

Smoke Management Review Committee Meeting
Oregon Department of Forestry
Operations Building Conference Room, Salem
May15, 2003
0930-1530

Attendance: Stephen Fitzgerald, Lee Miller, Stan Benson, Jim Russell, Gary Stevens, Sue Stewart (proxy for Erik Christiansen), Mike Dykzeul, Gregory McClarren, Jim Russell, Brian Jennison, David Collier, Mike Ziolko, and Cindy Smith (notetaker).

Visitors: Rick Smedley (National Park Service), Randy Clark (Grayback Forestry), Harold Merritt (Plum Creek Timberlands), Brian Finneran (DEQ), Mike White (CoosFPA), and Gerry Shipps (Confederated Tribes of Warm Springs).

Members not in attendance (and no proxy present): Geoff Babb

1. Administrivia

Mike Ziolko

Members and visitors were reminded that the minutes and agendas of the meetings to date of this committee are also available on the web.

Mike Ziolko noted Marvin Brown is the State Forester.

2. Minutes

Jim Russell noted the following corrections and the minutes were accepted as amended.

- Page 3, Bullet 4, line 22, add “and Oregon” at end of sentence.
- Page 4, line 3, should read “Jim Russell said that no published reports...”
- Page 7, line 1, replace 67% with 50-60 %
- Page 7, line 2, add sentence – “The percentage will increase in the future.”

3. FPFO Review

Jim Brown

- Jim Brown delivered the letter expressing the comments of this committee on the FPFO at the April 24, 2003, meeting of the Board of Forestry. The letter was well received by the Board of Forestry.
- Gregg thanked Jim for representing the Committee at the Board of Forestry meeting.
- Mike Ziolko noted that he expects the FPFO to be adopted at the September Board of Forestry meeting and to look for revisions sometime between the end of May and September. Having discussed it with David Morman, Mike said the smoke management and air quality portions will probably be in the Forest Health section of the final FPFO.
- Steven thanked the Committee for input into the letter, which was an unexpected addition to this committee’s work.
- Mike Ziolko mentioned that ODF now has a new State Forester – Marvin Brown.

4. Discussion of Previous Meeting’s Issues

See Matrix

Discussion:

- Stephen explained that this discussion is the committee’s focus on identifying the issues that may require alterations or review of the smoke management plan.
- Issue D – “Is there a Problem?” – Discussion of the 3rd Bullet “No mechanism to allow PF (prescribed fire) impact in lieu of WF (wildfire) impact.”
 - Asked for clarification, Mike Ziolko explained that the concept is we will have fewer wildfire smoke impacts because we have more prescribed fire

occurring and whether or not it is acceptable to allow more prescribed fire to offset the wildfires.

- Jim Russell commented that the objective was to look at whether the reduction in destructive wildfire should be an objective in the heightened smoke management plan. Fuels reduction tied to timber operation and harvest is a specific objective of forest practices. Logically it could be expanded to say that one objective of the smoke management plan is to allow for a level of prescribed burning commensurate with the reduction of total wildfire emission which is far more damaging to the air...
- Stephen Fitzgerald noted that there would be a lag time of probably 10 years of intensive fuels reduction before you would see a reduction of the impact of wildfire smoke.
- Jim Russell added that it could also lead to a policy issue. Current priorities are life, resources and property. At mitigation, could we potentially say that we are allowed to treat hazardous fuels to reduce wildfire incidence within wild and urban interface and that in turn protects all those values, reduces potential for loss of structure and also allows for a more direct response to those types of issues in terms of total emissions.
- Regarding Issue D – Will There be a Problem in the Future? Gregory McClarren noted that from a seasonality point, wildfire in Oregon almost exclusively occurs in a bell shaped curve with a little bit in May (mostly in southwest Oregon and Eastern Oregon), it starts to increase in June, more in July and really picks up in August and tends to peak in August/September. He added that you could probably portray tonnage by fuel type over a historical perspective that would show how it has changed from the 1930's to now.
 - Stephen drew a diagram to portray Gregory's comments (Included at the end of these minutes).
 - Sue Stewart suggested calling them planned vs. unplanned ignitions on the graph to allow for fire use approaches.
 - Jim Russell said there is data to show that one day of PM emissions from a large wildfire is equal to the total emissions of the area and point sources for an entire year, in the state of California. Jim will supply copies of that report to the committee. He added that nationally secondary products from wildfires, like ozone, are now being seen.
 - Stan Benson suggested the committee work on changing or making general policy to allow more prescribed fire earlier and/or later in the season.
 - It was pointed out that the public complains long before the threshold is reached and Gregory McClarren added that, from a SIP standpoint, from a healthful air standpoint and from a complaint standpoint, the system is not set up for what the foreseeable future looks like in the state of Oregon.
 - Mike Ziolk explained that one of the current strategies in the Smoke Management Plan is to try to move more of the fall burning into the spring when there is better dispersion and, hopefully, fewer emissions. There is still a bi-modal distribution in the spring and fall but the shift has been a long-term goal. Mike also noted that the committee needed to consider,

