

# Tanana Valley State Forest CAC Meeting

## April 5, 2012

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### **Introduction –**

Mark Eliot, Regional Forester

### Members Present/Representation

#### Jack DiMarchi, Mining Interests

Chris Stark, Environmental Interests

Tom Malone, Forest Science Chair

Paul Karzmarcyk, Fish and Wildlife Interests

Dan Rees, Private Forest Users

### Guests

Thomas Deerfield, Dalson Energy

Wynne Auld, Dalson Energy

Claire Doig, Forest and Land Management (Forest Consultant)

Val Stuve, Property Owner

Tom Paragi, ADF&G Wildlife Biologist

Jim Schwarber, DOF Forest Resources Program Manager (Acting)/Forest Planner

Jeff Hermanns, DOF Tok Area Forester

Al Edgren, DOF Delta Area Forester

Kathryn 'KT' Pyne, DOF Fairbanks Area Forester

Brian Young, DOF Fairbanks Area Resource Forester

Glen Holt, UAF-CES, Forester

Mike Reggear, Delta Area Resource Forester

Peter Talus, Tok Area IA Dispatcher

### New Applicants

Native Interest (one application) Kathy Morgan

Lower Valley Representative (one application) Jim Sackett

Doug Bower, Tourism Representative, may be leaving the state

No items from last month's meeting were discussed. No notes taken from last month's meeting.

### New Business

#### **Fairbanks Area Update**

#### **Forest Land Use Plans 2012-2016**

Brian Young, Resource Forester, Fairbanks Area

Reported on five year plan for Hastings, Spring Breakup, Road Maintenance

#### **Hastings**

An application has been filed to create a full road way to provide access into the burned area. It will cross Himalaya subdivision and connect to a dozer line. Also applying for borough easements. Road name could be Pete Simpson Memorial Rd.

Proposed sale of firewood for year two of five year plan. Public interest in dry dead wood which could be available after road is put in. Right now public is accessing firewood via dozer trail. Additional roads could be laid out if there is enough public interest.

Chris Stark asked about firewood, timber sales and road maintenance.

KT Pyne, Area Forester, replied there were 5,000 acres burned. Other resources besides burned timber for sales. Depended on public interest. A bridge across Hayes Creek could be built if interest was high enough. Pyne also answered questions about road positioning. A property owner asked about the road's steepness, cliffs, and the bog at the end of the old road from Washington Creek. Pyne answered that roads are platted but no new road has been built at this time. Pyne added that it might be an issue to get to better timber. The road looks feasible though and that they are trying to avoid the Himalaya subdivision. Owners are supposed to build road for that area. Trails that are currently there don't follow platted roads, right of way.

Chris Stark added that it would be easier to get exiting road from the borough instead of subdivisions. Would have to ask for more money.

Young continued stating that another issue concerning the possible new road was spring break up and road maintenance and that these issues are written into timber harvest contracts. Fairbanks Area Forestry was proposing signage to prevent road damage such as ruts and using Alaska State Park trail advisories as a model. However Forestry does not have the law enforcement capabilities to enforce such signage.

#### **Comments**

Dan Rees and Young concurred that bear baiters and firewood consumers would be most likely users of road. Paul Karzmarcyk worried about signage being an "invitation" to off-road vehicle use. Mark Eliot, Regional Forester, said trucks would be most likely vehicles on road and that signage would be a way to work with people. He said no barriers would be put in place.

#### **5 year schedule: Timber sales**

Young continued with possible timber sales in the following regions over the next five years: Cash Creek, Standard Creek, and Nenana Ridge. Areas are mostly birch except for area southwest of Nenana which would be a larger sale and has spruce. That area is currently being logged this year. It is adjacent to a winter road and ice bridges.

Stark was concerned about coho streams in the area. Said that Doug Whitlow, Heavy Equipment Ops, was unaware and was supposed to "walk the area" with Stark this summer to make sure dozer lines or new roads didn't disturb coho streams. He said a biologist he had spoken with as well as a cabin owner in the area also expressed concern over the coho.

