Fire and Smoke Collaborative, November 2022 - Key Findings[1]

Successes

Communications and Relationships with Air agencies, Burners, State Forestry and Natural Resource agencies, and Federal Land Managers:

Participants responded that communication/coordination with burners and federal land managers have been and continue to be successful, partly due to recognizing that relationship building is a priority. Many participants said that weekly calls between smoke management forecasters, meteorologists, and burners have been effective in planning burns. Participants shared that having a debrief with burners after a large burn has been very helpful in establishing trust and sharing important after-action information. In addition, air quality smoke managers have been communicating more frequently with smaller burners and ag burners.

FLM liaisons and airshed groups like the Montana Idaho Airshed Group (MIAG) help to create relationships and coordinate with large burners. The MIAG meets biannually to resolve issues among burners and DEQs. In California, a new MOU partnership is in place to problem solve. People said these arrangements are essential to smoke management programs.

Database, Modeling, Information Tracking, and Information Sharing

A new database in NM has been very helpful (the data can be uploaded directly to EIS for inclusion in the NEI) and MT and ID both agree that the Airshed Management System (AMS) is key to tracking daily requests and approvals.

One participant mentioned it has been very helpful to have the smoke management field guide to learn how ignition patterns for improved dispersion mitigate smoke impacts.

The National Wildfire Coordinating Group call has been an important call to share information nationally about smoke. Another agency that air quality smoke managers have been connecting with more are state department of health agencies. In some states, the health department and environment department are separate which can hamper data and information sharing and public outreach.

Prescribed Fire Exceedances

One participant stated that there have been very few exceedances from prescribed fire, which can be a measure of successfully implementing a smoke management program in line with air quality goals. Another participant said that they rarely have to ration prescribed fire but do have to look at background PM levels from other sources when considering prescribed fire emissions.

[1] Compiled from Fire and Smoke Collaboration JamBoard

Recognition of the Importance of Rx Fire

There is a renewed investment in smoke at the federal level, and at least one participant mentioned there have been state legislative efforts to increase acreage burned. In addition, public reception of prescribed fire activities has been favorable, except when burn windows are short or smoke impacts communities beyond tolerance. One participant mentioned that the support for prescribed fire in their state is there in part because burners must communicate with smoke-vulnerable populations.

Public Engagement and Building Trust

Providing educational materials and working towards building smoke-ready communities have been important foci of most air quality smoke managers. For example, Placer County, CA developed a prescribed fire/smoke management brochure to distribute at workshops. In Oregon, there has been an increase in trust from communities, which is also echoed by MT, due in part to more effort placed on public outreach regarding smoke. One participant mentioned the research materials that come out of the wildfire resilience smoke subgroup have been helpful when in their operations and implementation.

Flexibility in SMPs

In Montana, the flexibility in the design of the SMP allows burns to be accomplished in remote areas where impacts are low.

Challenges

Communications and Relationships with Air agencies, Burners, State Forestry and Natural Resource agencies, and Federal Land Managers

One participant stated that restrictions for small and large burners and getting notice out to authorities has been challenging. There is also a need to have a coordinated message with FLMs. In that same vein, another participant stated that as prescribed fire increases, the need to maintain close collaboration across agencies may pose a challenge.

Of particular concern is the challenge of communicating with nearby districts/states about transported smoke.

Public Engagement and Building Trust

Public outreach is especially tricky when smoke from prescribed fires impacts individuals. Although improving, communication with the public about the need for prescribed fire always poses a challenge. When prescribed fires escape, like in the Spring of 2022 in New Mexico, the pressure from agencies and political leadership can limit the amount of prescribed fire in the future, and building back the trust can be very tough.

Unknown Health Impacts

Many agencies are concerned about the unknown health impacts of fire, especially as it related to quantifying how long it takes to recover from smoke events.

Databases, Modeling, Information Tracking, and Information Sharing

Some agencies depend on Forest Service tools to assist communications with burners that are no longer available (for example, Fast Tracks). Communications with burners are difficult without this system. Another agency brought up questions and challenges regarding how to incorporate Purple Air

monitoring data into decision-making. One participant stated a need for models to inform the public more accurately about the time and space of smoke impacts; another stated that a database the public could access is needed.

With no Prescribed Fire…

What are the trade-offs of not doing prescribed fire? Alternatively, what are the unintended consequences of not completing prescribed fire?

Need More Staff / More Resources

Many air agencies are understaffed and need more personnel to help implement the smoke management program. One participant mentioned the need to bring National Weather Service Predictive Services expertise to help with prescribed fire.

More stringent NAAQS / Other Air Pollutants

Many participants cited a new PM NAAQS as a concern, especially in relation to the need to increase the prescribed fire.

There is also a concern regarding the cumulative impact of PM and ozone. Also of concern are the air toxics that enter the atmosphere from household materials burning. Another participant stated that carbon monoxide is a concern.

Outdated SMPs or Other Regulatory Challenges

Some states mentioned that their SMPs and rules are old and do not reflect what is currently implemented in the program. In some cases, specifics of the rule can hinder implementation, for example, an old rule requires data regarding the burn the day after the burn, while the new rule will allow for 2 weeks after the fire.

For state air quality departments that do not have jurisdiction, it can be difficult to see the see day-to-day changes because another agency implements the SMP. For Tribes that have delegation agreements with EPA, a change to the FIP for the Tribe will pose a challenge for SMP implementation.

There is also concern regarding how to address wildfire risk, climate change, and environmental justice in SMPs. These themes have not typically been addressed in regulatory actions and yet are increasingly germane to smoke management.