

Smoke Management Review Committee Meeting
Oregon Department of Forestry
Santiam Conference Room, Operations Bldg, Salem
0830-1500 October 21, 2004

Attendance: Erik Christiansen, Jim Brown, Stan Benson, Brian Jennison, Mike Dykzeul, Gary Stevens, Brian Finneran, Lee Miller, Jim Russell, Mike Ziolk, Nick Yonker, Cindy Smith

1. Administrivia

In Stephen Fitzgerald's absence, Mike Dykzeul served as moderator for the meeting.

2. Minutes

Clarification was added in the following areas:

- Page 2; Bullet 2: last line NEO should be NE Oregon
- Page 2; Last Bullet insert DEQ to read "incorporate DEQ's open burning regulation ... "
- Page 3; Reword Bullet 2 to read "Brian Finneran said that DEQ's open burning control areas are one approach to protecting areas from smoke."
- Page 3; Bullet 3; Should read "Gregory McClarren added that open burning control areas are also an existing program, as an example."
- Page 3; delete bullets 4 & 5
- Page 3; Bullet 10; After the first sentence should read "it is a source and not a receptor approach. It restricts prescribed burning to protect the area during a small portion of the year when woodstove problems may occur."
- Page 3; Bullet 13; Insert DEQ so it will now read "Brian Finneran said it was DEQ authority and was ... " Also replace National Ambient Air Quality Standards to NAAQS for consistency.
- Page 3; Bullet 17; replace "attribution" with "who is being quoted".
- Page 3; Bullet 15; replace "marshal" with "district."
- Page 3; Bullet 16; replace "people" "burning operation."
- Page 4; Bullet 10; remove question mark at end of statement.
- Page 4; Bullet 12; insert "poor" in front of air quality.
- Page 4; Bullet 16; replace "it" with "the need for air quality."
- Page 4; Bullet 3; delete "Oakridge" and add "Eugene/Springfield."
- Page 5; Bullet 10; "adjust" should be "adjusting."
- Page 5; Bullet 11; "program" should be plural.
- Page 6; Bullet 4; insert "that" in front of "relevant."
- Page 7; Bullet 7; should read "Brian said the Regional Haze Rule will resolve it."

The minutes were approved as revised.

3. Seventh Draft Matrix Question F (DAs)

Gregory M., Gary S., Brian J.

Gary Stevens noted that the requested changes from the last meeting had been incorporated into Version 7.

Discussion:

Is there a problem?

• **Definitions:**

- Brian Jennison volunteered that the sub-committee will incorporate the verbatim quotes reflecting the definitions currently showing in OAR or Directive.

- Jim Brown said he thought the definitions should be listed verbatim with any recommended changes to the definitions included in the recommendations section.
- Jim Russell added that the recommendations from the Visibility Protection Plan be incorporated in the recommendations of the SMRC.
 - Brian Finneran will review the recommendations of the Oregon Visibility Advisory Committee. This could be included as a footnote. Brian will coordinate with the subcommittee. He noted that the recommended suspension of the prohibition on prescribed burning in NW Oregon during the visibility protection period was temporary and relied on the Oregon SMP, administered by the Oregon Department of Forestry, to protect visibility in Cascade Class 1 Areas. It was to be re-evaluated after three years.
- Brian Jennison will review and add clarification to the first paragraph, page 2.
- Stan Benson questioned the dates listed for the SPZs.
 - Brian Jennison will review the dates listed for the SPZs. The Directive will be cited.
 - Jim Brown suggested that more general time references be used rather than specific dates.
 - Mike Ziolkko noted that the current dates limit the SPZs to a short period of time when woodstove smoke would be a problem. He added that when meteorological conditions are right, burning is still allowed in an SPZ.
 - Mike Ziolkko pointed out that SPZs were not necessary because the forecast/instructions could take care of that need.
 - Gary Stevens suggested the Committee recommend deleting or modifying SPZs.
 - Brian Jennison said he would agree, if it could be shown technically that he would not need it politically.
- Lee Miller said the concept of minimizing smoke impacts is treated more as no smoke impacts will be allowed into a DA. Lee added that smoke entering a DA once is not a failure of the program but is treated as such.
 - Brian Finneran noted that the rules specify when you can burn upwind of a DA. The principle is to minimize smoke impacts.
 - Stan Benson suggested looking at the statute/policy for clarification.
 - Mike Dykzeul read the policy.
 - Erik Christiansen referenced the first paragraph of the objective of the Smoke Management Plan Administrative Rules – “... prevent smoke from accumulating in DAs or other areas sensitive to smoke and provide maximum opportunity for forestland burning while minimizing emissions.”
 - Lee Miller said that’s not how the program is run.
 - Mike Ziolkko disagreed and asked, “How do we get intrusions if we’re not taking a chance?”.
- Jim Brown asked how much information was really needed in the background.
 - Brian Finneran added that it is the recommendations that ODF and DEQ are going to be most concerned with – not the background.
 - Stan Benson was concerned that the preamble to the Committee’s report may not be broad enough.
 - Mike Dykzeul said he would like to concentrate on the recommendations.
- Brian Jennison, at Mike Dykzeul’s suggestion will reword the portion regarding staff quotes to avoid having to include the quotes but explain how protection of cities/towns that are not DAs is addressed in daily operations.
 - Mike Dykzeul added that it would be best to capture it in a conceptual manner rather than including the quotes.
- Mike Dykzeul said the last paragraph under “Is there a problem?” is redundant. The committee agreed to delete it.

