

Summary Minutes of the  
U.S. Environmental Protection Agency (EPA)  
Science Advisory Board (SAB)  
Hypoxia Advisory Panel (HAP) – Subgroup Conference Call on  
Characterization of Nutrient Sources, Fate, and Transport  
January 25, 2007

**Purpose:** The purpose of this teleconference was for members of the Hypoxia Advisory Panel's Subgroups #2 and 3 to review materials submitted to date for technical disagreements and information gaps, and to identify deadlines and actions necessary to have a first draft report available for panel deliberation at the February 28 – March 2 meeting in Washington, DC.

**Attendees:** Subgroup 2 Leader: Dr. Judy Meyer

HAP Members: Dr. Walter Boynton  
Dr. William Crumpton  
Dr. Mark David  
Dr. Richard Lowrance  
Dr. Kyle Mankin  
Dr. Andrew Sharpley

HAP Chair: Dr. Virginia Dale

Subgroup 3 Leader: Dr. Catherine Kling

SAB Staff: Dr. Tom Armitage  
Dr. Holly Stallworth  
David Wangsness (USGS)  
Mary Belefski

Others Present: Barry Korb, EPA/OPEI  
Don Viviani, EPA/OPEI  
Dennis McKenna, IL Department of Agriculture  
Lara Beaven, Inside EPA  
Michael Sullivan, USDA/NRCS  
Sheryl Kunickis, USDA/NRCS  
John Wetherell, PA/DEP

**Meeting Summary:** The discussion followed the issues and timing as listed in the meeting agenda and is summarized below:

Dr. Meyer began the discussion by saying that the intent of the call was not to edit the preliminary materials but, rather, to identify any disagreements with the current

material, identify gaps, and assign action items so that a more complete draft can be available for the entire panel to review and deliberate during the next HAP meeting scheduled for February 28 – March 2 in Washington, DC. In general, there are sections of the report where there currently are no written contributions, other sections have contributions from more than one author that need to be merged, others may need additional material to be added, and yet others may have too much material and will need to be edited down or moved to another section or the appendices. But, overall, the group has made great progress since the last meeting.

Each draft section was discussed in turn, with the author of the section addressing questions and comments. Some of the broader issues, and resulting action items, are listed below:

- 1) Written contributions submitted in December, and compiled into the first version of the report outline, were not transferred into the current report outline. Dave Wangsness was asked to compile those sections into the current version and resend it to the group.
- 2) Because the USGS has revised its method(s) for estimating nutrient loads within the basin, the group agreed that there should be a description of those changes in the report. The analysis of changes in loads and fluxes that have occurred since the implementation of the action plan needs to separate or account for any differences in loads and fluxes that may be the result of the estimation technique. Likewise, Subgroup 1 needs to be aware of any differences since the literature values they currently are using to evaluate inputs to the gulf, or were used as inputs to the published model results they are considering, may not be directly comparable to the current load estimates or model outputs. Drs. David and Crumpton agreed to prepare a brief summary of the changes in methodology and provide a figure or table that illustrates the differences in the results.
- 3) Those sections requiring USGS load estimates for sub-basins are on hold until the estimates can be made available. Dave Wangsness will ask if preliminary results can be made available to Dr. David by mid February so that he can prepare draft materials for discussion at the February 28 meeting. When the estimates are finalized, any differences can be reconciled in a future draft.
- 4) There was discussion of what appears to be trends in several of the figures, and discussion of what may be the cause. The extent of any analysis of trends will need to be discussed further but it is likely that a statistical analysis is beyond the scope of this effort. However, the addition of trend lines to the figures and some discussion of possible causes may be appropriate. For example, Dr. David offered to add a figure illustrating changes in cropping patterns over time that also may be used to illustrate future changes in corn production if ethanol production increases.
- 5) Several issues to be discussed in the report will result in a recommendation of future research and/or monitoring. It was recommended that in all cases where there are recommendations there should also be an explanation of why the resulting information and understanding is needed. For example, there needs to be a better understanding of

nitrogen fixation throughout the system; better information on point sources, including seasonal values; a better understanding of wetland processes and the rates involved; etc. But the report needs to explain why this understanding is needed to better understand the system, and in order to help justify the required research.

6) The purpose for this review is to assess the current science, describe what has changed since the original assessment(s), and provide recommendations to the Task Force on issues they should consider in the next Action Plan. In some instances the original assessment did not, or was not able to, address an issue that can and should be discussed in this report. Those issues will need more background material in order to more fully understand their implications in this assessment, while less background material is needed for those issues fully described in the first assessment. In order to keep the background material to a minimum, and assure that it is relevant to the charge to this group, we should continue to ask “what is new” about the information and understanding presented in each section.

Review of Action Items & Assignments:

Dave Wangsness was asked to compile the sections submitted in December into the current version and resend it to all panelists.

Panelists were asked to edit their respective sections and email them to Wangsness on or around February 5.

Wangsness will recompile the updated sections from Subgroup 2 and work with the DFOs for Subgroups 1 and 3 to combine the material into a draft that can be discussed during the February 28 – March 2 meeting in Washington, DC.

Respectfully Submitted:

Certified as True:

*/Signed/*

*/Signed/*

---

David J. Wangsness  
Designated Federal Officer

---

Dr. Judith Meyer, Leader  
Hypoxia Advisory Panel -- Subgroup  
on Nutrient Sources, Fate, and  
Transport