

MINUTES
SMOKE MANAGEMENT ADVISORY COMMITTEE (SMAC)
January 30, 2019

477.552 Policy. It is the policy of the State of Oregon:

- (1) To improve the management of prescribed burning as a forest management and protection practice; and
- (2) To minimize emissions from prescribed burning consistent with the air quality objectives of the Federal Clean Air Act and the State of Oregon Clean Air Act Implementation Plan developed by the Department of Environmental Quality under ORS 468A.035. [1989 c.920 §2]

Committee Members Present:

Gregory McClarren, Committee Chair, Public Representative
Willie Begay, BLM Representative
Rick Graw, Forest Service Representative
Dave Cramsey, Industrial Land Owner Representative
Scott Hansen, Non-Industrial Landowner Representative

Others Present:

Nick Yonker, Smoke Management Manager, Fire Protection Program, ODF Support
Ron Graham, Deputy Chief, Fire Protection Program, ODF
Michael Orman, Department of Environmental Quality Representative
Matt Smith, Department of Environmental Quality Representative
Peter Brewer, Department of Environmental Quality
Christina Clemons, Field Coordinator, ODF
Pete Parsons, Smoke Management Meteorologist, ODF Support
Tom Jenkins, Smoke Management Meteorologist, ODF
Mike White, Coos Forest Protective Association
Shauna Morris, ODF Support
Tracy Guenther, ODF Support
Curran Kleen-Brown, ODF Support
Jim Gersbach, ODF
Jo Niehaus, Lane Regional Air Protective Agency
Brian Schrag, Roseburg Forest Products
Jim Coey, SWFC
Kyle Williams, Oregon Forest Industry Council
Pete Caligiuri, The Nature Conservancy
Ed Keith, Deschutes County
Amanda Rau, The Nature Conservancy

WELCOME – INTRODUCTIONS

Gregory McClarren opened the meeting at 0902. Introductions were made. Michael Orman, introduced Matt Smith, who joined DEQ in December. Matt advised he has been with the Forest Service for 10 years in New Hampshire and has a background in forestry, agriculture, smoke management, and ozone effects.

MINUTES APPROVAL

Gregory motioned for the previous meeting minutes to be approved. Approved as presented.

PROTECTION DIVISION REPORT

Ron Graham, Deputy Chief, thanked all involved in the Review process. Ron advised that Doug is in London working on the fire protection insurance plan. Ron gave an update about the leadership staff getting back to their assigned positions. Doug is back in his position as Protection Chief, Ron is back in his position as Deputy Chief and Russ Lane is back in his position as Fire Operations Manager. Doug will oversee implementation of the new Smoke Management Plan. The Protection division is fully staffed now, although, there are still some personnel transitions. We came through another challenging fire season. Smoke Management staff managed their workload very well. Ron highlighted that Protection is working on fiscal budgets and getting ready for fire season. Headquarter Services met last week to help finalize this year's budget for the legislative session. Peter and Travis Medema are in Medford today for a media event for the Wildfire Council kick off. Legislative session is top priority to get budget in order.

Willie Begay asked about state managed fires, as the agreement does not cover smoke monitors and Air Resource Advisors. He asked about who pays for these resources and will this change in the future. Is there any talk of sharing costs since DEQ has purchased 30 new smoke monitors? Ron mentioned there is a good chance this will be discussed in this new fire council. Ron does not think this has been discussed yet but hopes this new council will ensure that agencies work together.

FUND BALANCE

Nick Yonker referenced the graph titled, "Smoke Management Fund Balance History." Christina Clemons has been added full-time now on the Smoke Management budget. This has brought down the large budget surplus. Nick said the goal is to have a one-year surplus. BLM has a two-year contract now with lump sum semi-annual payments. The Forest Service has also contracted to pay a lump sum as well. Due to the extreme fire season, their first couple of quarterly payments were missed. A payment of \$112,000 is coming soon. This will bring the graph to a more realistic value.

Willie stated that IPP is the federal government's direct deposit system for contracts. Payments are no longer submitted through the mail; we have to work with federal payment system.

Dave Cramsey asked if there are changes to these new contracts. Nick explained for prescribed burning rules they've remained the same. Payments are set to have gradual increase with each contract renewal. Willie mentioned these fees were based on an average of several past year's payments before an agreement was made. Nick added that for BLM we have a two-year contract with set fees and a payment schedule. After each contract period, we will make payment adjustments. The Forest Service contract will be updated each year.

