

Minutes: Tanana Valley State Forest Citizens' Advisory Committee Meeting

April 25, 2019; 6:00 PM

Large Conference Room, Fairbanks DNR Building, 3700 Airport Way

Attendees:

State Employees:

Paul Keech, DOF
Jeremy Douse, DOF
Tom Paragi, ADFG
Todd Nichols, ADFG
Alison Arians, DOF (minutes)

Public:

Jamie Marunde, Doyon
Allen Todd, Doyon
Debra Lynne, Tanana Chiefs Conference
Christina Stewart, TCC
Gayle K. Vick, TCC, TVWA
Stefan Milkowski, Wall Tent Woodworks

CAC Members present:

Tom Malone, Chair (Forest Science)
Milt Behr (Mining)
Brad Cox (Value-Added Processing)
Reed Morisky (Tourism)
Tom Nerbonne (Upper Tanana)
Dan Rees, by phone (Private Forest User)
Fabian Keirn, by phone (Native Community)
Mike Spindler, (Fish & Wildlife)
Chris Stark (Environmental)
Kristin Timm (Recreation)
Jon Underwood (Lower Tanana)

CAC Members absent:

Jason Knowles (Forest Industry)

Tom Malone called the meeting to order at 6pm.

Members and guests introduced. Jon Underwood, new CAC member, introduced himself.

Minutes

Minutes from the October 25, 2018 meeting were approved without corrections. Chris Stark made the motion, Kristin Timm seconded.

Announcements

CAC members reappointed:

Mining Industry: Milton Behr

Tourism Industry: Reed Morisky

Private Forest User: Dan Rees

New CAC member to fill Lower Tanana Valley Rep.: Jon Underwood.

Alison will send a new member packet to Mike Spindler. Send email to CAC members.

Election of committee Chair and Vice Chair.

Milt made a motion and Chris seconded the nomination of Tom Malone as Chair, who was elected unanimously. Milt made a motion and Chris seconded the nomination of Dan Rees as Vice-Chair, who was also elected unanimously.

Presentations:

‘Investigating Changes in Forests Across Alaska and Canada,’ with CAC involvement – Dr. David Lutz, Dartmouth College, Department of Environmental Studies.

Proposal submitted last August, worked with Alison to provide letter of support from TVSF CAC. It is funded now as a 3-year project. Dave is a forest ecologist at Dartmouth, and is excited about involving the CAC in the project. This project is part of a large NASA program: a 10-year effort to understand Climate Change in boreal forest. ABoVE study region, including Alaska. Main question: vulnerability or resiliency of ecosystems to environmental climate change, and its communities.

The AboVE project is in Year 3 now, about 680 science team members. 83 funded projects funding 1262 scientists. Phase 1 collecting data, examining changes in the field. Phase 2: 18 projects. Ecosystem services and modeling.

Dave is lead researcher, environmental science and biology. Computational modeling. Same model that he worked on in Eurasia. The Alaska project is a joint project with 3 universities. Will use remote sensing tools to calibrate our models.

Rationale: Boreal forests are very malleable with changes in climate. Very low diversity. Can be vulnerable to pests and fire. Within Tanana Valley, managing different stands for different purposes. Everyone has different interests within the state forest. When we do a large-scale regional modeling, we need to put in inputs. The trick is that over private land, it’s difficult to get that information. We want to get it mapped accurately. Public lands are good case studies because there are legal requirements on how the harvests are planned, and the CAC has to be involved. It’s a good place to work because we can assess all of your interests and think about alternative scenarios. Some bounds to how you all might be interested in managing things.

Main objective for the project: to use our model to simulate forest fires and processes. Includes fire, changes in climate. Visualization. Gap model: monitoring small spaces, thinking about light transmission. Model has been trained to work in TVSF. Adrianna Foster working on this.

Second objective: interactions with CAC and other stakeholders. Use this tool to help the CAC and other stakeholders who are interested in managing TVSF to think about different management strategies with climate change. Having a meeting with CAC and having some workshops. Pathway for project:

Step 1 – Communicate with CAC and construct a list of stakeholders + participants

Step 2 – Work with the CAC and TVSF to collect/synthesize existing management plans

Step 3 – Think about a meeting location, logistics, to facilitate CAC involvement

Step 4 – Spread the word about ABoVE. This is a novel interdisciplinary project and one of the first of its kind. Follow-on and companion studies are of great interest.

