Minutes: Board of Forestry Teleconference Meeting Wednesday, November 10, 2021: 8am – 1:03pm

Call to Order and Roll Call. Helge Eng, State Forester, called the meeting to order at 8:00 am. Teleconference sites were provided in Anchorage and Fairbanks; everyone else called in from their own home or office. The public notice included connection information for anyone to call in or connect to the Zoom teleconference.

Present: Chris Stark, Denise Herzog, Bill Morris (Fairbanks), Nathan Lojewski, Eric Nichols, Mike Post (Anchorage), Russell Byerly (Haines). We have a quorum.

Also present telephonically:

- Anchorage: Alison Arians (minutes), Ben Mulligan (ADFG Habitat), Sarah Saarloos (DOF), Ashley List (DOF), Sue Rodman (ADFG)
- **Fairbanks**: Jeremy Douse (DOF), Todd Nichols (ADFG Habitat), Matt Stevens (DOF), Tom Paragi (DOF), Tim Mowry (DOF), Kevin Meany (DOF)
- Soldotna: Diane Campbell (DOF)
- Ketchikan: Paul Slenkamp (MHT), Greg Staunton (DOF)
- Juneau: Jon Wendel (DEC), Mary Gramling (LAW), Greg Albrecht (ADFG), Melinda Smodey (DEC)
- Palmer: Darren Finley (DOF), Stephen Nickel (DOF), Trevor Dobell (DOF)
- Craig: Mark Minnillo (ADFG)

Other call-in locations, or unknown: Laura Carmack (UA), Chris Tcimpidis (NRCS), Tim Dabney (DOF), Tom Paragi (ADFG), Kate Kanouse (ADFG), Dakota Truitt, Mark Minnillo (ADFG), Clare Doig, Haines Economic Development, Dave Schmid (USFS), Katie Riley, Dan Rees (TVSF CAC), Chiara Dangelo, Jean Daniels

Introduction of new Board Member Russ Byerly. Honored to be a part of the Board. President of the Haines Sportsmen Association. We operate a shooting range at Mud Bay area. Youth activities, provide training, annual Coho fishing derby, scholarships to local students. Meat manager at Olerud's Market in Haines. Have worked for Alaska Mountain Guides. Lived in California previously. Grew up in Wisconsin, lived in Minnesota. Look forward to gaining knowledge about forestry issues. Will interact with Haines State Forest and recreation opportunities.

Approval of Agenda. No additions.

Approval of Minutes. Minutes were approved, with no changes. Denise Herzog made a motion to approve, Bill Morris seconded. Unanimous approval.

Announcements. None.

Funding, legislation, and regulations

<u>Ben Mulligan, ADF&G Habitat</u>: Working on our FY 23 budgets now—confidential and deliberative until Governor releases them. Governor and Legislature left Habitat untouched, so we were able to hire some vacant positions with a stable budget. Folks moved on, took other jobs. Made for a lot of shifting. Promoted from within, had to fill in other positions. We're back to strength of previous few years. Maybe one more hire still to go.

Legislation: nothing introduced last session. Nothing closely following this year. Have been pretty quiet the last couple of years.

Questions.

Helge: You said you had full staffing-no significant vacancies?

Ben: A couple of positions open that we are thinking of filling. The folks that we have are getting the work done; we don't have anyone missing. Critical positions are filled. In SE our regional supervisor is looking to hire—they deal more with FRPA than with any of our regions. Position will be a seasonal to help do permitting and anadromous waters work there. Aggressive program there to catalog salmon streams. We have another grant so that looks good for a few more years.

Melinda Smodey, DEC: New APS enforcement manager. 3 items:

- 1. Budget is not ready to share. More to come.
- 2. Legislation: will introduce a cruise ship bill similar to 2021 bill. Have been working with cruise ship industry. More to come.
- 3. Tier 3 Antidegradation bill: examines whether a discharge should be authorized. Regulations done in 2017, but left open Tier 3 procedures. No process for designating these. Very contentious—how would that be decided because of discharge implications? Department does plan to introduce a bill—stay tuned. Will present that when it's finalized.

Questions.

Chris Stark: There isn't a process?

Melinda: Right. Tier 1 and Tier 2 were already in regulations, but no mechanism for Tier 3 waters. Many different approaches proposed. Governor? Legislature? Body of resource agencies? Will be happy to present at next meeting.

<u>Helge Eng, DOF</u>: Can't share Governor's budget until December 15th. Can share that we are looking to significantly right-size the Division to make up for our budget and staff losses in 2016. And we're hoping to get back to full staffing like ADFG. Several things happening at once:

Timber bridge is an effort in SE to support a viable timber industry with timber harvest on state and private lands. Puts some demands on our division, as well as MHT.

Looking to fill vacancies in SE. Fire seasons are not getting shorter—they are getting more intense and larger, fire seasons longer. In order to respond adequately, need to catch up on a lot of deferred maintenance. Stay tuned for more details on December 15th.

Big news is the federal intrastructure bill passed, and was signed. That piece of the roughly \$2 trillion package somewhere between \$25 and \$30 billion for forestry resilience. Wildfire mitigation is a major issue. Forestry resilience is fairly diverse. Focused on restoration and thinning, timber harvest focused on small-diameter trees. We will find out more, but forestry on National Forests looks like restoration more than timber base. \$500 million allocated toward mechanical thinning. Timber harvesting on small diameter trees. \$500 million for community wildfire defense grants, \$500 million for prescribed fire and related, and another \$500 million for hazardous fuels removal. It's a lot of money, but it needs to be spent across the nation. We are working actively with USFS Region 10 to keep Alaska in the picture—making good progress. A lot of that federal funding will go to Region 10, and hopeful that a lot of it will be allocated not just to the Tongass and Chugach, but on other lands in the state as well.

Questions:

Nathan: Would be great to do a statewide risk assessment. A lot of rural areas, off the road system, might get overlooked. Could be a simple model—quick snapshot of what needs attention.

Alison: What about Mark Cahur's risk assessment?

Nathan: That was just for Southcentral. Would be good to have a list of communities.

AWFCG fuels committee has started talking about it. Talk with Nathan later about who might be good. [*Note: Nathan talked with Chris Moore, AICC, and they already have a good start on this. More to come.*]

Helge: Likes the idea. One element that should be included is equity—ecological issues, plus communities that are also in need of fire protection.

Mike Post: What does the process look like working with USFS for getting funding? How long does it take?

Helge: Highly variable. We have a past forest service employee on staff—Tim, would you like to answer that?

Tim Dabney: We have multiple grants that we get from USFS—some are competitive, some are not. Up until recently, that was fairly easy. Grants provided and we've been working on hazardous fuels projects with funds solely from USFS over the last many years. Just recently, the state obligated about \$17 million in capital improvement projects (CIP), the first time ever. Main difference is that USFS funds can only be used in developing new projects—can't be used for maintenance of fuel breaks. Just awarded a contract on Murphy Dome that was established in 2000, so we used the CIP funds. Was used to protect Fairbanks communities.

