

Region 6 Breakout Group¹

Land Management Planning (LMP)

Participants: Erik Christensen, Louisa Evers, Janice Peterson, Tim Rich, Jim Russell

LMP Breakout Notes

1) The advantages of increased Fire & Air collaboration on LMP may include greater efficiency, better decisions, and fewer legal challenges. What are other advantages? Any specific to your region?

Not applicable yet.

2) What common messages can Fire & Air agree to with regards to Air Quality and Fire Use in the LMP process within the region? Possible examples might include:

- *The Forest Service will never plan to use fire in a way that is predicted to result in a NAAQS exceedence in a community or other area where the public has reasonable access.*
- *Fire use planned for ecosystem management purposes will attempt to minimize Class I area visibility impacts but we agree that visibility impairment is acceptable, even natural, from some types of fire use.*
- National Forests have the data needed to address regional haze requirements (know what data is needed even though we don't know exactly how data will need to be manipulated or summarized).

3) What questions need to be answered in the LMP process? What specifically needs to be disclosed?

WO/RO should provide guidance on air quality considerations working with regulatory agencies along with minimum standards/requirements. Forests need to decide which considerations are relevant to their particular situation.

There are regional drafts for guidance on what to include in an LMP and how to conduct an air quality analysis, but neither has been finalized.

4) What other partners would improve the process (e.g., State reps, other agencies, and organizations)? What is our appropriate relationship with them? What efficiencies can you identify that would result from this collaboration?

¹ *These notes have been slightly edited for style but remain largely as originally received from the breakout group reporters. Discussion questions that were provided to the groups, but were not addressed, have been removed. The original list of questions can be found in a separate document entitled "Breakout Handout" on the Fire & Air Workshop web page.*

Need to sell products (i.e. LMP guidance and guide on conducting air quality analyses) to regulatory agencies. How we deal with EPA will be very different from how we need to deal with the states.

5) What are the leadership and/or organizational changes at the WO, Research and/or RO level that would encourage increased Fire and Air collaboration?

In collaboration: Jim and Janice take lead on air quality section, Tim Rich take lead on fuels program, Louisa Evers take lead on fire ecology.

6) What are some policy/planning/information gaps that would inhibit better LMP decisions in your region?

- Goal - Each National Forest has the expertise needed to conduct air quality analyses and calculate emissions and has access to the needed data. Conduct training.
- Goal – Complete regional guidance on how to conduct an air quality analysis. Pull together a working team consisting of fuels, air program, and stakeholder folks to complete document.

****Identify the top 3-5 highlights from this breakout session and write them below. Be prepared to report these back to the workshop. Record highlights here:***

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Land Use Planning – Fire Effects on Air Fire and Air Quality Issues and Tasks	Current State			Optimal State		
	Fire Prog.	Air Prog.	Other	Fire Prog.	Air Prog.	Other
ID team lead for issue.				P	P	
Description of Affected Environment (general meteorology, sensitive areas, current air quality, etc.).				I	L	
Alternative Description (fuel treatment options, justify use of fire, timing of any proposed burning, mitigation measures, etc.).				L	I	
Environmental Consequences (quantify emissions; describe potential short and long term effects on health, nuisance, and/or visibility; worst-case analysis; dispersion modeling, etc.).				A/I	L	
Describe requirements and effectiveness of state smoke management plans and/or visibility SIPs.				I	L	
Monitoring				P	P	

Flipchart notes from report back:

- WO/RO provide guidance: there may not be so much WO can do at this level. At Regional Level: set minimum standards, the Forests decide what is relevant. Region 6 has a start on some of this – will need WO guidance to complete.
- Partnerships/Collaboration: better job of “selling” to Regional Agencies; and the strategies for “selling” to states will need to be different from EPA.

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State Implementation Plan (SIP) and Smoke Management Plan (SMP)

SIP/SMP Breakout Notes

1) Increased Fire and Air collaboration on RPO/SIP/SMP maximizes our ability to meet FS objectives. What other advantages are there?

Actively involved in 3rd generation of the Oregon SMP and will soon be doing the same in Washington. Both Jim Russell and Bob Bachman are involved in WRAP. Quality of involvement on visibility protection not where it should be; state agencies involved are unwilling to work with us to the degree we feel is necessary. Visibility implementation plan has already been revised for both states.

2) What common messages can Fire and Air take on Air Quality & Fire Use in the RPO/SIP/SMP process within your region? Possible examples might include:

- Unlike exceedances of the NAAQS, visibility impairment from fire use for ecosystem management purposes are acceptable in Forest Service managed Class I Wilderness areas.
- *FS fire use for ecosystem management purposes, based on an approved fire management plan, should not be regulated in the same way as industrial sources in the protection of visibility.*
- Prescribed fire is a best available control measure (BACM) for wildfire emissions.

