Roundtable 1 - SMOKE IN THE AIR: What Does It Mean to YOU?

1) Briefly describe an experience where a smoke event affected you in some way: a) What type of information did you receive or send? Who did you get it from or provide it to?

b) Was this information what you wanted/needed? If so, why? If no, why not?

c) What worked and didn't work in relation to how you received the information? Realistically, how could smoke information provision be improved?

Smoke workshop Roundtable 1-B

Suggestions:

- Think about how information is shared and disseminated to the public about wildfires and prescribed fires (i.e.: unplanned v. planned ignitions)
- Think about how FACs see fire v. non FACs
- Think about how smoke affects everyone
- Each person needs to be educated on smoke, not just a few like in the past *Communication/Outreach:*
- It doesn't matter how extensive your outreach is, there will always be people who don't receive message
- When we get to the point where people stop reporting smoke because they're so used to seeing it, then we will have arrived
- Society needs to understand fire is part of the landscape- the pathway to developing this understanding is unknown
- Must make communities aware of fire and smoke- be aggressive with implementation so public is used to seeing smoke, thus more accepting of smoke
- Messaging needs to incorporate timing and length of Rx fires; i.e.: difficult to do in short time span/high intensity
- Need similar resources to conduct Rx fires as wildfires
- Engage local fire departments (especially VFDs) and follow up as leadership transitions
- The only way to help local communities become comfortable with smoke is to expose them to it more
- Develop a "fire culture," especially in urban centers
 - \circ $\,$ How do we do this?
 - What are the barriers? Topography in SW allows for great visibility of smoke
 - Routine exposure to successful events (similar to SE)
 - Community involvement

<u>Smoke workshop Roundtable 1-C</u>

Personal experience:

• Firefighters need better specific info on smoke impacts

Communication/outreach:

- Early education on smoke and fire ecology, use kids to spread the message
- Better messaging for the public
 - Use technology, backed by science
 - VFDs, grass roots groups
 - Reverse 911?
- Start education young- get into schools now to teach about fire and smoke and fire ecology
- Use science and technology as tools

Smoke workshop Roundtable 1-D

Suggestions:

- Educate about burning before Rx burn
- Communication/Outreach:
- Communication for burn piles (Rx) sheriff's office
- Who do you communicate with? What groups need additional info?
- Use graphics in communication
- Access to regulators for information about fire

Smoke workshop Roundtable 1-F

Communication/outreach:

- What is the message? It's constantly changing- smoke, fire policy
 - Are we delivering a consistent message?
- Room for improvement in how we communicate smoke impacts
 - Communication should come not only from PIOs, but from boots on the ground
- Use PIOs/PAOs to explain difference between managed and Rx Fire, i.e.: unplanned v. planned
- Public message- fire is essential, but even some local staff don't understand terminology
- FIO- very important to have dedicated fire information with ops background!
- Hold workshops targeted at public to educate about the benefits of fire *Off-duty Ideas:*
- Smelling Forest Health
- Preach smoke duration
- Education opportunity

Personal experience:

- Very little talk about smoke impacts on fire fighters? But what can we do about impacts? Basic strategies should be discussed with crews, and those supervising
 - Smoke impact info should appear earlier in NWCG training
 - Respirators are lightweight- possibility?

Fire Ops practices:

- Manage for loss of life/property, THEN smoke
- Much easier to manage smoke issues for managed and Rx fire (typically smaller area, burning at lower severity, producing less smoke)
- Burning during better ventilation
- Smoke is always there- burn boss more concerned with ventilation/clearance than where the smoke is going

Smoke workshop Roundtable 1-G

Personal experiences:

- Entire hotshot crew was sick at end of assignment
- Firefighters had no idea of their smoke exposure impacts
- Lots of guessing on fuel loading, other inputs

Fire Ops practices:

- Practices are changing over time- more crew rotation
- Used to be no smoke information in fire camps, but starting to get info in morning briefings
- ICs are asking where to set up camps, IC center, relative to potential smoke impacts
- AZ has SASEM. 95% of people who do the runs- they mean nothing because no one can articulate the results
- Pushing for night time smoke models- some work for smoke that aren't made for smoke
- More research specific to SW is needed
- Be upfront with firefighters early on with potential smoke impacts
- Begin workshops in high schools on fire and smoke
- WY- no coordination among agencies, need better coordination
- Show on social media best practices to reduce smoke emissions- use photos

Smoke workshop Roundtable 1-H

Personal experience:

- Will now try to think of fire less as a fire fighter and more like the public
- Never thought about personal smoke impacts- will think less as a fire fighter and more as public

Communication/Outreach:

- Communication needs to happen quickly- PIOs need smoke info!
- Agencies are doing a good job and need to recognize efforts
- Communication through kids and educational system may be easier to get the message home
- Continue to think of ways to improve communication with public, to educate them re: smoke, fire, FAC/firewise
- Social media, homeowners' associations, other professional organizations, email lists for notification/Rx list, media- catch 22 on sensationalism