Helge: Recent Southeast Sustainability Strategy. USFS indicates that they aren't looking toward grants, but alternative mechanisms. Not clear what those are yet. Funding picture might be changing. USFS update later this morning.

Roadless Rule

Pending litigation & Roadless Rule, Mary Gramling, LAW. Represents AK in Roadless Rule litigation. Have 2 cases related to RR issues.

 State v. USDA—challenge to Roadless Rule before DC circuit court of appeals. Originally filed the case over 10 years ago. At appeals court again now. State is the lead claimant, as well as business interests aligned with us. Oral argument was on September 10th by Zoom. 3 attorneys arguing, 3 judges asking questions. Oddly, only the audio was available publicly. Audio is available.

The link for the argument <u>https://www.cadc.uscourts.gov/recordings/recordings2021.nsf/4F3CB08285966A</u> D08525874C005ED511/\$file/17-5260.mp3

It is about an hour long. That case is pending for decision. Don't expect a decision until 6 months at least—maybe 8 months. There were a lot of questions, won't speculate. Many questions on procedural aspects and state's standing. We are finished with this until we get a decision.

2. Organized village of Kake v. USDA. State intervened in new Tongass exemption rule in February. Case is challenging 2001 Roadless Rule. USDA requested an extension, then there was a change in administration, then they requested a stay, and it was extended until January 1st. Reason for most recent request was due to announcements by Biden administration that they are considering repealing the rule. They don't want to work on the case until the repeal question is settled. State wanted the federal government to give us more information about how this new process would work before the stay was granted. Judge Gleason agreed with us that we should get new information soon. Will get more information in January about what new rulemaking might look like. There have been some other federal statements that we are monitoring.

Questions

Helge: Have you heard anything on repeal and replace the Roadless Rule?

Mary: Since the summer, federal government has said they are still considering it and in internal review—we probably won't know anything until January 1st. Probably internal review—doing some finding. Then will propose the rule. Not sure how long that will take.

Helge: Basics of the Roadless Rule—areas that are designated roadless, you can't build roads, so you can't manage or harvest timber. Goes back to 2001, President Clinton.

Mary: Statewide in Alaska and nationwide. Roadless Rule was subject to challenges from states from the beginning—applied to Chugach since 2005, not present in the Tongass because of Tongass exemption for some time. It was in place from 2011 until 2020, when Trump administration granted Tongass exemption. Biden administration is considering amending this—don't know right now. Status reports, to support their extensions, they also said that they did not anticipate any projects relying on Alaska's roadless rule. If they did authorize any projects, would give all parties 30 days notice. State objected to that—not reasonable.

Chris Stark: Environmental groups aligned with the state? Are there any middle-of-the-road solutions being entertained?

Mary: State's challenge to the rule—there aren't any environmental groups aligned with them. There aren't any middle-of-the road options, because it's just whether the regulation is valid or not. In the state's participation in Alaska Roadless Rule between 2018 and 2020, when it was adopted, the state did try and facilitate efforts to bring more people to the table. In the context of rulemaking, that's when you see more variety of ideas at the table. In the context of rulemaking, it's just what's before the court. It's not an open forum during the litigation.

Chris Stark: Then why did we go through that exercise? We did go through that exercise—then the state supported a middle ground, but changed its mind. No way to use that product, going forward?

Mary: Not sure that there's ever been a fully agreed-upon avenue. As far as litigation. One case is about 2001 Roadless Rule. The other case is the challenge to the rule that exempts the Tongass from the Roadless Rule. The state is interested in exempting the state entirely. As part of the process, there were many meetings and comments. Litigation isn't the forum to bring people to the table.

Eric Nichols: You have politics and law. Two issues. Roadless Rule process—it was funded by the USFS. Did not reach consensus. We had a couple different ideas that we put forward. The USFS was not willing to support either one of our alternatives. I confronted USFS that they didn't use our recommendations and that broke this process down, and it went to the full roadless. We thought we could have lived with a compromise that would have kept us out of litigation, but they didn't take our advice. It was law plus politics.

Chris Stark: Thank you. I keep hoping we can come up with a compromise.

Eric Nichols: How many other litigations are we involved in?

Mary: Don't know the exact number of cases, but the state on our website—a link with our federal issues report. We keep a running chart of our cases, and to see whether we're aligned or not. Link:

The link for the State Department of Law's federal issues http://law.alaska.gov/pdf/admin/FederalIssues.pdf

Forest Management: State

Timber Bridge, Helge Eng, DOF.

Transition to young growth in the Tongass NF has been around since about 2014. A new development in July when Secretary Vilsack stated an immediate end to all old growth harvesting. Put the transition to YG in a new light. The Governor's Timber Bridge is the state's effort to come up with an alternative timber supply for SE forest products industry to stay in business. If an industry's raw materials are suddenly cut off, can't stay in business. Timber bridge is for all the state agencies (DOF, MHT, UA, DMLW) to work together with private entities and Native associations to stand up a predictable long-term supply of timber that can keep businesses in SE going. DOF has committed to a harvest level of at least 14 million BF a year for the next 5 years. That's well within our sustained yield mandate of not reducing the productive capacity of the forest. SE State Forest can produce 14 million BF in perpetuity. MHT has also committed to targets. All Landowners Group is a forum to coordinate our efforts. Sylvia Kreel from OPMP has taken the lead on that initiative, and has done a great job planning our contributions. Defined loosely initially with a 5-year horizon, the implication being that at the end of 5 years, transition to YG would be completed. Open discussion about whether this is realistic. Timber Bridge will probably be with us longer than 5 years. Long-term project, and work in progress.

Eric Nichols: We are 5 years into the Tongass Advisory Committee's 15 year bridge. Forest Service doesn't have enough young growth to bridge the next 10 years. We will quickly run out of merchantable timber. How did we get here? 2016 plan amendment—46 million BF/year. Over that time, they sold only a tiny fraction of that amount. Industry was totally starved of wood even when the Secretary made this announcement. Sullivan and Murkowski met with Vilsack—some confusion with what is YG and what is OG. Putting politics in a forest plan. Afraid that state doesn't have the land base to support industry.

Helge: Would like to support the industry, can provide state timber.

Eric Nichols: Seems to be some issues with tying in carbon with every decision.

Helge: Going back to recent infrastructure act—focuses on "ecologically appropriate" and "small diameter trees." That varies between OR and SE Alaska. Do they mean merchantable? Do we have a potential route toward a sustainable supply of small trees with some occasional large and medium trees?

Paul Slenkamp: Also included small businesses. Small mills should be included.

Nathan Lojewski: DNR wants to develop a carbon research project—why did they call out State Forests? Doesn't seem like they work together to do both? Have they been working with DOF?

Helge: Yes, discussion with DOF. The answer to that seeming inconsistency is that the 3 state forests are intended to serve as case examples, not necessarily a carbon project. The contract is not a project—it's for services to inform the state about possibilities for carbon projects and natural resources projects. To paraphrase the commissioner and COS: no intent to take productive forests out of production. These are intended to serve as case studies to see if carbon projects could be implemented in Alaska.

