

VISTAS State Consultation Meeting
Federal Land Managers and Environmental Protection Agency
Asheville, North Carolina
June 12, 2007

Attendees/Affiliation

Tim Allen, FWS	Cindy Huber, FS
Diana Andrews, KY	Bill Jackson, FS
Julie Aslinger, TN	Brenda Johnson, EPA Region 4
Vivian Aucoin, LA	Jimmy Johnston, GA
Leigh Bacon, AL	Rhea Jones, EPA OAQPS
Tom Ballou, VA	Kathy Kaufman, NC
Elliott Bickerstaff, MS	Martin Luther, KY
Laura Boothe, NC	Tim Martin, AL
Jim Boylan, GA	Doris McLeod, VA
Lona Brewer, KY	Ann Mebane, FS
Pat Brewer, VISTAS	Brock Nicholson, NC
Joelle Burleson, NC	Michele Notarianni, EPA OAQPS
Bob Carson, NPS	Bruce Polkowsky, NPS
Catherine Collins, FWS	Jim Renfro, NPS
Fred Durham, WV	Tom Rogers, FL
Stacey Gardner, SC	Renee Shealy, SC
Rick Gillam, EPA Region 4	Don Shepherd, NPS
John Glass, SC	Andrea Stacy, FS
Janice Godfrey, NC	Barry Stephens, TN
Todd Hawes, EPA OAQPS	Bob Stroik, NPS
Sheila Holman, NC	Ming Xie, NC
John Hornback, Metro4/SESARM	
Chris Howard, AL	

Objectives

The purpose of this consultation meeting was to overview the VISTAS and state technical analyses that will be the basis of the state implementation plans for regional haze and to receive feedback from the Federal Land Managers (FLM) and the Environmental Protection Agency (EPA) on the presented materials.

Expectations

The meeting opened with participants stating their expectations for consultation.

FLM interests included:

- understanding VISTAS technical analyses and how states will use these analyses in SIPs

- understanding states' reasonable progress goals and having opportunity to consult on these goals
- states' plans for consultation with neighboring states
- states' plans for mid-course review
- states' plans for continued consultation with FLM

EPA interests included:

- learn how states are using technical analyses
- understand FLMs positions
- provide clarification of revised reasonable progress guidance
- observe and report outstanding issues to management

States interests included:

- feedback from the FLM and EPA if technical analyses, when completed, would meet FLM and EPA expectations for SIP documentation.
- Some states would like to consider this meeting to meet the requirement for a face to face meeting with FLM, with further follow up and discussions by conference call.
- Common understanding between states, FLM, and EPA of revised reasonable progress guidance
- This first SIP for regional haze will be a learning experience. States can use mid-course review to evaluate what is working and where revisions are needed.

Technical Analysis Summary

Pat Brewer summarized the VISTAS Technical Analyses (see presentation on VISTAS website, <http://www.vistas-sesarm.org/documents/FinalDocs.asp>). Ammonium sulfate is the primary contributor to haze at the VISTAS Class I areas. Emissions sensitivity analyses showed greatest visibility benefit from reducing SO₂ from electric utilities or industrial point sources and little benefit from reducing NO_x, anthropogenic VOC, or primary sources of carbon. Ninety-six percent of the SO₂ emissions in the VISTAS states are from electric utility or industrial point sources. SO₂ Areas of Influence were defined for each Class I area. In 2018 coal fired electric utility boilers and coal fired industrial boilers are the largest SO₂ emission categories in every SO₂ Area of Influence. Several other industrial categories were minor contributors to SO₂ emissions in the Areas of Influence. Control options and costs of controls were provided to the states.