Workshops with stakeholders, managers and planners to discuss and design future alternative scenarios for management. Summer 2020. Plan to come out next summer to meet with as many people who can represent a variety of interests. Discuss: what would you prefer the outcome to be for management in 2020, 2030, 2040. Day-long workshop. Has travel reimbursement and snacks funds. Some deliberative discussion. Model will talk about different solutions. Coming up with different scenarios. Maybe should harvest be more aggressive? More fires, maybe cut more?

Third task: take that information that Dave has worked on with CAC and put the scenarios into the model, analyze the information, and then in Summer 2021 have another workshop to meet with CAC again, and show what the model is suggesting may happen. Outputs: stand density, merchantable wood, carbon storage, wildlife. Presenting the information and asking what we would like—what would be valuable for you? Having the option of telling us to see what scenarios you'd like to see run. Present with information. Our interest is to understand the science, but a major component is to present you with information that is valuable. United States public is paying for this, and we want it to be usable to you.

Work with forest managers to learn more about the Tanana Valley, then organize meeting. Deep ecology and biology, with social science added in: how a group of citizens makes decisions to manage a large area that is undergoing change. I'd like to have as many people with diverse perspectives to participate. In a democratic deliberative process, the more robust the results would be. Much better to have a very diverse group. Will be in touch to think about that.

Thankful for the CAC to be willing to work with us. Panelists for the grant proposal were happy to see the letters that showed we had connected with the CAC. Looking forward to meeting with you. Any questions you have. I'm from the East Coast, not as familiar with Alaska, and looking forward to learning more. Send me an email.

Questions:

Kristin Timm: I worked on a big project at UAF called the integrated ecosystem model. Are you familiar with it?

Dave Lutz: No, but to put it in perspective—this particular project simulates individual trees. Fine-scale vertical structure. Uses shading. Used to be only useable in small spaces, but now we can use clusters of computers. Very detailed. Lots of other ecosystem efforts—I'd like to learn about your project. Sometimes inputs are quite similar. Would like to learn about that other project. We have plenty of time. Seems likely that there are people throughout the ABoVE project at UAF.

Alison has given Kristin & Dave each other's emails

Kristin: Also wondering about scale of the modeling.

Dave: Written in the 80s with Fortran. Developed to look at biodiversity. Using these models for timber applications. Wasn't the original focus of the model, but can be used for that now. Will help to make decisions about what sizes to cut, numbers, etc. That's part of my job to work to put it in there. You tell me what you're going to cut in certain stands, and then I'll be able to put that in the model. If climate changes, what does that mean in terms of new recruitment. Hopefully the output will be helpful.

Milt: Why is NASA involved? Also, what kind of dog do you have?

Dave: NASA is the agency that is funding the whole 10-year study in the arctic. They have a whole side of their budget focusing on terrestrial ecosystem to predict what will happen to the earth's surface. That waxes and wanes, politically. This was part of their terrestrial ecology project. Google Earth, for example, funded by NASA: LandSat project. Interested in how the earth's surface is changing. We are scientists directly supported by NASA. Direct funded effort by them. Dog is a Bernese Mountain Dog.

Fabian Keirn: How does this differ from the Forest Vegetation Simulator?

Dave: I've worked a lot with FVS, which is a statistical model. USFS came up with curves of production, and how they thought forests were behaving with a built-in climate. Run FVS, this particular type (with FIA data), look at how inventory will grow back and change. It's not process based. You can't really ramp up or adjust climate in any meaningful way. It's used as an actionable tool—it's great for product-related information. Telling you what you can expect in terms of cubic meters. Our models are more process-based and ecological based. Input different values for climate. This model doesn't work for forestry. So that's my work—to integrate them with models of other strengths. More dynamically related to environmental conditions. FVS is more static.

Fabian: newer Alaska variant coming online soon. Time schedule was maybe this May.

Tom: We need to plan for another phone call to find a date.

Carbon Credit Purchases in the Tanana Valley – Brian Kleinhentz and Terra Verde.

Calling from Juneau. Topic of carbon credits—SAF had an excellent meeting in Fairbanks last summer that was really good. Fabian and Jeremy were also there. Terra Verde is a small consulting company; most of Alaska work happens in SE Alaska. Carbon markets. Disclaimer: SE and SC focus, since this market hasn't quite reached the Tanana Valley yet.

