

***Final Meeting Summary***  
**Ninth Meeting of the**  
**Mississippi River/Gulf of Mexico Watershed Nutrient Task Force**  
**December 10, 2002**  
**The Ritz Carlton, Pentagon City, VA**

**Task Force Participants:**

**Federal**

**G. Tracy Mehan**, U.S. Environmental Protection Agency (EPA), Assistant Administrator for Water

**Mike O'Neill**, U.S. Department of Agriculture (USDA), representing Dr. Joseph Jen, Undersecretary for Research, Economics and Education

**Chip Smith**, U.S. Army Corps of Engineers (COE), representing Mike Parker, Assistant Secretary of the Army for Civil Works

**Mack Gray**, U.S. Department of Agriculture (USDA), Deputy Undersecretary for Natural Resources and Environment

**Don Scavia**, National Oceanic and Atmospheric Administration (NOAA), representing Vice-Admiral Conrad Lautenbacher, Undersecretary for Oceans and Atmosphere

**Chris Schabacker**, Department of the Interior (DOI) Counselor to the Assistant Secretary for Water and Science, representing Charles Groat, Director, United States Geological Survey (USGS)

**Al Sherk**, Science Advisor to the Assistant Secretary for Water and Science, Department of Interior

**States**

**Earl Smith**, Arkansas Soil and Water Conservation Commission, representing J. Randy Young, Executive Director

**Patty Judge**, Iowa Secretary of Agriculture

**Joe Engeln**, Missouri Department of Natural Resources, representing Stephen Mahfood, Director

**Karen Studders**, Minnesota Pollution Control Agency, Commissioner

**Len Bahr**, Louisiana Governor's Office of Coastal Affairs, Director

**Warren Goetsch**, Illinois Department of Agriculture

**Objectives**

G. Tracey Mehan, EPA's Assistant Administrator for Water, chaired the ninth meeting of the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force. Mr. Mehan set forth several objectives for the meeting:

- Review the Action Plan agreed to at the Baton Rouge Meeting and bring new members of the public and Task Force up to speed.
- Discuss the application of existing programs, mechanisms and funding opportunities to Hypoxia reduction efforts
- Review recent developments in the implementation process of the Action Plan including efforts to form subbasin teams
- Address the participation of states and tribes within the basin who have not yet been Task Force members, but whose help is critical
- Hear reports from cross-cutting workgroups commissioned at the Eighth Meeting of the Task Force in Saint Louis, Missouri, in February 2002.

## **Opening Comments**

In his opening comments Mr. Mehan emphasized five key issues (1) the magnitude of the challenge of the Hypoxia issue at a time when the “Dead Zone” is continuing to grow (2) the commitment to using existing mechanisms and program to implement the Action Plan (3) the importance of enhancing the economic and social fabric of communities throughout the watershed (4) the need to encourage voluntary action by landowners throughout the watershed and (5) the commitment to the adaptive management principles outlined in the Action Plan.

New developments of interest to the Task Force that he noted were:

- EPA’s Office of Water is revising and finalizing water quality trading policy to be introduced early in 2003. Nutrient trading, particularly in the Upper Mississippi, offers promising developments to reduce nutrient runoff to the Mississippi River.
- The Farm Bill funding and industry resources toward carbon sequestration, a recent policy effort, might elicit positive results in terms of Mississippi River/Hypoxia goals.
- State water programs face significant budget cuts (20%-30%)
- The work of two prestigious commissions is highlighting the hypoxia issue and will contribute to increased attention on the work of this Task Force:
  - i) The Pugh Oceans Commission due to release its report in the spring of 2003.
  - ii) The U.S. Commission on Ocean Policy will report to Congress and the President in June 2003.

## **Development of the Action Plan**

Bob Wayland, Director of Wetlands, Oceans, and Watersheds within EPA’s Office of Water provided a summary of the process through which the Action Plan came about, including its study methodology, analyses that identified the sources of the problem, as well as Action Plan goals, approaches to address the problem, and milestones identified in achieving reductions in nutrients flowing into the Gulf.

## **Task Force Comments On Related Efforts/Programs**

Karen Studders, (Minnesota Pollution Control Agency), informed the Task Force of efforts to address Mercury pollution. This problem parallels the Hypoxia issue in its inter-state nature. Mercury has been shown to travel in the atmosphere and be air-deposited after time and distance lags. She mentioned three groups working on the issue:

- 1) A White House Task Force Advisory Group set up in response to senators concerned about the impact of high mercury levels in fish, making them inedible.
- 2) A “Quick Silver Caucus” formed about two years ago by The National Governors Association, state environmental agency commissioners and three media organizations to address Mercury’s generation, migration, deposition, and contamination. The Caucus enlisted the support of federal partners including EPA based on a strongly perceived need for their intervention and has since formed three sub-teams that will contribute to developing a National Action Plan for Mercury.