- Mike Dykzeul suggested that the committee accept past designations as just that – in the past, and go forward with determining the criteria that needs to be recommended for maintaining or developing DAs.

Will there be a problem in the future?

- Mike Dykzeul commented that issues associated with the Regional Haze Rule and the PM2.5 standard might require future amendments based on the obligation of new standards. It's a dynamic system and there will be changes that take place.
 - Mike Ziolko said these dynamics relate to the previous discussion of SSRAs. A new PM2.5 area would qualify as a new SSRA.
 - Mike Dykzeul noted that it should be explained in the preamble that the information and recommendations reflect existing rules to meet the objectives of landowners and health care, given the current law and regulation, which everyone agrees to. The committee recognizes that the dynamic nature of air quality issues is constantly changing and a recommendation to reassess and maintain the group to adjust as needed, given new regulations should be included.
 - Brian Jennison commented that standards are only going to become more restrictive.
 - Jim Brown noted that the machinery is there to do that via the advisory committee and the review process.
- The comment that “terms are difficult to understand” needs to be expanded to clarify what terms are difficult to understand.
- Probable new regional haze rules and PM2.5 standards also need to be expanded upon.
- Understanding the level of intrusion and whether it is a zero tolerance policy that allows for accomplishment on both sides may belong in this section. In the future, are there going to be increased concerns, complaints, and misunderstandings of what constitutes a negative situation?
 - Brian Jennison suggested this could be a ‘Measure of Success.’
 - Mike Ziolko suggested that it might be most appropriate under “Are Air Quality Standards and Objectives being met?”

What are the options to deal with it?

- Mike Ziolko encouraged the use of narrative style, rather than bullets, for clarity.
- Delete the final bullet item “Strengthen coordination with ODOT and Public Safety Agencies.”

Measures of success

- Mike Dykzeul suggested referencing Question A for consistency.
 - Stan Benson added that whatever was agreed to in Question A should be reflected here as well.
- Two additional bullet items to add are:
 - “Continue to meet standards.”
 - “Citizen complaints about smoke will be few.”

Will it require changes to rules, statute or directive?

- Jim Brown commented that the committee makes the recommendation and ODF makes the determination of whether the change comes in Rule, Directive, Statue or policy.
- Brian Finneran noted that it is important to have a clear understanding of what the recommendation would involve changing in order to understand how quickly the change could be implemented.

Recommendations:

- Brian Jennison noted that the items listed under ‘Broad Themes’ could be re-written and consolidated into one incorporating the SSRA concept. The ‘Broad Themes’ title will be eliminated.

- Committee members agreed to incorporate the SSRA concept.
- Brian Jennison will assume the re-writing task.
- Burning under and above an inversion was discussed in the context of coordinating SPZ open burning and slash burning.
 - Burning above an inversion requires education so the public understands why smoke should not impact them when the meteorology is appropriate to allow the burning at higher elevations but not in a valley.
 - Erik Christiansen suggested a recommendation that suggests improved or increased coordination at the local level.
 - Brian Finneran explained that SPZs were developed to complement the woodstove program.
 - Stan Benson asked if the same could be done with SSRA and consider the woodstove program.
 - Mike Ziolk added that SPZs are only applicable to non-attainment areas or when needed for maintenance plans.
- Brian Jennison asked for someone to read the definition of “Other areas sensitive to smoke”. Erik did so.
 - Brian Jennison noted that if the definition of the SSRA subsumes the old ‘other areas sensitive to smoke’ definition, the term would go away.
 - Erik asked if the intention was to consolidate receptor areas under SSRA.
 - SPZs are not included as SSRAs because they are source areas, not receptor areas.
- The paragraph “The regional Haze Rule will need to resolve the question of how to treat cities/areas outside the state.” will be moved to Question E (Interstate Transport) for consideration.
- Erik Christiansen noted that the “Criteria to consider in making additions/revisions to SSRA list” needs more detail.
 - The subcommittee will work on expanding the criteria to include population, smoke sensitive groups, geography, meteorology and frequency of intrusions and complaints.

4. Public Comment:

Lee Miller noted that he is “burning up a storm.”

5. Working Lunch

Discussion of Seventh Draft Matrix Question F (DAs) – continued

6. Final Draft Matrix Question D (WF v PF)

Jim Russell

Jim Russell presented the final draft of Matrix Question D.

Discussion:

What are the options to deal with the current problems?

- Paragraph 2 will now read “Encourage ODF to assume a leadership role in the development of an emission tracking system that will include all prescribed burners within the state (i.e. agricultural and rangeland). The data will be used in the development of a statewide emission inventory.”
- The term “Wildland Fire Use” will not be used. “Wildfire” and “Prescribed Fire” will be the terms used with a footnote explaining that “wildland fire use” is a subset of “prescribed fire.” Jim will make that change.
- WFU should be defined in Question C since it appears there first.
- Jim Brown asked if WFU was taken into account in terms of Smoke Management and other burning.
 - Mike Ziolk said it would only affect burning if there were WFU smoke impacts that could restrict other burning.
- Erik Christiansen suggested deferring discussion of WFU fire to Matrix Question C.
 - References to WFU in this section will refer to Question C.

