

Members  
Connecticut  
Delaware  
District of Columbia  
Maine  
Maryland  
Massachusetts  
New Hampshire  
New Jersey  
New York  
Pennsylvania  
Penobscot Indian Nation  
Rhode Island  
St. Regis Mohawk Tribe  
Vermont

Nonvoting Members  
U.S. Environmental  
Protection Agency  
National Park Service  
U.S. Fish and Wildlife  
Service  
U.S. Forest Service

MANE-VU Class I Areas

ACADIA NATIONAL PARK  
ME

BRIGANTINE WILDERNESS  
NJ

GREAT GULF WILDERNESS  
NH

LYE BROOK WILDERNESS  
VT

MOOSEHORN WILDERNESS  
ME

FRANKLIN MOUNTAIN WILDERNESS  
NH

ROCKY MOUNTAIN CAMPOBELLO  
NATIONAL PARK  
CO/NB, CANADA

Mid-Atlantic/Northeast Visibility Union  
**MANE-VU**



August 15, 2006

Mr. Marc Pitchford  
NOAA – Air Resources Laboratory  
Route: R/ARL7  
1215 East-West Highway  
Silver Spring, MD 20910

**Re: Comments on the Proposed IMPROVE Network Reduction Plan**

The Mid-Atlantic / Northeast Visibility Union (MANE-VU) thanks you for the opportunity to submit comments on the proposed plan for a reduction in the Interagency Monitoring of Protected Environments (IMPROVE) monitoring network. MANE-VU was formed by the Mid-Atlantic and Northeastern states, tribes and federal agencies to coordinate regional haze planning activities for the region. MANE-VU members include Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, the Penobscot Indian Nation, Rhode Island, the St. Regis Mohawk Tribe, and Vermont. Also participating as non-voting members of MANE-VU are the U.S. Environmental Protection Agency, the National Park Service, the U.S. Fish and Wildlife Service, and the U.S. Forest Service.

**MANE-VU's General Comments on the IMPROVE Reduction Plan**

The proposed cuts in the President's budget and the U.S. Environmental Protection Agency's (EPA's) decision to make substantial cuts in the State and Tribal Assistance Grants (STAG) appropriation will cause significant monitoring network reductions for both state and local programs and the IMPROVE network, which is funded from EPA/OAQPS STAG dollars. We strongly disagree with the policy decision to reduce STAG funding, and think our monitoring capabilities should not have to be

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compromised as a direct result; However we understand that funding cuts in light of their decision are inevitable, and we are not taking issue with the methodology that EPA is using to make decisions as to which IMPROVE sites to decommission. MANE-VU believes that it is very difficult to achieve a balance between data redundancy and the need for long-term compliance with the goals of the regional haze program. As you know MANE-VU does not have many monitoring sites that would qualify to help meet EPA's quota of reductions necessary to the IMPROVE network. Consequently, we are faced with some very painful choices that could impact adversely our efforts to meet our Clean Air Act obligations to submit revisions to the State Implementation Plan for the regional haze program.

MANE-VU's primary concern with the IMPROVE Network reduction plan, from a regional perspective, is in maintaining an effective monitoring network that will enable our Class I states to meet the requirements of the regional haze regulations in 40 CFR Part 51, Subpart P (relating to protection of visibility). Section 51.305(a) states: "For the purposes of addressing reasonably attributable visibility impairment, each State containing a mandatory Class I Federal area must include in the plan a strategy for evaluating reasonably attributable visibility impairment in any mandatory Class I Federal area by visual observation or other appropriate monitoring techniques. Such strategy must take into account current and anticipated visibility monitoring research, the availability of appropriate monitoring techniques, and such guidance as is provided by the Agency." Likewise, section 51.308(d)(4) states: "The State must submit with the implementation plan a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I Federal areas within the State. This monitoring strategy must be coordinated with the monitoring strategy required in §51.305 for reasonably attributable visibility impairment. Compliance with this requirement may be met through participation in the Interagency Monitoring of Protected Visual Environments network." Finally, section 51.308(g)(7) states that "[A] review of the State's visibility monitoring strategy and any modifications to the strategy as necessary" is required for the 5-year progress reports. The number of monitoring sites, therefore, is not as much the issue as is the location and capacity of sites for providing Class I States with the information necessary to adequately determine whether impairment or improvement is occurring at these sites.