New market in forestry. Fundamentals are simple. Now a group of industry is willing to pay to buy trees standing up instead of lying down. Big energy companies need to offset what they pump into the atmosphere. Climate change—CO₂ is one of the major culprits. If a person was going to design the perfect machine, it's hard to do any better than a tree. Fix carbon in the form of wood, give off O₂, standing upright like silos. Recognition of energy interests. Can deliver monetary interests in the form of trees, mostly to big oil companies. It's super exciting to see a new industry coming into the state. It's a win-win, because it's good for Chevron, BP, etc., and good for Alaska. Emissions are regulated in states like CA, so companies either pay a penalty for emissions, or find a way to offset it cheaper than the penalty. Helpful and if they are investing in a place where they are already doing business (like Alaska).

Ecosystem services. Wasn't until there was some regulatory action, California putting the bite on oil companies. This has been active since about 2015 in a big way in Alaska. Terra Verde does a lot of fieldwork (20 guys) measuring trees in the woods.

New market. One concern is from industry reps—is this a market that's putting traditional timber sales in jeopardy? The work I've done has not. This carbon credit product is about 10 times less valuable than a traditional log. If you are able to sell most land as stumpage, you can get a much higher value. On marginal land, on land that you wouldn't harvest anyway, you can lock in a market and get most of your money up front.

I've been working with Alaska landowners mostly on marginal lands. Most participants are Native corporations. These make a lot of sense for situations where people aren't sure what they want to do with their land. In early 2000s, 10 cents a ton. In 2015, now over \$13/ton through state of California. TV is not eligible yet to participate in the California market, but there is a voluntary market that is getting about \$9/ton. These are private deals between companies and landowners to offset emissions. (Disney Cruiselines, etc.)

Alaska Native Corporations have already sold \$120 million. Over \$150 million more under development. New dollars into Alaska. California market is changing, but will hope to get more into the voluntary market.

IFM project mechanics: If you can demonstrate that you have more CO2 than your neighbors, you can capitalize on that immediately. You could get to a carbon market in 1-2 years, while harvesting trees could take 20 years. In Tanana Valley, with sustainable forest management goals, with growth, you have a couple of options. You can sell that tree growth back into the market, or you can harvest it. It's not just purely conservation. You're just committing to keep a certain number of trees on the landscape. If you grow more than that, you can harvest them or turn them into more carbon credits. Choose what you do with it based on the market.

Calculating carbon in Alaska conversion factors:

Rough Conversion Factors for SE Alaska

1 sqftbasal area/ acre = ~1 metric ton of carbon per acre

Divide gross board feet per acre by 75 to approximate metric tons of carbon per acre

(12,000 bf/acre) / 75= 160 tons of carbon per acre

Field inventory: on carbon projects, you measure them, and then you turn the measurements into money. A really strong desire from all parties to have very precise tree measurements. Installing plots is very time intensive, because it gets audited by CA and by energy companies. No opportunity to game the system.

Impacts on management: all the programs want to see some kind of forest certification if you continue to harvest trees. CA market demands that you don't have clearcuts bigger than 40 acres. On our landscapes, we don't have the same issues—larger landscapes and also large disturbances by fires. Prohibit herbicides and fertilizers and foreign species. You don't cut down more trees than you promise to have on the landscape. This could be different for private deals.

Questions:

Tom: What's the period of the time that you have to maintain the stocking level?

Brian: Market in CA is 100 years. Voluntary market is usually 40 years. Part of the reason for the price discount. Varies from 40 to 100 years.

Chris Stark: \$10/ton. What does it cost to monitor your ton?

Brian: Every year, desk audit, then periodic field audits. You have to sell about 7,000 to 10,000 acres to carry those costs. You don't see backyard landowners, because you can't afford to do the desk audits.

Chris: Is the whole TVSF big enough?

Tom: 1.8 million acres.

Brian: For the state to participate, would have to be a voluntary agreement. Land Trusts, MHT, University trusts, that function more like a private landowner, could probably get into either market. Native Corporations are able to do either. Can't see it would be impossible.

Tom: What would happen if the fire reduces the stocking level on your land?