over a 10-year period, are we willing to accept more intrusions during that period of time until the public decides it's in the greater benefit long term.

- Sue Stewart said that given that the current plan is silent on the issue, we have a problem because of the lack of flexibility. It does not allow for logical trade-off analysis.
- Season of emissions needs to be included as well.
- Harold Merritt asked for a definition of "wildfire" as he was concerned that there were agency differences.
 - Jim Russell replied that wildfire is "unplanned and unwanted".
- Mike Dykzeul noted that there might be some science available from Boise Cascade or OSU comparing wildfire emissions and typical fall burning season on private lands. He will look into getting that information.
- Jim Russell commented that a link needs to be made between why burning is needed and what the outcome is, and that is to reduce the dollars spent and effects of the fire.

5. Public Comment

Randy Clark, Business Manager of Grayback Forestry, Inc., in Merlin, Oregon, and Secretary/Treasurer of Action Environmental Fuels Association, was present to express his concern over the rumor that the use of plastic to cover handpiles has come under scrutiny. He delivered a letter to the committee itemizing those concerns as well as copies of a Material Safety Data Sheet from Poly-America, Inc.

Mr. Clark pointed out that handpiling has always been a good alternative treatment and generally can take place during times of the year when the smoke disbursement is good and wind flows aloft are acceptable – to the public and to DEQ. He went on to add that another benefit of pile burning is that if there is a shift in the wind or a weather change, it can be shut down, unlike underburns. Pile burning at other times of the year after the fuels dry out naturally without being covered, adds to safety issues because there is a greater tendency for the fire to creep in drier fuels when there is no moisture in the ground.

Following an explanation of the numerous reasons he found paper an unacceptable alternative to plastic for covering the piles, Randy asked that if this committee has any influence with or could make recommendation to the USFS and BLM, that the Committee request that any decision to shut down the use of plastics be put on hold until further science is developed.

A copy of Mr. Clark's letter is attached to the minutes.

Discussion:

- Jim Brown noted that plastic does burn – and in a hot fire it's consumed. Paper burns in the cool part of the fire and whatever petro-chemicals are in that paper are released into the air.
- Asked about the rules involving the use of plastic, Brian Jennison, LRAPA, said that currently, plastic is a prohibited material and added that what he would like to get from the plastics manufacturers are emissions created by burning plastics because of a concern regarding toxic air contaminants. He added that perhaps a modification of the rules for pile burning is warranted.
- Stephen Fitzgerald asked David Collier about the rules – David said the rule was already in their binders. Brian Jennison referred members to OAR 264, section 340-264-0060. General prohibitions Statewide #3.
- Stephen asked how paper compared to plastic for durability. Randy responded that the fact that it did not stretch was the bigger issue.

- Gary Stevens added that the option may be to look at risk vs. exposure and suggested that if a good rationale was presented as to why the use of plastic was not a health issue, then it may be more acceptable.
- Jim Russell noted that the Committee could respond on this issue because our objective is to reduce emissions within the forest based on the Smoke Management Plan and Mr. Clark has shown us that if this ban takes place, total emissions will actually increase over time and it cause more of a problem for the reasons he cited. As a group we should be able to formulate a recommendation to DEQ. This is not an isolated issue, it's a widely held practice used throughout the west and could effect our ability to meet the NFP and the objectives laid forward in the NFP.
- Randy volunteered to continue investigation and provide information to the committee. He has tried to make contact with Roger **Ottmar** and did speak to Chris Johnson in Medford. He will continue to try to reach Roger.
- Stephen tabled any decision or motion for a future meeting but asked Randy to let him know after he spoke to Roger.
- Jim Brown that plastic is an all-encompassing term and data is needed to differentiate between the different types of plastic.
- Asked for comment, Gerry Shipps for the Confederated Tribes of Warm Springs noted that he was more concerned about the health effects of using plastic on handpiles and expressed concern over the chemical and particulate issues.

