousine—what a difference! And when we got married—Christina's down the river from Noorvik 25 miles—got married and lived in Kiana. Close

to the '60's, we got married in '59 and oil stoves started coming out – diesel oil stoves. We already had the cast iron wood stove but they came out with a kit where these wood stoves would open from the top. It had two round openings with a centerpiece, take those out, and a firebox would be open. They came out with a kit for that, and you just put another firebox in there that was contained and a carburetor. So we converted our wood stove to an oil stove. The problem was the oil. It was diesel. It was pure stuff and it had a hard time going through the pipes at 50-below. It would gel up. We got a little apartment in the '60's that had one of those stoves. This time of the year, it was close to Christmas, we woke up and that little room was real cold. I went over to that stove and I could see a little flame just like a candle in there and wondered what happened. I was fooling around the stove trying to make it go but nothing happened, so I went down to my older brother's house to see what I could do. He gave me a kerosene lantern and a caribou skin and a tarp, and he said 'Just go up and put the caribou skin over the tank, put the lantern under the valve,' he says, 'you got to heat it up, that stuff is ready to freeze up, it won't go through the pipes.' That was the trick to that, you had to keep that lantern going and keep the fire going.

We went through a lot of change in our life and those changes are a lot of our concern nowadays. It's not getting any better for our Native culture. And we ought to work on it. We ought to think about it, because someday we're going to need it.

Thank you very much. I'm honored to be here and I thank Cyrus [Harris] and his leader over there [Vern Cleveland, Sr.] for wanting me to come over and give this speech, and I hope you enjoyed it. Thank you."

### **III. Western Arctic Caribou Herd Summary Information**

2017 Western Arctic Herd Census Count and Population Trend – Report by Lincoln Parrett, Alaska Department of Fish and Game (ADFG), Division of Wildlife Conservation (DWC) regarding the WAH population status and trends (see p. 13 in WG Binder). The presentation laid the foundation for the WAH Working Group's later discussion of their recommendations regarding future management of the caribou herd. Key points in presentation included:

- The 2017 herd census, using new digital photo technology, resulted in a minimum count of >239,055 caribou in the Western Arctic herd, raising the total herd estimate to 259,000 (+/- 29,000 caribou). This count is up from 201,000 in 2016 and reflects both an increase in the herd's size and improvements in census technology.
- Biological data indicate that the herd's prior decline has stabilized: adult female survival is average, yearling recruitment is high, calf survival is high, calf weights and adult body condition are good, there are a lot of young bulls in the herd, and the bull:cow and calf:cow ratios are high. This herd "has momentum" for growth, with big healthy calves entering the breeding population within the next two years.
- ADFG and NPS continue to collar and track caribou, although very few adults were encountered and collared at Onion Portage in fall 2017.
- ADFG noted that all four main caribou herds grew in size this year: WAH, Teshekpuk, Central Arctic, Porcupine.
- Based on the 2017 herd census and the other biological indicators, at its December 12 meeting the Technical Committee (TC) recommended that the herd be considered "Conservative, Stable" on Table 1 of the 2011 Western Arctic Caribou Herd Cooperative Management Plan (see Attachment 2). (In 2016 the herd was considered to be "Conservative, Declining".)

Calf Survival Study – Alex Hansen, ADFG DWC presented information about the WAH neonate survival study (see p. 15 in WG Binder). As recommended by the WG, ADFG began a study in 2017 to establish a



baseline for calf survival in their first year of life and to evaluate causes of calf mortality during that first year. Seventy-seven (77) newborn calves were collared in June 2017 and tracked, with 27 calves lost to date. Predation (primarily brown bear and golden eagle) accounts for 74% of those mortalities. (Other causes of mortality: drowning, abandonment, unknown.) WG members commented about their past observations of bear and wolf predation on calves (including mass mortalities), as well as ravens and foxes going after newborns. Kyle Joly, NPS Wildlife Biologist emphasized that the rate of newborn survival in 2017 was very high (good news). ADFG will continue the study another 2-3 years.

Monitoring Caribou Movements and Distribution – Kyle Joly, NPS, presented information on the caribou the NPS has collared (see p. 31 in WG Binder). Information included: location of collared caribou in November 2017, their movements/range in Sept. 2016-Aug. 2017, the distribution of caribou as they cross the Noatak River in the fall (2014-2017), the timing of the fall crossing of the Kobuk River (2010-2016), and the timing of the spring migration crossing of the Selawik (2011-2017). Of 38 collars deployed in 2016-17, 88% survived over the winter, which is a second very high survival year in a row (previous year was 90% overwinter survival). Mean distance traveled by collared caribou in the past year was 1,822 miles. This is the 4<sup>th</sup> year in which the distance traveled has declined (it used to average 2,000 miles/year). Forty-two percent (42%) of the herd did not migrate off of the North Slope in the fall 2017. In November 2017, the highest aggregation of collared caribou was near Kobuk. Noted that the herd is going further onto the Seward Peninsula to overwinter to get to better range.

Working Group Observations about Herd and Harvest – WG members noted the following about caribou distribution, timing of migration, and condition. Additional information is reported in Caribou Round Table notes in Attachment 6.

- Pollock Simon, Sr. – Concern that construction of the TransAlaska oil pipeline and Dalton Highway have permanently impacted the caribou migration. They no longer see caribou near his community of Allakaket.
- Cyrus Harris – The fall 2017 caribou migration was late. The first group seemed to start on time, but then stopped. Indigenous knowledge says that caribou do follow along with the weather. Their late migration may be related to climate change.
- Vern Cleveland – Didn't see caribou this fall.
- Bill Bernhardt – Has heard that dead caribou are being seen near Kotzebue, possibly due to difficulty of migrating through snow with a later start to the migration.
- Benedict Jones – Last winter, the caribou movement was late in the Huslia area – usually in February but in 2017 was in March. Caribou in the wooded areas near Huslia were fat and in good condition, but caribou on the flats were in poor condition.
- Charlie Lean – On the Seward Peninsula, caribou are expanding out to use previously unused forage. IN 2017, caribou went toward Shaktoolik and Unalakleet for winter for the first time in ten years.

WAH Management Level, 2011 Cooperative Management Plan: The WG discussed what category to put the herd into, on Table 1 in the 2011 WAH Cooperative Management Plan (last year, the herd was considered “Conservative, Declining”). MOTION by Charlie Lean, second by Al Barrette, to assign to the Conservative, Stable category on Table 1 of the 2011 Western Arctic Caribou Herd Cooperative Management Plan. The motion carried 13:1. In their discussion leading up to this motion, WG members noted the increased census count and good biological indicators (see above), but also wanted to take a cautious approach (e.g., not move the designation up to “Liberal”) unless and until there is another year or two of census data confirming that the population decline has stabilized or reversed, this year's calves are fully recruited into the herd, and biological indicators remain positive. It was noted that keeping the “Conservative” designation would cause no change in the recommended harvest level of 12,000-16,000 or other management actions (or regulations). (Note: The one vote against the motion was made by a WG

member who thought it best to retain the “Conservative, Declining” designation, due to his concerns that the herd’s decline may not yet have stabilized.)