Dave noted concerns about waiting until the next review if there are changes, especially if costs go up. He had concerns about getting in a financial "hole." From subcommittee meetings during the review process, the federal agencies expected a burning increase of about 10 percent. Willie noted they plan to wait and see how the one-time payment works out. Nick said that we are advising land managers to only register what they are actually going to burn in order to prevent overpayments. Dave said he understands this but is concerned that our "front" balance is declining and doesn't want to see private land owners carry this cost burden.

Nick understands and will be watching the future fund balance. We don't know how much increased burning we're going to get with these new rules. Right now we have a surplus.

Gregory asked who was on the financial subcommittee and that those individuals continue to monitor this. All committee members were in agreement.

Rick Graw questioned the expenditures of salary, data systems, PE study, etc. He asked if there are any other deductions we should know about. Nick answered there were minimal expenses before Christina Clemons joined the Smoke Management section. The Review also increased costs due to meeting lunches, transportation, and travel expenses. Gregory anticipates increased cost due to implementing this Review. Rick questioned whether DEQ has adequate funding to sustain participation in the group, Michael replied that they did.

DEQ REPORT

Michael stated the proposed rules were approved by the Environmental Quality Commission (EQC) and described the handout entitled, "EQC Commitments and Next Steps (Jan 2019)." There were many questions from the EQC regarding the Polyethylene (PE) study, the one-hour threshold, and the exemption process. The agencies (ODF and DEQ) committed to investigate and report to the policy boards within one year. DEQ is committed to providing smoke health impact data to see if increased emergency room visits and other health impacts occur, especially when these prescribed burns are done near Smoke Sensitive Receptor Areas (SSRAs). ODF, DEQ and OHA agreed to coordinate regarding implementing the new rules. There were many questions about PE covers, relating to how much is really being used on the piles and how many of the piles were being covered. There was also discussion about ecological benefit of fire during the wet season vs. the dry season. Can broadcast burns equate to a benefit versus a natural burn that we have prevented from happening? DEQ, ODF and OHA agreed to develop a Memorandum of Understanding to identify resources that we will commit to certain process and how this will be implemented.

Nick asked about the completion timeframe of the State Implementation Plan (SIP). Michael replied that he is not sure. However, once rules are filed we can implement.

Gregory noted the lively EQC discussion. For the EQC there is a steep learning curve about forest management and use of prescribed fire, and consequences of wildfire. Gregory was not sure EQC believes the study about PE is a justification for unlimited use of PE. A great deal of time was spent on this topic of educating the commission. Michael stated the gap in knowledge is around PE. They wanted to know that we were not putting more PE on piles than needed.

Willie asked if public education regarding smoke health impacts will be provided for wildfires as well as prescribed fires. He noted public concern regarding health impacts, especially in SW Oregon. He asked about including information about prescribed burns lessening the effects of wildfire. He would like more participation and inclusion from DEQ for health alerts. Michael thinks this data can help on both sides. Michael stated he would like to coordinate more.

Michael added they have a new Area Administrator in DEQ, Ali Mirzakhilili, who advises changing the name of Smoke Management to "Healthy Forest Management" with a goal to look at other tools besides prescribed burning to mitigate wildfires. Gregory noted Ali was looking at this as "branding" and put a more positive perspective on working toward goals.

Rick stated he is uncomfortable with the gap in knowledge between DEQ, EQC and forest management. He would like to formulate a plan to educate them. Can we provide them a separate presentation about basics rather than present at a board meeting? Gregory noted that BOF has held education sessions previously. Nick cautioned there is consistent turnover of members which makes this challenging. Combined BOF and EQC meetings previously have been used to educate about various programs.

Matt Smith asked if there are any ways locally to educate the boards. One idea is to bring the board to a forest site for educational benefit. Willie noted the Smoke Management Review Committee went on a field trip near Bend which was successful for educating. Dave states he thinks this topic is very important, and with constant turnover, they are not necessarily experts in any field. From a staff perspective it is a challenge to continue to educate so they can make rules in an educated manner. Looking for guidance from Ron and Michael. Ron advised new board members through a "board orientation." Ron advised that he, Nick, and Doug sit with new board members and present information. BOF retreats also offer education. However, he is not sure if a presentation here would be possible, but will ask Doug to look into this.

Action: Formulate plan to educate EQC, BOF, especially new members, at a time other than board meeting, including a question/answer session.