6. Break

7. Continuation of Issues Discussion

See Matrix

8. Working Lunch

The following programs were presented during a working lunch:

- **National Park Service Air Quality & Fire Programs** **Rick Smedley**

Rick Smedley, fire planner for the National Park Service, Pacific West Region, presented a brief introduction to the NPS units and their fire management status, as well as NPS air quality.

NPS units in Oregon include; Crater Lake National Park, Ft. Clatsop National Memorial, John Day Fossil Beds National Monument, the Nez Perce National Historic Park and Oregon Caves National Monument. Most of the burning is done in Crater Lake and John Day with only minimal burning on the other three units. One main focus for the NPS is that people come for the view and don't tolerate smoke. Therefore the NPS has to plan accordingly. Reasons for burning include hazard fuel reduction, protection of private homes and communities in the wildlife urban interface and resource management.

Their greatest challenge is utilization – the legislation the created the parks often forbids utilization.

Oregon SIP regulations are incorporated into all fire management activities and fire management compliance documents include discussion of air quality and visibility. NPS fire management plans also detail the Oregon SIP smoke management processes for each park to follow.

A copy of Rick's presentation is attached.

Discussion:

- Brian F. asked that since Crater Lake obviously has the greatest visibility concern – in keeping the burning consistent with the SMP – on a given burn day, is the first thing they do is a check of the daily burn announcement for burning in that region of the Cascades? If it is a burn day, then do they make their own decision based on visitation, time of year, day of the week, etc?
 - Rick confirmed that it was – they first look at whether it's a burnable day (keeping in mind that there are some voluntary zones where they don't have to ask permission to burn) and secondly they look at the time of the year, whether it's close to the weekend and will it impact visitors.
- Rick added that the Park had a very active prescribed fire program in the past, in the 1980's, but after Yellowstone they reconfigured how they did fire management plan and the park at that time was not willing to accept any level of risk and the program really died down. Now they are starting it back up again. The way the NPS does their fire management plan, it becomes a mechanism for funding - through projects or wildland fire analysis.
- Rick pointed out that the NPS puts a lot of energy into interpreting an event (like prescribed fire) and will go so far as to set up an interpretive center on a high spot and interpret the project for anyone who wants to see it. Rick sees it as a very effective tool and highly recommends it to other agencies.

• **Regional Haze Rule Update**

Brian Finneran

Following up on last February's presentation, Brian described the Regional Haze Rule as "Part Two of the Visibility Rules" with part one having been adopted 20 years ago – it addresses close in impacts in Class I areas. The Regional Haze Rule is designed to address longer distance travel of air pollution. The phase one program remains in place through the transition.

Brian reported that DEQ held stakeholder and public outreach meetings throughout the state. The purpose is to discuss the Regional Haze Rule and gather input on 308 vs 309. There have been specific meetings with industry to go over the industrial requirements of the Regional Haze Rule. Meetings were also held with the Department of Ag, the Farm Bureau, and the Wheat Grower's League to talk about the ag burning requirements within the Regional Haze Rule and with Forestry. Brian explained that DEQ has tried to maintain a neutral position in regards to 308 or 309.

The feedback has been exclusively in favor of Section 309, with no support for 308 at any of the meetings. Brian explained that 309 is the part of the Regional Haze Rule that implements the Grand Canyon Visibility Transport Commission Requirements and has pre-identified strategies.

Brian went over an overview of the Regional Haze Rule and provided committee members with copies of his presentation. See attached.