#### IV. 2011 WAH Cooperative Management Plan, Five-Year Review

The 2011 WAH Cooperative Management Plan indicates that it should be reviewed and revised (as needed) every five years. Lincoln Parrett, ADFG, presented information about a number of caribou management plans in Alaska, for the WG’s consideration (see p. 39 in the WG Binder). ADFG also suggested some points that could be discussed if the plan is going to be revised, including (but not limited to):

- 6% harvest rate – might it need to be lower under some circumstances?
- importance of harvest data
- population “trend” (in Table 1) vs. establishing a population “objective” (e.g., to grow the population)
- how important is it to protect a high bull:cow ratio?
- allocation – are there consensus recommendations for allocation under different herd conditions?
- additional tools to manage harvest

In discussion, Working Group members addressed additional points to consider during plan revision:

- plan should address additional demographic indicators (not just emphasize the bull:cow ratio) – for example, calf:cow ratio
- if the herd is <200,000 animals – the plan needs to address what both the state and federal managers would do under their authorities, policies and recommendations
- plan should identify the objective for the herd for the next five years, with a 20 year outlook – e.g., manage the herd to keep it in the “Liberal” category with populations 250,000+; liberalize hunts; try to even out population cycling (prolong the highs and shorten the lows)
- how do we slow down a population increase if its too rapid or too high? – e.g., change herd composition
- should Table 1 have smaller incremental steps between categories?
- incorporate new data in the plan revision
- address need for consistency in state and federal regulations and management actions
- consider reducing the population harvest to 4% in certain circumstances?
- plan has to work for all of us – that is our future
- process should be included in Caribou Trails (2018) and advertised via Facebook, the WACH WG website, etc. – invite public input and ideas and collect all comments for the WG subcommittee to review and consider during the plan revision

MOTION by Thor Stacey, second by Al Barrette, to conduct a review of the 2011 WAH Cooperative Management Plan (the “five-year” review recommended in that plan), to address points raised in the ADFG presentation (“Revising the WAHWG Management Plan, What do other herds do?”) and brought up in Working Group discussion at this meeting. Do this work in a WG subgroup but the ultimate revision would be approved by the full WG. Motion carried 16:0.

MOTION by Al Barrette, second by Neil DeWitt, to form a subcommittee of no more than 10 Working Group members to work with the agencies on the plan review. MOTION TO AMEND by Al Barrette, second by Neil DeWitt, to no more than nine Working Group members (so as not to be a quorum). Motion to amend carried 13:1. Amended motion carried 15:0.

**ASSIGNMENT** – A Working Group subgroup of no more than nine members will be formed and will work with representatives of the management agencies (ADFG, BLM, NPS, USFWS) to prepare draft plan revision for consideration of the full Working Group at its annual meeting. If possible, the revision will be completed in 2018 (although it may take more than one year). Any plan revision will require

action by the full Working Group. Kyle Joly, NPS, will take the lead on organizing the agencies who are assisting. NOTE – As of January 2018, six members of the WG have volunteered to be on the planning subgroup: Vern Cleveland, Morris Nassuk, Al Barrette, Neil DeWitt, Charlie Lean, and Jake Jacobson (or alternate Thor Stacey).

## V. Harvest Regulations, Permits, and Proposed Legislation

Current State Caribou Harvest Regulations and Registration Permits – Alex Hansen, ADFG presented information about the new caribou harvest registration permits, outreach that ADFG has conducted in each community, its efforts to ensure registration permits are available in each community and online, and the importance of timely caribou harvest data to effective management of the herd (see p. 41 in the WG Binder). WG members suggested ideas for improving harvest reporting, including:

- ensure that there are well-publicized vendors in each community
- put information about the permit and a list of vendors in post offices and in the bush mailer
- post list of vendors online
- call people directly and ask them to return their harvest reports
- make sure people understand how to avoid any penalty, if they are unaware that the permit is needed or they do not report
- partner with the Tribe, city, and/or corporation to provide permits

Federal Caribou Harvest Regulations and Proposals to Federal Subsistence Board (FSB) – Chris McKee, Wildlife Biologist with the USFWS Office of Subsistence Management (OSM) reviewed seven proposals for changes to federal regulations affecting harvest of the WACH (see p. 45 of the WG Binder). These proposals will be acted on at the April 2018 FSB meeting and would take affect in July 2018. Chris noted that the FSB is required to give deference to recommendations from the affected Regional Advisory Councils (RAC) except under three criteria outlined in the Alaska National Interest Lands Conservation Act (ANILCA) Section 805(c).<sup>1</sup> While the official written comment period closed in summer 2017, the WG can still submit written comments in advance of the FSB meeting.

The WG took action on the federal wildlife proposals late on Day 2, but these actions are reported in this section of the meeting summary.

- MOTION by Thor Stacey, second by Al Barrette, that the Working Group consider each wildlife proposal and either support or oppose these proposals. Motion carried 16:0.
- WP18-32 (Caribou season dates) – MOTION by Tom Gray to oppose WP18-32, second by Neil DeWitt. Motion carried 14:0. In discussion, the WG noted that the RACs have opposed this proposal and the change in season dates would unnecessarily complicate the regulations.
- WP18-45 (Reduce bag limit, Unit 23) – MOTION by Cyrus Harris to oppose WP18-45, second by Al Barrette. Motion carried 16:0. In discussion, the WG noted that the Northwest RAC opposes the proposal, the change would misalign the seasons, and the 2017 herd census does not indicate a conservation concern.
- WP18-46 (Close federal lands except to federally qualified subsistence users, Unit 23) –
  - MOTION by Al Barrette to approve WP18-46, second by Neil DeWitt.
  - MOTION TO AMEND by Tom Gray, second by Al Barrette, to approve WP18-46 as modified to apply only to the federal lands included in FSB Special Action 17-03. Amendment approved 13:3.

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<sup>1</sup> ANILCA Section 805(c) criteria are: not supported by substantial evidence; or violates recognized principles of fish and wildlife conservation; or would be detrimental to the satisfaction of subsistence needs.



- MOTION TO AMEND by Al Barrette, second by Thor Stacey, to approve WP18-46 as further modified to apply for two years. Amendment approved 9:6.
- Vote on AMENDED MOTION (to approve WP18-46 with a modification to apply only to federal lands included in FSB Special Action 17-03 and only for two years). Motion carried 13:2.

In discussion if WP18-46, the WG members supporting the modified proposal noted that the closure will be limited to federal lands where user conflicts have been greatest in past years, will maintain access for non-federally qualified subsistence users to other federal lands in Unit 23, and will apply for only two years. WG members opposing the motion do not favor restricting hunting opportunity for resident Alaskans in Unit 23.

- WP18-47 (Close federal lands except to federally qualified subsistence users for two years, Unit 23) – MOTION by Thor Stacey, second by Al Barrette, to take no action on WP18-47. Motion carried 15:0.
- WP18-48 (Establish registration permit, Units 22, 23, 26A) – MOTION by Neil DeWitt, second by Enoch Mitchell, to approve WP18-48. Motion carried 14:0. In discussion, the WG noted that this proposal aligns federal and state regulations on harvest reporting and provides needed harvest data for herd management.
- WP18-49 (Establish registration permit, Units 22, 23, 26A) – MOTION by Thor Stacey, second by Neil DeWitt, to take no action on WP18-49. Motion carried unanimously.
- WP18-57 (Close federal lands except to federally qualified subsistence users, Units 26A, 26B) – MOTION by Neil DeWitt, second by Thor Stacey, to approve WP18-57. Motion failed 7:8. In discussion preceding this close vote, some WG members opposing the proposal indicated that the area proposed for closure is too large and that there is not a conservation concern. Others do not favor restricting hunting opportunity for resident Alaskans in these units. One WG spoke in favor of the proposal, noting that hunters from Anaktuvuk Pass have experienced user conflicts, had seen only small groups of caribou in fall 2017, and had to travel longer distances from the village to hunt.

**ASSIGNMENT** – Facilitator Jan Caulfield will work with the Chair Vern Cleveland and the Executive Committee to prepare a comment letter from the WG to the FSB regarding the federal wildlife proposals.

House Bill 211 Nonresident Hunting Requirements: Caribou – Representative Dean Westlake spoke to the WG about the intent and status of HB211 (see p. 49 in WG Binder). The bill would require hunters who are not residents of Alaska to be guided by a licensed professional guide or resident spouse or relative (second degree of kin) when hunting caribou in any of these four arctic herds: Western Arctic, Central Arctic, Porcupine and Teshekpuk. The intent of the legislation is to reduce use conflicts and provide an alternative to the closure of federal land to non-federally qualified subsistence users (as in Unit 23). The bill passed the House in 2017 and will be considered by the Senate in the 2018 session.