Will these options require changes in statutes, rules, or directives?

- Need to clarify what is being discussed in each part of this section.
- Mike Ziolk noted that the requirement to report the data would likely have to be an administrative rule. A policy statement would be needed for the second section.
- This section will now read:

Additional tracking responsibility can be accomplished as part of the SMP Administrative Rule. State agencies should develop cooperative agreements for tracking and storage of the data and information. Securing state wildfire emission estimates may require a change in state and local county fire reporting requirements.”

What are the barriers and opportunities?

- Change WFU back to prescribed fire.
- Second paragraph will be revised to read:
“The protocols for tracking emissions and complaints are not highly developed nor well coordinated. There is a need to modify the existing system for tracking emissions and complaints in order to facilitate a public dialogue and public education on the reason for using prescribed fire and the expected tradeoff between prescribed fire and wildfire emissions over time.”
- Utilize positive or negative verbiage to denote whether it is an opportunity or a barrier.
 - It was suggested that headings be used to identify barriers and opportunities.

How will success be measured in the future?

- Second paragraph, second sentence, will be revised to read: “These EI will allow tracking of total emission reductions/increases for purposes of determining reasonable further progress by 2064 under the Regional Haze Rule. The EI will also be used to compare the tradeoff between whether wildfires emissions have been reduced compared with the total prescribed fire acres burned each year/decade.”
- Paragraph 3, Brian Jennison suggested replacing “our publics” with “citizens.”
- Paragraph 3, last sentence, Mike Ziolk suggested ending the sentence at geographic areas and deleting the rest of the sentence.
- Jim Russell will make a footnote at the first mention of prescribed fire and WFU that it includes silvicultural burning for forest establishment and hazardous fuels includes ...
 - Mike Ziolk suggested that it could be included in part of the broad overall statement in the opening statement.
 - Jim Brown objected to the statement that prescribed fire is the only way to keep pace.
 - Mike Ziolk suggested “Prescribed burning is recognized as a tool to keep pace with highly destructive wildfires.”
 - It was also suggested that it could be revised to read:
“The Smoke Management Plan (SMP) acknowledges the tradeoff between PF and WF and sets objectives that attempt to reduce total smoke emissions as part of the SMP/RHR/SIP. Mechanical treatments are also effective in reducing emissions where conditions warrant. Landscape level use of prescribed fire and other fuels treatments will be needed to reduce the size and intensity of highly destructive wildfires, which routinely occur within the state. The tradeoff between prescribed fire and wildfire emissions will show a net reduction in total emissions over time.”
 - The fifth paragraph will be revised to read:

“Overall, there will be better coordination among the state smoke regulatory agencies. Less overlap for specific seasonal and geographic area allocation of burn days would be achieved, with less competition among landowners and agencies and a more equitable approach to allocation of opportunities to burn. Additionally, costs per acre will be less when the smoke management program is expanded to include all forestry and rangeland burning on a statewide basis.”

Recommendations:

- Mike Ziolk noted that there should be a statement regarding monitoring.
 - Comparing emission data to monitoring data could be an opportunity.
 - A second recommendation will be added:
“Results of this tracking should be compared to monitoring data to assess actual changes in wildfire vs. prescribed burning impacts.”

ACTION: Jim Russell will incorporate the recommended changes into Matrix Question D and email it to committee members for final approval.

7. First Draft Matrix Question H (Alternatives) Jim B., Stephen F., Brian F.

Brian Finneran presented the first draft of Question H. A brief discussion followed.

Discussion:

- Mike Ziolk noted that he recently attended a meeting on biomass utilization and one concern expressed was the need for a continuous supply of material to feed biomass facilities.

Is there a problem?

- It was noted that prescribed burning is not the predominant vegetative management tool. In 2002, in Western Oregon, of 26,6650 Forest Service acres treated, 17,176 acres were by mechanical means and of 53,597 BLM acres treated, 33,930 were mechanically treated. In 2003, mechanical treatment was planned for 12,000 of 48,000 acres on the national forests and 36,000 of 85,00 acres on BLM lands.
 - That sentence will be deleted.
- It was noted that there is currently no systematic method to record alternatives to burning on private land
- The second paragraph will be revised. Brian Jennison suggested “Although it believed that many forest landowners in Oregon practice alternatives to burning and ERTs, there is little documentation of this. Nor is there a concerted effort on the part of the state to promote or increase the use on non-burning alternatives or ERTs.”
- “Federal alternative practices are well documented.” will be added at the end of the paragraph.
- The last sentence of the third paragraph will be deleted.

Brian Finneran quickly presented the “Will there be a problem in the future” and “What are the options to deal with it?” portions of the document. Discussion will continue at the November meeting of the SMRC.

- Mike Ziolk noted that an option could be to work towards developing a steady supply of material that would encourage biomass utilization.

Mike Ziolk asked committee members to identify the funding source for Option 3.

ACTION: Brian Finneran will draft a recommendation section for this Matrix Question.