Young stated that map was laid out "awhile back" and changes may be needed to address fish habitat concerns.

Stark reiterated that streams are "all over the map" coming from a slough, not the main Nenana River. Said that Habitat and DNR had tried buffers in the past and they did not work to keep from disturbing fish habitat.

Pyne explained that a winter sale option would have to have an ice bridge under title 16. If there are any upwellings it won't freeze over and that is something to address and get access to in the summer. Eliot said that it needed to be vetted by public process.

Christ Stark said that he was stating his concern over barriers to the committee and that he wanted it noted.

Other areas for timber sales over the next five years were: Iowa Creek, Hastings salvage, Two Rivers, Harding Lake, Salcha, Mosquito Creek and Pleasant Valley.

**Questions:**

Chris asked Pyne about any sales in the 35 mile stretch between the Salcha and Delta rivers confluence. Pyne answered that sales have been proposed. There is mining road access but issues about going uphill from there so possible sales were pulled. There was a Midway gentleman who had a lumber business, over the counter sale, but that is as far south as they have gone. Pyne said Midway has an active firewood area. Dead standing trees which they didn't know about until timber sale had gone through.

**Tok Area Forestry Update**

Jeff Hermanns, Tok Area Forester

**Update:**

Hermanns reported that timber sales on Porcupine Ridge Road sold 700 cords of firewood. Didn't know personal use numbers but lots of visual activity.

Message: State should look at continuing to fund road harvest roads for big salvage fires. His concern was that once burned timber hit the ground it started to degrade quickly and the quicker roads could be made into burned areas, the quicker they could harvest.

Eliot commented that pushing through roads still had to be vetted through public process.

Hermanns continued that access was difficult. North of the Tanana River, thousand of acres of wood available. Tok has a huge supply but much of the access is seasonal. Tok needs wood for population. AP&T requested 25 year contract for biomass project which they were trying to push through. Received request from Young's Timber. Plans to put in boiler, densification plant. Project needs \$6 million in funding. Jeff Gross and Torsten Bentzen, local biologists, talked about wildlife habitat, about 500-700 acres per year. It's critical to work with biologists to ensure that the potential habitat benefits are realized in these forest management efforts. Habitat is working with DOF to make sure it's done right.

Stark, Malone, and others asked Hermanns about what kind of habitat was being produced for what kind of wildlife. Karczmarczyk noted that the species that the habitat was being created for would determine the size of the cuts made, whether timber was clear-cut or done in a mosaic pattern, the regeneration potential, and the composition of the tree species.

Hermann's and members continued discussion on research and logistics needed to classify timber and habitats and how best to access timber sale lots considering other environmental factors. Glen Holt and Karczmarczyk both suggested using resources at DOT, UAF, and Tetlin to gather information from biology testing to aerial photos.

Hermanns continued. Said that research also needed to be done regarding number of acres to cut, what's operable under each logging system, and what's reasonable to cut. He used the example of the slopes to the north of Tok which are filled with a lot of wood, but the steepness of the slopes makes it unreasonable. Showed map with operable acres which are classified, but unable to harvest. Transportation needs to be figured out. He cited the Tok River and Tanana as seasonal barriers to transportation.

He went on to describe the public outreach for the biomass and timber sales projects. Holt put on a public workshop on forest ecology in Tok. 25 people in attendance. Hermanns and Glen said it was successful and that people wanted more information on forest regeneration and the effects on wildlife. Hermanns wants to continue working with Holt and Tom Paragi and Tok area biologists on forest management and wildlife.

Hermanns reported that DNR was redoing ETAP designations. Wanted to trade land with Fish and Game to be included in Tanana Valley Forest. He said that land belonging to Fish and Game on the north side of town was a high fire danger area that could be used for biomass or timber sales but was classified as Fish and Game and not state forest. Said that Division of Lands would be in Tok week of May 7<sup>th</sup> to look at area.