REVIEW OF HEARINGS

Nick gave a summary on the hearings. They began in late August, 2018 in La Grande with only one public comment. In Bend 30 people attended. The forest health interest groups were well organized and supported the exemption process from the one-hour intrusion threshold. At Klamath Falls, 11 people attended. The group was supportive of the rule changes. In Eugene about 15 people attended. Most were supportive of the proposed rules, although Oregon Health Authority (OHA) had concern about how implementation of the exemption would work and asked for a different process of issuing a permit for an exemption. Medford, had a large crowd of up to 150 people due to local media engagement. There was high emotion and many wanted to discuss the topic of wildfire smoke which had affected the area for several weeks. By the time of public comment period came, many had left the hearing realizing the meeting was about prescribed burning rules. Most presented comments were in favor, with some concern over PE use. Michael also mentioned there was concern about how the Forest Service manages back-burning. Nick said that DEQ received over 200 comments. ODF received about 75 written or verbal comments.

At the BOF meeting, Doug Grafe, Michael Orman, Kirsten Aird (OHA), and Nick Yonker presented. Doug gave an overview of the Review process; Michael explained the changes to the intrusion definition; Kirsten presented that there is evidence of short term (hourly) smoke impacts negatively affecting human health, contrary to some statements presented at previous review meetings; and Nick outlined the communication plan and community response plan strategy.

One of the board members, Nils Christopherson received public feedback about concern of the limitation of the one-hour threshold for smoke intrusions and how the exemption process was going to work. Following discussion, the board agreed there was a need for a report out to the board on how the new plan implementation was working after a year. The EQC board also wanted a report out as well.

Nick finished by saying the next step are to enroll the new rules with the Secretary of State and briefly discussed the plan for implementation of the Smoke Management Plan, stating that some rules could be implemented immediately while other rules would take some time to implement.

PUBLIC COMMENT / BREAK

Mike White, with CFP, expressed concern for delayed or lack of payment for new federal fee contracts. Advised specific due dates for these payments. Also expressed support for educating our policy makers and the public.

Additional attendees introduced.

BURNING SUMMARY FROM 2018

Nick referenced handout entitled, "Accomplished Summary by District" for the year 2018. The total acreage recorded so far is 181,000 acres. The goal is to complete the annual report in May. Scott Hanson asked for a projection of how much burning would get accomplished this year. Nick stated there's a desire to increase burning but weather and resources are a limiting factor. Nick suspects there may not be a big change in amount burned this year. Dave thought there might be a slight increase in burning.

Rick asked Nick if he tracks planned acres. Rick wanted to find out if burners did not accomplish what they planned, what were the reasons why? Nick answered saying burners typically plan more than they know they're going to accomplish. This could be related to weather, equipment, etc. Nick said he's not sure if we'll be able to track this for private land. Rick mentioned this data was helpful when he tracked it.

Nick referenced "Accomplished Summary by Owner by District", and mentioned there's a minor difference on the summary by owners vs. summary by district regarding total tonnage. Otherwise units burned and acres burned are the same for each report. Dave asked about BLM land. Nick replied that they are under "federal, region 6" header, not "USFS".

Dave stated it would be nice to segregate landings, broadcast, and underburned acres. Overstating acres actually treated can be misleading. Nick said he has a report for the different burn types. However, the difficulty is when you burn different activities on the same unit, you can only report one burn type. This does create somewhat misleading information. Gregory asked if this makes a difference to quantifying emissions. David stated he thinks this does matter. Sometimes he does not actually get to broadcast burn but only is able to burn the landing piles. Nick cautioned that emission factors are difficult to calculate. Emissions reporting and fuel reporting is not an exact science.

Michael stated that DEQ does use the emission numbers. This issue warrants another look at how the information is collected related to the question about quantifying tons of emissions. Would rather over-estimate than under-estimate emissions. They will look more at these numbers. Dave asked to look at landings, grapple piles and broadcast treatments across all ownerships, to let everyone know exact numbers, because of concern for further regulations.

Nick countered that it's important to look at how much we are burning. The estimates may not be exactly right but we do have trends that are valuable. Rick voiced his agreement.

Rick asked how he will get access to the new data. Nick mentioned that Smoke Management was working with Information Technology (IT) to update our data system to allow field user access. Unfortunately, only districts can view now. This will be good for land owners to use in order verify correct billing. Matt asked about tracking whether PE was used or not. Nick said we currently don't track this. He is unsure how the current system would be used to collect this data. Gregory stated EQC also has this concern. Scott Hanson advised recent surveys show people are using PE very differently. Nick noted that at this time we are not able to track the size of PE on piles.