Western Arctic Parklands Report on Transporter Activity – Hillary Robison, NPS presented information regarding NPS’s management of transporters and air taxis in the Noatak National Preserve and its database of drop-off locations of hunting and non-hunting groups and camps in 2010-2016 in the Preserve, in relation to where collared caribou were observed each year. (see p. 53 of the WG Binder)

## **VI. ADFG Community Harvest Surveys – Brevig Mission, Teller, White Mountain**

Beth Mikow, ADFG Subsistence Division, presented 2015-2016 preliminary estimates of caribou harvest by Brevig Mission, Teller, and White Mountain (see p. 55 in the WG Binder). The presentation addressed the number and percent of households who harvested and who used caribou during the 2015-2016 study year, the total harvest and pounds per capita, the timing of harvest, geographic density of harvest, and comparison with prior year harvests (for years in which ADFG has survey data).

## **Day 2 – Thursday, December 14, 2017**

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

## **II. Resource Development Committee Report**

The WG’s Resource Development Committee Chair Tim Fullman presented background on potential resource development projects within the range of the herd, including developments in the National Petroleum Reserve-Alaska (NPR-A), the Ambler Mining District Industrial Access Road Project, and the State of Alaska’s Arctic Strategic Transportation and Resources (ASTAR) project (see p. 63 of the WG Binder). Tim highlighted comments that the WG had submitted to BLM in September 2017 about oil and gas lease sales in NPR-A (letter developed by the Resource Development Committee and approved by the Executive Committee). The Resource Development Committee also drafted comments to BLM about the Ambler Road project (see p. 77 of the WG Binder). The WG will be asked to review, revise, and approve a comment letter at this meeting to submit to BLM in January 2018.

## **III. Ambler Mining District Industrial Access Project & Mining Activity**

National Environmental Protection Act (NEPA) Process – Laurie Thorpe, BLM, gave a presentation about the NEPA process that will result in preparation of an Environmental Impact Statement (EIS) for the Ambler Road project (see p. 83 of the WG Binder). The Alaska Industrial Expert and Development Authority (AIDEA) is the project applicant and has funded the NEPA scoping process. Laurie described the project, reviewed federal and state agency roles and responsibilities (BLM is the lead agency for the NEPA review), and described what BLM has done so far to involve the public in the NEPA Scoping Process. In addition to meeting NEPA requirements, the agency review process will address ANILCA Section 810 requirements to analyze whether the project “may significantly restrict subsistence uses” and Section 106 of the National Historic Preservation Act. Scoping comments are due to BLM by January 31, 2018. Comments from the WG at this meeting are very welcome. For more information, see the BLM project website [www.blm.gov/AmblerRoadEIS](http://www.blm.gov/AmblerRoadEIS)

In discussion following the BLM presentation, individual WG members questions and comments included:

- Comment - The elders are opposed to this project. Concerned about impacts on caribou.
- Question – Will Section 810 hearings be held? A – 810 hearings will be held after a draft EIS is issued, projected for spring 2019.
- Question – What about rail and airstrips? A – Project does not include rail. Airstrips would be associated with the development, not near communities.
- Question – How will Boards of Game and Fish be involved? A – Alaska Department of Natural Resources (DNR) is responsible for coordinating all State of Alaska input.
- Question – What is length of public review period for draft EIS? A – Usually 45-day review.
- Question – Since only about 40 miles out of 200+ are on federal land, is the NEPA analysis limited to just these federal lands? A – The EIS will cover the entire potential road route, since there are federal permits/approvals required on non-federal land as well (e.g., Section 404 Corps of Engineers permits for wetlands fill). The Section 810 analysis also covers the entire project since it addresses all federal lands and subsistence resources that cross land ownerships.
- Comment – Need to clearly define “commercial traffic”, vs. public traffic.
- Comment – Concern that the Dalton Highway (Haul Road) also started as an industrial access road, but later opened to public access – this caused a great impact to resources used by communities.
- Comment – Reiterated concern about “promises made” to not allow public access. Do not trust this will be the case in the future for the Ambler Road.

- Comment – Concern that scoping meetings are not being held in many communities that will be affected by the road, such as Noorvik, Selawik, Kiana, Deering, Noatak, Buckland.
- Comment – If federal and state money is used to build the road, it will eventually be made public.
- Comment – A railroad would use less land and wouldn't have to worry about speed limits, fuel economy, public use, and may have less impact on caribou.
- Comment – Will need a lot of gravel for construction.
- Comment – Should include Tribes as a cooperating agency in this process. A – Tribes are included in the process and can request cooperating agency status.

National Park Service Environmental and Economic Analysis (EEA) – Greg Dudgeon, Superintendent of Gates of the Arctic National Park & Preserve, presented information about the NPS analysis (see 97 of the WG Binder). The purpose of the EEA is to determine the most desirable route for an approximately 20 mile right-of-way across Gates of the Arctic, as provided for in ANILCA Section 201(4)(b). The EEA will identify impacts and benefits, determine best location, and appropriate terms and conditions for the road construction and use. NPS has reached out to over 50 communities, Tribes, and organizations, and has offered government-to-government consultation with Tribes. For more information and to submit comments: <https://parkplanning.nps.gov/Ambler>

Additional comments and questions from WG members:

- Comment – BLM and NPS need to go to all of the villages that utilize the Western Arctic caribou herd. The WG and all of these communities need to receive from BLM/NPS a complete list of the issues and concerns that are raised during this scoping period, so they are directly informed (not have to go to a website).
- Comment – Concern that the caribou migration will be hindered. There needs to be a process to fix any impacts on caribou migration that may occur. If caribou don't cross the road, someone needs to fix it until they do cross it. Someone needs to be accountable to be sure the migration isn't hindered.
- Comment – Concern about how this road is going to impact subsistence users.
- Question – Can NPS consider more than the two routes through Gates of the Arctic? A – Yes, but will be looking most intensively at these two.
- Comment – Very serious that we can't protect our caribou and our land. We're supposed to be protecting our caribou---our main food source. Concern that only mining companies will benefit from the road, but subsistence users will be hurt. If the State connect that road to Anchorage, we will have a lot of problems. I oppose that road. We will have more problems in the future; we have to be very careful what we do with that mine. And how we protect our caribou. Caribou meat is just like beef to me. It's our way of life.
- Comment – Road can be expected to impact caribou range use and distribution. The large migrations of the past do not occur now. Used to watch the Western Arctic Herd in the Wiseman area and you could tell they were unfamiliar with the road. Roads can reduce herd range, reduce habitat availability, reduce potential herd size. Noise from road use can be heard miles away.
- Question – AIDEA is the project applicant for this phase, but who would fund and develop the road? A – Uncertain at this time.
- Comment – A longer route through Gates of the Arctic might be more favorable to the resource. NPS should not be biased to the shorter route.
- Comment – Speaking from experience as a road inspector, roads connect from material site to material site along hard ground – which will place the road on blueberry tundra, firm tundra. This is also the caribou range. Guaranteed conflicts with resource and resource use. This road will be like the Denali Highway. Don't believe promises that it will stay an industrial access road. It will become public. Also concern that NPS will establish new infrastructure for the public to access Gates of the Arctic. The real issues of concern are fish, wildlife, and natural values.

- Comment – The Haul Road impacted caribou near Allakaket. Caribou disappeared from the area within 4-5 years. Migration was affected. Caribou now migrate farther to the west, not near Allakaket.

MOTION by Charlie Lean, second by Thor Stacey, to: (1) take no action regarding support for or opposition to the proposed access road and (2) take no action regarding support for either a northern or southern route through NPS lands, but instead to (3) submit letters to BLM and NPS outlining the issues and concerns discussed by the WG during its meeting on December 14, 2017. Motion carried 15:0.

