

**WRAP FEJF Meeting
September 8 - 9, 2004
Coeur d'Alene Tribe
Worley, Idaho**

COMPREHENSIVE LIST OF ATTENDEES

FEJF Members:

Pete Lahm, USDA-FS, FEJF Co-Chair; Darla Potter, WDEQ-AQD, FEJF Co-Chair; Mark Fitch, AZDEQ, FEJF Co-Chair; Dave Randall, Air Sciences Inc.; Bob Palzer, Sierra Club; Angel McCormack, Nez Perce Tribe; Bob Habeck, MT DEQ; Larry Biland, USEPA R9

Outer Circle Participants:

Don McKenzie, USDA-FERA; Chet Sergent, NV BAQP; Suraj Ahuja, USDA-FS; Ron Heavner, USDA/NRCS; Darrel Johnston, WA DNR; Melanie Lombardo, AK DEC; Deb Wolfe, MT DEQ; Christi Gordon, USDA-FS; Lori Clark, USDA-FS; Dennis Haddow, US FWS; George Lester, Mescalero Apache Tribe; Dan Redline, ID DEQ; Karen Wood, WA Ecology; Steve Roe, PECHAN; Lisa Bye (by phone), BLM/FWS/NPS; Mark Schaaf (by phone), Air Sciences Inc.; Gail Tonnesson (by phone), UC Riverside

Other WRAP Participants:

Cathy Messerschmidt, NTEC, Tribal Caucus Coordinator; Don Arkell, WESTAR, State Caucus Coordinator; Tom Moore, WGA, WRAP Technical Coordinator; Lee Alter, WGA, WRAP Policy Analyst

PLEASE NOTE: These meeting notes have been prepared to capture questions, comments, and discussion on the various meeting topics. Please refer to the presentations and documents posted in association with this meeting for greater detail.

SEPTEMBER 8, 2004 8:00 am – 5:00 pm

Introductions (All) & Agenda Review

Announcements

- Pete Lahm has accepted a Forest Service position in Washington D.C. with the Fire and Aviation staff and will start on October 4, 2004. He has a commitment to be at the December 2004 FEJF meeting but his future with the FEJF is uncertain as he moves into this new position.
- Mark Fitch, AZ DEQ has agreed to step up as a third FEJF Co-Chair. Mark's appointment has been approved by the IOC and TOC.
- EPA FEJF Membership will be maintained by Larry Biland. John Kennedy is now the head of homeland security for EPA.

- Sam Jackson has moved on to another position with NV. Chet Sergent has moved back into NV BAQP and will represent NV.
- Bob Greunig is stepping down as the WRAP Co-Director from NTEC. Cathy Messerschmidt will be taking the WRAP Co-Director position.
- Lewis McLeod, Confederated Tribes of Salish and Kootenai, TOC Co-Chair is taking a job with EPA Region 10.
- The WRAP has a new Tribal Co-Chair, Councilman Lloyd Irvine, Confederated Tribes of Salish and Kootenai.

Coeur d'Alene Tribal Council Welcome (Chief Allen, Vice Chair Coeur d'Alene Tribe)

Coeur d'Alene Air/Fire Program (Alfred Nomee, Director of Natural Resources)

- Tribal Agricultural burning SMP
 - Issue burn/no-burn decisions
 - Coordinate with ID DEQ
 - August / September is the burn season
 - Average ~30,000 acres of agricultural burning annually
 - \$1/acre registration fee
 - Permits issued
 - Money pays for monitoring and meteorological sites
 - The tribe itself does not burn
 - They have compliance from non-Indian private owners
 - Looking to expand the SMP to all smoke (slash burning, wood stoves, spring cleanup of yard waste, burn barrels, etc.) and a yearlong program
- Cultural and tribal resource concerns always have to be taken into consideration

Idaho DEQ Welcome (Dan Redline)