Nick discussed the map handout titled "Figure 1" from the program's annual report. It shows that in 2017 burn acreage was down about 20,000 acres. This may be due to 5,000-10,000 acres being missed due to initial glitches in the new system.

Action: Updated data system online for all public to view.

Dave noted the unit intrusion percentage is .55%. This means 99.45% of units were conducted without an intrusion, this is phenomenal success.

Rick asked of DEQ if it possible their reports could also include health aspects. Michael mentioned this is something we can look at collecting and will look at what is available. Rick thought Kirsten Aird from OHA might have a way to track this.

Willie asked to get the last five years of burning data for the Forest Service and BLM.

Action: Willie requested Forest Service and BLM burn data for last five years of data (2014-2017). 2018 data available from meeting report.

FIELD COORDINATOR REPORT

Christina presented slide show.

- Christina performed 54 burn day and pre-burn audits in 2018. Her audits included one for Fish and Wildlife burning; they expressed appreciation for these efforts. This builds good will in the fire community. Goal is 30 audits/year.
- Pie chart: Audits by ownership - private 31%, ODF 17%, FS 48% and 4% other.
- We continue to build relationships with districts and Forests to increase awareness of audit program.
- Burn day, smoke tonnage audits chart: Increased audits due to more burning. Also, in her position as Field Coordinator, she is able to focus time on audits.
- Burn day estimate: Burners are overestimating tonnage of their pile burns. The reason may be they are using older methods. Now educating using the Washington state pile biomass fuels calculator. Most audits within an acceptable tonnage range. She will investigate when audit is significantly different from an estimate. Fuel-loading tool home page: overall good feedback in using this tool. Would like standard across the state.
- She provided training exchange (TRES) education in Ashland, Central Oregon, and Springfield. Smoke management seminar done in 2018. This year seminar will be more of a "road show" educating on the updated Smoke Management Plan.
- Burn opportunity maximization, public education, training and outreach, field coordination complaint investigation are other duties conducted. Klamath Falls/ Lakeview restoration project, engaged in the beginning of this plan. Some groups have asked for education ahead of time to help avoid complaint investigation.
- Smoke Management Field Coordinator position has added capacity to the Protection Division

Willie asked if we've accomplished our objectives regarding prescribed burns. She does hear that burners are wanting to get more burning done but are not able to. There have been a few cases where they wanted to burn more, but did not plan for it, so they took pictures to get clearance to burn more. We invite them to call forecasters when it's a good/ great day and want to burn more than expected. Tom added they invite burning staff to call early to get additional approval on these good days.

Michael asked about the audit process. Christina sends letter and instructions to conduct audit and which district/ Forest to audit.

Peter Brewer asked about continued auditing for second or third entry of units. Are the tonnage numbers down after first time burns? Christina said she often assesses the visual fuels prior to burning. She takes photos of smoke but does not know the exact variance of tonnage numbers.

Rick asked about pockets of heavy and light fuels, and does she try to represent this with an average. Christina stated she does not provide specific detail to the forecasters. She does use an average, especially if she has a variety of types of burning. She does give updates and land condition of fuels that may be burning hot to the estimators. Tom said that burn clearance may need to be tailored based on other conditions as well. Rick wondered if methods need to be changed or different information needs to be given to Tom to help avoid intrusions.

Willie asked about graph with piles. Burners overestimated more than they underestimated. Overestimating is preferred. Nick stated that in the 1980s burners were trying to get away with as much burning as they could. He mentioned the Fuel Specialist in the early 1990s noted this underestimated reporting. Christina thinks current tool for calculating now leads to overestimating.

Willie asked if PE covers were beneficial. Christina said, yes. There is much less visual smoke seen with wet piles vs. covered piles.

INTRUSION REPORT

Tom presented intrusion slide show.

- Spring 2018 communities impacted: Bend, six intrusions; Cottage Grove, two intrusions; Burns, two intrusions; Ashland; Baker City; Oakridge; Redmond; Roseburg; Lakeview; and Corvallis. Total intrusion hours: 125, mostly light intrusions
- Total smoke intrusion hours: 125 Hours, 59 in Bend; light intrusion impact: 86 Hours, 41 in Bend; moderate intrusion impact: 25 Hours, 10 in Bend; heavy intrusion impact: 14 Hours, eight in Bend.
- Primary causes determined: 12 events (67%) were caused by inversions/night-time drainage winds. Both Cottage Grove events and the Corvallis intrusion appear to have been caused by burning too long and having smoke pushed along the ground by incoming marine air. The Roseburg intrusion involved burning into a marine push, as well as the district allowing too much tonnage by misinterpreting the Standard Guidance Matrix. Additional spot fires burned outside the unit further contributing to excess smoke emissions.
- Nephelometer and PM2.5 graph shown for Bend from April 21- May 24, 2018.
- Fall 2018 intrusions: intrusion into Bend, total smoke intrusion hours: 17 hours, light Intrusion impact: 5 hours, moderate intrusion impact: 9 hours, heavy intrusion impact: 3 hours.
- Causes determined included: multiple local smoke sources, unfavorable weather pattern, and lack of field coordination with ODF prior to ignition.