The WG developed the following list of points to include in the WG's scoping letters to BLM and NPS. These points included:

Currently in draft scoping comments (*see WACH WG binder page 77*):

- Specify need to minimize impacts to WACH
- Best available knowledge (traditional and scientific) used to analyze potential impacts
- Need to analyze likely impacts to hunting access by local and visiting hunters
  - Include potential for increased conflicts between local and non-local hunters
- Analyze social and economic costs/benefits of road access to previously roadless communities
- Analyze cumulative impacts of Ambler in context of existing and potential other road and development projects within WACH range

Points raised at WG Meeting, December 14, 2017:

- Extend public review process for draft EIS (45 days not enough)
  - To 90 days? 6 months?
- Footprint impacted (road width, gravel sources, airstrips, etc.)
- Concern about road not staying closed to public use
  - Establish definition of commercial traffic
  - Concern about past broken promises with Dalton road
  - Concern about lack of enforcement
- Need to conduct scoping in all communities in herd range.
- All concerns and issues raised in scoping need to be compiled and sent directly out to all affected communities prior to the comment period on the Draft EIS so people can use it as a tool to make their comments on the Draft EIS. Not sufficient to put it on an agency website. Need more effective communication with local people.
- Provisions require permittee to pay to change the road if caribou migration is affected (until it isn't hindered)
- Concerned about range fragmentation and changes to movement patterns
- Our focus, viable and sustainable caribou herd, and the people who use and depend on them. Conservation of the herd, and habitat, and existing uses of the caribou resource.
- Ask for two analyses of impacts on hunting. (1) if road stays commercial only; (2) if in the future the road is used by the public for hunting access.

**ASSIGNMENT** – WG Resource Development Committee Chair Tim Fullman will work with WG Chair Vern Cleveland and the Executive Committee to prepare a comment letter from the WG to the BLM and NPS regarding the Ambler Mining District Industrial Access Project, including the points listed above.

Ambler Mining District / Trilogy Metals, Inc. – Rick Van Nieuwenhuyse, President and CEO of Trilogy Metals, Inc., presented information about the company's current and proposed activity in the Ambler Mining District, including the Arctic and Bornite Deposits (see p. 105 in the WG Binder). He addressed the value of the mineral deposits and the importance of copper to clean (non-fossil fuel) energy; partnership with NANA Corporation (including shareholder hire and training programs); baseline studies and work done to minimize potential impacts to ecological and cultural resources, including recognition of the importance of caribou; consultation with a Subsistence Subcommittee (members from five villages)

to avoid impacts; importance of Ambler Road to provide feasible transportation for the mining projects; use of containers that will not leak in transport.

WG members' comments and questions included:

- Comment – Concern that mining activities will affect some of the most indigenous people on the planet. Local people need to know what toxic materials will be left behind, where they will be held, and how they will be secured.
- Comment – Concern that mining companies will take the ore and leave environmental damage.
- Comment – Observation that caribou migration may not be west of the mining district, but that changes with time. The project needs to consider how it will avoid impacts to caribou migration and how it would correct any impacts it may cause.
- Comment – Concern about impacts to aquatic insects and fish.
- Comment – Important to consider impacts to greens and berries that are collected for subsistence foods.
- Comment – Caribou migrate through more eastward than what the collaring data shows for 2013. Must protect the herd for our future; our food on the table.
- Question – Does Trilogy have a financial commitment for the road? A – AIDEA would be responsible to build and maintain the road. But users (like Trilogy) would pay tolls to support this.
- Question – What is company policy on employees hunting and fishing? A – Strict policy that there will be no employee hunting and fishing at the site.
- Question – What lessons have they learned elsewhere and how would they apply those lessons to Ambler projects? A - Point to Lower 48 mining that was not done well, done before NEPA Proud of lessons learned in mining in Alaska, and thinks much has been done well. There are things (spills, accidents) that happen, but have plans in place to address those types of issues. When we have issues, we inform the communities and work through it. Will not develop this mine until we have a robust plan.
- Question – Proposed road (on map slide) doesn't appear to go to mining locations. How would those sites be accessed? A- There would be connector roads that Trilogy would get permits for and develop, to intercept the Ambler Mining District Road.
- Question – What is duration of the mine? Reclaim after mining done? A – About 15 years for Arctic Deposit. Do not have a specific plan for the Bornite Deposit. Permits will require a closure plan that requires land reclamation and monitoring plan.
- Question – How much traffic on the road? A – 30 concentrate trucks/day to/from Fairbanks. Also looking at trucking Liquefied Natural Gas (LNG) instead of diesel fuel.
- Comment – Thanks to Trilogy for employing local people.
- Question – Why not barge on the Kobuk River as an alternative to a road? A – Not certain, but expect it would not be predictable enough access.
- Question – How is future contamination of groundwater prevented and who pays for treatment? A – Reclamation plan is required at closure, and a performance bond based on future treatment required.
- Comment – Concern bond will not keep up with inflation. A – Bond amount would be set by State of Alaska. Typically monitor in perpetuity and may also be required to treat water in perpetuity.
- Question – What about size of the disturbed area and level of noise? A – Arctic deposit is a high-grade small deposit. Working to keep the footprint tight. There would be blasting, which would create noise.
- Question – Do you have proof caribou don't migrate around the area? A – We do see caribou but not large number of them migrating through the site. We have policies in place to shut down drill, helicopter, trucks, etc., as necessary to avoid disrupting the herd.
- Comment – Concern about power generation. A – Site would not rely on communities for fuel or power; all on-site.



- Question – Is the road needed for exploration, or primarily for later production? A – Road would facilitate additional exploration in the Ambler Mining District and reduce those costs.

#### IV. National Petroleum Reserve – Alaska (NPR-A)

Associate State Director Ted Murphy, BLM, briefed the WG on potential oil and gas leasing and development activities in NPR-A (see p. 147 in WG Binder). Key points:

- Greater Mooses Tooth 1 (GMT1) has been in development since 2015. There will be up to 33 wells; first production of oil expected in 4<sup>th</sup> quarter of 2018.
- Next area of development will be GMT2, with 48 wells. Supplemental EIS (SEIS) will be issued in January 2018. Hearings will be held in Utqiagvik, Nuiqsut, Atqasuk, and Anaktuvuk Pass.
- Secretary of the Interior (Sec. Order 3352) has instructed BLM to review the 2013 Integrated Activity Plan (IAP) for the NPR-A to balance the promotion of development, while protecting surface resources, and to maximize tracts offered via lease sales. A full public process will be provided for this IAP revision, but no details yet on the process or schedule.
- Considering development of a snow trail from Utqiagvik to Nuiqsut, for five years.
- Recent discoveries and exploration include ConocoPhillips Willow and BEAR 3D seismic surveys.

#### V. Communication Committee Report

Kari Rasmussen, ADFG staff to the WG's Communication Committee, distributed the committee's report highlighting outreach during the year, public presentations and school visits, village visits, Caribou Trails, fliers, permit instructions and magnetic reminder clips (see p. 165 of WG Binder). Kari listed topics to include in the 2018 issue of Caribou Trails and asked WG members for more ideas. She noted that WG members can ask people within their communities for suggested topics and provide those to ADFG.

Topic list includes:

- Herd status
- Update on 2017 WG meeting
- How hunting licenses, registration permits and harvest reporting helps caribou management – where to get licenses and permits
- 2017 photocensus results
- Info about Ambler mining district and Ambler Road

WG member suggestions for additional Caribou Trails articles:

- Update to the 2011 WAH Cooperative Management Plan – Ask key questions to solicit public comments/ideas
- Include a contact person at BLM and NPS for people to talk to about the Ambler Road and summary of the issues that were raised during scoping
- Explain that WG is commenting on proposals to Board of Game and FSB

In discussion, WG and staff discussed developing a broader Communication Plan for the WG, that includes Caribou Trails but also social media tools, radio talk show regarding caribou issues (with WG members and/or agency speakers), fliers, etc. **ASSIGNMENT** – Work with the Communication Committee to consider what objectives/actions would be included in a Communication Plan. (Kari Rasmussen, ADFG).

