

Meeting Notes
Implementation Work Group
December 6-8, 2006
Santa Fe, NM

Purpose of Meeting: States share status of their planning efforts; learn from WRAP staff and contractor about features of the Technical Support System; review the New Mexico case study on use of TSS tools; See an example of use of the TSS in a stepwise planning process to demonstrate reasonable progress; Discuss interstate impacts; establish training needs.

Agenda Issues:

- Status and projected timing of each state's planning processes, identification of in-state issues;
- Relationships of BART and Reasonable Progress;
- New Mexico case study on use of TSS for dust strategies;
- Example process to demonstrate reasonable progress;
- How to move forward with BART and Reasonable Progress in a timely manner;
- TSS Training needs and schedule

Significant discussion points:

- States are at various stages in development of their RH SIPs
- Several states believe they will submit plans on-time, or not miss the deadline by much;
- Other states are projecting delays in processing BART determinations, possible limits on legal authority, causing some late SIP submittals
- Completing BART determinations in time for "2018 Control-case" scenario modeling may be problematic for several states.
- Reasonable Progress demonstrations should not wait for BART determinations

Status of state planning (roundtable)

See Appendix, with summary table

It appears that some states will have difficulty completing their BART determinations on a timely schedule. This may cause delays in final submittals.

SO₂ BART is important for 309 states that are scheduled to re-submit their SIPs with re-established SO₂ milestones

TSS update, Examples, Training

Presentation at: [PDF](#) or [PPT](#).

TSS website at: <http://vista.cira.colostate.edu/tss/>

This is an overview of current status of the TSS webpage, demonstration of tools, ongoing development work, and suggestions about training needs.

Summary:

- TSS is a resource for support of state and tribal regional haze implementation plans;
- TSS is a focal point for four technical information centers, Emissions, visibility measurements, causes of haze and modeling;
- Interactive dynamic (graphs, tables, maps) and static (reports, documents) tools are part of TSS;
- Currently the web-based system is partially completed, but is functional;
- Development is ongoing, and additional functionality is being added;
- Functional status of each tool is color-coded;
- Continual TSS updates, as new or updated data becomes available, adding links to EDMS, CoHa, Views, Modeling Center

Training program is anticipated early in 2007, including two or more WebEx sessions, possibly a classroom session. Participants will be asked to fully engage in the training, with homework, etc. Sessions would be designed for plan developers, with possible participation by larger audiences.

Consensus that training needs to start with a “TSS 101,” describing system capabilities, how to navigate and use each feature (driving the system), followed by a tutorial on selecting the appropriate information and tools to make reasonable progress demonstrations, or how to best support the demonstrations. (e.g. example shown under “reasonable progress” elsewhere in the agenda)

Action Item: Develop a schedule of training, including two (not twenty) training sessions on TSS tool usage, using WebEx format, followed by a tutorial on selecting appropriate tools to support the SIPs, possibly using classroom format.

NM Pilot Dust RH SIP, Gail Cooke, NM

New Mexico Pilot Study Outline [PDF](#) or [DOC](#)

Presentation: Regional Haze, Dust, and New Mexico [PDF](#) or [PPT](#)

This was a pilot project to test the tools produced by DEJF, provide feedback to DEJF for refinements, provide a template for application of DEJF tools in other Class I areas, and apply as appropriate other TSS tools (Used at end of study). Among the findings and recommendations:

- CMAQ produced large differences in predicted vs. measured coarse mass and wind-blown dust emissions. Much better performance using local emissions. Fine dust predictions were much better. Need an alternate method to calculate CM.
- Plain English and glossary of acronyms in the dust handbook would help users and others understand the data and use of the available tools
- TSS weight of evidence was useful, but need list of which databases contain what information.

All in all a useful example of how to apply some of the WRAP work products, and a prototype for examining dust as a cause of haze in other Class I areas.

If CMAQ model is used, it performs much better using LOCAL emissions data. This was a big problem for dust forum. Coarse dust predictions were 16 times lower than measured values in this study. WY found large over predictions. Model performance for fine dust was much better.

Windblown dust model also had a substantial model of error-less (better performance) for fine dust.

Technical Analysis-Monitoring Metrics Document, Tom Moore

Schedule, conceptual plan [PDF](#) or [PPT](#)

Technical recommendations on monitoring metrics [PDF](#) or [PPT](#)

These presentations and discussions cover the status of modeling relative to 2018 projections including BART, some of the findings of the modeling, data gaps, areas where refinements may be needed. Significant points are:

- Most of the modeling analyses are complete for current base year, projected 2018 base case, though a final check on projected emissions should be made;
- Funding for future modeling is limited, so requests for additional modeling work should be considered with care;
- We know that the prospects of showing reasonable progress goals that are at or below the uniform rate of progress are not likely at any Class I area of the west, due in large part to the predominance of natural smoke and dust (coarse mass) impacts, as well as influences from offshore and international transport of pollutants
- This is amply shown in the source apportionment analyses, which for many western Class I areas show predominance of visibility reducing species from natural and boundary sources. This presents a much different picture than for eastern Class I areas where haze is predominantly Sulfates and Nitrates from stationary and mobile sources.
- Analysis of monthly and seasonal variations of projected 20% worst days' visibility vs. EPA default annual averages showed some, but not a lot of differences. The EPA default average 2018 visibility projections can be used for comparisons with the URP benchmarks.
- Recommendation that instead of using combined visibility, species-specific glide paths and visibility projections will be made to assess reasonable progress on

the “controllable” portion of haze. These data will be used in the Reasonable Progress determinations (see below)

- Discussion of reasonable progress demonstration relationship with BART determined that in several cases, state BART determinations would not be completed in time to incorporate into reasonable progress. Potential problems with out-of-synch SIPs, with a number of states needing to know impacts of neighboring states’ long-term-strategies.