Brian pointed out that the immediate requirements for fire under the Section 309 require that the SIP need only address the 16 Class 1 areas of the Colorado Plateau – not the Oregon Class 1 areas. Brian went on to add that seven basic elements that the 309 requires for prescribed fire are already in the Oregon Smoke Management Plan. Only four things will be needed to meet the 309 requirements for prescribed fire according to Brian, those being:

1. Fire emission inventory improvements/modifications.
2. More "regional coordination" to meet the ESMP requirement.
3. Strategy to "overcome barriers to non-burning alternatives" requirement.
4. Process to quantify the use of ERTs to meet annual emission goals requirement.

Brian expects that developing the first SIP will be relatively easy and expects to hold public hearings on the SIP in September.

Discussion:

- Jim Russell asked if Brian Finneran would endorse the Smoke Management Plan as it exists? Brian said yes.
- Jim Russell commented that there is a specific definition for emission inventory and asked if the state was willing to accept it.
 - Brian replied that there are no specifics yet, and added that regarding surveillance and enforcement – there is already a mechanism in place in the current Oregon SMP for people that go off and burn illegally...
- Brian – we aren't going to have to expand the SMP to include rangeland burning for the SIP.
- Greg McClarren said he sees this as a golden opportunity for coordination of all emission sources
- Would additional funding be needed? Brian answered "No".
- Jim Russell asked if this committee address any of the issues and make recommendation?

Brian replied that the 4 items in listed on the last slide should be considered by this committee as well as the matter of enforcement.

- **Smoke Management Fee Increases?**

Mike Ziolko

At the request of Bill Lafferty, Mike Ziolko asked the committee to consider raising the fees on pile burning to the maximum allowed by law – increasing the fees from the \$2.50 per acre currently charged to the maximum of \$5.00 per acre would amount to an estimated \$100,000/year to support the program and would replace revenue lost from the General Fund. Mike noted that Bill would appreciate input/feedback from this committee.

If rule was developed now, Mike said it would still take a minimum of 2-3 months to implement and he would like to get the rule adopted by the end of September.

Mike went on to explain that another option is to adopt a temporary rule and that can be done rather quickly but then has to be finalized and adopted at a later date.

Discussion:

- Mike Dykzeul asked if ODF would be asking only to use the maximum of what is already allowed and Mike confirmed that was correct.
- Gary S. commented that you always lose when you have to replace general funds with fees and asked if Mike had any idea what is needed to do the job – to meet some of these goals? Mike replied that he could not answer that question, it would depend on what the committee wants to do with revisions to the Plan..
- Gary S said he thought it would be more than \$5 per acre and was concerned that they may only get one chance at it and we want to get it done right.

Mike responded that it would depend on whether fees applied to all land as to how much the fee would need to be to operate the plan), and added that there would probably be no further legislative changes until 2005.

- Mike D explained the limitations imposed by the 50/50 General Fund/Harvest Tax split – the basic level of protection for each of the 12 forest protective associations around the state. The landowner can only match what comes from general fund. OFIC is concerned that for every dollar you lose, you really lose \$3.18, on a statewide average. Mike was concerned the effects of budget cuts

could be far reaching - that fees would increase, trucking fees would increase, licensing fees increase, etc. It reaches too many levels.

- Jim Brown noted that part of SM benefits all the public and the public should pay part of the bill. Pointing to the 50/50 again, Jim said the general public causes 70% of all fires – they (the public) enjoy the recreation but don't pay their share.
- Jim Russell said he wants equity for what they (the Forest Service) pay for. Jim thought that changing the rates primarily affects the Forest Service because, they do most of the pile burning. Smoke management fees are the least concern for federal agencies in the costs associated with burning.
 - Statutorily , that is the only option available today.
- Asked the annual cost of the program, Mike Ziolko said it was approximately \$650,000 - \$750, 000 with the general fund comprising 30-40%. (Editors Note: Corrected – GF is approximately 25%, before loss of General Fund due to cuts, and the program costs are a biennial total). Mike explained that the monies come from:

General Fund, which is tied into the Harvest Tax with a 60/40 split.

