

Recommended Actions

Prescribed Fire and Smoke Management Summit II Joseph W. Jones Ecological Research Center

From focused Discussions of Key Prescribed Fire/ Smoke Management/ Air quality Issues

February 20, 2015

Topic 1: Identify Southeast-specific prescribed fire and air quality goals and issues that could help inform EPA's re-evaluation of the Exceptional Events Rule, air quality standards, and fire policies (Co-leads: Frank Sorrells and Karen Hays)

Recommendation 1.1: Support a scientific study that specifically shows the correlation between Prescribed Fire and Air Quality in the Southeast to accurately quantify the effects of smoke on air monitoring and air quality standards.

Basis: We need to have scientifically based data to show the effects of normal prescribed burns on air quality (not exceptional events), and to know the difference between prescribed and wildfire impacts. We need to understand what the monitors are picking up from prescribed fires and the difference between burning on "good days" versus "bad days."

Action 1.1.1: Randy Strait will pilot an analysis of prescribed fire data from monitors in NC (note: think about complications from open burns.) As part of this analysis data from sample days will allow the comparison of wildfire and prescribed fire burning activities to specific air monitor readings.

Action 1.1.2: Alan Long will float the idea of a scientific study (or a literature review, at minimum, to see what information exists for the Southeast). Note the information available on military land case studies of operational prescribed burns (SERDP)

Recommendation 1.2: Assist EPA air quality rule makers in determining appropriate standardized definitions of fire terminology and minimum characteristics to consider as "Basic Smoke Management Practices (BSMPs)."

Action 1.2.1: Fire Summit participants suggested NWCG fire terminology definitions and NRCS's categories of criteria for BSMPs would be good places to start. (State Fire Chiefs review and report back to group)

Topic 2: Identify information needs and data gaps relevant to fire activity and emission production from prescribed fires. How can states provide best data to EPA for emission modeling? (Co-leads: Rick Gillam and John Fish)

Recommendation 2.1: Look into SmartFire/Blue Sky to get more comfortable with the quality of the emissions data. Look at the underlying data and assumptions. Seek to reconcile the differences between state calculations of emissions and those produced by SmartFire/Blue Sky

Action 2.1.1: Dave Frederick will talk with Scott Goodrick about how this recommendation might be accomplished

People to involve: Randy Strait, Rick Gillam, GA and FL SME's

Recommendation 2.2: Investigate the ability to coordinate fire data being collected across the South using existing mechanisms like FAMWEB (NASF) or IRWIN

Action 2.2.1: Rick Gillam will look into this by first having a conversation with Keith Smith (NASF), Roshelle Pederson (NWCG) & NEI

Recommendation 2.3: Assess how big a difference there is between authorized acres vs actual burned acres and then develop ways to address the problem

Action 2.3.1: John Fish will bring this issue to the fire committee at the summer SGSF meeting

Action 2.3.2: Alan Long will raise this idea as one for possible funding through JFSB

Action 2.3.3: Mark Melvin and Frank Sorrells will bring the issue up to the state/national prescribed fire councils.

Recommendation 2.4: Determine whether there is an assumption in models currently being used that when peat is present in a burn location it is actually available and being consumed by fire

Action 2.4.1: Rick Gillam will check on the intent of the language around peat burns and get back with the group (and Darryl Jones in particular)

Topic 3: Identify communication, outreach and education opportunities that will improve coordination between air and forestry staffs across agencies (Co-leads: Darryl Jones and Robbie Brown)

Recommendation 3.1: Increase information exchange between AQ and Forestry Agencies

Action 3.1.1: Each state should host an annual, state-level coordination meeting

Considerations: Face to face is preferred, coordinate how data/concerns will flow between agencies, ensure AQ agency is represented on PFC, share products and coordinate message, encourage local meetings between field staffs

Lead: Fire Chief & Air Director

People to Involve: State Fire Staff, State Air Staff, Field/District personnel

Timeline: Before end of 2015

Action 3.1.2: EPA include in annual meetings with air quality agencies encouragement for continued discussions between state air agencies and state forestry agencies on:

- opportunities to continue prescribed fire
- enhancement of data reporting for prescribed fires
- understanding of the science behind actual emissions from prescribed fire

Considerations: By formally including a discussion about ongoing interaction between sister state agencies, EPA can assist in fostering the relationship as personnel change through the years.