3) How can we best interact with States/what are our opportunities to do so? (E.g., RPO involvement, etc.).

Need a more effective forum to get together and discuss what is going on and how do we want to deal with emerging issues and technical snafus.

Need to find simpler and less time-consuming ways to deal with the technical aspects of smoke management and visibility protection.

4) What are the leadership and/or organizational changes at the WO, Research and/or RO level that would encourage increased Fire and Air collaboration?

Need to standardize emissions estimates for wildland fire between all the fire agencies and in collaboration with the regulatory agencies.

De-emphasize proliferation of models and shift resources into standardization of air program requirements in collaboration with regulatory agencies.

5) What are some policy/planning/information gaps that would inhibit more effective RPO, SIP and/or SMP participation by your region?

Need to better report how much biomass is utilized or otherwise treated without burning.

Existing staff is already over-committed; there are simply no more time or staff to increase participation. Other resource areas are of much greater emphasis than air program management; changes in priorities have to happen at the Washington Office, Departmental, and Administrative/Congressional level.

Shortfalls in state budgets are impacting states' ability to carry out responsibilities under Clean Air Act. EPA may have to take over management of the Implementation Plans. Should leadership role for federal land managers increase when state shortfalls decrease their ability to implement Clean Air Act?

Flipchart notes from report back:

Advantages:

Noted: State agencies unwilling to work with us to the degree we'd like – how to deal with snafus?

Technical aspects – need simpler more efficient ways to address.

Nationally: need to standardize emissions data.

Standardize Air Program requirements – different requests from different agencies.

Existing staff over-committed, other resources come before Air – need to change this priority, but must come from above.

Resource issue is huge

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Data Needs/Strategies

Data Needs Breakout Notes

1) What are some information and/or data gaps in your region that limit your ability to estimate emissions for fire tracking, emissions estimation, and emissions inventory?

Good estimates of live fuel loadings (FCCs should help remedy this problem, new photo guides are already helping in some cases).

Wildland fire emissions tracking and reporting. Better temporal resolution of data, i.e. daily reporting instead of event reporting.

Accurate reporting of acres actually burned and fuels consumed, more a matter of training for prescribed fire reporting than setting up a reporting method. Accurate estimations of amount of flaming verses smoldering combustion.

No complete emissions inventories for anywhere in PNW. Inventories incomplete for rangeland burning and some agricultural burning (eastern Oregon, esp.). No reporting of utilization for emissions reduction reporting (part of 10-Year Comprehensive Strategy).

2) What information needs have been identified in your region for LMPs, SIPs, SMPs, and/or RPOs?

Re-examine what data is needed to accurately calculate emissions, may be collecting more data than is needed. Also need to conduct marginal analysis on whether data is worth collecting. Need to cover in revised SMPs.

Need to report actual emission reduction techniques and amount of emissions foregone.

3) Does your region need to collect new data or develop new processes to meet these information needs?

Need to know where all the different data resides, what it means, and how to use it. Public website with links can help folks find data. Folks need training on interpretation and summarization/crunching, preferably delivered in a non-traditional manner (i.e. outside a formal classroom).

Will be introducing FETM to forests to use as an emissions prediction tool for land use planning.

4) How far along is your region's FCAMMS and what can you do to help it advance? (i.e., What is needed in preparation for the FCAMMS products and what will the FCAMMS need from your region?) How will you do LMP, SIP, and SMP analyses until FCAMMS products are ready?

BlueSky (BlueSkyRAINS?) is (or will be) main FCAMMS for R6. (Thanks, Sue!)

5) Will FCAMMS tools change or evolve existing LMP, SIP, and SMP processes? How?

May eventually change how we build/revise LMPs, but not in this round of planning or at least for all forests. Will likely change SMP processes since designed to be an operational tool. Unsure about SIPs unless BlueSky changed to also include design features useful for planning purposes. Concerned that MM5 doesn't work well under stable atmospheric conditions; need more testing under stable conditions or to find a model that does work under stable conditions. Need to ground-truth or otherwise verify emission model outputs.

6) What did you see in the BlueSky example that would work in your region and what would not?

Already operational (mostly).

7) What are the leadership and/or organizational changes at the WO, Research and/or RO level that would encourage increased Fire and Air collaboration?

Need one set of data definitions, data collection tools, and set of business rules for all fire agencies, probably based on NFPORS.

8) What policy or planning gaps would prevent this collaboration in your region?

Lack of resources and program emphasis.