Brian: Or hurricane, or bugs? Any party that enters the market pays a balance of credits enters into an insurance pool. Not everybody's trees will get burned down at once. Catastrophic event gets covered by others. Alaska is pretty good bet—we have big fires and insect infestations, but we have a LOT of forests and carbon. In SE, rarely burns. Help to mitigate fire risk.

Milt: Is there any special tax advantages to companies? Like alternative energy?

Brian: Doesn't know of any tax advantage. Energy companies avoid a regulatory fee.

Landowners, it just looks like any other form of income for them. More of a game of when you get the revenue, rather than where it came from.

Update status of forest management on military lands in the Tanana Valley and CSU involvement – Dan Rees.

Ft. Wainwright lands: in the middle of doing our natural resource management plan. 1.5 million acres, most of it is around Fairbanks and Delta Junction. About 300,000 is commercial forest lands. Most firewood stands. Hardwoods and spruce. Don't have a lot of sawlog spruce. We adopt FRPA standards, same as state of Alaska. We are not a multi-use agency—primary is training Army and Air Force. Focus on hazard fuel reduction. We use a lot of pyrotechnics, so we do a lot of fuel reduction to keep wildfires from burning. Next is forest health. Diverse stand types. For our wood that we sell from clearing projects, in general we sell about 50 acres/year, in Delta and Fairbanks. Most of the woodcutters we deal with are small. Sell units from half acre to 20 acres. Work closely with Division of Forestry. Most are references from DOF that want smaller sale units than DOF is offering. It's a good partnership that fulfills our objectives for smaller owners. Also we sell firewood at the same rate as DOF. Issue about 200 permits a year. Funding has been going down for CSU involvement with State inventory, using USFS protocols. Now that the USFS has come in, using DOF, we may phase out our inventory system and use the USFS.

Questions:

Chris Stark: how long would that phase-out be?

Dan: Hard to say—we'd have to go out to bid. On Elmendorf, CSU has been outcompeted by UAA. UAA has replaced CSU, and it might happen at Ft. Wainwright.

Society of American Foresters meeting update – Dan Rees.

Joint meeting with Western Forest Insect group—AZ, CA, BC. Topic that's dealing mostly is spruce bark beetle. 600,000 acres of active infestation in Mat-Su. Started in 2016, about a million acres, and it is also a little bit in the northern Kenai. Largely the theme of the meeting.

Management options for small private landowners with hazard tree removal, some treatment. Broader treatments: feasibility study from company from Afognak. Would need to harvest 2,500 acres/year, using Port MacKenzie to export the chips. Right now the Asian export market is pretty weak, and log transport costs don't look promising. Talking to Area Forester, only 5 active sales. Doesn't look like a lot can be done. Trees are mostly dead now. Spreading into Denali State Park.

Salmon Habitat Improvement Project in the Lower Tanana Valley – Reed Morisky.

Right across from Nenana, two streams used to flow clear, but are now flooded with glacial silt. Blocking the stream channels that are adding silt to these streams could be a non-hatchery solution to a known production problem. Coho run in September used to come up to these streams, and they were very productive. Has been studied since late 70s.

One of the channels cuts through old growth spruce. A lot of swamp and lowland, but to the west of the river is about 10-15' higher than the rest of the land. It's a new channel since 1915. About 300' of gravel off the Alaska Range, with upwellings and springs. All of these flow north into the Tanana and then out to the Yukon. Two areas that are issues—runs clear half the year, some kings, some coho, some chum, and some grayling. One area is across from Anderson, where Nenana has punched through into it. The southern area would be an easier fix. We found the area it punches through, and it's only half the size of this room, and only 4' deep.

ADFG's Anadromous waters maps, indicate that the different species present. Amazing how small some of those streams are, and still have salmon. Nenana runs glacial all summer, so does Teklanika, that is the glacial silt water. One idea is to potentially use access that would be from the harvest area in FYSTS—maybe using bull rock or engineered structure to block the Nenana silt. The timber harvest is very close to where the stream across from Anderson is. Forestry roads come very close to this drainage, and some Ag lands. Wouldn't take much road work, and it would all be done in the winter.

Timeline.