Regional Forester update: Coastal & Northern. Jeremy Douse covering for Hans Rinke, DOF. New Staff: Tok Area Forester: Kato Howard; Fairbanks AFMO: John Dibert.

Vacancies: Tok FMO, Tok admin assistant, Delta Operations foreman, Fairbanks Prevention Technician.

- Staffing is a challenge
 - Acting positions
 - Non-perms
 - Contractors

Fire and Fuel: Some folks are still fighting fires in the L48.

Fuels Reduction projects

<u>Coastal:</u>

Southwest -

• MTNT - shaded fuel breaks and mitigation around community refuse sites. 196 acres protecting 560 homes.

Mat-Su –

- Hidden Hills Road - 200 foot shaded fuel break protecting the community of caswell. 320 acres Kenai-

 Morgans landing, Kenai Peninsula College campus and city of Kenai, Russian River campground (RSA) – 100 acres

Northern:

Fairbanks

- Old Murphy Dome fuel break Maintenance 498 acres
- Goldstream shaded fuel break 23 acres (burn piles)
- Vista Gold shaded fuel break– 17 acres
- Anderson shaded fuel break- 94 acres

Delta

• Delta River West fuel break – Phase one – 374 acres

Tok

• Eagle subdivision shaded fuel break – Phase one - 64 acres

Copper River

• CWPP - Kenny Lake, Copper Center, Tazlina, Lake Louise, Slana, Mendeltna and Nelchina

Personal Use Firewood

- Starting to see the normal seasonal increase in personal use permits.
- August November activity
 - 187 permits, 691 cords mostly coming from Fairbanks, Mat-su and Delta.

Mat-Su Beetle Salvage:

2 DPO's submitted for spruce salvage of beetle killed timber.

- 48 acre sale on Yoder road near Talkeetna
- 100 acre sale near Wasilla

Timber Sales

Coastal Region:

- Edna Bay Parlay One: 168 Acres in 2 units, 4.7 MMBF
- Bids due by Nov 16

Northern Region:

- 2 small fuelwood sales sold since last BOF meeting. One in Delta and one in Fairbanks
- 44 active sales serving 36 businesses
- 3336 acres under management

<u>Forest Inventory</u>: FIA – southwest unit complete– 200 plots installed FHM/ Evaluation Monitoring Grant

• 17 Mat-Su CAFI plot remeasurement

McIntire Stennis Capacity Grant

- Birch regeneration and site preparation, 12 units complete (181 plots)
- Proposal for CAFI remeasurement, 5 plots planned

Fort Wainwright Forest Inventory

• 45 plots completed, Added FGA, TFTA

- Levels of Growing Stock
 - Bonanza Creek site complete
 - Tok site next year

TVSF management plan update

- Kick off meeting October 4th with core management group
- Internal issues identified, working on plan format
- Public Scoping to start in December

Questions:

Helge: Primary purpose of TVSF is forestry, but recreation is also a use. The recently installed Rosie Creek trail system has been a step up from that. What is the feedback from the public?

Jeremy: Public has viewed it positively. Material site on the state forest that was used as a shooting range and dumping ground. Cleaned that up. The work that the contractor did has greatly improved the roads. Logger won't have to fix up the road before they get in there. We will have to grade the dips down, and replace them afterwards. Local ski race there previously. Everyone seems to like the kiosks and the maps. Seems like it's a good project. My concern is that the state forest has been managed passively. They can use it, access the logging roads. We aren't funded for recreation management. My concern is that we are committing ourselves for recreation management. Public has an expectation that we will manage the trails.

Denise: The TVSF management plan scoping will be in December. Where is that noticed?

Jeremy: Looking at doing something using Teams or Zoom. We don't have dates scheduled yet, it will be on the website and you all will be notified.

Chris Stark: Are we going to try and cross that bridge? Making dollars available to Forestry, the far larger resource of recreation dollars? There are way more funds available for recreation. Is that even possible. Alison successfully completed this project already.

Helge: Yes, there are absolutely dollars available. Elephant in the room; once the public starts recreating in the state forest, are they going to be accepting of timber harvest down the road. Is that going to be compatible? We'd like to think and hope that they are—working toward that. It's not easy, and will need constant work. I like to tell people that when I left CALFIRE, we had the first tree-sitter in the history of the department. I hope that's not an omen. That was inexplicable to me—it was a young growth tree, the forest was only getting harvested 20% annual. That shouldn't hold us back—but go into it with our eyes wide open. The co-existence has to be worked on; it's not a given.

Jeremy: Alison did a great job on this. Would require staff to do this. To take on recreation resources would need additional staff.

Chris Stark: I don't doubt there will be hurdles. We've had a successful show of this. The only reservation is where is the money, and that we're very clear on what we tell the public. We have evidence that it can work.

Helge: Are you thinking of something specific?

Chris Stark: I would ask Alison that question-what can we do in the next 10 years?

Helge: We are well on our way there. The Rosie Creek trail installation is part of that. It'll be great to see how the Rosie Creek project works out. Rosie Creek timber sale will be a good test case. We're on our way down that road. Appreciate your input and how to make this better.

Chris: Timber sale will give us good information.

Helge: UAF probably has researchers that would take on the social science aspect of compatible uses—forestry and recreation.

Chris Stark: Good idea, Helge. I can ask them.

Mental Health Trust exchange update & forestry activity: Paul Slenkamp, MHT.

Exchange should be finished by the last day of December. Has taken many years. Still working through segments of that. Very exciting. Presentation to Trustees a couple of weeks ago. John Sturgeon did a historical update for the trustees. Would be a good idea while he's still available, to have him do that for the BOF.

Work with DOF doing inventory work, sale administration, especially in Haines, Gustavus, Kenai and Fairbanks. Have done some administration and inventory for us. Most of our lands are in the TVSF and near Fairbanks and Mat-Su. Primary revenue source is from holdings in SE Alaska. Thanks to land exchange, we have 3 basic areas of lands in SE. Icy Bay, POW, and near Ketchikan. We do an intensive harvest program to benefit our beneficiaries. So involvement in bridge timber program is because the Trust needs to maintain its value, we need a healthy competitive timber program. Perpetuate the industry. Right now, just 2 large timber sales, both associated with land exchange. 1) Viking Lumber on POW at Naukati. Primary source of fiber to keep that mill in operation. Over 100 jobs. Important to the economy. 2) Shelter Cove sale. Just got conveyance of that land in September. Shelter Cove road project--\$5.8 million project.

Upcoming: Shelter Cove, Hollis, Haines, Kasaan.

Questions;

Helge: Shelter Cove road up to DOT standards for public use?

Paul: It will be a public road for transportation. Has been a real challenge—DOT wants a 35 mph road. DOT is used to using FHWA \$\$; doesn't know how to manage a forest road. We have run into maintenance issues. Hesitant to use pre-manufactured bridges, etc. The road will be open to the public, hoping to open it next Fall.