Smoke Management Fees

Forest Service/BLM for NE Oregon

DEQ contract for open burning forecasting

- Greg suggests we not do this now because concern that if take fee increase now, it might preclude taking legislative action down the road.
- Brian F –said he would support the increase providing it does not hinder future requests.
- Stan Benson –suggested a sunset to the fee increase of two years.
- Sue Stewart asked what percentage of pile burning was done by the Federal agencies and if most of the fees for pile burning were generated by the Federal agencies. Was there another mechanism that would enable the federal government to defray the general fund loss without having to go through the rule making process? She questioned if another option might be more efficient and less time consuming.
 - Jim Russell replied that he would support a surcharge if he knew there was an opportunity to defray General Fund loss.
 - Mike said it would not defray the General Fund loss – it would replace it. Additiojnally, most of the fees associated with piled burning are generated from private land.
- Sue S. then asked if the current plan allows for inflation? It does not.
- The last fee increase was 8-9 years ago according to Mike Ziolko.

It was decided that Mike Ziolko will take the following recommendation back to Bill Lafferty:

Recognizing the immediacy of the need to fund the program: 1.) The Smoke Management Review Committee supports the increase in fees for pile burning to the maximum allowed by law (\$5 per acre) with a sunset in the rule of two years. 2.) The Committee does not want to hinder funding options for further improvements coming out of this process (The Smoke Management Review). 3.) The Committee recognizes that a long term funding solution is needed. 4.) Don't remove current fee exemptions now, but leave it as an option for later on.

9. Continuation of Issues Discussion

See Matrix

Returning to the earlier discussion, David Collier said he wanted to be sure the committee was not saying that more smoke would be allowed (smoke benefit trade-offs). He was concerned that it not happen at the expense of increasing intrusions, or that we try to explain away intrusions through education. Neither was the intent of the earlier discussion.

Issue F –

Discussion:

- Sue Stewart said she saw protection and management of identified areas as a three legged issue:
 - Different labels – SPZ's, Das, etc.)
 - Lack of spatial specificity of maps
 - Question of need for a different approach for each area
- Greg McClarren reminded committee members that goal is not to not burn but to burn without causing smoke intrusions.
- Stan Benson asked who determines SPZs. Mike Ziolko said they were determined jointly by DEQ and ODF.
- Asked for clarification, Mike Ziolko said SPZs are areas around non-attainment areas where burning occurs and a DA is an area they are trying to keep smoke out of.
- Sue Stewart asked for a one page cheat sheet explaining what SPZ, DA, etc. are and what it involves.
 - Mike Ziolko will work on developing this.

10. Break

11. Public Comment

There was no public comment at this time.

12. Adjourn

The meeting adjourned as scheduled at 1530.

The next scheduled meeting of the Smoke Mgt Review Comm is June 19, 2003.

Mike Ziolko will invite BIA to make a presentation.

Smoke Emission Graph:

Graph Details:

X-Axis is the wildfire and burning season (March to November)

Y-axis is the relative smoke emission levels.

Seasonal maximum smoke emission level -- This level will vary from season to season, depending on fire activity.

Smoke mgmt threshold - level at which all burning emission must be maintained below.

Complaints Begin - this is the level at which we begin to hear the public complain about smoke levels, and it usually starts before smoke has exceeded the smoke management threshold. For prescribed burning, these complaints are typically local (i.e., in proximity of the burn)

Description of Smoke Emissions Graph:

The shape of the smoke emissions graph can vary a lot from season to season. It usually begins with smoke emissions from prescribed burning in early to mid-April through May and tapering off in June as the forest dries out. The shape of the spring prescribed burning "hump" can vary depending on spring weather conditions.

There will be a decline in smoke emissions in June as prescribed fire tapers off and where the forest is too moist for wildfires to begin. However, as the forest continues to dry out and/or the lightning activity begins, this initiates wildfires and smoke emissions begin to rise. Depending on the season, smoke emission will continue to rise and reach a peak in July and early to mid-August. Again, there is a lot of daily and weekly variation around this. That is, it could spike up for a couple of weeks and decline sharply for the rest of the summer; or, like last year, emission levels remained high for late June, July, and August before declining.

In September, wildfire activity and emissions usually begins to decline, continuing to decline through November. However, in mid September through early November, smoke emissions from prescribe burning increases, possible up the smoke mgmt threshold level. Again, the shape of the fall prescribed burning "hump" will vary depending on favorable conditions for fall burning.

The graph does not show any smoke emission during the late fall and winter months. Since pile burning occurs at this time, should that be reflected in this graph?

