



WESTAR Prescribed Fire and Smoke Management Dialogue

Summary of February 28 Meeting Themes March 27, 2019 (FINAL)

Overview

On February 28, 2019, at the WESTIN Hotel in Denver, Colorado, the Western States Air Resources Council (WESTAR) convened the second of two *Prescribed Fire and Smoke Management* dialogues. During the meeting, state air quality and federal, state, and private land management agency staff met to share perspectives and lessons learned with regards to prescribed fire, smoke management, and air quality objectives. The February 28 meeting agenda was informed by the major themes from the January 23-24, 2019 dialogue.

The meeting facilitator, Ross Strategic, conducted interviews with state air quality and federal, state, and private land management agency staff in advance of the January 23-24 meeting to establish an understanding of the current programmatic landscape, key interests, needs, and challenges related to prescribed fire, smoke management, and air quality. On Day 1, state air quality agency staff met to share perspectives and learn about one another's smoke management programs, as well as explore challenges and identify best practices across the major elements of a prescribed burn. On Day 2, state air quality staff reconvened to build on their Day 1 discussions and held a short conference call with state and private land managers. Federal land managers were unable to participate in this first dialogue due to the partial federal government shutdown; however, WESTAR staff were able to hold a conference call on February 20 with federal land managers to brief them on the January 23-24 meeting themes and hear their perspectives in advance of the February 28 meeting.

This document summarizes the major themes from the February 28 meeting and recommendations for potential actions that can be taken to enhance state air quality and federal land management agency collaboration and coordination and improve program outcomes related to prescribed fire, smoke management, and air quality objectives. The degree to which state air quality and federal land management agencies will be interested and/or willing to take actions to enhance their respective programs will vary depending on their context and, in part, upon their capacity to do so. Each of the western states has a unique regulatory structure and approach to air quality management and prescribed fire permitting. Similarly, federal land management agencies are evolving towards greater consistency but still have unique agency and geo-ecological contexts.

Meeting Themes and Recommendations

Theme #1: “Engaging Early and Routinely During the Planning Process”

State air quality agencies have opportunities for improving understanding and engagement with federal land management agency’s processes that determine desired fuel load management options.

Federal land management agencies conduct a host of analyses and consider a range of options (including emission reduction techniques) to reduce fuel loads to support forest health and resilience and reduce the risk of catastrophic wildfires. These include land management plans and efforts through the National Environmental Policy Act (NEPA) to evaluate the various ways appropriate fuel load reduction could occur in specific landscapes. The NEPA analysis may occur as much as 3-5 years prior to when an annual prescribed burn plan might be submitted to a state air quality agency for approval. In order to fully understand the landscape being analyzed, the scope of land management plan and NEPA efforts is significant, including evaluation of prescribed fire and smoke management alternatives, water quality, air quality, endangered species, cultural resources, etc. Often the NEPA analysis will include several prescribed burns, and alternatives to prescribed burns, occurring in a large geographic area, as well as many other activities occurring within the land use management plan area.

Federal land manager’s burn plan submittals may not include all details of these prior analyses – including consideration of alternatives to prescribed burning, emission reduction techniques, and other landscapes that were evaluated and ultimately deemed ineligible for prescribed burning – which state air quality agencies might want to understand explicitly while reviewing the burn plans. Resource constraints as well as degrees of risk that different landscapes pose for possible smoke exposures of concern preclude state air quality agencies from reviewing all documentation associated with federal land managers’ decision-making for all landscapes and fuel load treatment options.

Recommendation:

State air quality and federal land management agencies should find opportunities to engage at the beginning of each major planning cycle (i.e., annually for each NEPA planning effort) and compare the geographic areas of greatest concern for possible smoke exposure with the landscapes being analyzed for fuel load management. This overlap is likely to be in complex geographic locations such as the Wildland-Urban Interface (WUI) and other areas with poor drainage, smoke sensitive populations, or competing sources of emissions. State air quality agencies should then continue to engage and review the steps the federal land managers take to select the preferred option for fuel load management based on the level of concern that each landscape represents. Development and consideration of this **‘key map’** overlay – which would highlight the geographic areas of greatest concern for possible smoke exposure being targeted for fuel load management – can effectively channel early interest and attention to the key areas of concern, prioritize alternatives to prescribed burning in the areas of greatest risk of smoke exposure, and ensure that subsequent consideration of requests to burn are considered in light of the previous efforts to consider alternatives to prescribed burning. State air quality and federal land management agencies should coordinate and develop this ‘key map’ early, and state air quality agencies should track NEPA and other land management plans at appropriate intervals (i.e., on an annual basis) so as to understand and review the planned and proposed fuel reduction measures that would be of key interest.

Theme #2: “Interjecting and Inviting Connectivity”

Opportunities exist for improving connection and interaction among the regional leadership of federal land management and state air quality agencies.

In addition to the more formal ways (see Theme #4) that federal land management and state air quality agencies can seek increased cooperation, numerous operational opportunities exist for improved engagement. These include joint pre- and post-burn season planning meetings, RX 410 Smoke Management courses, burn boss refresher exercises, explicit on-the-ground participation by state air quality personnel during a burn, and post-burn assessment meetings. Many western states already do some or all of these activities; singularly and collectively, these opportunities build a common base of understanding regarding goals and requirements and enhance understanding of how each party operates and what specifically they want to accomplish to fulfill their mission and responsibilities.