Hannah Atkinson, NPS, described the Caribou Hunter Success Working Group and *Iñupiat Ilitqusiat, Anunialguliq: Hunter's Success for Caribou Hunting* (see p. 170 in WG Binder). The workgroup was created by the Kobuk Valley Subsistence Resource Commission (SRC) to address concerning hunting practices on the Kobuk River, to increase public safety and the health of the herd. The Kiana Elders Council led the way with development and distribution of the *Iñupiat Ilitqusiat, Anunialguliq: Hunter's*

*Success for Caribou Hunting.* The workgroup has helped share with message throughout the NANA Region, held hunter success meetings, and sharing traditional knowledge as the center of hunter education efforts. Next steps include radio public service announcements and publicizing traditional values for hunting caribou by snow machine. WG members commented on importance of elders' guidance to hunters; hunter education centered on traditional values; success of radio shows as a way to share information in the region.

Brittany Sweeney, USFWS, described the Selawik National Wildlife Refuge's (NWR) outreach in the region regarding the current federal and state caribou harvest regulations in Unit 23 (see p. 201 in WG Binder). They also worked with BLM and NPS to update the "Frequently Asked Questions" flier about the federal lands closure now in effect in Unit 23. The Selawik NWR also provides an update about the caribou herd in its January newsletter and on its Facebook page.

## **VI. Management Agency Reports**

The management agencies did not provide verbal reports to the WG. However, written reports from BLM, NPS and USFWS are included beginning on p. 171 of the WG Binder.

## **VII. Business Meeting**

Approval of December 2016 WACH Working Group Meeting Summary (p. 207 in WG Binder) – MOTION by Morris Nassuk, second by Ron Moto, to approved the 2016 WACH Working Group Meeting Summary. Motion carried unanimously.

2018 Meeting Date: The WG recommended that it meet next on December 12-13, 2018, in Anchorage, with a Technical Committee meeting on December 11, 2018.

**VIII. Adjournment:** MOTION by Neil DeWitt, second by Morris Nassuk, to adjourn the 2017 WACH Working Group meeting. Motion carried unanimously. Meeting adjourned at approximately 6:00 PM on December 14, 2017.

**Western Arctic Caribou Herd (WAH)  
Working Group Meeting  
December 13-14, 2017**

8:30 am – 5:00 pm each day

Anchorage Marriott Downtown      Anchorage Room  
820 West 7<sup>th</sup> Avenue, Anchorage, Alaska

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**Western Arctic Caribou Herd Working Group Mission:**

“To work together to ensure the long term conservation of the Western Arctic caribou herd and the ecosystem on which it depends, and to maintain traditional and other uses for the benefit of all people now and in the future.”

**DAY 1 – WAH Working Group, December 13**

**8:30 Call to Order (15 min)**

Invocation and Remembrances

WAH Working Group Roll Call / Establish Quorum

Introduction of Working Group members and State & Federal agency leads

Approval of Agenda – Preview Meeting Binder

New Member & Alternate appointments

**8:45 Guest Elder – Mr. Larry Westlake, Kiana (45 min)**

**9:30 BREAK (20 min)**

**9:50 Western Arctic Caribou Herd Summary Information (115 min)**

9:50 2017 Western Arctic Herd Census Count & Population Trend –  
including Technical Committee recommendation on status of the herd  
– Lincoln Parrett, Alaska Department of Fish and Game (ADFG)

10:30 Calf Survival Study – Alex Hansen, ADFG

11:00 Monitoring Caribou Movements and Distribution – Kyle Joly, National  
Park Service (NPS)

11:20 Working Group Observations & Discussion about Herd and Harvest

**11:45 LUNCH**

**1:15 Working Group Observations & Discussion Continued (60 min)**

- Continue Working Group members' observations and comments about the herd and harvest in 2017. (*Working Group members are invited to answer questions on "Caribou Roundtable" forms if they wish. Give completed forms to Jan Caulfield.*)
- 2011 WAH Cooperative Management Plan, Five-Year Review - Consider Technical Committee's recommendation on proposed process and timing for a review and update of the management plan over the next two years.

**2:15 BREAK (15 min)**

**2:30 Harvest Regulations, Permits, Proposed Legislation (90 min)**

2:30 Current State caribou harvest regulations and implementation of registration permits (30 min) – Alex Hansen, ADFG

3:00 Current Federal caribou harvest regulations and proposals to Federal Subsistence Board for April 2018 meeting (20 min) – Chris McKee, US Fish and Wildlife Service (USFWS), Office of Subsistence Management (OSM)

3:20 House Bill 211 Nonresident Hunting Requirements: Caribou (20 min) – Representative Dean Westlake

3:40 Western Arctic Parklands Report on Transporter Activity (20 min) – Hillary Robison, NPS

**4:00 BREAK (15 min)**

**4:15 Working Group Discussion/Action on regulatory topics (25 min)**

**4:40 ADFG Community Harvest Surveys – Brevig Mission, Teller, White Mountain (20 min)** – Beth Mikow, ADFG Division of Subsistence

**5:00 Adjourn Day 1**

## **Day 2 – WAH Working Group, December 14**

### **8:30 Call to Order / Announcements**

### **8:35 Potential Resource Development in the Herd's Range**

#### **8:35 Resource Development Committee Report & Context for the presentations (15 min) – Tim Fullman, Committee Chair**

- Working Group comments sent to Bureau of Land Management (BLM) on National Petroleum Reserve–Alaska (NPR-A) oil and gas leasing
- Arctic Strategic Transportation & Resources
- Introduce Draft comment letter to BLM on Ambler Mine District Industrial Access Project

#### **8:50 Ambler Mining District Industrial Access Project (60 min) –**

- National Environmental Protection Act (NEPA) Process – Laurie Thorpe and Tim LaMarr, BLM
- National Park Service (NPS) Environmental and Economic Analysis – Greg Dudgeon, NPS

#### **9:50 BREAK (20 min)**

#### **10:10 Trilogy Metal's Activities in the Ambler Mining District (45 min) – Rick Van Nieuwenhuyse, President and CEO, Trilogy Metals, Inc.**

#### **10:55 Ambler Mining District Industrial Access Project (cont'd, 50 min)**

- Working Group Questions, Comments, Discussion
- Revisions / Action on Draft comment letter to BLM developed by Working Group's Resource Development Committee

#### **11:45 LUNCH (90 min)**

### **1:15 Potential Resource Development (continued)**

#### **1:15 National Petroleum Reserve–Alaska (NPR-A) Update (45 min) – Ted Murphy, Associate State Director, BLM**

### **2:00 Communication, Education and Outreach (30 min)**

- WACH Working Group Communication Committee - Kari Rasmussen, ADFG
- Caribou Education Working Group – Hannah Atkinson, NPS



- Outreach on caribou harvest regulations – Brittany Sweeney, USFWS

**2:30 Working Group Photo & BREAK (30 min)**

**3:00 Panel - Management Agency Reports (60 min) - *NOTE: Verbal presentation of these reports may be skipped if the Working Group needs this time for additional discussion or action. Written reports will be provided in the meeting packet.***

3:00 Alaska Department of Fish and Game (15 min) – Tony Gorn, Region 5 Supervisor, Division of Wildlife Conservation

3:15 Bureau of Land Management (15 min) – Bonnie Million, Anchorage Field Office Manager

3:30 National Park Service (15 min) – Maija Lukin, Superintendent, WEAR, and Greg Dudgeon, Superintendent, Gates of the Arctic National Park and Preserve

3:45 US Fish and Wildlife Service (15 min) – Susan Georgette, Refuge Manager, Selawik National Wildlife Refuge

**4:00 Business Meeting – Actions - Assignments (50 min)**

- Approval of 2016 WG Meeting Summary
- Committee Membership – Review & reconfirm
- “Bin” topics
- Action Items / Assignments
- Next Meeting – Date / Location

**4:50 Closing Comments – Working Group members**

**5:00 ADJOURN**

## 2017 WACH WG Technical Committee Report

The Technical Committee (TC) met on December 12, 2017 to discuss scientific and technical issues related to conservation and management of the Western Arctic Caribou Herd (WACH). The following are meeting highlights and TC recommendations for consideration by the WACH Working Group at its December 13-14 meeting.