Milestone 1, Summer 2018

- Conduct initial
- field surveys

Milestone 2, 2019

- Coordinate with applicable agencies for potential field work for flood barriers

Milestone 3

- Project Funding-to Complete breach work identified in 2018 Field Work

Milestone 4

- Continue annual observations/ counts through 2025 and beyond

Project benefits:

- Non-hatchery solution to a known production problem. Will not require continual on-going funding after breach repair, other than annual enumeration surveys to examine project effectiveness.
- Project provides an opportunity to study a cost-effective method of spawning habitat rehabilitation.
- Proximity to Fairbanks and Nenana provides project efficiencies

- Project location is above subsistence and commercial users. This project would provide an increase in natural salmon production for those, and other users.

Questions:

Mike: When did the breaches occur?

Reed: Small channel: glacial overflow entered old slough 10 years ago. Second one is getting bigger, maybe 50 years ago.

Tom Paragi: Any USGS gages above that?

Reed: Nenana River at Healy gage. Intermittent, but can go back and see the history. 1967 flood in Fairbanks, 3 or 4 feet of water on the Parks at Anderson. Who knows what the hydraulics did. Could maybe trace it on Google Earth.

Reed's coworker (who?): With drone work, you could see the silt was ruining the salmon spawning capability, covering the rocks. The murky water created no visibility. Found new spawning areas further up, so salmon found a place to go, but they didn't go into this area. We were doing aerial surveys, and there were a lot of trees that were falling over and ruining the habitat.

Brad: Working with timber operators to make the barriers?

Reed: Bullrock with some geotextile fabric. Maybe a grant to get help.

Brad: Rootwad systems? Would that work?

Reed: First one you could do pretty easily with chicken wire, etc. The bigger one will need more. Underlying material is silt. Could be done, but whether it's rootwads or rock and fabric, I'm not sure. We would want to do it in the winter. We'd keep the group apprised of how it would be done.

Mike: You've mentioned a couple of grant sources. Who would write the grant?

Reed: We have been working with TCC. Would be a group, including Chris Stark, Gail Vick.

Kristin: Rainfall events? Seasonal areas?

Reed: Right now Nenana is clear. You can see flood events for a pattern. 10 years ago, massive flood that washed out the Parks. Rainfall driven in September.

Kristin: Build it big enough to withstand big floods.

Meeting coordination for ABoVE project

Tom Malone: Would like to think about when to meet with Dave Lutz, who are the stakeholders

Kristin: Need to have stakeholders that will be able to use the information.

Tom: Need to have production folks there. DOF, TCC, ecosystem services: hydrology, water, carbon.

Timing should be in April, not the summer. Not good timing May 1 – October. Our field season is much shorter than on East Coast.

Should include ADFG, hunters, wildlife viewers.

*Alison as emailed to ask Dave to make the workshop concurrent with the next CAC meeting in April. The day before would be best: April 15th.

*Alison has connected Tom Paragi by email with Dave.

AREA UPDATES

Fairbanks/Delta Area Update – Jeremy Douse, Area Forester.

Introduced himself.

Delta Management Area

- 24 active timber sales with 11 operators
- 3 sales available OTC
- 5 timber sales offered and sold
- 56 firewood permits for 201 cords
- More Ips and bark beetle monitoring

Fairbanks Management Area

- 51 active timber sales with 29 operators
- 19 sales available OTC
- 7 sales offered and sold
- 270 firewood permits for 939 cords

Roads

- Delta - 55 miles of road maintained (8 state)
- Fairbanks - 190 miles of road maintained (60 state)
- Repaired Cache Creek Bridge

2019 Activities

Reforestation

- 40,000 seedlings
- 133 acres

Bison Habitat Rx burn

Area equipment additions

- front-end loader, including a mower attachment

Auctions:

Pete Simpson Memorial Road: easement through Borough land. Some differing opinions about how much surveying has to be done. We'd really like to get into this area because of dry timber. Comes off Elliot Hwy just north of Chatanika River. Hastings Rd. West of the highway.

Questions:

Chris Stark: talk about Pete Simpson

Paul & Jeremy: one of first employees into forestry in the Fairbanks office, and ended up in Stewardship. He was a character, and did a lot of good, volunteered in the community. Passed away after a surgery.

Tok Area Update – Paul Keech, DOF.

Derek Nellis resigned, went back to Michigan. Position vacant, selected Nick Carter from Idaho. Currently a fire warden, similar to FMO, but prior to that he was a resource forester. He's got experience in both sides. Lots of people with only fire, or only forestry. Tok has fairly active work for both. May 20th is first day of his work. Will also oversee Copper River.