Recommendation:

Both state air quality and federal land management agencies should assess the value of engaging together in the range of routine operational opportunities to connect and learn from each other and share priorities, and select those that resources allow them to participate in. Equally importantly, the leadership of each party (i.e., state air quality directors and regional leadership of federal land management agencies) should proactively ensure working relationships exist that can enable each to ‘pick up the phone’ in order to stay in touch and work on issues as they arise, i.e., recognize that communication is a ‘two-way-street,’ don’t wait to be contacted. Leadership from state air quality agencies and federal land management agencies should extend invitations and ask to be included proactively to build relationships that can be most helpful when dealing with the inevitable issues that will arise over the course of the prescribed burn season and beyond.

Theme #3: “Building Trust, Knowing What’s Happening, and Who is Engaged”

There is a need for productive interaction on-the-ground as prescribed burns are approved, conducted, and assessed.

Developing common or at least shared messages about upcoming prescribed burns, including why they are necessary, what they hope to accomplish, what to expect in the affected area, what to do to prepare for them, and who to contact if smoke intrusions occur is needed to efficiently and effectively approve and conduct prescribed burns and to engage and connect with adjacent and potentially affected communities and smoke sensitive populations. While federal land management agencies have the primary responsibility to develop a communications and action plan to protect the public from prescribed fire impacts, other key stakeholders, such as local community and environmental organizations, Forest Health Collaboratives, and state and local departments of health can play a central role in preparing communities for prescribed burns through communicating the reasons for the burn, how it is being conducted, how to respond if the burn produces actual risks to people or property, and what the burn actually accomplished in light of its original intent and purpose.

Wildfires can put communities and property at risk, some with catastrophic results. While all fires on federal lands – whether wild, human caused, or prescribed – are managed to some degree, they do not all represent the same level of risk from excessive smoke exposure. In addition to ‘key maps’ (see Theme #1 recommendation)

that identify joint priority areas of concern for health impacts from smoke, there is a need for establishing working relationships between the personnel involved in managing prescribed burns of mutual concern. Determining the shared desire of engagement between state air quality agency personnel and federal land managers can contribute to the trust and communication needed to stay on the same page as potential risks from prescribed burns are properly addressed. For example, in the case of multiple-objective fires, federal land managers have strict protocols for how these types of fires are managed, including air quality considerations, and state air quality staff realize they may not be engaged in real time decision-making. However, coordination and communication can occur through venues such as cooperator meetings, via Air Resource Advisors, pre- and post-burn season planning meetings, or other direct communication in the case of a need to issue advisories.

Recommendations:

1. Joint efforts led by federal land managers should occur to establish a clear and comprehensive approach to planning for and conducting prescribed burns, and if necessary, responding to smoke intrusions that create community concern. This is especially needed for burns that are in complex geographic areas of concern for state air quality agencies.
2. At pre-burn season planning events and during the prescribed burn season, federal land managers and state air quality agency personnel should coordinate with each other to develop and exchange a contact list of engaged staff and their respective responsibilities, as well as any protocols needed to structure effective communications during the burn season as circumstances require. Federal liaisons and Air Resource Advisors should be utilized and relied upon to support and facilitate this communication and state air quality agencies' leadership should proactively connect as needed to ensure that the interactions remain on point and productive.

Theme #4: "Putting Prescribed Fire and Smoke Management in the Secretary/Governor Loop"

High level efforts are occurring to align federal land management agency and western state governor's priorities regarding forest health, resiliency, and reduction of catastrophic wildfire events.

There are a variety of existing agreements and other documents that reflect efforts between states and federal land managers to promote forest health and resiliency, including the Memorandum of Understanding between the Western Governors Association and the US Department of Agriculture (USDA), National Cohesive Wildland Fire Management Strategy, Good Neighbor Authority, Restore New Mexico, Utah Partnership for Conservation, and USDA Shared Stewardship initiative. US Forest Service (USFS) also recently updated and amended their smoke management guides to reflect the increased attention, resources, and protocols they are directing towards smoke management. The updated smoke management guides and other agreements referenced above are currently being collected and posted on the USFS website.

The Western Governors Association recently released a policy statement emphasizing the increased use of prescribed fire across the western landscape. In addition, the recent Executive Order 13855 on *Promoting Active Management of America's Forests, Rangelands, and other Federal Lands to Improve Conditions and Reduce Wildfire Risk* and subsequent joint response from the Governors of California, Oregon, and Washington seeking increased state-federal land manager cooperation are examples of recent efforts aimed at developing agreements on cooperating to maintain a healthy and resilient western forest landscape, including the use of prescribed fire and smoke management activities. In doing so, there is an emphasis on identifying and assessing

the multi-faceted social, economic, and environmental concerns inherent in these activities to ascertain if a joint vision is emerging in each of the western states.