### 1. Western Arctic Caribou Herd (WACH) Condition and Management Status

The 2011 WACH Cooperative Management Plan (p. 17) asks the TC to “*evaluate the status of the herd and develop recommendations on herd management level for the Working Group*”, based on Table 1 in the plan. On December 12, the TC discussed the following regarding herd status:

- In 2017, the Alaska Department of Fish and Game (ADFG) photocensused the herd using new digital cameras that provide substantial technical efficiencies and a more accurate population count, particularly for calves.
- The herd photo census in July 2017 counted 239,055 caribou.
- The increase of 30% over the July 2016 count represents population growth, as well as improvements in technology that allows ADFG to more accurately count individual caribou, especially calves.
- There are very good demographic indicators for the herd: High adult female survival (avg. 84%), high yearling recruitment (22:100 adults), and high calf survival (90%). ADFG also observed good calf weights and good adult body condition in September 2017 (although small sample size for both).
- Herd composition is also very good, with a 54 bull:100 cows (high) and 57 calves:100 cows (high).

**After discussion, the TC recommends that the WACH be considered “Stable” and within the “Conservative” category**, with regard to Table 1 of the WACH Cooperative Management Plan (p. 17 of the plan). The 2017 population count and demographic indicators are very positive and indicate momentum for continued herd growth. However, the TC agreed that it would be best to be cautious in management and have another census number (2018) before moving the herd out of the Conservative category (into Liberal). The committee does not recommend making changes that would liberalize harvest regulations at this time. Keeping the herd in the Conservative category would not change the harvest or management recommendations for the herd (see Appendix 2 of the plan).

### 2. Registration Permit

ADFG discussed the new harvest registration permit (RC907), emphasizing the importance of obtaining more accurate harvest data on a yearly basis to inform herd management. ADFG used a wide variety of outreach approaches (including many public meetings in communities, PSAs, Caribou Trails) to explain the reason for the permit and how obtain it and report harvest.

Suggestions from Working Group and TC members to ADFG to increase the number of hunters getting a registration permit and reporting harvest included:

- Make it possible for people to submit harvest reports online.

- Offer the option of reporting to tribal office or regional organization (Maniilaq).
- Show communities how the data is used to maintain a healthy herd and provide for sustainable harvests.
- In addition to working with vendors to distribute permits, make them available through other organizations (e.g., NANA, IRAs).
- Involve vendors in community meetings to build familiarity.
- Put more information in Caribou Trails about how to get the registration permit (available on-line), the importance of reporting harvest, etc.
- Bring translators to the villages when meeting with the public.

### **3. WAH Cooperative Management Plan – Five-Year Review**

On December 13, the Working Group will discuss whether and when to begin a review and update of the 2011 Cooperative Management Plan. The TC wants to hear what the Working Group is thinking about how the plan is working, whether it needs revision, and how to tackle that planning process.

The TC noted that it is when the herd population is lower (as in the past several years) that the plan becomes most important in terms of guidance for management. Agencies have identified things that should be reconsidered or clarified when the plan is revised. It would likely take two years to complete a plan revision.

Several points made during discussion included:

- Before revising the plan, it may be useful to see another year of census data and demographic observations as the population becomes more stable.
- There may be additional tools or management actions that could be added to the plan (Appendix 2).
- Recommend not being too prescriptive in the management actions included in the plan. Need to plan a course of action, but also allow flexibility for managers in future changing conditions.
- It is important to have a management plan that will prevent a herd crash like that of 1976!
- There is value in doing this planning sooner, rather than later.
- Would like to see a more common management approach between the state and federal boards.
- Include triggers or thresholds that then lead to specific management actions.
- Process – there should be input from people who live within the range of the herd; bring meetings back to the region.

### **4. Prioritize Research Needs related to WACH**

The Technical Committee reaffirmed that the following research topics are still high priority for the WACH (this list is unchanged from 2014-2016):

- Continue to use satellite collars (or other improved technology) to collect data about the herd's movements
- Subsistence harvest information
- Snow/weather/icing/climate data (including periodic extreme weather events) and the effect 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

The committee noted that there is a lot of research done on this herd that touches on all of these topics, including – a large number of radio collars deployed, an annual population census (with new digital photocensus technology), studies of subsistence harvests, 16 new weather stations, a calf mortality study (evaluating numbers and causes of mortality), preparation of annual snow melt maps for the range (and statewide), and studies of impacts of human activity and infrastructure (e.g., Red Dog Road). (See also Section 6 below regarding the list of research and management projects and bibliography of published studies.)

Working Group members and TC members suggested several additional topics for future research:

- Conduct a literature search regarding why some herds in history have crashed and did not come back (e.g., Kenai Peninsula, Seward peninsula, Galena). What were the drivers of these declines? What lessons can be learned?
- More studies on traditional harvest areas and methods.
- More work on whether, how, and to what extent nonlocal harvest affects the herd and local harvest opportunity.

It was noted that the current research priorities are tied to more short-term management issues, while some of these additional topics address longer-term context and considerations.

## **5. Additional Presentations**

The TC also heard presentations about the following research studies (see the TC meeting packet at [www.westernarcticcaribou.net](http://www.westernarcticcaribou.net) for copies of the presentations):

- WAH Neonate (calf) Survival Study – including calf first year survival rates and most common sources of mortality in the herd
- Movement-based methods to infer parturition events in migratory ungulates
- Effects of environmental features and sport hunting on caribou migration in northwestern Alaska

## **6. WACH Research and Management Projects and Bibliography**

At the request of the Working Group, the Technical Committee maintains a list of research and management projects related to the WACH, and a bibliography of publications regarding the herd. These lists will be updated in January 2018 and posted to the WACH WG website, [www.westernarcticcaribou.net](http://www.westernarcticcaribou.net)

**Motions Acted Upon at WAH Working Group Meeting**  
December 13-14, 2017

1. Member Appointment: MOTION by Tom Gray, second by Cyrus Harris, to accept nomination of the following Working Group primary and alternate members: Seat 3 Alternate Eli Nukapigak; Seat 6 Primary Jake Jacobson and Alternate John (Thor) Stacey. Motion carried unanimously.
2. WACH Management Level, 2011 Cooperative Management Plan: MOTION by Charlie Lean, second by Al Barrette, to assign to the Conservative, Stable category on Table 1 of the 2011 Western Arctic Caribou Herd Cooperative Management Plan. The motion carried 13:1.
3. Review of 2011 WAH Cooperative Management Plan:
  - MOTION by Thor Stacey, second by Al Barrette, to conduct a review of the 2011 WAH Cooperative Management Plan (the “five-year” review recommended in that plan), to address points raised in the ADFG presentation (“Revising the WAHWG Management Plan, What do other herds do?”) and brought up in Working Group discussion at this meeting. Do this work in a WG subgroup but the ultimate revision would be approved by the full WG. Motion carried 16:0.
  - MOTION by Al Barrette, second by Neil DeWitt, to form a subcommittee of no more than 10 Working Group members to work with the agencies on the plan review. MOTION TO AMEND by Al Barrette, second by Neil DeWitt, to no more than nine Working Group members (so as not to be a quorum). Motion to amend carried 13:1. Amended motion carried 15:0.
4. Ambler Mining District Industrial Access Project: MOTION by Charlie Lean, second by Thor Stacey, to: (1) take no action regarding support for or opposition to the proposed access road and (2) take no action regarding support for either a northern or southern route through NPS lands, but instead to (3) submit letters to BLM and NPS outlining the issues and concerns discussed by the WG during its meeting on December 14, 2017. Motion carried 15:0.
5. Wildlife Proposals to Federal Subsistence Board:
  - MOTION by Thor Stacey, second by Al Barrette, that the Working Group consider each wildlife proposal and either support or oppose these proposals. Motion carried 16:0.
  - WP18-32 (Caribou season dates) – MOTION by Tom Gray to oppose WP18-32, second by Neil DeWitt. Motion carried 14:0.
  - WP18-45 (Reduce bag limit, Unit 23) – MOTION by Cyrus Harris to oppose WP18-45, second by Al Barrette. Motion carried 16:0.
  - WP18-46 (Close federal lands except to federally qualified subsistence users, Unit 23) –
    - MOTION by Al Barrette to approve WP18-46, second by Neil DeWitt.
    - MOTION TO AMEND by Tom Gray, second by Al Barrette, to approve WP18-46 as modified to apply only to the federal lands included in FSB Special Action 17-03. Amendment approved 13:3.
    - MOTION TO AMEND by Al Barrette, second by Thor Stacey, to approve WP18-46 as further modified to apply for two years. Amendment approved 9:6.
    - Vote on AMENDED MOTION (to approve WP18-46 with a modification to apply only to federal lands included in FSB Special Action 17-03 and only for two years). Motion carried 13:2.