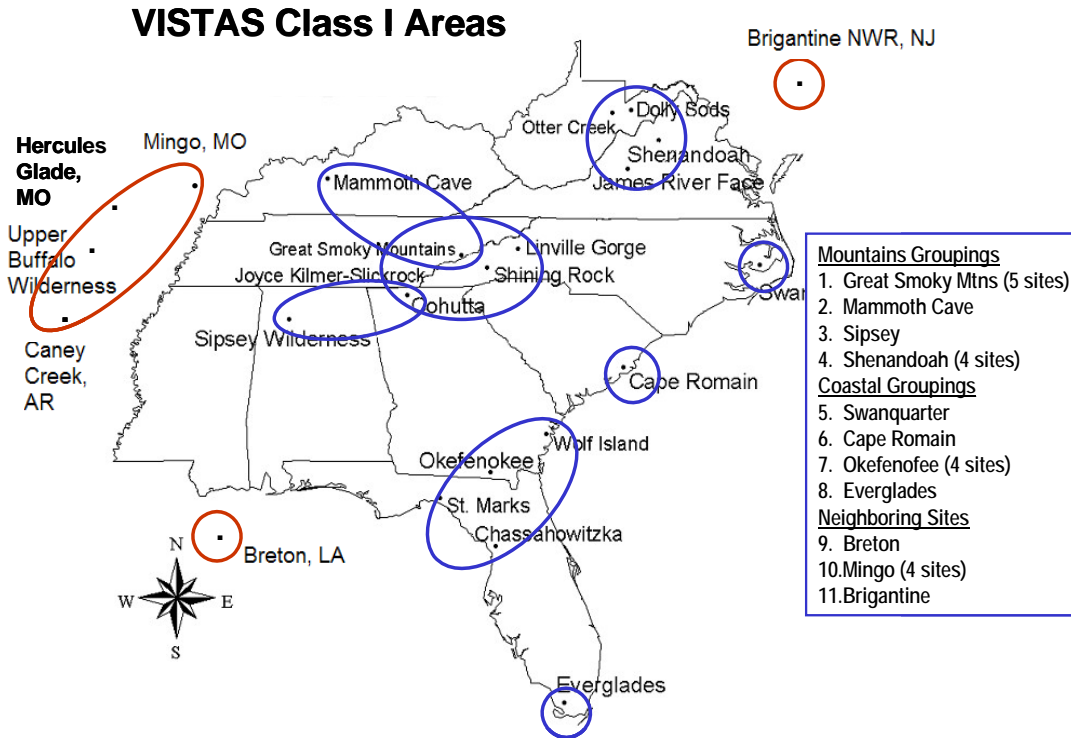
Concurrent Consultative Sessions

The meeting then broke into two concurrent sessions addressing the mountain or coastal Class I areas. Each state then summarized:

- criteria used to rank sources in SO₂ Areas of Influence for Class I areas in that state
- list of sources for which reasonable control measures and 4 statutory factors are being considered

- expected controls from exiting regulations for listed sources
- status of BART determination
- plans for consultation with neighboring states
- next steps

Groupings for of Class I Areas for VISTAS and Surrounding Regions



Status of BART Determinations in Each State

STATE	Complete	Eligible	Subject	Controlled
Tennessee	NO	13	4	1 or 2
Georgia	NO	25	3	1 or 2
Virginia	NO	13	3	3*
S. Carolina	NO	21	14	0
N. Carolina	NO	17	2	0
Mississippi	NO	15	2	1
Kentucky	NO	31	1	1 maybe
Florida	NO	47	9	don't know
W. Virginia	NO	22	3	0
Alabama	NO	31	2	2

*listed individual units, may or may not be the same facility

Some BART subject facilities took limits to exempt out, these are not included as a control

BART control for some sources subject to BART may be fuel switching

Issues Discussed and Resolved

- Reasonable progress goal should be reported using deciview with one significant digit beyond the decimal point (e.g. 25.4 dv, not 25.44 dv).
- Final long-term strategy (LTS) run will not be completed in time for FLM consultation prior to public review. States can report that reasonable progress goal for 20% worst days will be at least as stringent as BaseG2a modeling results and that additional BART and reasonable measures within the state and neighboring states could accomplish greater progress than the Base G2. The final RPG would be reflected in the RH SIP submittal.
- Consultation with non-VISTAS states: AR and MO are consulting with KY and TN. LA is participating in VISTAS meetings as consultation for BRET. MANE-VU states have asked VISTAS states to consult this summer (call in July, meeting in Aug).
- All four statutory factors need to be considered, but if there are no cost effective controls for a source, then the other three factors do not need to be addressed in depth.
- GA found that 2018 emissions for non-EGU sources were sometimes overestimated, likely due to overestimating growth factors.
- SIP wording should note that sources that take emissions limits to exempt from BART cannot go above that limit in the future.

Issues Requiring Follow-up

- FLM asked KY about their plans to consult with MRPO states re impacts on Mammoth Cave
- FLM and EPA asked for justification of the Class I area groupings. The groupings were intended to organize presentation of data for similar sites. The groupings are based on similar Areas of Influence and similar responses to geographic sensitivity analyses.
- Most states used emissions divided by distance (Q/d) and maximum residence time (RTmax) to rank sources in the SO₂ Areas of Influence. Most states used a 1% contribution as cutoff to consider a source for 4 factor analysis of reasonable further controls. GA used 0.5% contribution as cut off. FLM and EPA asked for justification of cutoff value that states selected. FLM also suggested that states consider if a source affects more than one Class I area.
- FLM need follow up from states on BART controls under review.
- FLM would like to help define what midcourse review will look like. Focus expected to be on emissions changes from baseline to 2012 (CAIR, CSA, BART, projected mobile reductions). Trends in monitoring data may also be considered but may be difficult to interpret due to inter-annual variability in meteorology. What commitments will states make if emissions reductions are less than projected in the SIP? Need to describe in SIP how States will check progress and make corrections if/as needed.