Both a state and a federal Caucus member chair each team, thereby guaranteeing the inclusion of both those perspectives in policy development. The teams are:

- TMDL Team
- Stewardship Team
- Research Team

3) The United Nations Governing Council is making Mercury a priority item among several environmental issues to for its February 2003 meeting, emphasizing the need for international mediation on cross-border Mercury pollution. Ms. Studders noted that the sources of Mercury pollution in the Boundary Waters area in her state are primarily located in Canada.

Earl Smith (Arkansas Soil and Water Conservation Commission), emphasized the importance of supporting research to understand Mercury's behavior, and management of this issue, in light of similar deliberations on the issue of Hypoxia.

Len Bahr (Louisiana Governor's Office of Coastal Affairs), informed the group of two significant initiatives from the state of Louisiana on Hypoxia reduction efforts:

- 1) Controlling landscape deterioration. Measures to redress the degradation of swampland and habitat are being formally connected to the goal of reducing Hypoxia. A feasibility study for a comprehensive landscape restoration program is being conducted jointly by the state and the U.S. Army Corps of Engineers, and is due to be submitted in a report to Congress in June 2004. Although the fiscal public investment would be large, it would, he said, be justified. A conference on technical issues of river hydraulics and flow system mechanics to support this effort is being planned in early 2003.
- 2) Forming a subbasin group to address Hypoxia-related goals. Doug Daigle of the Mississippi River Basin Alliance, a non-profit organization, is leading the committee. Its goal is to explore and push strategies that reduce Hypoxia. The composition of the committee, which started out with agricultural and environmental groups has expanded to include state level participation in Louisiana and further buy-in from the states of AK, MO, MS, TN, OK and perhaps TX. A proposal to further evolve this into a formal inter-state subbasin group is now on the table.

**Workgroup reporting session  
(Reporting from workgroups formed out of the eighth meeting in St. Louis, February 2002)**

**Watershed Restoration Workgroup**

Co-chairs: Teresa Woods, U.S. Fish and Wildlife Service, in the Great Lakes/Big Rivers Region, Minneapolis, MN and Owen Dutt, U.S. Army Corps of Engineers, St. Louis, MO.

Ms Teresa Woods outlined the mission and goals of the workgroup:

Mission:

- Support the Action Plan goal of restoring and protecting the waters within the basin through implementation of nutrient and sediment reduction actions.
- Focus on restoring degraded landscape features to help to clean nutrients from the system that are already present (thereby differentiating from the efforts to reduce generation of nutrients from point sources or nonpoint sources)

- Be responsive to the Task Force and Coordination Committee, and subbasin committees. Serve subbasin committees who are doing on the ground work by
  - 1) providing tools to help them do their job more efficiently
  - 2) facilitating voluntary restoration of landscape features

Goals /Possible Products:

- Compile and publish information on programs available to assist landowners with restoration activities. (This would include sources of funding, technical assistance and other resources. This workgroup could consider either spearheading or contributing to an effort by the Midwest Natural Resources Group (a group of federal managers in the midwest region) to develop an interactive, Web-based tool for landowners to seek out resources they can use for restoration activities. Landowners would click their location on a map to retrieve resources available to them.)
- Compile and publish an existing inventory of wetlands and ongoing watershed restoration projects. (This could be used as a reference map to locate hot spots where further restoration work is needed that could potentially remove nutrients in the water system)
- Identify techniques and design guidelines for restoration activities that will optimize results for multiple objectives. (Currently restoration funding is primarily geared towards wildlife habitat or mitigation, not towards removing nutrients from the hydrologic system. This contribution is envisioned as a technical manual or guidebooks on project design considerations to meet the purposes of specific restoration funding, and maximize the efficiency of removing nutrients from the water)

**Logistics:**

The workgroup was appointed in late August and currently has representatives from EPA, USDA-NRCS, USGS, NOAA, and the states of Wisconsin, Illinois and Missouri. Efforts are being made to make contacts and increase membership. The first meeting of this group is set for early February 2003, with an agenda of refining goals/possible products and mission, and to set specific actions on a schedule. Coordination and communication are critical as there is opportunity for overlap with other workgroups, and it is imperative to avoid both duplication of efforts, and letting things slip.

*Comments:*

Don Scavia, (NOAA) confirmed that coastal wetlands were included in the purview of restoration efforts. He urged the use of existing manuals on coastal watersheds to avoid redoing work.