Jo Niehaus asked about a better way to show the PM data for public perception purposes, suggested units update. This data is captured with DEQ given equipment.

Amanda Rau asked about other intrusions that went into Springfield that she was involved with (TNC burns). She wanted to know if ODF coordinates with LRAPA on these intrusions. Tom replied that we generally don't.

Rick mentioned there were two super fog events recently in one month. Rick said these events are forecastable and would like to discuss further about ODF forecasting these events. Nick countered that their forecast focus is mixing and transport direction of smoke, not necessarily forecasting unique hazardous weather features.

Dave asked about further categorizing impact on a community. Was the entire community impacted by smoke or only a small portion of a community? Tom stated we do not have the data for this, although, location of complaints could be looked at further.

Willie asked if we have had complaints about purple monitors. Tom said we don't usually receive complaints. Complaints go directly to the district, then district gives to ODF.

Michael asked about being able to tell where the inversion is? Tom mentioned we can see how accurate the model is behaving and can get good idea where to find the inversion.

Gregory commented that the public gets their information from many sources, even for air advisories. However, an air advisory does not determine whether there has been a prescribed burning smoke intrusion.

Action: Print page with Air Quality graph in Bend. Done in meeting.

SMP IMPLEMENTATION

Nick presented the document "ODF Implementation Plan Example." Nick commented that the matrix format has been the way it has been done in the past. He is open to new ideas. Dave suggested we hold off on how we track this, and first identify what we are going to track.

Nick then introduced the document, "Summary of Changes to Smoke Management Rule (OAR 629-048) January 2019."

- Nick noted the first bullet point does not need to be discussed, as we removed the language that allowed for an agreement between ODF and DEQ that tried to deal with burning outside of protection boundaries. We discovered we could not legally make the change to develop an agreement between ODF and DEQ.
- The first key change was altering the definition of a smoke intrusion. Prescribed burning smoke that does not meet the level of smoke intrusion will be considered an incident that will be logged internally. If smoke exceeds the level of the new intrusion definition in an SSRA, a report will be done similar to what has been done in the past. If an intrusion exceeds the National Ambient Air Quality Standard (NAAQS), in addition to an intrusion report, additional measures will be required to prevent this type of intrusion from occurring again. Gregory stated we need enough language to make it clear to people what the process will be. Nick said the draft directive states ODF, DEQ will meet to discuss how to handle an exceedance.

Rick asked if we will involve the burner in this discussion. Nick mentioned initially ODF and DEQ would discuss then the burner will be a part of the discussion. Rick stated as soon as this happened in Bend, they got on the phone with the burners to immediately trouble shoot to prevent this from happening again. Rick advocated the burner be part of the immediate response. Peter asked about intrusion level limits. Nick responded the directive states if we exceed 35 micrograms per cubic meter at the 24 hour average, this is considered an exceedance and a meeting is necessary. At this point discussion will be who all needs to be part of the discussion.

Willie asked where the measure of success is. Is it trying to avoid 26 microgram per cubic meter or 35 microgram per cubic meter? Has concerns about overnight intrusions.

Dave stated we need a process of how we will do these three things: 1) smoke incidences 2) smoke intrusions 3) and NAAQS exceedances. Gregory discussed an additional three items to address: 1) Do not wait for a year to go by, 2) involve people at the local level, 3) and call rather than write an email. Christina expressed a concern with calling burn boss while burning when he gets close to finishing the unit. Michael said to deal with exceedance after it happens and learn from it. Nick also added that you get only so many exceedances before it becomes a violation that leads to non-attainment for an SSRA.

Rick asked DEQ about exceptional events. Michael stated this could be considered if a burn gets out of hand, but hopes are to plan well so this does not occur.