Forest Management: Federal & Private

Good Neighbor Authority Update: Kosciusko Sale: Paul Slenkamp.

State manages federal timber sales. Has been some differences in management styles between federal and state agencies. Worked on FRPA standards, water quality preservation. AlCan timber is the owner of this sale. Halfway through the sale with YG management. Issues with uneven-aged management. Challenging layout prescriptions, working through USFS restrictions. First timber sale that has been asked to produce revenue. Several sales in the past they have paid people to do prescriptions.

Questions:

Helge: What are the prescriptions?

Paul: Some 20 acre openings, some 2-acre openings, a couple of larger cuts. The 2-acre openings were difficult wanted to include the skid road into the openings. Need to have a 60 foot opening just to get logs out. Buffering issues because of karst. Wildlife access issues. Also restoration work required. Tried to incorporate that, but fell outside the scope that we advertised for.

USFS update on forestry activity: David Schmid, USFS.

Helge: Glad to have a USFS report. Hope to do this moving forward.

Dave: Has been about a year since I was last able to come. Appreciate that opportunity. New administration, new secretary. Randy Moore brings a real understanding to local issues—wants to get local agencies empowered.

New administration brings new priorities. Regional approach—trying to align with that. Big Secretary announcement in July. Most folks are interested in the investment part of that. What will be monumental—SE Alaska—is infrastructure bill. Highlighting some items. Southeast Alaska Sustainability Strategy. Announcement: replacing Roadless Rule, investment opportunities, and refocusing forest management based on recent history. Meanful consultation with the tribes.

Roadless Rule: How we got where we are. Was working on POW in 2001. Has ping-ponged back and forth. Last attempt was to find something that worked for SE Alaska, trying to find something durable. The state did under Chris Maisch work through a group of stakeholders to develop a proposal. We worked really hard—21 different in-person meetings across SE Alaska. Last administration deferred to highest elected officials and Governor, who decided to repeal the whole thing. Now with the new administration, being reconsidered. Federal register notice will be new information at the end of the month. Will probably restore some or all of the roadless rule protections.

Investment opportunities around SASS: Southeast Alaska Sustainability Strategy. Lots of applications from local communities. This is an initial investment—looking to long-term investment. How can we best support Alaska, and where those investments can make a difference. Open engagement period—received 160? proposals. Have worked with DOF, DNR, AFA, other communities and groups. Collaborative effort—not a request for proposals. Informal. Looking to recommend to the Secretary not specific projects, but areas to invest and maintain latitude in the Region to direct that funding. Will have that recommendation in the next week or so.

MHT Exchange: Long effort. Still some pieces to work through around the easements for road use.

Infrastructure: Will be a dramatic shift in how it plays out. Senator Murkowski was part of the bipartisan group—I admire and commend a lot of the pieces in the legislation that didn't leave Alaska out. Looking at least in USFS from scarcity to opportunity. Act includes \$5.4 billion for the agency nationwide, in addition to Great American Outdoors Act. Finally competed well. \$12 million last year, and another \$12 million this year. This is targeting our deferred maintenance around decaying recreation infrastructure. Some of our other capital improvements projects, as well. Roads, etc. Looking at another \$25 million in GAOA, and appropriations. Around forestry--\$400 million for thinning to promote fire-resilient stands and pre-commercial thinning in YG stands. Wildlife

habitat and subsistence resources, targeting SE Alaska. Facilities: \$400 million to purchase financial assistance for byproducts from restoration projects. Learning experience in Kosciusko with GNA sale—what we leave on the landscape and also to include industry. Restoration projects under GNA sales—some real potential in SE Alaska and maybe in Chugach. State & Private programs—working through Challenge Cost Share 1 & 2, moving through 3. Lots of components. Funding has come through. \$12 million grants for biomass and wood innovation. Cooperating with tribes and the state, etc. All areas. Reconciliation bill—following that.

Between American Outdoors, Infrastructure Bill and increases in Alaska appropriations, restoring some of the non-fire capacity to USFS. Foresters, biologists, archaeologists, planners—reduced by 30%. Fires have been the priority. We don't have a big fire program on the Tongass—lots of those reductions have been overshadowed with bigger fire programs. Looking forward to some increases. Not just hiring a bunch of people, but looking at increased capacity to manage the work—through other entities.

Questions.

Eric Nichols: Can you tell me what climate-smart forestry means? Carbon-based scenario?

Dave Schmid: I'm not sure what that means either. What we are trying to understand better is how we can manage the forest within carbon cycles. Our approach here is with our transition—how can be best transition to Young Growth? Watching this last week a lot of discussion about climate. I think we can do the appropriate level of forestry and silviculture to accomplish young growth transition to help industry and our communities.

Eric Nichols: Any idea of where the industry is going? Pretty bleak on our side. Can't do this on a 4-year election cycle. Don't see long-term consistency.

Dave Schmid: I know it's frustrating. My employees get whip-sawed as well. My goal is to try and bring some stability. When we look at the YG coming on line—it's at least 5 years out. One of the pieces of the puzzle is working through the Landowners Group—DOF and MHT, Sealaska Corp. with oldest young growth. Between the state, MHT, we still envision at some long-term point at least 5 million BF annually of old growth. Does contribute to very small operators. We are trying to work with folks. I hope that some of the investments we are making could help facilitate this over the next 5-10 years to get to something long-term and sustainable. Tongass is a lightning rod for Roadless and for old growth. A tough road to be successful. Hard to shift with administration.

Chris Stark: Carbon sequestration and logging are going different directions? Seems like they aren't mutually exclusive. Logging and carbon sequestration haven't worked together very long.

Helge: They are not. It's a hotly debated topic. My understanding of the research is that timber harvest is eminently competitive with setting aside an acre of forest, in that when you harvest trees, you in many cases turn the logs into high value long-lived wood products in use. If you go back to where you harvested, you either reforest, or in SE trees naturally regenerate. Wood is a renewable resource, the most carbon-friendly resource for construction. Managed forests and working forests are very competitive from a carbon perspective. Many people would like to live in nice big houses made out of wood. That demand is not going away. Climate change is not going away. If we don't harvest here, they will harvest somewhere else. Forest management is a very carbonfriendly activity. We need it to support our consumption of wood products. We consume a lot of lumber, and consider the double benefit of harvesting and using the wood, and growing new timber. It's really the only solution. Nathan is an expert on carbon offset issues.

Nathan: One thing is not quantified is new technology like mass timber—can replace steel and concrete. Folks don't have a good handle on that yet.

Dave Schmid: Good to look from a broader perspective. Great discussion.

Public Comment

Clare Doig: Consulting Forester. Haven't heard anything reporting the amount of work being done on Native Corporation land in the SE area. NRCS has been fundging pre-commercial thinning, as well as projects on fish

habitat restoration work, with a lot of community and local involvement working with USFS/Native Corporation lands.

Katie Rooks: SEAAC. Lives on POW Island. My question is: Discussing high value products coming from the wood you're cutting. I'm not aware of that happening with wood leaving the Tongass. Exported for pulp. If there are high quality products or houses built for that, I'd like to know what they are, and what are they selling for?