**Point Sources Workgroup**

Dugan Sabins, Louisiana Department of Environmental Quality

Mr. Sabins outlined the Environmental Leadership Pollution Prevention Program in Louisiana that is jointly sponsored by EPA and the state. This voluntary program is designed to give government rewards to and public recognition of efforts by industry to lower pollutant levels in their effluent water and as such, is an example of a cost-effective strategy to reduce pollutants entering the water system.

Industries in Louisiana have begun to focus efforts on nutrients in recognition of their impact on water quality in the lower river and the Gulf, whereas before they were mostly concerned with ammonia. An interest group from industry commissioned a report to look at status of nutrient discharges. Data and funding was provided by industry itself. The report titled "Nutrient reductions to the Mississippi River in the Louisiana Industrial Corridor; Voluntary Reductions in Nitrogenous and Phosphatic Compounds", helped to give impetus to nutrient reduction. Mr. Sabins remarked that these nutrient reduction efforts might be good preemptive measures in anticipation of EPA's recent efforts to prepare nutrient criteria for state and regional waters.

He noted a press release from the state of Louisiana (Office of the Governor) recognizing the efforts of two industrial groups, the IMC Agrico and BASF, for large reductions in nutrients from their effluents going into the Mississippi River.

### **BASF Wastewater Treatment**

Mr. Sabins introduced Mr. Olaf McDavid of BASF, who spoke about the nitrate reduction program in his firm. In his presentation he explained the simple principle used in BASF's wastewater treatment plant that force nitrates to be consumed out of the wastewater. He also outlined the cost of modifying the technology at the wastewater treatment plant, and illustrated how simple and economical it was for his plant to reduce nitrates being pumped out into the water system.

#### *Comments:*

Mr. Mehan wanted to know how the Leadership Program is marketed to industries. Mr. Sabins noted that the Leadership program has an outreach component, including a Web site for the program, and a coordinator at the state government. Mr. McDavid emphasized that the chemical industry in particular has a public recognition incentive.

Mr. Bahr noted cross-linkages between voluntary industry activities and landscape restoration. Nitrates in river water that is used by industry for cooling, could be put to use to nourish the swamps and marshes used in landscape restoration. The IMC Agrico Plant has volunteered for a pilot study of this method of removing nitrates from the river. This method proves cost-effective because plants often have direct trajectories back to swamp areas, instead of having to bear costs of purchasing rights of way etc. EPA Region 6 is supportive of this idea.

### **Non-Point Source Workgroup**

Tom Christensen, USDA- ARS

Mr. Christensen summarized the goals of this committee as follows:

- Help agricultural producers with the right technical, financial, educational and practical tools to do even more nutrient and sediment reduction.
- Use the private sector including producer/industry groups and non profit groups in this effort to help advance the cause of agricultural conservation.
- Identify and promulgate BMPs that are the most effective for nutrient reduction.
- Come to a consensus on the highest priority watersheds.

- Promote a watershed approach exemplified in the Lower Mississippi Valley Initiative which is supportive of the Lower Mississippi Subbasin Committee proposed by the state of Louisiana.

Characteristics of the watershed approach:

- It has a pragmatic message; it focuses on economic and efficiency aspects of production in conjunction with conservation, and includes the goal of healthy local water quality
- It is non regulatory, and uses a voluntary actions-based approach
- It recognizes the value in using EPA's water quality trading policy as a tool to lower nutrient pollution

Mr. Christensen noted that Farm Bill Conservation Innovation grants may help to provide the financial means to work with producers. Mr. Dennis McKenna, Illinois Department of Agriculture was acknowledged for the majority of the work on this effort. Mr. Wildon Fontenot was introduced.

### **The Lower Mississippi Valley Initiative**

Mr. Wildon Fontenot (U.S. Fish and Wildlife Service)

In his presentation Mr. Fontenot highlighted key principles and strategies of the Lower Mississippi Valley Initiative as exemplary of a watershed approach. He emphasized that agricultural stakeholders played a pivotal role, and that any strategy should ideally include incentives and be economically meaningful to producers. To support watershed strategies, he identified three key points, (1) research and technology development in terms of BMPs (he pointed out the example of work done at the LSU Ag Center), (2) documentation and analyses in terms of databases / inventories, and (3) governmental cooperation. Currently the watershed approach is based on a fairly loose MOU among partners including state agencies with agricultural stakes, such as the Farm Bureau, NRCS etc.

### **Monitoring, Modeling and Research Workgroup (MMR)**

Herb Buxton (U.S. Geological Survey)

Mr. Buxton reported on the workshop held by the MMR group October 16-18, 2002 in Saint Louis, MO. Its objective was to develop a monitoring, modeling, and research strategy in support of the Action Plan. He described how the organizational structure of the meeting divided the over 100 invited technical experts into groups developing separate strategy documents or chapters. Each chapter focused on science-based monitoring, modeling and research to provide what managers in the basins need to have answered. The groups then met back together to discuss coalescing their ideas into a joint report. A writing team headed by Don Scavia and Herb Buxton will follow-up the meeting by revising the chapters. A joint, complete first draft of the MMR strategy is due in January 2003.