Willie repeated the question about how to measure success. Nick stated the measure of success would be no intrusion. Willie countered that this might not be success to the burners. Nick replied that the burner has to be within the bounds of these limits. Gregory said the change was going from no intrusions to accepting minimal smoke impacts. He is supportive of burning to the degree that it is within these metrics. If landowners have concerns about not being able to be productive, then encourage discussion about other options/ ideas. Scott stated he thinks it's good to let the burner know. Nick noted we have moved the (intrusion) bar up to where the smoke level can go. This review did not change the process, the definition changed. Nick said we're looking for additional implementation about what to do when an exceedance of the NAAQS occurs. Gregory stated people will be interested in what we do with this new process. Nick mentioned that we have considered this. Smoke intrusions will continue to be reported as in the past. An incident will be a logged internally on a summary report. Information would include date, time, duration, responsible party and magnitude but would not be disseminated. Amanda stated she had concerns about this information leading to more SSRAs. Nick said that OAR 629-048-0140 had some changes based on our new definition that could potentially lead to new SSRAs.

Action item: ODF and DEQ to discuss by meeting with landowners regarding intrusions that exceed the NAAQS.

Dave asked questions about EQC commitments regarding smoke impact data, and stated we will likely have many smoke incidents.

- Nick discussed how our instructions will change based on the new intrusion definition. We are studying this issue. By March 1, we may have new instructions to allow more burning but we don't want to cause a smoke problem.

Dave stated he's interested in understanding data gaps and technology gaps when he thinks about these new rules. Need to be able to estimate tomorrow's particulate. Nick noted if it's a good air quality day, we can allow for some significant increase in the amount of burning, but on bad air quality days, we will likely

not add anything more. It may be less. If the background air quality is already approaching 70 micrograms we cannot burn at all. We'll take a "go slow" approach to increasing the burning under the new rules. Jo advised she likes the 24-hour average and suggests clarifying the 24-hour period (midnight to midnight) period with landowners. Michael asked if the 24-hour intrusion threshold will be more limiting. Nick said he does not know how much the exemption will help, especially for poor air quality days. Michael stated he is interested in hearing more about the one-hour exemption on a good air quality day. Nick explained the need to study allowable burning on good vs. poor air quality days. Rick noted if we need help with analysis, let him know. Gregory advised he does not want to see us burning on the bad days. For vulnerable populations, a little smoke has a big impact. Dave asked if this research is more community-based forecasting than fire weather zones. Nick replied that burning does not always take place near a community and does not see how we can change the forecasting method we currently use. Need to deal with some local effects in some areas (Bend, John Day, Ashland). Some places it will work out fine. The Bend SSRA is the place with the most concerns. In most areas smoke clears out pretty quickly. Dave advised for forecasting we need to make a plan before we allow a lot of burning.

Action: Study how we implement new instructions, especially on poor air quality days (with Rick and DEQ).

- Nick noted we added a definition of "vulnerable populations."
- Objectives of the Smoke Management Plan changed to "minimize smoke emissions". However, there is nothing to implement.
- Nick introduced the next key implementation plan change: incidents and intrusions will no longer be characterized as light, moderate, or heavy. No action needed.
- Nick asked the DEQ representatives what the plan is for using the 30 new monitors for SSRAs. Michael replied that we have monitors in most or all SSRAs. In addition, there is a conversion tool for comparing to PM2.5. Some SSRAs are being converted over to continuous monitors. Peter stated there are a few areas that will not likely have a monitor in the near future, such as Dallas, Sheridan, and Willamina. Nick stated a monitor is needed more in Dallas than in Salem. Veneta would be a good spot for monitor also. Michael mentioned they have smaller monitors that they might be able to use in the meantime. Rick asked for a listing of SSRAs, if the SSRA has a monitor, and, if not, what date is a monitor expected.

Action: Need a spreadsheet/list of all SSRA areas, monitor locations, expected date, area that it's needed and how can we get one there. Also then discuss possible cost sharing of monitors that are needed.

Willie asked to receive the monitor information Rick asked for. BLM is concerned spending additional money on smoke monitors. Nick asked how many monitors BLM/Forest Service have. Peter stated there are about 5-6 Forest Service and 4-5 BLM monitors. Sisters has a Forest Service monitor, as well as Detroit, Baker City, Enterprise, and Hood River. There was a question whether this can be a cost share item. Peter noted DEQ does maintenance on these monitors. Nick commented that if the Forest Service wanted to get rid of them, maybe DEQ can pick them up. Peter noted these monitors are old and starting to fail. Jo asked if the Forest Service monitors are on the DEQ map.

Action: Find out if BLM, Forest Service would like to sell their monitors.