Tom Paragi inquired about criteria for designating a state forest. Tom Malone answered access and potential for growth stands.

Hermanns said that the state forest included sheep habitat with no trees that they would like to trade Fish and game as habitat.

Tom Malone suggested adding to state forest instead of trading land.

Update changed focus to long term timber sales and biomass project. Conversation about what would happen if a lot sold to a vendor in a long term contract was struck by fire. Hermanns said that was being researched. There are no precedents in Alaska but there have been some set in Washington. The question was whether or not the state was obligated to provide timber if a lot previously sold was burned.

#### **Questions:**

Stark asked about the land transfer and whether it was plausible or not to swap land between agencies.

Hermanns said that Yes, in 2008 through an advisory committee process that land was exchanged between the state and Fish and Game and the Minto Flats Wildlife Refuge was created. Hermanns said that ground work needed to be done to classify areas.

Hermanns said that numbers were being collected as to harvesting. In Tok they worked on a fuel break on Borealis Street and found that they could do an acre in six hours and could get 60 tons of black spruce per acre.

Holt urged committee to go to Tok and see what's there. 1990 fire was devastating. Fire still a threat to town of Tok.

Hermanns said fire danger is changing public opinion. Harvesting and development could compliment each other.

Tom Paragi commented that DNR Lands had discussed identifying hazardous fuels during land disposal nominations so to not lay out subdivision in high fire danger areas.

**BREAK 7:45 p.m.**

**MEETING RESUMED 8 p.m.**

### **AP&T Biomass Update**

Thomas Deerfield, Dawson Energy

Wyne Auld, AP&T

AP&T Project in Tok, Upper Tanana CHP Biomass

Deerfield explained that woodchips were a viable source of energy for the town of Tok and could provide a cheaper way to heat and provide electricity to state-owned building in Tok.

He said that a feasibility study was being conducted in Tok with two areas to research: viability and operability?

Clair Doig, AP&T Consultant, may have had specific numbers. He was in meeting via conference call. Bad reception prevented him from responding throughout the meeting.

Questions about precedents for fire damaged areas and long term contracts were brought up again. Deerfield said that flexibility has to be built into contracts. Long term harvest contracts will have to raise money privately. The feed stock for the boilers had to be whole tree chips. Boilers don't like mineral content, dirt or rocks. The total tree is used.

Tom Paragi wanted to know when does it become uneconomical? Does the cost of production go up?

Deerfield: Assuming fuel/production goes up, cost is going to go up also. Energy price will also go up.

Hermanns: Part of the study is fuel/per ton of wood harvested. He said the two did not parallel each other making biomass energy more affordable than fuel.

Deerfield said that his concerns with long term harvests needs to be figured out for all of Alaska. Biomass thermal/heat needs to be figured out all over not just Tok.

Tom Malone asked about the amount of wattage. Asked if 2 megawatt was a concrete number.

Deerfield said that the existing load is 1 ½, 2 megawatt. Not huge amounts compared to whole tree chips. Still don't know exact number. No bigger than 4. The more industries that use this process should lower costs.

Members asked why fire killed wood was an issue? Deerfield said that it's not. There was a window of time before timber hits ground and starts to rot where the wood could still be used for biomass energy. Deerfield said that he was pushing for determination of that date. Next summer if grants come through from state. Has to be supported by the state for benefit of rate payers and forests. Potential 2013, more likely 2014. He said the use of heat is used for district heat loop, Tok School. Biomass energy was used commonly in Europe. District heating lines run several miles in Iceland. Could do the same in Tok.

Hermanns concurred that if they only did the state building in Tok that it would save state a lot of money. Deerfield said that cost of fuel is staggering in Tok.