Fire & Research & Planning

Implementation plan for fuels reduction funds: Darren Finley/Sarah Saarloos, DOF. Strategically located breaks in hazardous fuel on the landscape to protect life and property. Implementation through mechanical, hand-treatments, or prescribed fire. Funding sourced through federal competitive grants or State allocated.

Current projects:

Fairbanks - Pile Burning, Old Murphy Dome Retreatment

Copper River - 6 new Community Wildfire Protection Plans (CWPP), updating 4 that have been in existence. Hiring two project assistants.

Mat-Su - MTNT (McGrath, Tokotna, Nikoli, Telida) in the Southwest, Casswell/Hidden Hills Phase 1. **Kenai** - Working at Morgan's Landing, working on an RSA and contracting with Kenai Peninsula College. **Tok/Delta** - Both community hazardous fuel drop off locations have been successful this year and have recently been lit as weather becomes more advantageous.

Capacity:

Personnel

- Area Fuel Specialists
- Area Fuel AFMO's
- Regional FMO's
- Additional Admin, Procurement Positions
- Equipment
 - 4 new industrial chippers

Implementation: Identification, Planning, Execution.

Each area has been tasked to identify at least one project and complete the planning process by years end. This will ensure a minimum of 6 projects moving into an execution phase for 2022. As our capacity increases our execution of more fuel mitigation projects will also grow.

Questions:

Nathan Lojewski: Position for Regional FMO is a new position? Darren: DOF has had these in the past. Nathan: Just for fuels? Darren: Will help with Fuels and also fire projects. Nathan: Very exciting.

Fire season, Fall Fire & Forestry Review, AWFCG: Norm McDonald, DOF.

4 vacancies last year—filled, including Sarah Saarloos and Darren Finley, to work on these fuels projects. Regional FMOs were part of budget cuts. Part of our mission this winter is to reorganize and build capacity. Regional FMOs are part of this rebuild. Some steps to go through. Intent is to support fire management and fuels. In the process of hiring admin support and field support. A call on Friday with Nathan and Charlie Sink on cooperation with Native associations.

Still challenged with budget cuts from 2016. Added some challenges, but we're adapting to it. Theme is capacity building. Unique arrangement with AFS and DOF—a template that other agencies are going to in other states.

Below average season, but was not slow. Many challenges with shortages of resources. 388 fires, 254,414 acres. Starts are beginning sooner and fire seasons last longer. Mat-Su could burn right now, snow-free. Average is usually a million acres—that has doubled.

Positions filled by L48 resources this year: 311, in a below-average season. This year we sent 786 people to L48. Every state and agency is facing burnout and shortages of resources. In 2019 we imported 6,000 people to Alaska—luckily it was a slow season in the L48. Fear is when there are high fires in both places. The decisions aren't what resources or roads—but what communities to protect, for example in California. L48 and Alaska seasons conflict or coincide—that will be a problem.

Fewer and fewer EFF crews. These usually come from villages. This year, we've had less than 10 EFF, and at any given time only had 5.

For every firefighter, takes 5 people in support. Process to consolidate northern Dispatch center, including warehouses, public information.

We are one of three wildland protection agencies in the state of Alaska. DOF, AFS, USFS. We protect land owned by various other agencies. Interagency collaboration between agencies is important--Alaska has a unique agreement, different then any other State. Scope of the state, limited resources.

The guiding document is the Alaska Interagency Wildland Management Plan: Statewide implementation and use includes all DOI agencies-USFS-State of Alaska- and Alaska Native Land Managers

• Purpose is to promote a cooperative, consistent, and cost-effective approach to wildland fire management.

•Standard reference for wildland fire operations and initial responses. Limited-Modified-Full-Critical – defined to provide a range of responses (from suppression actions that restrict size and extent of fire à to periodic surveillance to monitor fire behavior and enable a natural fire regime)

•Essential element of Alaska's fire management and interagency cooperation and collaboration..... Up for review in 2020/21 (This year)

•Opportunity for all land management agencies to provide for public and firefighter safety, accomplish fire related management objectives while adhering to each agency's specific rules and regulations.

Most of the population in AK lives in the areas protected by Forestry. Values in State Protection: WUI-Population-Highway Corridor-Rail Corridor. Closure of these have significant economic impacts. Ex. Swan Lake.

fire program budget is 89% of the Division of the budget – majority of workforce is fire not resources. A Natural Resource Agency that does public safety

Budget Components

- Forest Management and Development 7,999.5
- Fire Suppression Preparedness 19,721.2
- Fire Suppression Activity 39,101.4

Going back to 2004 initial fire starts for the season have ranged from as early as March 7 to as late as April 15. Most often our initial ignition occurs in March. The last ignition for the season varies between late September as far out as December. Rolling average under 1 mm average until early 2000, almost doubled in last 20 years

There were a total of 388 fires in 2021.

- 251 Human- Caused
- 126 Lightning-Caused
- 11 Undetermined
- These fires burned a total of 254,414 acres. 9,893 Human-Caused
- 244,508 Lightning-Caused

• 14 Undetermined

Staffed fires are those fires where personnel stayed overnight. 80% of all our fires are human caused. Prevention is a major part of our program and needs to continue to be an emphasis.

This season the State of Alaska utilized 311 overhead resources from the lower 48 to fill a variety of overhead resource orders. We are working on building capacity. In busy seasons such as 2019 we imported over 6000 lower 48 firefighters.

Alaska filled 786 overhead resources orders to assist with lower 48 incidents. We still have 13 firefighters and dispatcher on assignment. All wildland fire agencies and all states are dealing with resource shortages. Recruitment/retention, large fires, longer seasons. Important to share resources.

Fire Operations:

- Two Airtankers
- Six Helicopters
- Four Detection Aircraft
- 85+ Technicians
- 59 Engines
- Three Agency Crews (Two cooperator)
- Less than 10 EFF Crews*
- Type 1 and 2 Incident Management Team

Support

- Northern Forestry Dispatch Center
- Alaska Interagency Coordination Center
- Area Dispatch Offices
- Two Warehouses
- Four Retardant Bases
- Public Information
- EFF Program
- Fire Education and Prevention Program

Alaska Incident Management Teams: 2015-2021 = Alaska Teams used 18 times in Alaska, 13 L-48 assignments.

- All Risk- Earthquakes (Denali Fault), Floods Mat-Su/Eagle/Galena, Storms (Cordova), Hurricane Katrina, New York 9/11 recovery effort
- 2015-2021- Alaska (DOF) hosted 30 IMT orders including Type 1, 2 and 3 organizations and a NIMO IMT
- DOF sponsors 182 DOF or Emergency Firefighters with qualifications, training and administrative support that make up the team rosters.
 - Alaska Type 1 IMT
 - 2 Type 2 IMTs Green and Black
 - Local Type 3 Teams
 - All-Risk Support
 - Lower 48 Support
 - Interagency effort : DOF, DOI, USFS, NPS, USFWS, and Local.