- Information may vary depending on crowd and situation
- Agencies are doing their best with available resources, public needs to take some responsibility to stay informed and act appropriately
- Effective and diverse smoke communication is of paramount importance
- PIOs need a greater base of information on smoke management
- Tailor smoke dissemination methods to local area
- Someone will always be "unhappy"
- Look at smoke not as a fire professional but as a member of the public

Smoke workshop Roundtable 1-I

Suggestions:

- Prepare for the worst case scenario concerning smoke impacts
- Incorporate smoke management training earlier in fire training curriculum
- Share more success stories/smoke management planning process with the public
 - Share the "no go" decisions and explain what led to the no go decision

Smoke workshop Roundtable 1-J

Suggestions:

• Need to cross train between fire and public affairs staff to create more transparent, honest, consistent smoke messaging

Communication/Outreach:

- Transparency important but how much information is too much? Does the public respect the hard truth more?
- Transparency and honesty in talking about smoke is key
- Smoke has negative effects on everyone- managers, workforce, public
- Are we really open with the public concerning health issues of smoke?

Observations:

• We are afraid in a democracy to hear the responses when we are honest about the health consequences of smoke

Roundtable 2 - **SMOKE IN THE AIR: Why do we care?** (This exercise is designed to help participants see multiple sides of an issue)

1) Short background presentation by Ron Sherron

- 2) View video produced by a smoke sensitive group from Arizona and discuss
- a) What were your general reactions as you watched the video? (be constructive)
- b) What aspects did you agree and disagree with? Why?

c) When presented with information like this, where would you go to determine its accuracy?

Smoke workshop Roundtable 2-A

Reactions to the video:

- Extremism, most of the time, groups that produce videos like this do not want to collaborate or communicate. However, those in the public that use reason will understand what is try to be accomplished. Work with those whom want to understand.
- It contained selective facts to promote their position. The main thing missing is the fact that a major part of the reason for doing prescription fires is to limit/reduce the smoke, damage, severity of uncontrolled wildfires.
- Sympathy and frustration Everyone wants good health and free of threats; frustration because the concern with personal threats makes people deaf to the large forest problems.
- The video misses bigger pictures issues. It presents a very singular view of a complex issue and multifaceted picture.
- We all value air quality and every effort is made to minimize impacts in reintroducing fire to ecosystems.

• Prescribed burning is only one of many tools used in forest management. *How I would approach the people who made it?:*

- Let them know I have been in a similar situation in the past (chemical sensitivity) and understand their frustration/anger. But tell them that prescription fire is an effort to prevent larger fires.
- Work on developing a personal relationship with the community members, give good information and advice, help them communicate their concerns productively.

Smoke workshop roundtable 2-B

Response to the video:

- "Made me shutdown" (so no effective communications)
- Interesting blend of science, the "selective somewhat science.
- Incomplete understanding of ecological concepts.
- While indictment of FS fire management as cause for human suffering and death, video offered several recommendations for alternative actions.

Smoke workshop roundtable 2-C

Response to the video:

- Fire is going to happen
- No arguing with these people
- Agree with health effects
- Disagree land management ideas
- Disagree idea of extinguishing all fires
- Reference medical findings
- Air quality
- Trend analysis of RX vs wildfire
- EPA

Smoke workshop roundtable 2-E

Response to the video:

- Extreme and negative perspective
- Opinionated
- Lacking supportive research
- Speaks to broader land policy issues
- Emotionally driven
- Some good points
 - Fire as a "silver bullet"
 - Promote diversity of thought
 - Share with folks who disagree with you from a multi-agency approach
 - o Communicate barriers to implement other strategies
 - Look at existing resources by district
- Try to show benefit of what you're doing
- "Education process"
- "One-on-one"
- Take the emotion out of it
- Develop relationships
- Mutual respect
- Active listening
- Visual examples

Smoke workshop roundtable 2-F

Response to the video:

- At some point you have to accept that you are not going to change their minds
- Public meetings
 - o Listen
 - Be humble when answering
 - Only these to provide information, you might not know the answers but that's ok.
 - \circ Set up more meetings at the local levels they live there
- Get the "activists" out on the RX (at least to the briefing)
- Not well informed
- Sensationalistic
- Enough kernels of truth that you can't disregard
- Surprised about focus on mercury
- Good example of bias can find anything on internet to validate
- Difficulty of trying to use materials
- We pay \$600/acre to thin but ticket for removing wood
- Fire is best (only) tool
- "How do you want your smoke?"
- Have to come to state of happiness for both of us
- Where in the middle can we meet?
- If you don't agree, don't run out and print rebuttal

- Some of the points may be true but always know that there may be more to the story
- Need to include smoke impacts in your desired results (not just conditions within the actual burn area)

Smoke workshop roundtable 2-G

Response to the video:

- Nice to hear from people on all sides of the issue of smoke from RX fires with specific knowledge in specialized areas.
- Are the alternatives feasible? Realistic? Economic?
- How do we get more information about issues raised? Mercury?
- Why not use goats?
- Why not chip? Log?
- Prescribed burns need to be announced on TV. They should be announced on the front page of the newspaper
- It would help to be able to know how to get information about prescribed burns.
- Check references, check other studies, check credibility (mercury statement and others)
- If known, wouldn't go for a walk outside
- The YMCA would be good places to share info with these sensitive
- Are there alternative mechanical methods that are feasible?
- Emotional
- Air support does not "put fires out"
- To find information accuracy
 - Google scholar
 - Library
- Information on RX fire community centers
- Learned a lot about what's feasible and what isn't
- It was helpful to hear from a member of the public that, once again, we're not reaching people whose main complaint is that they have no/little warning. We're not reaching them!
- How to communicate with select audiences "retired" community prior to prescribed burn

Smoke workshop roundtable 2-H

Reactions to video:

- Questions
 - Smoke environment issue the public
 - Mercury issue
 - Scientific evidence to back up agencies
 - Other effects beside smoke
 - o Sawmills
 - More collaborations among everyone
 - Fires going to happen

- Land management practice
- o "Drip torch baby killer"
- Their position is understandable but ideas, facts, are blown out of perspective
- Is toxic waste release valid?
- We are too late to work with these folks
- \circ These are the extreme
- \circ This is their viewshed
- The video didn't have personal data, stories but many have been to solicit universal buy-in

Smoke workshop roundtable 2-I

Reactions to video:

- Accurate information highroad
- Owe other people information
- Don't get sucked up by a minority
- Be unbiased
- Transparent
- Why we do RX burning
- More costs to society doing RX vs. not doing
 - Mercury in air
 - \circ Lost wood
- How do you work with groups like this? Smoke=death to them
- Extreme side
- Verde valley drip torch baby killer
- Facts in presentation but arranged in an extreme view
- Economics of alternative
- Accuracy of data?
- Third party (unbiased)
- Generational effects, what things improved for next generation
- Adaptive management transparency
- Interagency cooperation
- Listen to community
- Reactionary vs. pro-active communication. Some sensitive groups don't tune into large media sources difficult to contact.
- Forecasting and advanced warning
- People are interested in long-term positive effects, but a conversation on how realistic alternatives to burning are would be helpful to build understanding.
- Communicate why some alternatives don't work
- Make it a requirement to report what impact smoke will have.
- Focused on the short term not long term potential impacts to the ecosystem
- State facts that may not be totally accurate
- Agencies may be underprepared to respond to comments made in the video

- Use scientific data and state the facts
- We cannot stop every fire
- The concerns are real, suggested alternatives may not be realistic
- Conduct more public education in the schools, target the "kids"
- No matter what we do we are wrong
- May be we need data/info from a third party (unbiased)
- If your health is being threatened nothing else really matters and other opinions may not be heard or received
- Cherry picked facts to present on side of argument
- Data interpreted to back their opinion
- Unrealistic expectation of what agencies can provide
- No matter what, someone's views/feelings on smoke are real
- What from video can we take back and use to help the creators?
- Develop regulations requiring disclosure about some by realtors

Smoke workshop roundtable 2-J

Reactions to video:

- Broaden and improve public participation. Public meetings are not adequate. We need to have creative tools for information sharing between stakeholders.
- Support education and sharing at all age levels.
- Need to engage one-on-one, ask for solutions and talk about impacts, costs, and feasibility
- Use partner/stakeholder groups to host public meetings instead of agencies.
- In smaller communities especially, use fire department as a partner
- Collaboration
- Show your limitations and end results desired
- What are their issues and ideas
- Both parties need to meet with a realistic place in the middle
- Build on areas of agreement
- Connect with the affected community
- This takes time, years to reach cooperation
- Be specific about real conditions
- Don't be reactionary
- Have an open mind for new ideas
- Educate the young, they can educate their parents
- Diffuse confrontation
- Citizens are at risk from smoke so communicating with affected citizen is key
- We are aware of the situation of lack of knowledge by the public. Media TV why are we still advertising smoking fire, Smokey Bear fire=bad. That needs to change by educating viewers it's not bad to reintroduce fire back into the ecosystem.

- Get the community involved whether it is getting the youth involved in an effort to get parents involved or include stakeholders because they are directly impacted.
- Ensure groups that are against what you are doing are feeling heard and try to work with them (even if finding a happy medium may not be practical)
- Sometimes we need to do a better job of listening to the publics concerns. We also need to do a better job of allowing them to have a say in what happens on public lands.
- Really bias but that is not a practical solution.
- They have the idea that we can put everything out. There are perfect storms of conditions
- Maybe we do need to consider other treatments
- Gut reaction but then stop and realize this is an emotional response
- This might be about hearts and minds, not science
- There might be a happy medium in this, have a vote
- How do we manage expectations? Local context/analysis
- Less than half the group has ever commented on project
- Collaboration is often hollow, no meaningful change
- Engage local Fire department, increased trust and increased communication
- Larger communities are harder
- Increase volunteer engagement
- Long term engagement, look at school systems