Recommendations:

1. State quality agencies should engage through their respective Governors on issues of concern with federal land management agencies, including prescribed fire and smoke management, as these high-level discussions move forward in each state. Similarly, federal land management agencies should seek participation of state air quality agencies when high level discussions with Governors are occurring.
2. USFS should notify state air quality agencies when the updated smoke management guides are finalized. State air quality agencies should review the updated USFS smoke management guides and reflect in their own procedures how best to interact with federal land managers regarding smoke management and bring any questions or concerns back to federal land managers.
3. State air quality and federal land management agencies should coordinate to ensure that any agreements that exist in states regarding prescribed fire, smoke management, and air quality objectives are included on the USFS website and review other agreements as examples for strategies to improve state-federal land manager coordination. USFS should maintain the website and contact state air quality agencies for additional information as needed.

Theme #5: “Modeling, Monitoring, and Tools for Effective Fuel Load Management”

Developing and sharing technical expertise can improve forecasting, decision-making, and on-the-ground data gathering.

Significant investment at the federal level is being made to improve modeling and monitoring of air quality and meteorological conditions prior to and during prescribed burns and wildfires, and to enable more nimble deployment to prescribed burn areas that can be treated under proper conditions. State air quality agencies have invested to various degrees improvements in their own modeling and monitoring capabilities. Sharing or combining these efforts could facilitate both improved forecasting methods and better on-the-ground decision-making. Developing and sharing data sets can also improve the effectiveness of models and support the learning that needs to occur from prescribed burns conducted each year across different landscapes.

Recommendation:

1. State air quality agencies that have the capacity to share technical methods and improvements should connect with federal land management agencies to develop efficient ways to do so.
2. If air curtain incinerators are considered the preferred approach by state air quality agencies for effective fuel load removal in a given area, state air quality agencies and EPA should consider ways to facilitate and expedite the acquisition of necessary permits, especially if the alternative would be implemented by an adjacent community partner.

Theme #6: “Ensuring that State Capacity isn’t a Bottleneck”

As there is a concerted effort to increase the pace and scale of prescribed burns, the capacity of state air quality agencies to perform their responsibilities and engage productively with federal land managers as described in the preceding themes may become a pinch point.

Federal land management agencies have increased their resources through investments in both capital equipment and personnel that can assess, prepare for, and conduct more and more frequent prescribed burns, subject to state approval. At the pace and scale of prescribed burning to date, state air quality agency approval and engagement does not appear to be a major impediment to the amount of prescribed burning that is currently approved and conducted (approximately 50% of approved burns are actually conducted in a typical burn season throughout the west¹). However, state air quality agency capacity will change as the pipeline of properly assessed and selected landscapes for prescribed burning expands in the next few years and beyond.

Recommendation:

Federal land management and state air quality agencies should remain in regular dialogue on how each party has been able to meet prescribed fire, smoke management, and air quality objectives in light of their respective missions. This dialogue (along with Theme #2 recommendation) can improve the quality and trust of state-land manager interactions and mutual support for each other's missions. If the dialogue identifies gaps or pinch points that are due to resource constraints, more specific solutions and options should be identified and communicated to the appropriate entities that deal with resource allocations and priorities.

Theme #7: “How to Account for What No One Wants or Plans for: Exceedances”

Invoking the Exceptional Events rule for a prescribed burn represents both a challenge and possible opportunity in identifying and responding to air quality emission exceedances.

EPA is in the process of finalizing guidance on the potential use of the Exceptional Events rule for prescribed burns. EPA is not intending there would be any specific regulatory requirements or additional restrictions on the guidance that would limit states' ability to determine the clear and convincing evidence of causality of prescribed burn caused exceedances, believing that flexibility in accord with a state's smoke management plan is both desirable and necessary. EPA and the states anticipate and desire that the Exceptional Events process would be invoked rarely, if at all, for a prescribed burn.

Some states are open to the idea that an Exceptional Events demonstration for a prescribed burn may in some specific circumstances be appropriate but are concerned that the evidentiary requirements could be prohibitive. Other states believe that an Exceptional Events demonstration for a prescribed burn would be contrary to their mission to protect air quality. Federal land management agencies believe that if the pace and scale of prescribed burning is increased to accelerate efforts to support forest health and resiliency and to reduce the severity and risk from catastrophic wildfires, there may be a need to reassess the level of risk that should be taken when designing, approving, and conducting prescribed burns; and the Exceptional Events process should be available for consideration if an exceedance, however rare, does occur as a result of a prescribed burn.

¹ There are several factors limiting the application of prescribed fire, including increasingly shorter burn windows and an inability to mobilize adequate resources when burn conditions are favorable; concerns for community health and safety; presence of non-attainment areas; potential visibility and regional haze impacts; unfavorable weather conditions and challenging topography; and competing sources of emissions within airsheds.

Recommendation:

State air quality agencies that are interested should continue to engage EPA over the Exceptional Events guidance and continue dialogue with federal land managers as to how states, either through their smoke management plans or other venues, would choose to use the Exceptional Events process, or not, in the case of an exceedance from a prescribed burn.

Next Steps

WESTAR will develop specific recommendations for the air directors of the 15 WESTAR states.