Tok FYSTS is out for review. Also included Fairbanks/Delta in packet. Our plan will be next year to redo Fbx/Delta schedule, get any additions from Tok, and present it all together. And put it out every other year.

Three operators in Tok: Logging & Milling, Young's Timber, and Tok School, plus a smattering of firewood operators. Now everyone is transitioning from winter grounds. We will have some demands for summer lands, which we will try and do for now before Nick Carter arrives.

Tok Wood Fuels product is available at Three Bears stores. In the next week, Tok will start wildland fire fuel mitigation grants, which is the last portion of money to spend. School district will collect the felled trees. We can't sell the trees since they were cut with grant money. Further grants will help the school in the future. FYSTS shows future fuel reduction for biomass for the school and can be used for grant money. Dual benefit of fire protection and helping school.

Statewide update – Paul Keech, DOF Regional Forester.

Copper River: Very stable, small program. Personal use firewood and house logs.

Mat-Su/SW area: Dan Rees already gave the report there about spruce beetle infestation. Very political. A lot of education necessary. Doug Hanson has written up a prospective. Mat-Su has a very mixed forest, dead spruce are mixed in with big birch trees. Economics are really difficult. Lower 48 interests. Chinese tariffs are putting a big hurt on any marginal project. Ed Soto is Coastal Regional Forester. Stephen Nickel is new area forester, and was already up to speed with issues.

Tom Paragi: Is DOF worried about fire risk?

Paul: Yes. Chris is working on getting USFS hazard fuel \$. Most of work so far is assisting Division of Parks with cutting hazard trees in campgrounds, and hoping to get funding for that. Doug and Kevin might run down to Byers Lake to get a pellet mill interested in harvesting at the campground. Interagency all-lands all-hands beetle working group also working together. Mat-Su is a checkerboard of land ownership.

Kenai-Kodiak: A little beetle mitigation. Stable harvesting. AF goes to Afognak for FRPA inspections on Native Corp land.

SE: Vallenar sale: GNA gives us the authority to lay out sales on state and USFS land. New administration is putting pressure on us to produce sales. We own very little land, but we are doing our best to provide sales to the local companies. They are asking for 10-year contracts. A ten-year sale to Viking under .118. Alcan has been declined for .118 10-year sale since their sale is for export, but we can use other sale types.

FIA crew is going to be working in Copper Basin for first half of summer, then transfer to Trapper Creek area. 4 crews of three people.

Tongass Young Growth crew will be working on SSE State Forest.

Questions:

Tom: About Tok, with the FYSTS, on the Lookout Road, there's some pretty steep land there. Is there somebody interested in those sales who is going to work there?

Paul: Those were probably put in there 2 foresters ago. A long time ago, Jorgenson was logging in that area, high grading some of the bigger pockets in there. We are cleaning up the FYSTS. We found some sales in the schedule that wasn't even on our ground that we needed to drop. We need to get a better look at what's out there. Hopefully the new area forester will be able to work on it. Getting Doug and Paul working with the new person to bring it into reality, to see what's feasible. Paper exercises with old inventory. Need to do recon.

PUBLIC COMMENTS

None.

CAC MEMBER COMMENTS

Mike: When would this massive FYSTS be done?

Paul: Update it every 2 years, so next winter sometime for all 3.

Jeremy: Want to be able to be reviewed during the meeting in April—that might be hard to work on then. Could complete it, and then have the review period within the meeting date. Wouldn't change much from this one.

Mike: Do you have maps of what was sold, so you could look at the last few years of harvest together with what is planned?

Paul: We have that information.

Mike: That would be helpful to see the map with the history of harvests on it, with different colors.

Jeremy: Can see all of them online.

Paul: We could look into putting that in the schedule—or have it online. A GIS page that would have the FYSTS.

Mike: To see a more holistic scale, that would be great if it could be done online pretty easily.

****Send the GIS link to the CAC and Tom Paragi.**

Paul: could send a link to the website.

****Put on the agenda for next meeting: how to use the GIS system. Ask Doug.**

Kristen: Dave's workshop: maybe fire issues?

Next meeting schedule

The next meeting is scheduled for Thursday, April 16th, 2020.

ADJOURNED at 8:30pm.

Future agenda items:

How to use the DOF GIS system. Ask Doug Hanson.

Alaska Trails Initiative & CAC.