As site reductions and their regional consequences are contemplated, we ask that EPA consider that the MANE-VU region includes more than 20% of the states in this country and more than 20% of the US population but contains less than 10% of the EPA-funded IMPROVE and protocol sites. The proposed elimination of 3 of 9 MANE-VU sites would increase this regional imbalance. These few MANE-VU IMPROVE sites provide especially valuable information in a region where regional haze is more heavily impacted by inter-RPO transport than in any other region. In addition to filling obvious information needs for the regional haze program, IMPROVE and protocol sites in our region also provide valuable information for quantifying regional background contributions to, and sources of, PM<sub>2.5</sub> non-attainment. The monitoring information also facilitates tracking changes in the concentration and deposition of acidifying sulfate and nitrate compounds in the most acid-sensitive region of the country (as required under the 1990 CAA Amendments), and for quantifying transboundary pollution. We encourage EPA to consider these multiple uses of the data in making final site selections. We firmly believe that the most important sites are those that simultaneously fulfill the most monitoring objectives.

Recognizing the many valuable uses of the data, the MANE-VU states have been strong and long-term supporters of the IMPROVE program. Using state funds and site operators, the 7-site NESCAUM network employed IMPROVE methods during the late 1980s and early 1990s at a time when there was only one federally funded Class 1 IMPROVE site in the region. More recently, MANE-VU states have used state funds and personnel to support a larger number of IMPROVE protocol sites than have been funded by states in any other region. We believe that it is unfair to cut federally funded sites because the states have enhanced the regional network with their own funds. In fact, federally funded efforts should take over state funded monitoring sites in light of the deep cuts to state and tribal programs. The MANE-VU states have also been diligent in conducting analyses of the data collected at our IMPROVE and protocol sites. The most important sites are those from which the data are most heavily used.

### **Technical Considerations for Listed MANE-VU IMPROVE Sites**

MANE-VU has three monitoring sites on the Phase 2 list of 35 sites proposed for decommissioning: Connecticut Hill in New York(#1) , Great Gulf in New Hampshire(#7)

and Moosehorn in Maine(#24) . The first site on the list, Connecticut Hill in New York, an EPA Protocol site, is already slated for decommissioning in 2006.

Both the State of New Hampshire and MANE-VU believe that there are strong technical reasons for keeping the Great Gulf site (GRGU1). Great Gulf is a critical site in New Hampshire's Regional Haze SIP planning and tracking activities. Considerable planning and technical work for regional haze SIP submittals have already taken place for New Hampshire's two Class I areas. Removal of Great Gulf would represent a considerable set-back in those plans and raises new questions regarding how New Hampshire could meet EPA's regional haze regulations as there are no other IMPROVE sites in New Hampshire and no other plausible "caretaker" sites. Decommissioning the Great Gulf site hinges on the Phase 2 data redundancy analysis which proposes that the Bridgton Maine Protocol site fill in as a "caretaker" site. However, preliminary indications from both Maine and EPA Region I are that the Bridgton site is likely to be part of the regional cuts needed for reductions in the non-regional haze related speciation network.

There are other good reasons to keep the Great Gulf IMPROVE site. The Mt. Washington area has extremely high public usage - removing this site is not unlike removing IMPROVE samplers from Acadia or Great Smokies National Parks, even though the Mt. Washington National Forest Area is not a national park. Great Gulf has been running for more than a decade (since 1995). It has continuous PM2.5, ozone, and a Camnet hazecam associated with it. An additional value of the site is its relationship to AIRMAP, the UNH project run by Bob Talbot, AIRMAP is conducting intensive long-term air pollution and climate-related measurements across New Hampshire, including at the summit of Mt. Washington. Also, the Great Gulf IMPROVE site offers an opportunity to compare low and high elevation measurements a few miles apart horizontally.