8. Second Draft Matrix Question E (Regional AQ) Brian F., Brian J.

Due to time restrictions, discussion of Matrix Question E was deferred until the November meeting of the SMRC.

9. Public Comment

There was no public comment at this time.

10. Final Draft Matrix Question C (For. Health) Lee Miller, Erik Christiansen

Due to time restrictions, discussion of Matrix Question C was deferred until the November meeting of the SMRC.

11. Status Update/Next Steps

- A & K Complete
- B Complete
- C ready to finalize in November
- D Review and finalize via email
- E November Discussion
- F Ready to approve final changes in November
- G Mike Dykzeul asked subcommittee members to cut and paste their recommendations for staff to provide guidance.
- H Second draft – November Discussion
- I Economics and Funding Jim R/ Mike Z and Mike D. When other sections are nearly final.
- J Communication/Education Brian F and Gregory. Need to Schedule in advance and be able to invite OFRI and public affairs to attend – possibly for the December meeting.

Mike Dykzeul asked Mike Ziolkko to provide feedback in the form of recommendations they would like to see. The committee agreed.

12. Adjourn

The meeting adjourned as scheduled.

Next Meeting November 24, 2004

Committee information may be found on the web at:

http://www.odf.state.or.us/DIVISIONS/protection/fire_protection/smp/SMR/SM_Review.asp

Charter Question F

Are designated areas and smoke sensitive areas adequately identified?

Narrative Description

Is there a problem?

Oregon Revised Statute states:

“477.013 Smoke management plan. (1) For the purpose of maintaining air quality, the State Forester and the Department of Environmental Quality shall approve a plan for the purpose of managing smoke in areas they shall designate. The plan shall delineate restricted areas to which this subsection applies. The plan shall also include distance of the burning from designated areas, All burning permitted within the restricted areas shall be according to the plan.”

Definitions are described in OAR 629-43-043 or Directive:

1. **“Designated area”** - Those areas delineated in Exhibit 2 (a map in this rule) as principle population centers or a sub-region such as the Willamette Valley.
- **“Restricted areas”** – Those areas delineated in Exhibit 2 for which permits to burn on forest land are required year round pursuant to rule 629-43-041.
- **“Other areas sensitive to smoke”** - Specific recreation areas during periods of heavy use by the public, such as coastal beaches on special holiday and special events. Heavy use is defined as “unusual concentrations of people using forest land for recreational purposes during holidays, special events.” Federal mandatory Class I areas during peak summer use are considered smoke sensitive areas. All Oregon and Washington Class I areas shall be considered as areas sensitive to smoke during the visibility protection period, defined in the Oregon Visibility Protection Plan, OAR 340-20-047 Section 5.2.
- **“Special Protection Zone”** – a source geographic area term that establishes specific boundaries around Eugene/Springfield, Grants Pass, Klamath Falls, Medford, Oakridge, LaGrande and Lakeview. These boundaries are only in effect during the winter months and in some cases, Eugene/Springfield and Grants Pass, only under certain conditions. Directive, Appendix 4.
- **Attainment Area** [also non-attainment area] – Receptor terms that define a geographic area in compliance [or non-compliance] with federal air quality standards. Commonly used but not defined by DEQ rule.

The SMP designated areas [restricted areas and other protected sites] have evolved with the SMP. It has been a piecemeal process. No criteria by which these areas would be designated have been clearly established. Exhibit 2 in the OAR [629-43-043] and the various agreements [Appendices] and Directives do not concisely list the DAs or other smoke sensitive areas, nor do they further establish or describe criteria for additions/deletions/revisions to the list of areas.

As an example of and criteria for here is the manner another State agency, DEQ, took on source related restrictions on geographic areas [these date from the 1970s]. DEQ Rules establish “open burning control areas [OBCAs].” OCBA’s are those areas around more densely populated locations in the state, and valleys or basins that restrict atmospheric ventilation and are designated “open burning control areas.” The areas, and the attendant restrictions, are listed in OAR 340-264-0100 through 340-264-0170 by county. DEQ rules use a combination of population, distance from city limit/UGB [three miles between 1,000 to 45,000 people; six miles for cities over 45,000 people], proximity to AQMA [or non-attainment area], common boundary [determines population threshold] and separation between cities of less than three miles.

Currently in the SMP Exhibit 2 and the Appendices or Directives the following areas are established:

Receptor Based

- **DAs** – Astoria, Tillamook, Lincoln City, Newport, Coos Bay-North Bend, Grants Pass, Ashland-Medford, Roseburg, Bend and the entire Willamette Valley [WV not defined].
- **NE Oregon Agreement** – Baker City, Burns, Enterprise, John Day, La Grande, Prineville and Pendleton [plus ‘protection’ given to Idaho and Washington cities as well as other Oregon towns in NE Oregon]. These are so-called “protected areas.”
- **Class I Areas** – These are 11 federal Wildernesses and one National Park designated by Congress [ref: Visibility Protection Plan for Class I Areas].

Source Related

- **SPZs** – These are around cities/areas that are protected. This term applies November 15 through February 15 of each year to Klamath Falls, Medford, Oakridge, LaGrande and Lakeview PLUS Eugene/Springfield and Grants Pass on a contingency basis [the SPZ is about a 20-mile zone around the cities or non-attainment area or is the AQMA].
- **Restricted Areas** – All forest lands west of the Cascades and forest protection areas of Mt Hood and Deschutes National Forests east of the Cascades.