Action Item: Complete survey of state schedules from questions addressed. Develop several alternative approaches for remaining modeling analyses, possibly for SSJF and AMC review and direction.

Action Item: Tom to update the list of what is “on the books”- organize 2018 projection table of top twenty source categories, Send out to states for review to be sure state agencies are comfortable with projections. RMC will do a final modeling run in March, on base-line 2018 projections

Reasonable Progress, Lee Alter

Analysis/outline [PDF](#) or [PPT](#)

This presentation provides a format and potential stepwise process flow to determine reasonable progress goals for Class I areas. Key components include:

- Purpose was to see if proposed demonstration methodology works, using TSS information-particularly the glide slope calculation and the species-specific approach.
- Species-specific comparison of separate Uniform Rate of Progress glide paths help understanding causes of haze and illustrate prominence of boundary conditions and natural emissions (see discussion above);
- Projections of base-case + BART, vs. Long-term-strategies involving non-BART sources, emphasizing that long-term strategies must address sources other than BART;
- Example of species-specific process using a Class I area (Eagle Cap/Strawberry Mt.) and available TSS tools.
- Conclusion is that the methodology works

Action Item: States present would try using the format and process on one or more of their respective Class I areas, and report back. States agreeing are: AZ, NM, WY, CO, ID, NV

Example Questions:

TSS - Emissions Rollback

TSS will not contain attribution rollback from emission reductions, but weight of evidence can be used to provide estimates

Oil/Gas, energy development assumptions
PDF or PPT

SSJF has initiated EI on O&G, and a series of additional tasks to better characterize base-year and possible control scenarios. Emission projections to 2018 will be refined.

Interstate Impacts, Joe & Tom

This discussion showed how the tools on the TSS could be used to address several specific questions. Topics include:

- WRAP analysis tools
- Weight-of-evidence
- Source apportionment
- Example Questions:
 - Utah impacts on Black Canyon of the Gunnison
 - Nevada impacts on Zion
 - Impacts of Wasatch Front on WY and ID Class I areas
- Showed examples of use of PSAT tools to yield bar graphs, trajectories
- Maps tell where to look, but don't provide quantitative information.

OR RH SIP template, Brian Finneran

Postponed-Do over phone

Overview, discussion PDF or PPT

Additional related discussion points:

Reasonable Progress-How to demonstrate in SIP

- Lee's approach is a place to start. Species-specific approach allows cleaner description of what source areas need to be addressed. Combined deciview approach is problematic for most western areas, due in part to the difficulty of applying 4-factor test, and the overwhelming effects of boundary conditions in most Class I areas-these are largely trans-continental, global issues that require federal participation.
- EPA needs to have the 4-factor test applied, appropriately, as a minimum.
- IWG should be forum to describe what they are doing to show reasonable progress, and to reach consensus on defining what reasonable progress is. EPA and FLMs should be encouraged to take advantage of this.
- Consider reasonable progress not as a "pass-fail" test, relative to the Uniform Rate of Progress glidepath. EPA is tending to think this way.
- FLMs will want to see more than "We did BART, and that's it..."
- What is possible to include??

Legal Authority for haze and BART

- States should identify areas where there may not be adequate authority, and where, if any commitments can be made to address other source categories by rule, legislation, further analysis of causes.

Timing of SIP submittals

- The issue of out-of-synch SIPs is important for several states, who need to know what are other states are doing during their planning processes. This is a particular problem if different submittal times are accompanied by use of different modeling results.
- Discussion about what is possible for submittals
- CO is particularly concerned
- Important to keep as close to schedule as possible
- May be policy issue for consideration by AMC-On schedule, but incomplete, or later and complete
- States will need to talk to their respective EPA regions as well as other stakeholders if they will be late

Support for 309 re-submittals

- This is important!!! The WRAP 309 coordinating committee and staff are placing emphasis on re-establishing the SO₂ milestones, but BART determinations are needed

Participation in IWG meetings

- EPA was asked to have all regions represented at the IWG meetings

Next meeting:

April 16-end of week

Summary of Action Items:

- 1.) Send e-mail to IWG-reminder to send projected SIP planning timetable to Lewis McLeod, lmcleod@ntec.org and FLM on planning schedules.
- 2.) Summarize State responses to BART and SIP planning questions and post
- 3.) Summarize issues for air managers/state directors-recommendations??
- 4.) Several states agree to using Lee's reasonable progress approach on at least one example Class I area and be ready to share their experiences with others. AZ, NM, WY, CO, ID, NV
- 5.) IWG Finalize TSS training needs and develop a training schedule.
- 6.) WRAP staff re-issue the 2018 scenario with what is available. States will sign off on 2018 emissions projections.
- 7.) In March, RMC will run a final 2018 scenario model. States can use this for RFP demonstration if it is sufficient.
- 8.) Anticipate another 2018 modeling run with control scenarios, if enough additional controls will be developed for individual SIPs.
- 9.) EPA attendance at IWG meetings will be encouraged