- State Office and 6 Regional Offices
- 5 Class I Areas
- Mainly rural state, dealing with urban growth
- Agricultural growth is an issue that they are dealing with (CAFOs)
- Agriculture Smoke Management Program in northern Idaho, ID Dept. of Agriculture – ID DEQ works cooperatively
 - \$2/acre
 - Payment of fee provides safe harbor per State Legislation
 - Those burning on the reservation pay the tribal fee as well as the state fee
- Emissions characterization of Kentucky blue grass fields – bailing versus all residue burning ([WSU website](#)), emissions greater than AP-42 (4 times)
- Cereal grain study in eastern Washington (http://www.ecy.wa.gov/programs/air/pdfs/FinalWheat_081303.pdf), emissions less than AP-42
- ID/MT Airshed Program – started in northern Idaho and has moved into southern Idaho as well
- Working on ClearSky, which is a companion to BlueSky, will account for agricultural burning – (<http://www.clearsky.wsu.edu/>)
 - plume rise characterization studies are being conducted for agricultural burning

- linking the ClearSky and BlueSky results is planned for the future
- has been running for two seasons now and is being refined and improved

FEJF Status

- Membership and Vacancies
 - Emphasis for alternatives to attend if FEJF Members cannot attend the meetings.
 - Industry FEJF Member Dick Hayslip is pursuing an alternate.
 - An Academic FEJF Membership position on the forestry side needs to be filled, previously held by Phil Omi.
 - A Private Rangeland FEJF Membership position is open.
 - A Tribal FEJF Membership position is still open.
 - A replacement needs to be designated by DOI for Tim Sexton.
- Planning Team Meeting Review/Budget

[See documents posted on the FEJF website.]

 - 2005 Budget and Workplan
 - 2006/2007 Workplan

Phase I Emissions Inventory and Continuing Tasks (Dave Randall, Air Sciences)

[See presentations by Air Sciences posted on the FEJF website.]

Agricultural Burning State/Tribe Outreach

- Submission for review during ag. burning season was a problem.
- QC review for some states and tribes may reflect new programs and better compliance with old programs leading to better data collection and reporting.
- The meeting participants were reassured that the FEJF had no intention of assessing a trend between the previously prepared “typical” ag. emissions inventory and the new and improved 2002 ag. emissions inventory.
- The format for the ag. QC notebooks will be the starting point for the Wildfire and Prescribed Fire QC notebooks.
- The QC review packets will not resolve the question regarding what to do for tribes with ag. burning amounts as zero. To further discuss this concern, the ETT agreed to have a breakfast meeting on September 9.

Natural/Anthropogenic Categorization of Prescribed Fires

- By delivering the “natural” / “anthropogenic” refined emissions inventory on September 10, more time is allowed for preparation of the Phase II emissions inventory.
- The “natural” / “anthropogenic” categorization is strictly for the placeholder modeling runs that do not contain the final emissions inventories for the various sources.
- For proper perspective, what appears to be the complex “natural” / “anthropogenic” categorization approach will only apply to prescribed fire, which is only 10% of the emissions inventory for 2002.
- The meeting participants agreed that the “natural” / “anthropogenic” categorization is fine for a starting point, but will look for refinement in the future. Refinement in the future may include use of the FRCC, as currently there is not global enough map coverage to make that transition.
- It was further emphasized that the proposed “natural” / “anthropogenic” categorization is not the rule for future classification.

EDMS Status (Steve Roe, PECHAN)

[See presentation by PECHAN posted on the FEJF website.]

- Will there be an ability to capture meta-data when states and tribes feed in emissions data versus activity data to capture the various emissions calculation methodologies?
- The EDMS output can be model ready files, but the decision of what information to use for modeling is still up to the FEJF.
- Is it realistic to support all three models (i.e., CONSUME, FEPS, FOFEM) and the various versions of each?
- Will there be database storage of hourly emissions? Or will the EDMS only store the base data and calculate hourly emissions when needed?
- Is there a way to make the bottom data streams equivalent to the top data streams?
- The FEJF is at a critical juncture with EDMS and needs feedback regarding the federal, state, tribe, and local needs regarding data input and data flows. A technical memorandum will be posted on the FEJF website for a 2-3 week comment period.
- The FEJF will need to explore what is cost effective and efficient to determine what options, priorities, and level of effort as the EDMS development moves forward.
- Have Steve Roe attend the December FEJF meeting for another update.