Daily operations of the SMP have changed. These quotations from staff help understand the complexities:

“Restricted Area - In addition to the present Designated Areas within the Restricted Area, I will, when working with the districts, take into consideration any community of any significance when approving a burn. Examples include towns like Coquille, Lakeside, and Sisters. Although these are not Designated Areas, we still try to minimize the chances of impacting these communities. It is not a requirement, just good practice. The very small communities out in the forests, I don't pay much attention to. In fact these sorts of "towns" are so small they don't even show on our map. And even then there are exceptions. I think I mentioned Siletz in one of the committee meetings. Although this is a very small community, and out in the forest, for a time there was considerable burning going on all around the town. Smoking them out day after day would just not have been very neighborly, even though Siletz is small and not a designated area.”

So even though they may not be a DA, cities/towns in the restricted area get similar levels of consideration by SMP staff, and it gets even more interesting as one reviews operations outside of the restricted area [see definition above].

Again a quote from staff:

“Non-Restricted Area (Eastern Oregon) - You mentioned Pendleton. In the plan there are communities in eastern Oregon that we are instructed to keep smoke out of. We have termed these as Protected Areas. Protected Areas include Pendleton, La Grande, Baker City, John Day, Burns and Enterprise. Although they carry a different designation, since they are outside the restricted area, we give them a level of protection similar to a Designated Area. And, as on the west side of the state, there are those additional communities that are not specifically Protected Areas but are still considered when a burn is approved. Such towns as, for example, Redmond, Prineville, Heppner, etc.”

So not all protected areas, or smoke prohibited areas, are ‘designated areas.’ Exhibit 2 depicts nine cities/towns as DAs plus the entire Willamette Valley. In reality, however, two dozen cities/towns in all of Oregon receive SMP ‘protection’ at a level consistent with being a “designated area.” All of this has evolved without formal criteria, nor the best documentation.

However, let us go back to our original Charter Question – “Are DAs and smoke sensitive areas adequately identified?” The existing SMP works well protecting air quality and serving land owners, but it is NOT adequate in the identification and documentation of DAs and other areas sensitive to smoke. There are no clear criteria. The program’s level of professionalism deserves better. There are definitely anachronisms in the SMP relative to DAs.

Will there be a problem in the future?

Yes, because certain difficulties can be expected. These include:

- It appears these areas are poorly defined.
- Protocol to change designations doesn't appear to exist (except for non-attainment areas or AQMAs).
- Terms are difficult to understand.
- Current maps are inconsistent in scale and boundaries are not clear.
- All areas in need of protection may not be identified e.g. emerging population areas, increasing population (may expand boundaries) and WUI areas.
- New Regional Haze Rules must be considered.
- Probable new PM2.5 standards (new DA's may surface).
- Geographical differences - more burning in certain specific regions.
- Poorly integrated regulations and loosely defined jurisdictions exist among local, State and Federal authorities.

What are the options to deal with it?

- More clearly defined boundaries
- Utilize GIS/GPS maps on a computer-based system
- Aim for one designation with equal protections
- Some areas may require more intense management (e.g. those with a high potential for winter time inversions; or those with increased prescribed burns).
- Establish clear criteria for designated areas and revisions to them (e.g. population and proximity to prescribed burning)
- Strengthen coordination with ODOT and Public Safety Agencies

What are the Barriers and Opportunities?

Barriers:

- Resistance to change;
- Increased workload for program during change to new system;
- Staffing and Funding; and
- Technology adoption i.e. GIS

Opportunities:

- Streamlined program [rather than many definitions];
- More effective & greater efficiencies;
- Clarity;
- Consolidated OAR’s, Directives and statutes (minimize conflicting and confusing direction);
- Greater responsiveness and increased credibility by citizenry.

Measures of Success

- Numbers of intrusions or complaints
- Numbers of requests for addition to ‘SSRA’ status or ‘other areas’ status
- Concern from Program staff or landowners that criteria are unclear or inequitable.

Will it require changes to rules, statute or directive?

Not in ORS, but probably in OAR and directive. Maps are not allowed in OAR now so text will have to be clear. ODF Staff to assist with the actual re-write.

Recommendations:

BROAD THEMES

- One designation with a limited # of exceptions or differences e.g. focus on receptors
- Eliminate source i.e. Special Protection Zone terminology
- Require all burning statewide on forest [all classes] and range land to be permitted or at least registered.
- Consistent state regulations - Statewide no differences between AQMA, SPZ, DA, etc
- Adaptive to NAAQS / Regional Haze Changes without OAR changes.
- UGB designations, populations and trends is a key (follows DEQ strategy).
- Use updated maps (GIS based; internet accessible) so ALL can access.

SPECIFICS

*** Eliminate ‘restricted area’ terminology and establish state as ‘regulated area.’**

*** Establish Smoke Sensitive Receptor Areas [SSRAs].**

Definition will be: Areas around cities and towns and ‘areas’ where smoke should not get into and generally will be principle population centers and/or a sub-region, i.e. Willamette Valley.