- WP18-47 (Close federal lands except to federally qualified subsistence users for two years, Unit 23) – MOTION by Thor Stacey, second by Al Barrette, to take no action on WP18-47. Motion carried 15:0.
- WP18-48 (Establish registration permit, Units 22, 23, 26A) – MOTION by Neil DeWitt, second by Enoch Mitchell, to approve WP18-48. Motion carried 14:0.
- WP18-49 (Establish registration permit, Units 22, 23, 26A) – MOTION by Thor Stacey, second by Neil DeWitt, to take no action on WP18-49. Motion carried unanimously.
- WP18-57 (Close federal lands except to federally qualified subsistence users, Units 26A, 26B) – MOTION by Neil DeWitt, second by Thor Stacey, to approve WP18-57. Motion failed 7:8.

Working Group Business – MOTION by Morris Nassuk, second by Ron Moto, to approved the 2016 WACH Working Group Meeting Summary. Motion carried unanimously.

Adjournment – MOTION by Neil DeWitt, second by Morris Nassuk, to adjourn the 2017 WACH Working Group meeting. Motion carried unanimously.

**Assignments Made at WAH Working Group Meeting**  
December 13-14, 2017

Assignments

1. A Working Group subgroup of no more than nine members will be formed and will work with representatives of the management agencies (ADFG, BLM, NPS, USFWS) to prepare draft plan revision for consideration of the full Working Group at its annual meeting. If possible, the revision will be completed in 2018. Any plan revision will require action by the full Working Group. Kyle Joly, NPS, will take the lead on organizing the agencies who are assisting. NOTE – As of January 2018, members of the WG subgroup include: Vern Cleveland, Morris Nassuk, Al Barrette, Neil DeWitt, Charlie Lean, and Jake Jacobson (or alternate Thor Stacey).
2. Facilitator Jan Caulfield will work with the Chair Vern Cleveland and the Executive Committee to prepare a comment letter from the WG to the FSB regarding the federal wildlife proposals.
3. WG Resource Development Committee Chair Tim Fullman will work with WG Chair Vern Cleveland and the Executive Committee to prepare a comment letter from the WG to the BLM and NPS regarding the Ambler Road.
4. Work with the Communication Committee to consider what objectives/actions would be included in a Communication Plan. (Kari Rasmussen, ADFG)

**WAH Working Group Meeting Public & Agency Attendance – 2017**

<b>First Name</b>	<b>Last Name</b>	<b>Agency / Organization</b>
Jill	Klein	ADFG, Special Assistant to the Commissioner
Beth	Mikow	ADFG, Division of Subsistence
Mark	Burch	ADFG, Division of Wildlife Conservation
Tony	Gorn	ADFG, Division of Wildlife Conservation
Alex	Hansen	ADFG, Division of Wildlife Conservation
Ryan	Klimstra	ADFG, Division of Wildlife Conservation
Lincoln	Parrett	ADFG, Division of Wildlife Conservation
Phillip	Perry	ADFG, Division of Wildlife Conservation
Kari	Rasmussen	ADFG, Division of Wildlife Conservation
Brandon	Saito	ADFG, Division of Wildlife Conservation
Jeff	San Juan	Alaska Industrial Development & Export Authority (AIDEA)
Dean	Westlake	Alaska State Legislature
Jesse	Logan	Chief of Staff to Rep. Westlake, Alaska State Legislature
Elizabeth	Harball	Alaska Public Radio Network (media)
Yereth	Rosen	Arctic Now (media)
Erik	Kenning	Arctic Slope Regional Corporation
Ben	Sullender	Audubon Alaska
Douglas	Ballou	Bureau of Land Management
Douglas	Ballou	Bureau of Land Management
Casey	Burns	Bureau of Land Management
Steven	Cohn	Bureau of Land Management
Tina	McMaster-Goering	Bureau of Land Management
Bonnie	Million	Bureau of Land Management
Ted	Murphy	Bureau of Land Management
Bruce	Seppi	Bureau of Land Management
Dan	Sharp	Bureau of Land Management
Laurie	Thorpe	Bureau of Land Management
Brian	Ubelaker	Bureau of Land Management
John	Gaedeke	Brooks Range Council
Julie	St. Louis	Courthouse News/Nome Nugget (media)
Christina	Westlake	Kiana
Larry	Westlake, Sr.	Kiana
Ernest	Lee	NANA Corporation
Lance	Miller	NANA Corporation

<b>First Name</b>	<b>Last Name</b>	<b>Agency / Organization</b>
Billy	Adams	North Slope Borough
Brian	Person	North Slope Borough
Janet	Mickley	Northern Alaska Environmental Center
Cal	Craig	Nova Copper
Joan	Frankevich	National Parks Conservation Association
Ken	Adkisson	National Park Service
Hannah	Atkinson	National Park Service
Nikki	Braem	National Park Service
Matt	Cameron	National Park Service
Greg	Dudgeon	National Park Service
Kyle	Joly	National Park Service
Maija	Lukin	National Park Service
Hillary	Robison	National Park Service
Clarence	Summers	National Park Service
John	Chase	Northwest Arctic Borough
Suzanne	Little	The Pew Charitable Trusts
Lois	Epstein	The Wilderness Society
David	Krause	The Wilderness Society
Nicole	Whittington- Evans	The Wilderness Society
Rick	Van Nieuwenhuyse	Trilogy Metals, Inc.
Susan	Georgette	USFWS, Selawik National Wildlife Refuge
Brittany	Sweeney	USFWS, Selawik National Wildlife Refuge
Karen	Deatherage	US Fish and Wildlife Service, Office of Subsistence Management
Thomas	Evans	US Fish and Wildlife Service, Office of Subsistence Management
Lisa	Mass	US Fish and Wildlife Service, Office of Subsistence Management
Chris	McKee	US Fish and Wildlife Service, Office of Subsistence Management
Eva	Patton	US Fish and Wildlife Service, Office of Subsistence Management
Zach	Stevenson	US Fish and Wildlife Service, Office of Subsistence Management

## **Western Arctic Caribou Herd Working Group Caribou Roundtable Questionnaire Responses – 2017**

At the December 2017 Western Arctic Caribou Herd Working Group meeting, the group did not participate in small group Caribou Roundtable discussions, as agenda time was needed for other discussion. Instead, Working Group members were invited to fill out and hand in the questionnaires. Their responses are provided below. (Note: Audience members were also invited to complete the questionnaires, but no responses were received from other than Working Group members.)

### **Kotzebue Sound / Game Management Unit 23**

Working Group members: Vern Cleveland Sr. (Noorvik), William Bernhardt (Kobuk)

#### **Weather/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 was very late. Getting later and later freeze up. Got a lot of snow before freeze up. Break up was early and early break up.
  - Mid-November, later. Snowfall was late but a lot of it. Break-up was about normal
- 2. What did you notice about snow depth and icing?**
  - Lot of snow this year, and rain.
  - Lots of snow. Thin ice with the snow cover.
- 3. What were winds like in winter? In summer?**
  - Somewhat windy in the winter, no real storms. Summer windy all summer.
  - Normal for the winds.
- 4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)**
  - We had flash flood high water and lots of rain.
  - A lot of snow. 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.)**
  - Lots of erosion due to floods.
  - Late freeze-up with lots of snow.