FETM Project – Initial Findings (Mark Schaaf, Air Sciences)

[See presentation by Air Sciences posted on the FEJF website.]

- The draft report is to be submitted within the next week (~ September 15) and will go into great detail on all of the WRAP fire policies. The draft report will be made available for comment and then a final report will be prepared.
- None of the models discussed provide seasonal output. The all produce annual or decadal output.
- If the goal is to assess different ERTs at the state level: run FETM for individual administration units and then scale them up.
- If the goal is to assess different ERTs at the WRAP region level: run FETM for different bailey ecoregions and then scale them up.
- Assessment of runs already performed using FETM will be discussed in the report. That information is not readily available for the other models and will not be discussed in the report.
- FETM could be used at a smaller scale (e.g., county, tribal lands), but running FETM is always a question of data availability.
- Q: Is there any place where all of the models have been run simultaneously for comparison? A: The PSW study is now running the models to compare them from a capability standpoint but not a performance standpoint.
- FETM is the only model that evaluates the acres/emissions tradeoff on the landscape scale.
- FETM could be used for the areas in/around the Class I areas.
- EPA has heard several presentations on FETM. FETM has not been submitted to EPA for approval.

Natural & Anthropogenic Guidance (Bob Habeck)

- The task team considers Version 6 of the document to be good and can easily generate a clean Version 7 to be made available for targeted review.
- The main participants in the task team have been state and federal land managers and state air regulators. Targeted review is needed from tribes and private industry.
 - Tribes – suggested reviewers Angel McCormack, George Lester, get additional suggestions from Cathy Messerschmidt.
 - Private Industry – suggested reviewers Mike Dykzel
 - Other names should be submitted to Pete, Darla and Mark.
- A targeted review will be conducted via e-mail; the document will not be posted. Comments will be compiled to make changes to the guidance with a target of having a final document for consideration by the FEJF at the December meeting. As it is not a Policy, it will not need the approval of the IOC, TOC or WRAP Board.
- The guidance document will be recommended by the FEJF for use for “natural” / “anthropogenic” classification of future fires. The final document will be presented to the IOC and TOC to promote its utilization. This document should also be distributed to states and tribes to promote its utilization.

Phase I Emissions Inventory and Continuing Tasks (Dave Randall, Air Sciences)

[See presentation by Air Sciences posted on the FEJF website.]

Rangeland Burning EI Methodology

- The definition of rangeland in respect to the agricultural land definition needs to be clarified for this effort.
- It is more efficient to build this emissions inventory from the top down rather than the bottom up.
- Level 1 is a consistent approach, not necessarily accurate.
- Is the QC review of the rangeland burning emissions inventory within the scope of the Phase I and Phase II contracts?
- Event based data duplication will need to be investigated between the rangeland emissions inventory and the prescribed fire emissions inventory based on range land type and ownership.

Phase II Emissions Inventory and Continuing Tasks (Dave Randall, Air Sciences)

[See presentation by Air Sciences posted on the FEJF website.]

- All work is to be completed by the end of 2004.
- The wildfire and prescribed fire QC notebooks will need to go through a beta review just like was done for the ag. QC notebooks.
- Will the QC notebooks also be prepared for federal agencies (e.g., USFS, BLM, NPS, FWS, etc.)? This was not originally envisioned but will need to be considered especially for wildfire, possibly for prescribed fire as well.
 - The specifics of sending the notebooks to the federal agencies was discussed at length.