*** Eliminate old ‘Designated Areas’ definition.**

*** Retain ‘Other Areas Sensitive to Smoke’ category and definition.**

*** SSRAs will adopt existing Exhibit 2 list**

- Willamette Valley is a SSRA. It is the area includes portions of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties [using existing Exhibit 2 map].
- AQMA or non-attainment areas [boundary will be that defined by DEQ determination]. This includes: Lakeview, Klamath Falls, LaGrande, Oakridge, and Medford-Ashland-GrantsPass [Eugene-Springfield is within Willamette Valley sub-region].
- Astoria, Tillamook, Lincoln City, Newport, Coos Bay-North Bend, Roseburg and Bend [Exhibit 2 map].
- Baker City, Burns, Enterprise, John Day, LaGrande, and Pendleton [NE Oregon Agreement will need to be re-assessed by parties].
- The boundary for the above cities/towns will be the UGB for all cities outside the Willamette Valley and Medford-Ashland AQMA.

*** The Regional Haze Rule will need to resolve the question of how to treat cities/areas outside the State.**

*** Criteria to consider in making additions/revisions to SSRA list**

- Frequency of intrusions and complaints.
- Nature of any other air pollution impacts.
- Proximity to areas of increased prescribed burning.
- Tracking and monitoring of any kind in potential SSRA?
- Population and what are the trends.

*** SMP Agency Advisory Committee will assess revisions to the SSRA list annually.**

Charter Question D: How should wildfire versus prescribed fire impacts is addressed?

Is there a problem?

Yes - Smoke from wildfires has historically been more of a health risk than all forms of prescribed burning combined. The current smoke management plan is silent on the public health concern and visibility impacts of wildfire smoke. The concept of considering wildfire smoke emission within the SMP is new, but without this inventory and tracking consideration it will be difficult to chart further progress under the Regional Haze Rule and to track substantive change in total emissions (i.e. wildfire and prescribed fire) under the plan as a way to demonstrate potential trade-offs.

Annual tracking of prescribed fire emissions compared against estimated historical wildfires smoke emissions has been done in NE Oregon in order to demonstrate this tradeoff between wildfire and prescribed fire emissions (Operational Guidance for the Oregon Smoke Management Plan, Directive 1-4-1-601, p.67, Appendix 5)

Will there be a problem in the future?

Yes – Wildfire frequency and acres burned are generally increasing throughout the state, with the highest levels of wildfire acres burned and smoke emissions occurring in those areas that have a highest fuel hazard and ignition risk. This is primarily in the southwest and eastern geographic areas of the state. The northwest portion of the state carries a high fuel hazard but a significantly lower risk of wildfire occurrence.

The public may not universally understand the logic and theory behind the premise that increasing the level of prescribed burning will ultimately reduce the wildfire acreage burned and total smoke emission produced over time.

What are the options to deal with the current problems?

Expand the Smoke Management Plan (SMP) emission tracking responsibility to include wildfire and wildland fire use _1 emission in order to develop emission inventories for both public and private land wildfires within the State. Include wildfire acres, location, and fire behavior and fuel consumed just as the State requires prescribed fire data reported through FASTRAC, under the federal system, and as part of the permitting process for private land prescribed burning.

Lobby for and develop a leadership role that will bring all prescribed burners (i.e. agricultural and rangeland) in the state into a reporting process that will track all prescribed burn and allow for the development of comprehensive emission inventories. This data and information will be invaluable in the development of the Regional Haze State Implementation Plan (SIP) and designation identification of PM2.5 non-attainment areas. There would be a shared responsibility for management of database between ODEQ, ODF, and ODA. This activity could be contracted or shared among the three primary state agencies.

This data set will improve the geographic area specific forecast that will be generated along with improved science for emission estimations and validation. The process will also include protocols for complaint tracking and identification of health, visibility, and nuisance smoke impacts.

Will these options require changes in statutes, rules, or directives?

Additional tracking responsibility can be accomplished as part of the SMP Administrative Rule. This would include development of cooperative agreements between the three state lead agencies for tracking and storage of the data and information. The SMP can direct the Federal Land Management Agencies (FLM's) to transfer the wildland fire data, that they already are required to do by agency policy, along with the prescribed burning information used for smoke clearances at this time. The majority of this information can be collected electronically from the FLM's. Securing state wildfire emission estimates may require a change in state and local county fire reporting requirements.

What are the barriers and opportunities?

Increased public acceptance of the use of prescribed fire is key to the long-term maintenance of any prescribed fire program regardless of the geographic area in which it is being planned.

Getting consensus among the lead state agencies to collaborate on the data collection need and the methods for implementing the process is critical to meeting the overall objective of emission tracking. All SMP participants will have to view the need to collect wildland fire (Wildfire and Wildland Fire Use) information as being a high enough priority and a long term benefit to both the Westside, under the existing Oregon Smoke Management Plan, and the Eastside under the current voluntary and cooperative agreements.

The protocols for tracking emissions and complaints are not highly developed nor well coordinated. There is a need to modify the existing system for tracking emissions and complaint in order to facilitate a public dialogue and public education on the reason for using prescribed fire and the expected tradeoff between prescribed fire and wildfire emissions over time.