2021 Assignments

- Haystack Fire, Fairbanks, AK T2 Black
- Bootleg Fire, Oregon, AK T1
- Monument Fire, California, AK T1
- McCash Fire, California, AK T1

Challenges:

- Recruitment and Retention Vacancies and loss of experience
- Budget reductions (2015)
- Decreased EFF (Crews) Capacity
- Increased Contractual Costs Aviation
- Decreased Federal Capacity- AFS and Lower 48
- Facilities Replacement & Maintenance Many 1960s era BLM
- Reliance on Technology- Increased upkeep and costs
- Climate Change
- WUI Expansion

Strategies to meet the challenges:

- Build capacity through reorganization, modernizing our organization to meet the mission.
- Consolidated model for efficiencies in Forestry dispatch organization, taking advantage of technology development.
- Prevention focus! Retooling that program including public outreach, enforcement and education.
- Implementation of state supported fuels program with recovered funds... WUI and remote Alaska.
- Continue crew programs excellent building blocks for new fire leaders. DOF and Cooperating Agencies. (TCC and Chugachmiut)

Successes:

- Consolidated Northern Region Dispatch
- First state to utilize Q400 Air tanker
- Assisted multiple L-48 incidents with 2 strike teams of engines.
- Purchased a Cessna Grand Caravan to replace 909AK
- Alaska DOF unveiled their new wildfire prevention mascot, Spruce the Moose as part of the Take Time to Learn Before You Burn campaign.
- DOF awarded more than \$159,000 to 34 Rural Volunteer Fire Departments as part of the Federal volunteer fire assistance program.

Questions

Russ Byerly: You people are warriors. Thanks for all you do.

Norm: Lots of good people doing good work.

Chris Stark: You made a comment about fires being so complex that it's hard to do your other duties. What about the other things you have to do?

Norm: Fire part of the division. A lot of the Forestry part of the division, we are stretched thin to accomplish fire and forestry tasks. Looking at some organizational changes.

Chris Stark: Should you split off? You answered my question. How bad is this, and is there organizational changes needed? Sounds like you're addressing it.

Helge: How many different agencies are represented on IMTs?

Norm: Homeland Security, other DNR agencies. Primarily DOI BLM, USFS, and DOF.

DOF research projects: Miho Welton, DOF. Inventory Projects Federally Funded Programs:

- Forest Inventory and Analysis
- Cooperative Alaska Forest Inventory
- Fort Wainwright Forest Inventory
- Birch Regeneration

DOF Funded Programs

• Levels Of Growing Stock

CAFI: Originally part of Growth and Yield Program at University of Alaska Fairbanks. First plots installed in 1994 but discontinued in 2015. 5-year interval up to 5 measurements (6 including 2020-21 remeasurements). DOF took over the project in 2020. 10-year interval moving forward.

CAFI – Collaboration

Two Funding Sources: USFS Evaluation Monitoring Program and USDA McIntire-Stennis Forestry Capacity Grant. * Both grants heavily matched by DOF.

Evaluation Monitoring Program (2021-2023). Collaboration with Jason Moan, DOF entomologist, using CAFI plot remeasurements to assess spruce beetle damage in southcentral.

McIntire-Stennis Forestry Capacity Grant (3-year funding). Collaboration with UAF researchers; remeasurements of the rest of the CAFI plots.

Not all spruce are beetle killed—larger white spruce are more susceptible to spruce beetle attack. Sites with more white spruce are more susceptible to spruce beetle attack.

Fort Wainwright Forest Inventory. Started in 2001. Likely the last cycle of measurements. Funded by Department of Defense, 5-year grant, Year 2 just ended.

Birch Regeneration. Regeneration survey of birch harvest units on Fairbanks Management Area of Tanana Valley State Forest. Funded by McIntire-Stennis Forestry Capacity Grant (funded to UAF) and matched heavily by DOF. Collaboration with UAF researchers

2 research questions:

- Is regeneration successful following birch harvest?
- Can we use drones to measure?

Levels of Growing Stock:

LOGS

Originally part of Growth and Yield Program at UAF. 2 locations –**Bonanza Creek** and **Tok**. Bonanza creek sites established in **1986** (sites burned in 1983). Tok site established in **1992** (site burned in 1990). UAF did last measurements in **2011**(Bonanza Ck) and **2012**(Tok). DOF remeasured Bonanza Ck sites in **2021**. DOF plans on remeasuring Tok site in 2022. Continue remeasurements at 10-year interval

Questions:

Denise: I've read that spruce beetle don't attack the black spruce as much. Is that what you see?

Miho: Yes, we did see some that were attacked, but not nearly as much as white spruce?

Denise: Have you seen any movement of the beetles coming north of the Alaska Range?

Miho: Unfortunately there are no CAFI plots between Alaska Range and Nenana. As far as I know, they haven't passed it, but they are close. Some say they are on their way, but others aren't sure. Some are looking at the leading edge.

Denise: Do you have plans to put in new plots?

Miho: Not with CAFI, but I have a collaborator at UAF who is going to put in some plots. But maybe we could make this a CAFI plot. Future report on this for the BOF would be good.

Jeremy: Jason Moan, our forest health specialist and USFS has done a lot of trapping between Nenana and Cantwell. Monitoring that to see if that is progressing. Ongoing thing. Beetles have made it as far as Cantwell.

Jennifer Barnes: Spruce beetles have made it as far as McKinley Village, just south of Denali Park entrance. 40-50% mortality of large diameter white spruce, starting 2 years ago.

Helge: Levels of growing stock: Were you able to draw conclusions about spacing and amount of total biomass?

Miho: I haven't done the biomass yet, but I can get those numbers pretty quickly. Should be similar to the volume.

Helge: Carbon sequestration capacity—directly related to volume, we know from previous research that it's different to change the total volume. Does the same hold for carbon sequestration?

Miho: Will send that to you.

Nathan: Do you know the dates that you are measuring for the beetle studies? Have seem some intense mortality but it seems like there is a lag behind white spruce.

Miho: Beetles prefer white spruce. They kill all the white spruce, and then move into black spruce stands. A time lag due to that.

Chris Stark: Older spruce are getting hit harder. When older trees died, younger trees survived for a while, and they get hit.

Miho: Could happen. It might be that it hasn't been long enough to kill the young trees yet. Might need a little more time for them to kill the younger trees. Will probably see those effects at the next measurement.

Chris Stark: Major thing that drives these things north is temperature.

Miho: Yes, the temperature limits the spruce beetle outbreak, but now their population is increasing, so they have to move to find the live trees. North of Alaska Range some people think it's too cold for them to have an outbreak. We don't know yet.

Laura Carmack: Request for Miho. Would like you to reach out to our office and working together on research projects that we are working on at UA, to get those projects going and making contacts. New director, Adrienne Sculpey. Reach out to us.

Tanana Valley State Forest Management Plan update: Ashley List, DOF.

Forest Planner and Coop programs manager. Starting to work on revision of TVSF management plan. TVSF Established 1983. First plan written in1988. Revision 2001.