Amanda had question about smoke impact into a non-SSRA. Nick stated any impact into a non-SSRA is an "incident." Dave said tracking this is important for a community to get SSRA status. Gregory stated the community has to make a request for SSRA standing.

- **Key change: statewide communication plan.** Gregory emphasized that the SMP demands this new communication feature. This will be significant work. Nick discussed the three parts of the communication plan: 1) statewide communication plan will need to be done first, working through Jim Gersbach with ODF Public Affairs. Rules have listed what to include in the communication plan in order to help SSRAs formulate their community response plans. Willie asked if communities will have to wait to start their response plans. Nick advised they can start but must add in the statewide plan when it becomes available. Rick asked if there is enough in the rule to devise a community response plan, even without the state plan. Nick stated that for approval a community will have to have all the elements in the rule. Rick asked if this can also be part of the community's overall wildfire protection plan. Discussion ensued about whether this is a stand-alone document, and whether there was flexibility to include into a wildfire protection plan. Gregory stated he thinks each community response plan will have some similarities. Michael said that we coordinate these new plans throughout the state and participate at the local level to help answer questions. Gregory mentioned he

and Doug discussed the likelihood of not getting many of these plans in place by May/June. Bend, Oakridge, Klamath Falls and Ashland may be responsive to get plans in quickly. Nick stated the communication plan will originate at ODF and asked for comments on the communication plan itself as far as implementing. Gregory mentioned Kirsten at OHA will help get word out.

Nick said the goal is to develop a brochure to get information out to everyone, referring to p. 19 of the Smoke Management Rule.

Rick asked about section d on p. 20, wanting to know if this will be anything above and beyond what we do during wildfire season. Gregory replied that this is not a catastrophic event. Scott asked about a plan for who would close roads for prescribed burning. Rick also asked about section e on p. 20, referencing how residents can get up-to-date information on anticipated smoke impacts. Gregory mentioned the Deschutes collaborative does this notification and has a good example. Nick mentioned his idea is notifying residents about planned prescribed burns on the Smoke Management website. Michael advised there is a need for the public to be notified through outreach/ advertising, and social media. Nick replied that the map on our website is the best way to find this. Rick requested follow up on this, asking if this will be enough. Also discussed an example of a resident who wants to know about the amount of smoke so she can know if she needs to close her windows that day. Nick replied that we are working in that direction but do not have the capacity to notify to that level of when to close windows. Communication plan can address some of these things such as shelter-in-place, or advising to leave the area. Michael noted this data should be accessible for all communities statewide. Willie noted the "Oregon Smoke Blog" includes prescribed fire. Peter suggested adding a section for smoke modeling. Jo suggested a "one-stop-shop" on the internet would be ideal for the public.

Dave commented on the statewide plan, presenting the idea to have locals help to deliver the message. Consider multiple messages, fire interval, fire frequency and how prescribed burning fits into fire prevention. This needs to be widely delivered. Nick noted public affairs will work on getting this message out.

Michael asked what metrics we are going to use to measure successful outreach. Nick replied that we'll think about this. We are still in the stages of what message we are going to get out. Gregory noted that Bend does have experiences they have learned from and can share.

Community response plan:

Nick said the community response plan is a localized version of the state communication plan. Questions to address include: 1) which SSRAs should be encouraged first to develop a response plan. Nick stated that coastal SSRAs would not likely need a plan due to minimal smoke and limited duration of smoke. Dave stated that he wondered if, under the new rules, coastal SSRAs will get more smoke. Gregory advised he would discourage those communities from having a response plan right now. Nick noted Bend and Ashland are ready to develop their plans right now. Other communities such as Klamath Falls (non-attainment area), Lakeview, Oakridge (non-attainment area) and Medford (maintenance area), may want to have a community response plan soon. These communities have historical smoke concerns, and would be eager to have a response plan. Other areas have had some smoke, such as the coastal SSRAs, but have good weather conditions with onshore wind, preventing smoke from stagnating. Rick asked about the list of communities and recommendations to them, stating the need for response plans for SSRAs that have had repeated smoke incidents and intrusions. Nick replied he had done a cursory analysis to come up with the list. Gregory recommended focusing on first tier communities with health concerns. Scott recommended starting with two areas only, in order to learn how to properly create these response plans. Nick stated he wanted to move quickly due to the new rules. Gregory said he thinks Bend and Ashland are priorities. Michael referring to section 2 on p. 20, stated the rule does not require us to make a list, but that communities come forward and need to develop a response plan to request an exemption.