#### **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?**
  - Late November-December arrived.
  - Very few caribou this year.
- 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?**
  - None.
  - Very few caribou.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?**
  - Very slow – no fat.
  - No caribou.

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

- Very late due to warm weather!
- Very few caribou.

**Other Animals**

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

- Reports of lots of bears and wolves.
- Wolves coming into town at night → hungry. Seems to be more bear taken close to village.

**10-A. How did these predators affect caribou in your area?**

- No caribou this year.

**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).**

- More bears and wolves, fewer moose and caribou.

**Other Comments**

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

- Mukluks, dolls.
- Mattress, rug, mukluks, mittens.

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

- Bornite mine noise.

**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 caribou/no conflict.

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

- No caribou.

**Koyukuk & Middle Yukon Region**

Working Group member: Pollock Simon, Sr. (Allakaket)

**Weather/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 was a month late, break-up is two weeks early.

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

- This year is more snow.

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

- In summer there is more winds.

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

- Much/little snow.

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

- Fires impacted caribou range, late freeze-up/early break-up.

### 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?**
  - In year 1974 the oil pipeline road was built going to the Slope. Before that year there was caribou in Koyukuk River. Present Time there is no caribou in the area. The north to south road impacted the caribou route.
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 caribou in this area.
8. **If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?**
  - Caribou were in good shape.
9. **Were there any other notable changes regarding caribou compared with past years?**
  - No.

### Other Animals

10. **What did you notice about bears and wolves in your area?**
  - There is more bears and wolves.
- 10-A **How did these predators affect caribou in your area?**
  - They kill the young caribou.
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).**
  - None.

### Other Comments

12. **How do people in the communities use caribou, other than for meat (e.g. clothing)?**
  - Caribou skins make good mittens, the legs is used for winter boots.
13. **What types of recent exploration and development or other activity have you noticed in the region that may be impacting caribou?**
  - The pipeline road impacted 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?**
  - Upper Koyukuk River. There is low number of moose and caribou. We can't hunt alongside sport hunters.
15. **Is there anything else that you have seen this year that you would like to mention?**
  - There is more bears and wolves. They kill young caribou. The state and the feds could do well in dispatching some of the predators. Bears and wolves don't know of not to kill caribou calf. While that we subsistence users are not allowed to take caribou calves.



***North Slope Region***

Working Group member: Wanda Kippi (Atkasuk)

**Weather/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 late in middle of October. Past years have been about the same. Snowfall in September but a wet September, the snow kept melting. I think break-up was late or mid June.

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

- Hardly any snow in October and November. It was rough riding with snow machine. Just a few inches but snowdrift on the ridges, lakes and hills, snow about 6-18 inches in December and end of November. Ice froze up late October, had about an inch to 2 inches end of October and by 2<sup>nd</sup> week of November, 4-6 inches.

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

- Winds were windy around ranging about 5-20 mph and blizzards high as 25-60 mph if I remembered correctly. Summer were some breeze about 3-12 mph winds, to hot sunny days with hardly and winds. A lot of heat waves across the tundra.

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

- Wet weather rain, light showers, and some heavy rain in October, very wet this time in October.

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

- I have not noticed any changes in the air, lakes or land. Oh except after freeze-up November 3<sup>rd</sup>, 2017 on the river a silver salmon was caught ice fishing.

**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?**

- April thru August, then they came back again October thru December. Last seen in December. It was unusual because they were usually around in September. But heard there was a bear around our area and I finally seen some caribou signs of tracks further south about 10-15 miles.

**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?**

- In August we had big herds coming through our area by the hundreds. Majority of the herd was female, calves, and young bucks, 25 male per 100 caribou. Last year was about the same except herds of smaller by groups of 150 or less.

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

- Majority of the caribou harvested the meat was good, the skins were good, the fat was a lot less from last year but some had more fat than others like the bulls. Did not see any parasites at this time.

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

- Yes. Last year seen 1-2 caribou with green pus around the hindquarter, and one with just a growth cyst looking circular with rough looking deformed skin. And this year one caribou had green stuff all around the belly and side of the hindquarter. With another caribou with green pus everywhere around the neck, shoulder, side of belly and on the opposite side of body too.

**Other Animals**

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

- We had more bears coming through last year and maybe a couple wolves around our area. This year had seen only one bear and tracks spotted in the area and wolf tracks right outside my cabin area, and heard a wolverine was in our area at the time also.

**10-A. How did these predators affect caribou in your area?**

- This year was hard on us from September and most of October. The predators kept the herds farther south. I heard Utqiagvik on the VHF at my camp, campers telling or announcing a lot of bear activity to the east of our area.

**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).**

- Yes last year we had a lot of owls and lemmings, this year no owls and lemmings. Seen more hawks/falcons this year, and a musk ox near town by the end of the airstrip near the Imagruaq Lake on August 26<sup>th</sup>, 2017.

**Other Comments**

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

- Caribou heads are boiled and eaten also the bones are boiled and the marrow in the bone is eaten either boiled or right out of the bone. Tendons are used for thread to sew skins. Whole caribou skins used as padding in tents to keep warm and used for sitting on while ice fishing. The belly part of the stomach is cleaned, cut into strips to dry for dried caribou meat. Heart, tongue and liver are eaten. Antlers used for ulu handles or knife handles.

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

- Aircrafts doing flights for census on birds, fish and plant vegetation, etc. Once in a while, at least once or twice, would see an aircraft just scaring caribou for no reason.

**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?**

- I have not seen any conflicts as to regards of hunting with locals and nonlocals. I have no locals come up to me for advice though.

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

- None at this time.

**Seward Peninsula Region**

Working Group members: Charlie Lean (Nome), Morris Nassuk (Koyuk)

**Weather/Physical Environment**

- 1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?**
  - Month late October-November.
  - End of October, around June. First snowfall was in Nov. followed by rain and snow, finally the snow stayed.
- 2. What did you notice about snow depth and icing?**
  - Somewhat early snow this year.
  - The snow depth in the preceding years have been accumulating to March and that has been when it is deeper whereas in the 60's deep snow came in Nov. The icing has usually started in Oct. and Nov.
- 3. What were winds like in winter? In summer?**
  - Some days the winter winds were strong. The summer had some days with little breeze.
- 4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)**
  - Lots of open streams even now.
  - The fall winds were more consistent in the month of August and going strong in October. The rain has been occurring Nov. and Dec. in small precipitation.
- 5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrence of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)**
  - Caribou working west into new range the last several winters.
  - The burn area/s has shown good growth and even August the vegetation is bright green.

**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?**
  - Winter 2016-17 Northside Seward Peninsula on border of GMU 22.23. Now mid Seward Peninsula – Nulato Hills for a change.
  - Yes. Around end of November. April is my best guess. Very similar.
- 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?**
  - Lots in the west. Cows, calves, yearlings, not many bulls.
  - Hard to make an estimate, a fair amount of all. Pretty average.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?**
  - Meat normal. Bugs bad in over summering animals from Kuzitrin River Drainage.
  - There are no noticeable changes by the time they reach they are lean. Haven't heard of any yet.
- 9. Were there any other notable changes regarding caribou compared with past years?**
  - None that I know of yet.

**Other Animals**

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

- They seem to have peaked may be declining.
- The bear sign are healthy also as are the wolves.

**10-A. How did these predators affect caribou in your area?**

- May trigger migration – bears.
- They keep the caribou in good health to my knowledge.

**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 target moose more bears too, ravens working calves, newborns.
- None that I know of.

**Other Comments**

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

- Hides for sleds/camping. Sell antlers.
- The skins are used for cushion from what I've seen.

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

- I am unaware of any impacts from the GCI stations in our area which are 3 that were placed within the last 3-5 years.

**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?**

- Few more fly in hunters 2016 not 2017.
- Nothing.

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

- Nothing out of the usual.