Reasons to update the plan: New timber inventory, access information, reflect current information Process: One year goal. Board of Forestry review, TVSF Citizen's Advisory Committee review, State agency

review, Public review (public hearing, public notice, comment opportunity).

Scoping Issues: Access, recommended additions to TVSF, updated forest inventory, silvicultural treatments, forest health and climate change, wildlife habitat management, recreation, research uses.

How would the Board of Forestry like to be involved?

Could be as part of public review, as presentations as plan progresses, or separate working group. Thoughts on timing or how to go about it.

Questions:

Denise: Federal landowners in the areas—any thought to them?

Ashley: will be contacting adjacent landowners. Plan is limited to state lands, so won't address outside our jurisdiction, but will be considering adjacent landowners.

Denise: I represent the mining industry on the Board. Have you thought about multiple use in terms of mineral use.

Ashley: The forest plan process is similar to MLW process. Same guidelines that govern the area plans. Can consider decisions for closures to mineral location and leasing. The 2001 plan was 99% open. I haven't heard that this is a focus of this plan—don't expect any big changes. It could be taken during the planning process.

Helge: A couple of options: could be as part of the public process, or if the Board wants to formulate a set of recommendations to the division.

Chris Stark: I'm on the CAC and public and BOF. I'd like to see the plan and have lots of time to consider and talk about it. 90 days isn't very long. When will a well-engaged person be able to see it?

Ashley: Draft plan will be available late spring/early summer. For CAC, idea is to time a meeting with them at the scoping part of the process. I'll ask the CAC if they want an advanced presentation on the plan, or after the plan has been out for a week or two. I'm planning on deferring to the CAC on that.

Chris Stark: We need to get your information as soon as we possibly can.

Ashley: 5 days required notice ahead of time for the CAC—we will give more notice than that.

Helge: My motivation for asking if the BOF is interested in commenting on the plan is self-interested, in that it would help the Division to have a statement/letter from the BOF supporting the revised management plan. We will bring it back to you for another look when we are ready.

Annual interagency research needs meeting: Alison Arians, DOF.

DOF, ADFG, NRCS, Sealaska Timber, USFS, DEC, USFWS. Thanks to those of you here who attended: Tim Dabney, Bill Morris, Jeremy Douse, Hans Rinke, Greg Albrecht, Mark Minnillo, Joel Nudelman.

Interagency information sharing on funding opportunities, compliance monitoring, effectiveness monitoring projects that are already implemented and planned for the future, and research priorities from each agency going forward.

We will hear more about compliance monitoring after the calendar year for our annual report from Joel's data in the spring.

Lots of interesting projects from USFS and USFWS—rather than going through them, minutes from the meeting can be found on DOF link under FRPA monitoring: <u>Interagency Coordination for FRPA Effectiveness Monitoring</u>. Waiting for final report from USFS next week, so it'll be at least another week.

Priorities for DOF: Continuing road condition surveys, especially on Sealaska inactive roads as their timber operation closes down. POW complete, will look toward other areas moving forward, working with ADFG.

DOF Research priorities:

- Research projects from Miho.
- Jeremy: Updates to Anadromous water catalog
- Jeremy: Water quality monitoring in specific watersheds in state forests. Annual variability of non pointsource pollution.
- Tim: Hazardous fuels reduction and possible thermokarsting consequences. Roller-chopping, shear-blading, masticating—what works best.

Priorities for ADFG:

Greg Albrecht. Possible FRPA regs changes, including the map requirements for DPOs, and also new provisions for young growth buffers for applicant, perhaps including voluntary variable and windproof buffers.

Also exploring changes in regulation that would increase the buffer size on big floodplain streams, while perhaps decreasing buffers on very small streams. Would like to do a literature review, looking at what the net trade-offs would be, what is equitable. Will present to the Board in the future.

John Sturgeon presentation would be great to show past agreements.

Fire research needs: Jennifer Barnes, National Park Service.

Representing Fire, Research, Development, & Application Committee (FRDAC). Regional Fire ecologist, presenting for AWFCG. Purpose is to identify research needs for fire, get a list together to facilitate the exchange of information. Alaska Fire Science Consortium. Other purpose is to make this applicable to other agencies. Have been developing fire research lists since 1999. Last full list was done in 2017. This group tries to get input from different agencies—what are the needs. Examples of details in 2017 list: Fire behavior modeling, Canadian fire danger indices, fuels treatments, climate and fire regime change.

Links to a survey for fire research needs, and other links:

- Alaska Fire Science Consortium great resource for completed fire research and presentations: <u>https://www.frames.gov/afsc/home</u>
- AWFCG Fire Research Committee on frames: <u>https://www.frames.gov/afsc/partners/frdac</u>
- List of 2017 fire research list: <u>https://www.frames.gov/documents/alaska/AWFCG_research-needs_2017.pdf</u>
- Survey for AWFCG organizations 2022 fire research needs: <u>https://forms.office.com/g/PY2rT7hXWS</u>

Lots of research information out there, but what we are struggling with, is how to the fire and forest managers apply the research that has already been completed? How to get that information into our agency policies. Mike Butteri is the chair of the committee, and I'm the vice chair.

Questions:

Chris Stark: In L48, controversy about spacing in thinning. Any insights?

Jennifer: Spacing of trees for fuels treatments? Yes. Can increase grasses and breezes with spacing. Crown fire limbing trees is very beneficial. A good spot of what spacing you do for fuels treatments. Some done for fire behavior, as well. Alaska Fire Science Consortium is available to everyone.

Helge: Highly site specific to different ecosystems. A Ponderosa pine forest in AZ is significantly different than OR or Alaska.

Jennifer: Spruce beetle work in interior: not as much grass as in the Kenai. Even within the state varying ecosystems.

Recreation/Forestry projects update: Alison Arians, DOF.

Rosie Creek project is complete. Lots of good press. Timber sale coming up this winter. The Rosie Creek timber sale will be part of Fairbanks/Delta Area's fall/winter auction. The auction prospectus will be released when the final best interest findings (BIFs) and forest land use plans (FLUPs) have been issued for all the included sales. Prospectus will likely be issued the first week of December.

Bonanza Creek Connector Trail project would build 4 miles of motorized/non-motorized trail connections linking the 35 miles of Rosie Creek all-season forestry roads to 18 more miles of all-season forestry roads in the Zasada Road and Bonanza Creek Road complexes, to the west; provide directional signs, a map kiosk, and GPS map links. Applied for RTP Grant, Spring 2021 with 10% Yamaha matching grant for Outdoor Access, also worked with UAF to ensure no impacts to research plots, neighborhood to resolve parking issues. Grant was denied: forestry roads used for "general passenger vehicle traffic," MLW permit was not complete.

Now considering whether to apply again for the RTP grant this fall, based on the costs/benefits of recreation & forestry partnerships. Need to decide this week whether to apply: deadline to post public notice approaching.