Deerfield said they are working on systems, water vapor, but little more with clean burning technology. No scrubber technology. Electrostatic Precipitator removes small particles. Hermanns said that vapor is so low that it is hard to see in Tok.

Karczmarczyk asked if there were aerial photos available to show timber lot removal and possible destruction

Hermanns answered that a Lidar study comparing strips with destructive research on the ground should be done. The state would have to invest in aerial photography. Imagery is old and outdated but there is no money for new photography. Spot data is used. But other images only show one kilometer of large forest.

Karczmarczyk said to use DOT. DOT can go out and get modeling images while doing their own research.

Deerfield commented that the benefit of the state is that connections can be made between divisions. Deerfield said that Vermont is doing this. It competes with natural gas hydro, etc. Pays \$60 per ton still buying and selling at competitive price. Whole tree chips.

Holt said that other states do pellets. He asked if harvesting is planned on research based on biomass and was there a difference between tons per acre and growing stock.

Deerfield said that no, the difference between species is not different enough to change what a ton is.

Tok seems sustainable. Is diesel sustainable? Fossil fuels go up in trend line. Refer to recorder for costs and stuff.

Tom Paragi asked if potential for generating gas in an environment without oxygen.

Deerfield said that gasification to IC engine. Cook gas out of fibrous material. Take out gas clean tars and turn into syngas. Low btu version of natural gas. Done worldwide. Tricky to make it work. Fort Yukon and small communities haven't worked yet. Developer can't make it work.

Tom Malone more diesel fuel to make syngas why use more diesel to use syngas.

Deerfield in North America no small scale (100 Kwatt or smaller). Working on it though. GEK (Gasifiers Equipment Kit) Batch system. Not fully automated. More complex in maintenance than could be used in village applications. Looking to create an auger that flips switch.

Chris Stark: What is CAC's situation in next two months or so? Don't work in Summer.

Mark Eliot: Two applicants. With this issue may have summer meetings.

D: could have info in next few months.

Lissa Hughes Northern Alaska Env. Center. Jim Schwarber and Mark got to meet with her. (See handouts for AP&T)

What can DOF do to get word out.

Public process.

Wants to start agency review so that public review can follow in next couple weeks. Jeff in touch with Tok info.

Thomas talked about 25 years. Info to public on each contract and section. FLUPS.

Chris: FLUPS more work?

Make sure that they're doing on each year instead of five years.

Tom Paragi: Hired person to pick up timber sale paperwork in Tok? CIP question into the legislature to kick in July 1 if approved.

Mining pays regulators to do works. Chris says fixed cost to work to advantage.

Wynne developer picks up cost of the review.

Mining companies pay for hours of time. Could use this as a model for DOF. Now companies pay after stumpage. Goes into general fund, but does go out as general state income.

Wynne: How does this work if Tok is being benefitted also? User of resource has responsibility, but since it's more of collaboration between. Mining is voluntary, but provides good communication and a resource. Statewide problem.

Easier to get position created to fund position. Easier to get position. CIP's not reliable

Example of Susitna project. Has a coordinator there.

Mining is controversial. Staff in their pocket. State and competitors go after same ground. Conversation revolves around competition, workload. Other states (Idaho) money is

Chris: user fee. Environmentalist could look down, but it is. Refer to recorder for this conversation and relate back to it. Summarize. Win-win could be possible for dof to recover costs.

Mining companies have to publish hourly rates. Invoices and transparency.

## **Delta Area Update**

### **Al Edgren**

Process of Biomass

5 year process going through agency review, May 1<sup>st</sup> to public review

4 FLUPS

East Volkmar- potential for harvesting that wood Volkmar Fire

Normal Timber Sale Activity

65,000 tons of biomass. Enough to run Ft Greely boiler system. On table as option. Scoping document.

Chris: Comments on process in writing?

Volkmar Fire: Effects of Wildfires on Management Plans

Gilles Creek Fire, salvaging now. When fire burns through stands everything on outside is flashed, but biomass in trunk still available.