An opportunity exists to use various modeling protocols such as the Fire Effects Trade-off Model (FETM) for specific geographic area analysis to develop a process for prioritizing where to treat, when to treat, and display the long-term (100-300 year) emission production by vegetative type for both wildfire and prescribed fire emissions.

The primary barrier is the availability of additional funding and staffing to operate the tracking and data storage system along with the cost of using models such as FETM.

If increased impacts start to occur from prescribed burning the public may be less willing to accept prescribed burning.

How will success be measured in the future?

Tracking of the change in wildfire and prescribed fire acres burned and fuel consumed over time is the key to both gaining public understanding and acceptance of the long-term strategy needed to meet emission reduction objectives on a state-wide basis.

Comprehensive emission inventories for all open burning sources will be in place for the State of Oregon. These EI will allow for charting total emission reduction/increases each year compared against the decadal target for the Regional Haze Rule designed to chart further progress towards 2064 and to compare the tradeoff between whether wildfires emissions have been reduced compared with the total prescribed fire acres burned each year/decade.

Public understanding of the need to use prescribed fire will be enhanced and there will be fewer complaints from our publics concerned with the impacts of smoke generated from prescribed burning. Overall there will be more informed decision-making on smoke management and the use of alternative treatments and emission reduction techniques by geographic areas that have the biggest effect on total emission reduction.

The Smoke Management Plan (SMP) acknowledges the tradeoff between PF and WF and sets objectives that attempt to reduce total smoke emissions as part of the SMP/RHR/SIP. The need for landscape level use of prescribed burning is recognized as the only way to keep pace with the highly destructive wildfires that are routinely occurring within the State. The tradeoff between prescribed fire and wildfire emissions will show a net reduction in total emission over time. Overall

Overall there is better coordination among the state smoke regulatory agencies, less overlap for specific seasonal and geographic area allocation of burn days is achieved with less competition among landowners and agencies and a more equitable approach to allocation of opportunities to burn. It will also cost less because we are working from a broader vision to meet smoke management objectives statewide.

Recommendation

To implement a state-wide wildfire and prescribed fire tracking system that collects the data needed to develop Emission Inventories (EI). This will also allow for tracking the difference in prescribed fire and wildfire emissions over time.

Charter Question H: What feasible alternatives to prescribed burning exist, and how can they best be implemented?

Matrix Questions: Narrative Description

Is there a problem?

Yes. On forest lands in Oregon and states across the West, prescribed burning is the predominant vegetative management tool. Increasing regulations and concerns about smoke impacts have led many states to take steps to make significant smoke management improvements. The Environmental Protection Agency has for many years encouraged states to adopt Best Management Control Measures (BACM) for prescribed fire, which includes promoting the use of alternatives and emission reduction measures. The federal Regional Haze Rule now requires states to adopt “enhanced” smoke management programs, identify and remove “administrative barriers” to the use of non-burning alternatives, and track the use of emission reduction techniques (ERTs) and quantify the emission reduction they provide.

It is believed that many forest landowners in Oregon practice alternatives to burning and ERTs. However, there is no good documentation of this, nor is there a concerted effort to promote or increase the use of non-burning alternatives or ERTs. Oregon Department of Forestry rules make no mention of alternatives or ERTs. OAR 629-43-043 (1) does mention an objective to “encourage the reduction of emissions”, but nothing more specific than this.

In the “Operational Guidance for the Oregon Smoke Management Program, Directive 1-4-601”, it does state that the policy is to “minimize emissions from prescribed burning, where appropriate, by encouraging cost effective utilization of forest residue; alternatives to burning; and alternative burning practices.” There is similar language in the “Special Guidance” section that encourages the “utilization of residue” and “alternate treatment practices that are consistent with the purposes of the Forest Practices Act”. These are the only references in the Directive to alternatives. There is no description of possible alternatives or ERTs, how to quantify their use, or mechanisms for implementation.

Will there be a problem in the future?

Yes. Significant increases in prescribed fire in Oregon have been anticipated for many years. There has been some increase in central and eastern Oregon, and this is expected to continue in the future. In areas such as Deschutes county, this increase in burning is being accompanied by significant population growth. Reliance solely on smoke management in these areas may not be enough. Greater use of non-burning alternatives and ERTs will be needed. Concerns on fire danger in the wildland urban interface (WUI) combined with population growth will also put greater emphasis on applying non-burning fuel treatments in these areas.

From a regulatory standpoint, the federal Regional Haze Rule will play a significant role in future prescribed fire. The Oregon Regional Haze Plan, submitted to EPA in 2003, must be updated periodically to demonstrate that smoke management controls are effective, and that alternatives to burning and ERTs are also effective in reducing emissions from increases in prescribed burning as it occurs in the future. In addition to regional haze, EPA is considering lowering the federal particulate air quality standard in order to provide greater protection of public health. This will put more pressure on smoke management programs to minimize smoke intrusions, and will likely place greater emphasis on non-burning alternatives and ERTs as well.

What are the options to deal with it?

Option 1: A greater commitment in ODF rules/directive, and addressing at burn unit level.