Nick shared his thoughts about priority SSRAs to develop response plans: Bend, Ashland, Klamath Falls, Lakeview, Oakridge, Medford, Eugene/Springfield, Veneta, Baker City, La Grande, and possibly Corvallis and Cottage Grove.

Dave advised there will need to be a "phase in" timeline and recommends doing two response plans at a time.

Jo advised we let the public know what they can do and who they can go to, if they have concerns to protect themselves. Rick suggested a letter to make them aware of the new rule including wording such as, "per this new rule, we are recommending a community response plan. It is not required, but it is a way for you to educate your citizens." Nick stated he thinks the district forester can assist with information sharing. Jo noted local health

authorities can send the notice or letter. Michael noted a group discussion would be ideal, to help with workload, but that it gets the word out. Nick stated he would like this to come from the districts, someone the community knows. Rick suggested it would be ideal to let communities know they are eligible for a one hour exemption. Ron noted different groups that could possibly help with notifications including Association of Oregon Counties and League of Oregon Cities. Gregory noted the prescribed fire council might have contacts at the community level.

Nick suggested a cover letter with the rule as an appendix. Start at the local district forest office and federal offices, and let them bridge to the community.

Exemption:

Nick stated that Bend is working on community response plan. Ed Keith said they are engaging with the City of Bend about their desire to request an exemption. This will be presented to the city council next week with the expectation they will want to move forward quickly. Pete Caligiuri mentioned there are questions about what will be "adequate" for the response plan. Gregory advised he would prefer their collaborative submit what they have if it answers the questions presented. Rick asked if the response plan is similar to the wildfire smoke protocol, for example using HEPA filters for protection from smoke. Michael replied that OHA, DEQ, ODF had a meeting with OHA wanting to ensure specific populations can protect their health. Jo stated that health effects are similar whether it's wildfire or prescribed fire. She expressed concern that prescribed burn smoke does not turn into a prolonged health hazard. Gregory advised collaboration is essential, especially for these first response plans. Michael clarified they want this in the plan, but would not likely have these types of intrusions from prescribed burns.

Rick asked who approves these plans. Gregory noted this is for the local community to agree on through their city council and county commission.

Summary of what we have agreed to:

- Keep Nick's matrix format spreadsheet for the Smoke Management Implementation Plan.
- Conference call once per month lasting 60 – 90 minutes, including SMAC members and other interested parties. Goal to discuss progress, comments, using a short agenda.
- Meet before fire season in person to discuss problems and concerns. Goal of early June.
- Metrics of success. Doug asked about data to show how prescribed burns are reducing wildfires. Answering the questions: Does the data show trends of how the prescribed burns are reducing wildfire? Are we doing better on the health side of things? Can we see how we are doing once a year? Which metrics do we want to use? Gregory asked for feedback from each SMAC member/agency, and to come up with top two or three needs or things they want to see improved by this work.

Action: Each SMAC member have a list of top two or three needs and send in within the next few months.

OTHER ITEMS

Dave discussed implementation and identifying which knowledge gaps we have, long term costs of program maintenance as a result of implementation. We've lost the SODAR, but now we have a data grid that Pete is working on.

NEXT MEETING

Goal last week of June. Nick will send out doodle poll.

ALTERNATIVES TO PRESCRIBED BURNING

Willie mentioned there are alternatives to prescribed burning. Part of evaluation is to look at other alternatives to prescribed burning for emission reduction techniques. Nick stated we have asked for a report from BLM and Forest Service. Christina will be point person for alternatives discussion. Consensus is that it would be good to have a list to summarize emission reduction techniques and burning alternatives.

Action: Rick requested dates/ locations of road show for this year.

Nick stated the Secretary of State office will put the new rule on our website approximately March 1. Michael added that the new DEQ SIP will follow. Nick said he will update all when the new rule is out.

OTHER ITEMS

Dave remarked the PE study produced great data. If piles are covered, it would be helpful to know how many more tons are able to be burned. As an incentive to use more PE, let landowners know they can burn more tons in a given day. Nick replied that the goal of updating the forecasts is to address PE usage, with the intent that using PE will allow burners to burn more tonnage. Gregory asked for a one-pager about PE covering benefits, with specifics given as soon as possible to burn bosses.

Rick asked if permits are needed with air curtain burners. Michael stated a permit is needed and would like to discuss further. Christina mentioned she will email videos of the air curtain burner in operation. Amanda noted that bio char is being studied further for use but not sure if it qualifies as a burning alternative. The product is used for a soil amendment. Nick also mentioned burning piles from the top down produces more complete combustion and less smoke.

Meeting adjourned 3:47pm.