- SIP narratives need wording about new source growth and how PSD permitting will be affected, as well as about uncertainty in the 2018 projections. Each SIP must commit to what will be specifically reviewed at the 5-year check. Would like to see specific procedures on consulting with FLM.
- FLM also suggested that States should interrelate PSD and haze by having the haze SIP set a zone around each Class I area to point out to state PSD permittees the area where they need to look more critically at controlling growth to protect the Air Quality Related Values (AQRVs)
- Don't forget deposition data, what improvements in deposition projected? Bill Jackson will make available upon request deposition results for 12 km grid using 2018 Base G emissions (provided by Bill by Alpine Geophysics).
- Consider benefits from ozone and PM2.5 attainment. How will new ozone standard affect visibility?
- Florida needs to discuss with EPA Region 4 its plans for setting reasonable progress process.
- FLM would prefer that they get a copy of the SIPs 60 days prior to the public hearing.
- If states are not going to meet the December 17, 2007 deadline, they need to let EPA know and work with them.
- Since Breton is not meeting the uniform rate of progress glidepath, FLM suggested that emissions sources permitted by Mineral Management Services should be separated from domestic sources (this has not been done to date). FLM also suggested that LA alert EPA that there is a marine treaty issue with MMS permits.
- For Class I areas impacted by sources in different RPOs, it would be helpful if states used consistent methods for weight of evidence and reasonable progress goals. For BRET, LA could do similar AoI analysis for sources as VISTAS states.
- Setting RPG for 20% best days: do states set as no degradation from 2000-2004 baseline or as modeled results for 20% best days in 2018? In follow up with EPA and FLM: rule states no degradation on the 20% best days but also says that can't set goal worse than progress expected under implementation of controls under other CAA programs. If Base G2 model results project that 20% best days will be better in 2018 than in 2000-2004, then states should discuss this is setting goal for 20% best days. FLM pointed out if states use model results for 20% worst days, they should also use model results for 20% best days. States' concern is whether model performance for 20% best days is reliable since most of VISTAS model performance evaluation to date has focused on 20% worst days, not 20% best days. For instance, there are issues with poor nitrate performance issues on winter days that could affect model projections for nitrate in 2018 for 20% best days that occur in the winter.

Discussion of Revised Regional Haze Guidance

- EPA cautioned that states need to be careful to interpret the guidance as a whole and not isolate any single sentence in the guidance out of context of the whole document. The guidance does not trump the Regional Haze Rule or the Clean Air Act.
- States need to look at the four statutory factors to determine what measures are reasonable.
- States have flexibility. The new guidance states that in deciding the minimum RPG it is reasonable to defer reductions to later planning periods in order to maintain a consistent glidepath toward the long-term goal.
- One possible approach is to use uniform reasonable progress to back out what additional controls are necessary.
- \$/dv approach is included in the new guidance as an additional measure of cost effectiveness. It is not intended to be used instead of \$/ton. VISTAS does not have plans to generate \$/dv in response to new guidance. If used, the correct metric for this objective would be \$/Mm-1 rather than \$/dv because dv is logarithmic.

Conclusions and Plan of Action

VISTAS states committed to share summary of the meeting with the VISTAS workgroups. FLM, EPA, and VISTAS workgroups are asked to review the Technical Summary that is posted on the VISTAS website and provide feedback if the format, when completed, would meet expectations for a SIP Narrative. Comments are requested by the July 23 workgroup call.

VISTAS contractors are working on final project reports. Reports will be posted to the VISTAS website. States are working on documentation for SIPs and intend to provide documentation to FLM for formal review prior to the public hearings. NC and SC are looking to provide documentation in July; other states expect documentation to be ready in the Aug-Nov timeframe. Each state will independently set their FLM consultation, public review, and SIP submittal process.

VISTAS states are consulting with neighboring states as appropriate to meet the regional haze rule requirements. Each state is defining its own consultation process.

VISTAS states are not clear if a final meeting with the VISTAS workgroups is needed prior to the public review. States have been working directly with their sources as necessary to evaluate BART controls and reasonable further control measures. VISTAS is providing technical support to the States, but the States are not developing collective policy recommendations through VISTAS.

Questions should be directed to John Hornback, Pat Brewer, or state contacts.