- Maintenance expectations
- Increased objections to timber sales
- Increased awareness of "working forest," TVSF and land ownership
- Building a constituency for forestry

Questions:

Chris Stark: any thought toward a media event walking people through the timber sale. Some map or something?

Alison: Not anticipating closing the roads. Made sure the sale story was in the newspaper.

Jeremy: We put up signs if there is active timber sales. Don't anticipate closures. 7 Mile Island sale—sometimes there are conditions that can't be snow cover. Sometimes there will be plowing. A good case study to see how things work. I want to see if things can be successful here first.

Helge: Input from the Board?

Chris: In favor of going for it.

Division of Forestry structure & organization: Helge Eng, DOF.

Background is, as we've heard, fires and seasons are increasing. Pleased to report that we are receiving funding to mitigate fire risk and moderate future wildfires. To spend \$17 million, you have to increase your bandwidth or go to a contracting model. We're doing that right now—everyone is tapped out in their current job. How do we effectively get ahead of the wildfire problem and increase our capacity and personnel? Not just the fire side, but also the bark beetle issue on the forestry side. Looking to restructure our organization to address these.

Define more clearly the chains of command for fire and forestry side, as well as adding staff to make up for cuts in the past. We can't share details of next year's budget, but we are hopeful. Will report back at the next meeting. Putting that on your radar.

Questions:

Nathan: Loss of EFF crews to the state—that could be some potential for statutory changes. AWFCG did a study on how important these EFF contracts could be. Could increase firefighting capacity if they had work that wasn't tied to a fire assignment.

Norm: People leaving the EFF ranks is that there is more consistent opportunities other places. Will be good to use village crews for fuels. Get them on in April, snow-free, then when there is a fire, they are ready to work. A 2-week assignment isn't enough to keep them engaged. Hopeful that the legislation passes to allow that funding.

Research priorities: Helge Eng, DOF.

Provided a draft/outline to you in the packet. Our first humble attempt at a draft. The BOF's duties are listed there. The second item is particularly relevant. We've heard quite a bit of research discussion at this meeting. Jennifer Barnes summarized it nicely—we need a business model to sift through the research and decide what is applicable, how do we apply research to policy and action, what are best management actions and practices. Good niche for BOF to fill, as an applied filter. Take that relatively massive amount of research information and focus on BMPs for Alaska.

Spruce beetle—life cycle north of Alaska Range.

Political landscape changing from OG to YG.

Spacing and sizes of trees for carbon sequestration and for fuels management—fire resilience. What is the optimal spacing in different areas in Alaska for fire resiliency?

List of topics is endless. Several examples of different organizations creating their own lists. AWFCG, UAF land managers office, and researchers—even though they don't have a forestry program, they have researchers. Annual interagency research meeting that Alison holds. Lots of individual efforts; not a central vetting and discussion of what of that research might be applicable for use by practitioners in Alaska. My idea for a research plan. Is that of interest to the Board?

Eric Nichols: Political/economic list. I'm all for using the different backgrounds we have on this board to improve industry. How do we narrow this down? Carbon and trees. My question—what is the carbon cycle of a tree?

Bill Morris: I supported it previously and still do. Looking at this list, I think an effort for us to come up with a well-informed strategic plan—I struggle to see what venue we'd use to do that. We could easily spend multiple days on this concept. How would be approach that in the context of our few annual meetings. Should be outside these meetings.

Helge: I had some of the same thoughts. Perhaps UAF or other campuses, DOF staff (although no one has spare bandwidth), and working group could provide recommendations to the Board for decisions on what would be the best practices for different issues.

Bill Morris: Points at Science & Technical Committee process.

Tom Paragi: Part of what you're wrestling with is understanding new research needs, plus framing what we've already done. I've served on this group with Jennifer for 20 years. Wants to provide guidance to land managers. Provide implementation. Effects of wildlife impacts from fire. From my perspective, a lot of information has come out. No end to science questions. Managers should interact with those who can come up with people to synthesize literature. Literature review for recommendations worldwide on best management practices. What have we learned—what can we give managers to carry out their jobs?

Chris Stark: Tom is spot on. Every strategic plan—we hire somebody. All laid out by someone who knows what you've done. From that information, can pose that laundry list. S&TC just laid out what we know. Most of this work has already been done. Tom can point out a lot of this information.

Tom Paragi: Our fire meeting is next week. At the Fall Fire Review—state of the art identifying hazards around subdivisions. When you start talking to communities about them, hard for them to identify what the prescriptions might be. Could synthesize what has been done by Joint Fire Sciences, relative cost per acre, lots of data. Could synthesize that to the fire managers—could show the hazard maps, show fuel breaks—thinning or shear-blading. Attempts to synthesize what we know from different disciplines.

Helge: Tom summarized that much better than I did. Guidance for land managers. That may be the highest and best uses for a plan like this. Another might be identifying areas of unknowns. Like bark beetle spread, carbon sequestration issues for research. I see at least two areas where this can go. In addition, I wanted to bring up the infrastructure bill. A fair amount of funding for research like this.

Nathan: Fire research needs: statutes say that BOF can be involved in research. Fire research committee was formed for the ASFCG to write letters to support grants. Clear purpose and use for that list. I don't see that right now with this proposed list. Who will use it? DOF doesn't have a research program.

Helge: Good questions. This Board could capitalize on their intellectual authority as well as their mandate, and would carry a fair amount of weight to have something come out from this Board—on where are the greatest needs, and what are technology transfer summaries? Perhaps the way to go would be to flesh this out some more based on today's comments, bring it back to the next meeting. At that point decide whether it's a viable idea, or pull it.

Chris Stark: Using the terms of our "clout" for getting more research done. How does that work?

Helge: I know for a fact that BOF and your voice carries a fair amount of weight. I think we can capitalize on that.

Bill Morris: That's our approach where we are brought up to speed on the current state of the research—be careful that we know what has been done, then identify deficiencies.

Annual Report

Topics for letter to the Governor: BOF.

Nathan: with all the fuels funding, maybe we need a workforce development effort—like an advanced training academy.

Wrap-up

Review schedule for BOF Annual Report 2021, Alison Arians, DOF

- Nov/Dec: **BOF winter meeting**. Discuss topics for letter to Gov.
- Dec: Alison drafts letter (w/o compliance data), sends draft to BOF.
- Mid-Jan: DOF, DEC, and ADFG complete FRPA reports. Alison adds compliance monitoring info to letter.
- Early Feb: packets to BOF
- Late Feb: **BOF spring meeting**. Review annual reports and make edits to letter to Gov.
- Early March: send report to Governor, Legislators

Winter meeting date and agenda items. Wednesday, February 23rd.

- Carbon offset projects—state project update
- Where are we today with carbon credits?
- New wood products like mass timber-get an overview of state of the art
- Tier 3 waters
- Roadless Rule
- Statewide fire risk assessment—especially fuels.
- Public scoping meeting for TVSF plan update.
- Native land projects—thinning, etc. Update from Clare Doig.
- Legislation and budgets
- Research strategy
- Historical perspective of FRPA from John Sturgeon.
- Spruce beetles