Both the State of Maine and MANE-VU believe that there are strong technical reasons for keeping the Moosehorn IMPROVE site (MOOS1). The site represents two Class I areas, the Moosehorn Wilderness and Roosevelt Campobello International Park (RCIP) Class I areas. As with the Great Gulf site, this site is one of only 5 IMPROVE sites in New England with over 10 years of data. Decommissioning these two sites will leave us only three IMPROVE sites with 10 or more years of important trend data. Looking at the

IMPROVE data, it does not appear that the Acadia IMPROVE site is very representative of Moosehorn and Roosevelt-Campobello Class I areas. The Moosehorn site is impacted by a nearby pulp mill and there are at least three proposals to construct LNG terminals within 15 miles of the Moosehorn Class I area and within 10 miles of the Roosevelt-Campobello Class I area. LNG tankers will be passing within a mile of Roosevelt-Campobello. If these proposals are built, there will be a need for more, not less, air monitoring to determine the impacts in these Class I areas. The Acadia site over 75 miles away would not likely measure these impacts.

### **MANE-VU's Recommendations for the IMPROVE Reduction Plan**

As all of the states and RPOs depend heavily on the IMPROVE network for data necessary for Regional Haze planning and SIP development, we expect you will receive numerous comments to consider that may impact the list of sites to be recommended for decommissioning. In addition, given a very recent development where some of the proposed budget cuts may be restored by a House-Senate conference, we understand that there is a possibility that fewer than the 35 sites currently proposed on the list will be decommissioned. It is also our understanding that if some level of funding were to be restored by Congress, EPA anticipates that it would "restore the funds in the same way that they came out;" i.e., the line would move back from 35 to an earlier place on the list commensurate to the amount of funding restored. This would suggest that in that event, the restored funds will likely move the "cut line" from #35 on the list to #20, or lower, which would restore MANE-VU's Moosehorn site. MANE-VU supports this methodology for restoring sites commensurate with any restoration in funding provided by Congress. Prior to final decisions being made, MANE-VU requests an opportunity for States and RPOs to review and comment on any changes to the "Priority List" of IMPROVE sites and EPA Protocol sites to be decommissioned as a result of comments submitted by states, RPOs, other stakeholders or due to changes in available funding.

Given the unnecessary but inevitable reality that a reduced STAG appropriation will impact the IMPROVE network, if EPA conducts a reanalysis of the "priority" listing or decides to decommission any MANE-VU sites (Great Gulf, Moosehorn or others), MANE-VU respectfully requests an opportunity to recommend another site within the region in place of the listed MANE-VU sites before a final decision is made. MANE-VU

strongly believes that this option will allow for the best combination of regional and state-level planning flexibility with respect to meeting the monitoring requirements of the regional haze regulations.

MANE-VU also respectfully decline to comment with respect to EPA's or another RPO's internal decision on decommissioning a particular IMPROVE site beyond our region. We feel that we have the expertise to judge the monitoring needs for the MANE-VU region; conversely, we feel that we do not have the information necessary to comment on another RPO's monitoring needs, nor would they have the expertise to comment on MANE-VU's monitoring needs.

Finally, MANE-VU notes there has been some documentation of alternative methods to address the anticipated funding reductions in the IMPROVE program in lieu of decommissioning monitoring sites. To date, only two such alternatives have been presented with any degree of detail: the gravimetric screening and the redundancy analysis approaches. However, noticeably absent has been an equivalent technical analysis of a reduction in the sampling frequency, for example from once every third-day (1 in 3) to once every sixth-day (1 in 6). We would find having such an evaluation extremely beneficial in assisting MANE-VU and its member states in our assessment of the relative uncertainties, merits, etc. associated with any of these approaches to address the anticipated funding cuts. Therefore, we respectfully request that such an objective technical evaluation of a "reduced sampling frequency approach" be completed and shared with the IMPROVE community before any final decisions are made on how to address any program funding cuts. Such an analysis should use the most recent five years of data; include all sites nationwide and all parameters (or, possibly, just those used for reconstructing extinction), including reconstructed extinction for the 20% best and 20% worst visibility days 20th and 80th percentile values (the RHR metrics); and using the 1 in 6 day dataset derived from the existing 1 in 3 day dataset, calculate these metrics for both the 1 in 6 day and 1 in 3 day datasets. The results of this analysis could be compared to assess their differences, including the relative uncertainties between approaches.

Thank you again for the opportunity to provide MANE-VU's comments on this critical aspect of the regional haze planning process. If you have any questions, please feel free to contact me at (202) 508-3840.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Recchia". The signature is fluid and cursive, with the first name "Chris" and last name "Recchia" clearly distinguishable.

Christopher Recchia

Executive Director

Cc: MANE-VU Board members

S. Wierman, MARAMA

A. Marin, NESCAUM

D. Austin, OTC