SEPTEMBER 9, 2004 8:00 AM – 2:45 pm

Schedule Next Two Meetings

- December 8-9, 2004 [*NOTE DATE CHANGE*] – Location TBD

- Location suggestions – Las Vegas, NV; Palm Springs/Palm Desert
- February 23-24, 2005 – Location TBD
 - Location suggestions – location not chosen for December meeting - Las Vegas, NV; Palm Springs/Palm Desert
- Future Meetings – Dates TBD – Locations TBD
 - States where FEJF meetings have been held less than 3 or 4 times
 - Alaska 0, Montana 0, North Dakota 0, Colorado 1, South Dakota 1, Wyoming 1, Nevada 2, Utah 2, Washington 2
 - Other location suggestions from past meetings as well as this meeting are
 - Montana – Kalispell, Missoula Bozeman
 - Colorado – Denver, Colorado Springs, Pingri Park
 - New Mexico – Albuquerque
- Suggested meeting topics
 - December
 - AoH preliminary results on “n” / “a” apportionment, DRI (Tom Moore coordinate)
 - EDMS Update, Steve Roe, PECHAN
 - Natural & Anthropogenic Guidance, results of targeted review and final consideration
 - Phase I / Phase II Emissions Inventory Updates, Dave Randall, Air Sciences
 - Inter-RPO Wildfire Emissions Inventory Update, Dave Randall, Air Sciences
 - ERT Methods progress, Don McKenzie & Dave Randall
 - Phase III & IV RFP, ETT
 - Suggested presentation by Paul Ervin on ag burning and emissions credits/tradeoffs, possibly even via a virtual presentation, Cathy M. contact him.

Inter-RPO Wildfire Emissions Inventory Status (Dave Randall, Air Sciences)

- The contract between WGA and Air Sciences has not yet been executed.
- Air Sciences is subcontracting some of the work to ERG. Both Air Sciences and ERG are ready to start work as soon as the contract has been executed.
- Three weeks for development of the draft workplan.
- Three to four month duration of schedule for the project.

Attribution of Haze Project Status (Mark Fitch / Tom Moore)

[See presentation by Tom Moore posted on the FEJF website.]

- Review the package on “n” / “a” source apportionment prior to December meeting.
- External review December 2004.
- Please provide feedback on draft of EI summary products (emissions charts) on the website to Tom Moore and Mark Fitch. Note that these are post SMOKE emissions.

Emissions Reduction Technical Methods (Don McKenzie / Dave Randall)

[See presentation by Don McKenzie and Dave Randall posted on the FEJF website.]

- This was a self initiated effort by Don McKenzie and Dave Randall to start brainstorming and provide food for thought for the FEJF discussion.
- Concern was expressed about the utilization of the term “credit”, which led to discussion of potential “credit trading” with other sources. This was not the intent of the presentation. The focus is on being able to calculate the emissions averted not a “credit”.
- The difference between an emission reduction technique and a smoke management technique needs to be made.
- This work needs to address wildland and agricultural burning practices.
- May need to establish a set of rule for use of overlapping ERTs that may cancel each other out.
- A suggestion was made to “package” the ERTs together that are typically used together.
- In terms of proof of ERT use, there needs to be verification opportunity.
- Does the table need to be made three dimensional by adding fuel loading?
- Next Steps
 - Review MACTEC work
 - Separate ERTs from Smoke Management Techniques
 - Identify fuel types
 - Additional source of information - GCVTC Work
 - Additional source of information - Smoke Management Guide
 - Interactivity of ERTs (canceling out)
 - Combinations of ERTs (those typically used together)
 - Separate tables: agriculture and wildland
 - Engage Brian Jenkins on agriculture
 - Hire subject experts to then populate the “blanks” in the tables or to serve as a mini peer review
 - Run CONSUME or other models to fill in the “blanks”
- Deliver Critical January 1, 2005
 - Priorities
 - list of ERTs and fuel types
 - initial estimate of reductions (can be further refined as the work moves forward)
- An extended discussion ensued on the possibility of hiring federal subject experts, specifically federal researchers.

Sensitivity Model Run Results (Gail Tonneson, UC Riverside by phone)

The ETT will be having further discussions regarding the sensitivity modeling.

Emissions Task Team: Phase III and IV RFP (Pete Lahm / Mark Fitch)

There are some changes to be made to the scope of work for the Phase III and IV RFP.