Need a fire event reporting tool that includes all fire events (prescribed fire use and wildland fire).

Data Needs/Strategies Fire and Air Quality Issues and Tasks	Current State			Optimal State		
	Fire Prog.	Air Prog.	Other	Fire Prog.	Air Prog.	Other
Prescribed fire data collection for emissions estimation	L			L	A	Remote sensing
Emissions estimation methods						
Dispersion modeling expertise						
Development and maintenance of emissions inventories						
Emergency event (wildfire) Wildland fire smoke monitoring	A	L		P	L	
Prescribed fire smoke monitoring networks	P	L		P	L	
FCAMMS participation						
Wildland fire data collection for emissions estimation		L		L	A	

Flipchart notes from report back:

- Wildland fire emissions track/report: daily
- Prescribed fire arena: need training; Wildfire: need system
- No complete emission inventories; rangeland and Ag not under State SMPs
- No reporting of utilization as ERT (10 Year Comprehensive Strategy)
- What data is actually needed? We collect more than necessary.
- Report actual Emission Reduction Techniques used and emissions averted as a result.
- Verify emission Model outputs.

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Regional Action Plan/National Priorities

Participants: Erik Christensen, Louisa Evers, Janice Peterson, Tim Rich, Jim Russell

National Priorities

- 1) Need to standardize definitions and terms applied to fuels and air, and standardize emissions estimates and reporting to fully report and compare information between agencies and across the country for emissions inventory purposes. Utilization in lieu of burning should be reported through NFPORS. Some information may not need to be standardized in order to have comparable data. All affected federal agencies should be involved.
- 2) National initiatives, such as the National Fire Plan and the 10-Year Comprehensive Strategy, need to include air quality and emissions management as an integral part of the initiatives. The agency needs to resolve the conflict between protecting visibility in Class I areas and the amount of fire use needed to implement the National Fire Plan and the 10-Year Comprehensive Strategy.
- 3) The National Office should promote the recognition of all sources of smoke emissions, such as agricultural burning and other open burning along with silvicultural burning, for complete emissions inventories, bringing together relevant state and federal agencies.
- 4) The Forest Service should join the National Fire/Air Issues Coordination Group.
- 5) We suggest that other regions may want to use the FERA-R6 relationship as a model for setting up a similar coordination between research and users.

Flipcharts notes from report back:

- Standardize definitions/terms. Standardize emission estimates and reporting.
- National Initiatives – include air quality emission management.
- Promote recognition of all sources of smoke emissions.
- FS join NFACWG
- Other Regions: use FERA model, to setup coordination.
- Develop Regional comprehensive emission benchmarks – historic/future burning – incorporate in Regional land management process
- SIPs/NAAQS – Region needs to get/be involved with states and the RPO
 - FS presence to advance issues. Air needs Fire personnel to participate.

Regional Action Plan

- 1) Build a more complete emissions inventory for the federal lands.
 - a) Investigate bringing the Northwest Coordination Center into the mix and developing a reporting system for daily reporting of all fire emissions, at least on federal lands. Jim Russell and Janice Peterson would work on developing a more automated process for daily estimation of wildland fire emissions. FASTRACS needs to report to the Northwest Coordination Center automatically so the Intelligence Office can prepare a more complete report to forward to the National Interagency Coordination Center. Will probably take at least one year to investigate what is needed and what is possible.
 - b) Review data requires currently in FASTRACS and work with states to determine what data is really needed and what is not to adequately estimate emissions from prescribed burning. Conduct a marginal analysis on the data used now and any proposed changes to determine the value of the data for regulatory and research needs. Come to agreement on what data is really worth collecting. Roger Ottmar, Janice Peterson, Sue Ferguson, Jim Russell, Tim Rich or John Orbeton. High priority.
 - c) Work to include federal rangeland burning and voluntary compliance currently under MOA in south central Oregon. Jim Russell to lead.
 - d) Identify an appropriate data repository for emissions data and emissions foregone through other treatments.
- 2) Build a reporting system that includes emission reduction techniques used and the emissions foregone as a result. First priority would be on commercial utilization, in keeping with the 10-Year Comprehensive Strategy. Next priority would be other mechanical methods. Third priority would be biological and chemical methods. One method may be a crosslink between NFORS and FACTS, for example. Tim Rich to take the lead. Janice Peterson will work on better documentation of existing emission management techniques currently available through FASTRACS, such as burning under higher fuel moistures and spring burning.
- 3) Complete working drafts of guidance documents on information needed in land use plans and conducting air quality analyses. Working drafts should be sent to the field no later than June. Final versions will be completed by the following year in collaboration with the regulatory agencies. Janice Peterson and Louisa Evers.