Lead: EPA Region 4 staff and Air Quality Director

People to Involve: EPA Leadership, State Fire Leadership, State Air Leadership

Timeline: Annually

Recommendation 3.2: Ensure prescribed fire training is available to all burners

Action 3.2.1: Discuss forming a workgroup at the June SGSF Fire committee to:

- Evaluate course length & alternate delivery methods
- Explore ways to recognize prior experience and/or certification from other states
- Evaluate tiered training – introductory level to advanced classes
- Identify similarities in certification training in states
- Explore ways to increase participation by private landowners

Lead: Darryl Jones will bring to SGSF

People to Involve: State Fire and Air Staffs, State Prescribed Fire Councils

FLIPCHART NOTES
from the initial discussion
February 19, 2015

Topic 1: Identify Southeast-specific prescribed fire and air quality goals and issues that could help inform EPA's re-evaluation of the Exceptional Events Rule, air quality standards, and fire policies.

Co-leads: Frank Sorrels and Karen Hayes

What can we do together?

- Get a collective understanding
- Be aware of the monitors and what they are telling us
- Increase communication opportunities (like this Summit)

The goal is to maintain flexibility in how States perform their burns in the development of National rules and policies.

Issue: We need better information about the effects Rx fire has on air quality (and not just the information we collect at the time of a violation). We recognize that pollution from Rx fires has not been a big issue because burn managers are doing a good job of burning within established guidelines. But can we do more?

Possible Actions:

- Support a scientific study that shows the correlation between Rx and air quality and use the science that exists to make the case
- Each State will continue to improve data quality
- Correlate burn days with information coming from monitors to show the connections

Issue: What can be done to improve the next iteration of the Exceptional Events Rule? The goal is to have fewer Exceptional Events (airbag metaphor)

Possible Action: Agree on terms

- Adopt the NWCG definitions
- Involve the Fire Use subcommittee in helping to define terms

Possible Action: Get consensus on Basic Smoke Management Practices (BSMP's)

- Look at NRCS categories
- Do we need both BSMPs and State Certified SMP's?
- Review the "recur" aspects of Exceptional Events in the SERPPAS document

Possible Action: Beef up our education materials/presentations to explain "the why"

- Involve State EPA folks in Forestry courses (either in preparation of course material of actual training)
- Forestry across the states could coordinate curriculum across the region to learn from each other

Topic 2: Identify information needs and data gaps relevant to fire activity and emission production from prescribed fires. How can states provide best data to EPA for emission modeling?

Co-leads: Rick Gillam and John Fish

Issue: The emission factor for the southeast used in SmartFire/Blue Sky is under question

Possible Action: Look into SmartFire/Blue Sky to get more comfortable with the quality of the emissions data. Look at the underlying data and assumptions. Seek to reconcile the differences between state calculations of emissions and those produced by SmartFire/Blue Sky

Issue: How might we coordinate the data being collected across the south?

Possible Action: Could we tie to the data we send to NASF (FAMWEB)? Could we use IRWIN? A good first step would be to have Rick talk with Keith Smith and NEI.

Issue: How to get at the difference between authorized acres vs actual burned acres?

Possible Actions:

- Ask for or require post burn reports
- Survey a percentage of the events after the burn season
- Do an audit summary – apply for a multi-state grant to fund it
 - Look at both the permitted acres vs actual burned acres AND the reduced fuel load consumption

Issue: SC's peat question

Rick will check on the intent of the language around peat burns

Topic 3: Identify communication, outreach and education opportunities that will improve coordination between air and forestry staffs across agencies.

Co-leads: Darryl Jones and Robbie Brown

- Host brown bag lunches that invite talks from Air/forestry
- Face-to-face interactions are best
- Air reaches out to forestry district staff to inform them on regs
- Forestry forwards violations of air regs to air staff for information
- Forestry districts and county people need to know Air people. Invite Air folks to District/County Forestry meetings
- Put an Air Quality rep on Rx Fire Councils in each state

- Share the products produced by Air and Forestry with each other
- Air quality Index: Should it be included in the weather forecast? It is important information for the burn manager. If so, an education element would be needed.
- Would it be helpful to routinely notify Air folks of fires that are set within X miles of a monitor?
- Certified Burn Training: What are the barriers to getting the training needed for certification?
 - 40 hour training is difficult for some (working) folks to commit to
 - Some folks think their years (generations) of experience should qualify them
 - Think about offering a portion of the class on-line (TN has an 8-hour on-line segment of their 20-hr training)
 - Think about the idea of a tiered training – beginning to advanced classes