Outline:

Accelerated Harvest Scheduling to maximize Harvestable salvage volumes.

Resource constraints (manpower and money) for salvage layout and infrastructure

Reduction in annual allowable cut within the resource area

Local community impacts

Multidecadal loss of large capital forest product opportunities

10 years on a fire, still salvageable. Still into camp creek from 2004. Trying to salvage as much as possible.

Logistics of Salvage

3 fires about 5 million green tons

Salvage harvest schedule 10 year window of opportunity

Numbers show you won't have to cut green.

Actions and Plans

- Protect timber resource in high value areas

- Recalculate annual allowable cut to incorporate loss from large wildland fires

- Change culture from present value to future value

  - Need to look ahead if fuel prices rise

  - Price of fuel is turning people away from Alaska, village McGrath, Northway, Allakaket

Stark urged foresters to get ahead of this. Relying on public to take care of this. Don't think issues will come up if you get ahead of it. People don't like surprises.

Pyne said when she got back from leadership conference a lot of lessons were learned. Communication: Pre, during and post helped a lot. Agency had support from community in Montana and beat lawsuits because of it.

Stark agreed and said that environmentalists will support you if information is ahead of the curve.

Edgren's Report Continued:

#### Biomass Systems

Ft Greely School

Heating \$42 a square foot

Delta 41 cents per foot

Doyon contracts to Ft Greely, looking biomass

Bill Bulpitt, URS, Georgia, feasibility study in Ft. Greely. Plan to have green light in August. Potentially two facilities. Spoke with DOF Delta on Wednesday about resources. Gave copy of five year schedule. Proposing 50 to 63 thousand tons to run facility. Likes 5 and 10 year prices better than 25 year because of costs of production. Several engineers on project, looks positive. Location, chip storage, is an issue. Burning barley is on the table. Multifuel is better than just wood or just barley.

Tom Paragi said that barley has lots of minerals that may create slag so be sure to be tested. Did own experiment with Delta barley straw pellets he obtained from a Fairbanks vendor and went back to wood pellets because of ash and slag.

Moisture content is higher. Cost in manufacturing that larger scale pellet. Industrial pellet is whole tree process. Lots of costs into process. Big difference for industrial grade.

Advantages?

Outside of Alaska looks like no-brainer. Question is 65,000 tons of wood chips? No operators in area capable of producing mass. Only four wood chippers in area. Chad owns two of them. Interested in providing product for Ft. Greely. Don't want 100 percent of production. Participation gives one stable user to increase production and decrease cost for public user. Pellets are easier to use, manufacture than chips.

Pyne added that long term storage for chips in silos. Wood chips harder to store.

Deerfield said that the comparison comes down to transportation and storage and consistency. Trade off is high cost of fuel, less consistency. Depends on suppliers and where you are out. Pellets look good.

Edgren said that Ft. Greely storage comes down to footprint. Don't want to store and take up land with pellets and chips and logs.

Stark said that storage was an important thing for state to think about. Volume improves economics.

Tom Paragi commented that Forestry ought to consider statewide education. Need more outreach. Pellets are second to cleanest than natural gas. Harvesting and building roads will worry public if not addressed now.

Jim Schwarber said that they were working on it, statewide prospective on outreach. Keeps getting reinforced at meetings. Strategic biomass for the state. Biomass is going to get us if we don't get it. Aware that resources are needed. Looking into hiring more people to deal with biomass.

Holt said that travel is another thing to look at when looking at cost.

Schwarber said that Southeast has hired a biomass coordinator. Providing multiple levels of support for small region. Biomass is new for everyone.

Holt said that DOF approached with fact sheet request. Two to three publications put out to address public education. Questions need to be gone over several times. Hard because of downsizing. Should use own PR, Maggie Rogers, as an information person for this project as well.

**Next meeting: Thursday May 17<sup>th</sup>**

**Adjourned at 10 p.m.**