As pointed out above, neither the Oregon Smoke Management Plan nor the Directive put much emphasis on promoting the use non-burning alternatives and ERTs. Adding a greater commitment to more actively pursue these objectives is an option. Consideration should also be given to encouraging that alternatives and ERTs be evaluated for each individual burn. Currently in the Directive, forest land owners are currently required to identify basic burn unit information (e.g., fuel loading, type of burn, and primary reason for burning). States such as Utah have provisions in their smoke management plans to identify what alternatives or ERTs were considered. Utah uses a checklist that has six “Emission Reduction Categories” that include reducing the fuel load, reducing the size of the area burned, reducing fuel consumption, and increasing combustion efficiency.

Option 2: Identify a process for evaluating alternatives/ERTs.

The Oregon Regional Haze Plan, adopted in 2003, contains a commitment to identify a process for overcoming “administrative barriers” to the use of alternatives, and a process for tracking ERTs and estimating the emission reductions that occur. The plan identifies two guidance documents prepared by the Western Regional Air Partnership (WRAP) related to non-burning alternatives and SMRC Minutes 10-21-04.doc

ERTs. The first WRAP document “Non-burning Alternatives for Vegetative and Fuel Management” is intended to be used by forest land owners and managers as a tool for evaluating alternatives to prescribed burning. It is designed to be a reference manual for different non-burning management options and potential markets and funding sources for utilizing forest materials. It provides a “decision-tree” for considering treatment options, and a list of the different types of equipment associated with mechanical removal. The second WRAP document “Annual Emission Goals for Fire Policy” is intended to be used by mostly state smoke management staff and air regulators to encourage the use of ERTs, track their use, and estimate of the emission reductions they provide. The estimated emission reductions are then compared to the total estimated emissions from prescribed burning, in order to satisfy the Annual Emission Goal requirement in the Regional Haze rule.

These documents are intended to be used as references for showing what “process” will be used under the Oregon Smoke Management Program to promote alternatives and ERTs. Additional work is needed to describe what process will be followed under the Oregon Smoke Management Plan to accomplish these two objectives.

Option 3: New position at ODF for an alternative fuels/utilization specialist.

To assist forest landowners in evaluating non-burning alternatives and fuel treatments, a new position could be created at ODF. This could be a fuels treatment specialist, with knowledge of current biomass markets, mechanical removal equipment and costs, tax incentives for alternative use, and current fuel treatment methods and ERTs being practiced. This specialist would be available to consult directly with landowners, to help them increase their use of alternatives by identifying viable options. The creation of this position could be done in conjunction with Option 2 identification of a process for using the WRAP “Non-burning Alternatives for Vegetative and Fuel Management”. A funding source would need to be identified by ODF to create this position.

Option 4: Provide greater incentives (i.e. tax credits) to landowners for using alternatives/ERTs.

There are currently few incentives for forest landowners to consider alternatives. Oregon DEQ has Pollution Control Tax Credit regulations that can provide a tax credit for purchasing wood chippers. Expanding this tax credit to include other equipment or non-burning practices could be explored, as well as determining if other tax credits or incentives exist. This option could be combined with Option 3, in terms of work that could be conducted by the alternatives specialist.

In terms of other incentives besides tax credits, there could be greater emphasis under the Oregon Smoke Management Program to reward landowners who increase their use of alternatives and ERTs. For example, additional burning opportunities could be provided for burn units where mechanical treatments have taken place to reduce fuel load and the size of the burn. Another example would be a burn unit that normally would not be burned due to proximity to a populated area or WUI, but where significant fuel removal has taken place to reduce the risk of fire escape, and where rapid mop-up will be conducted.

Will these options require changes in statutes, rules or directives?

To be determined. It is not anticipated that a change to statutes would be necessary.

What are the barriers and opportunities?

There are currently many barriers to using alternatives and ERTs. The first barrier is that not all alternatives are feasible, due to various technical, economic, environmental, and sociopolitical factors. Another barrier is that some forest landowners do not have up-to-date information on the cost effectiveness of different alternatives and treatment options, mechanical equipment costs, new biomass markets, available tax credits and funding sources. A third barrier is general resistance to change from the current reliance on burning. Finally, the lack of funding to create economic incentives for using alternatives is also a barrier.

In terms of the opportunities that may result from using alternatives and ERTs, forest landowners who have more treatment options available to them will be more successful from a forest management standpoint, which in turn has economic benefits. Better forest management will result in less intensive wildfires, lower the risk to loss of life, health problems, and property damage. As energy demands increase, this may create opportunities for new biomass markets, making it more cost-effective for landowners to purchase equipment for mechanical removal, and to transport the material to the biomass plant. Finally, as described in Option 4 above, some additional burning opportunities could be provided to landowners who use increase their use of alternatives and ERTs to significantly reduce emissions and the risk of fire escape.

How will success be measured in the future?

Success will be measured in several ways. Forest landowners who can increase their treatment options by using alternatives and ERTs will likely find it easier to meet their forest management objectives, and see increased economic benefit. From a smoke management and air regulator perspective, the more widespread use of alternatives and ERTs will result in lower emissions and less intensive wildfires, and increased fire safety in the WUI. This can be measured statistically in terms of fewer deaths, health problems, property damage, and smoke complaints. Improved visibility in Class I areas such as Crater Lake National Park will be another measure of success.