*Comments:*

Len Bahr:

In considering research on nutrient fluxes it is important to include the path between the watershed and the hypoxic zone, the actual river. Restoration efforts are key to reducing nitrogen here. The state of Louisiana has hired the Segrilla Corp. from France to build a physical model of the Birds Foot Delta to help model how nutrients are disgorged from the river. The theory is that if water is mixed better before going into the Gulf, the nutrient flux could be reduced.

Don Scavia:

The overarching theme of the workshop was that while actions are going to be locally based, only through monitoring, modeling as assessment, can we understand how the Gulf is responding to the individual actions in the next decades.

## **Subbasin Coordination**

### **Lower Subbasin Committee**

Doug Daigle who has been appointed by the Louisiana Governor's Office as the quasi-official spokesman and coordinator of the Lower Subbasin Committee provided a brief overview of this committee. Participation in the lower Subbasin Committee includes the states of Arkansas, Louisiana, Mississippi, Tennessee, Missouri and possibly also Texas and Oklahoma. Federal partners include EPA, NRCS, Interagency programs such as Gulf of Mexico, the Lower Mississippi River Conservation Committee and stakeholders. The subbasin committee wants to coordinate efforts with existing programs, as well as other initiatives such as the LMVI.

The subbasin committee helps states to coordinate efforts to pursue funding from federal agencies. Even though budgets have not been decided, there is important interim work by states on teaming together on watershed projects, moving forward with assessment efforts, and targeting Farm Bill programs. Opening up the channels of inter state and state-federal communication is a key aspect of the work of this subbasin committee.

*Comments:*

Don Scavia encouraged the development of environmental endpoints or goals as a worthwhile strategy for this subbasin committee.

### **Ohio River Valley**

Alan Vicory, (Ohio River Valley Water Sanitation Commission, ORSANCO) provided an overview of initial efforts of his organization to spearhead a subbasin movement in the Ohio River Valley. ORSANCO's involvement with the Mississippi River Task Force began in earnest in February 2002 following the Eighth Meeting of the Task Force in St. Louis. The meeting was adjacent to the ORSANCO Commissioners Meeting and led to an exchange of ideas, and brought up points of convergence.

ORSANCO was originally formed as an inter-state commission to address water pollution in eight states within the Ohio River Valley. Historically it has worked with the state and federal EPA. ORSANCO is now in discussion with EPA on spearheading a subbasin approach for the Ohio Valley. The subbasin approach is a fairly new idea for ORSANCO in that it incorporates perspectives from and works together with agricultural interests. ORSANCO will be spearheading efforts to collude a subbasin coordination and strategic approach for the Ohio River Valley, beyond its strict water pollution abatement role.

### **Missouri River Valley**

Joe Engeln (Missouri Department of Natural Resources) said that the Missouri River states would also like to organize themselves into a subbasin. In view of the unique geographical position of the state of Missouri and the stretch of the Mississippi River through it, as well as for efficiency, the state would like to request the Task Force to combine the Middle and Upper Mississippi subbasins to reduce the number of subbasin committees that Missouri has to participate in from five to four.

Mr. Engeln mentioned that this subbasin would benefit from educational efforts since many of the states have not been involved in the discussions to date. A recent meeting with states in EPA's Region 7 was successful in getting the states of Kansas and Nebraska on board in river issue coordination. The state agency commissioners are meeting next week with EPA to identify goals that are reasonable both in the near and the long term for this subbasin.

Mr. Engeln mentioned that at the annual Missouri River Natural Resource Conference (coordinated by the USGS Biological Research Division and state Fish and Game Agencies in Columbia) he will be giving a talk at a first-time, unique session on water quality issues, on the subject of Hypoxia. This has not traditionally been an agenda item at this conference but will be an important introduction for the management of this area.

#### *Comments:*

Mr. Mehan said that although federal dollars are an integral part of many of the programmatic proposals on the table, it is important that states factor in as many of their own funding initiatives as they can muster, since federal dollars are severely curtailed and may be out of reach in many instances. States might look to innovative programs in land acquisition and conservancy, and Soil Conservation Service sales tax revenues for ways to address Hypoxia reduction goals.

### **Public Comments**

#### **Suzie Greenhalgh, World Resources Institute, WRI**

WRI research on policy options to reduce the hypoxic zone has found nutrient trading to be the most beneficial option to meet multiple objectives including others such as local water quality, and global climate change goals. As a performance-based mechanism, it is also cost-effective because producers focus on what works in reducing nutrients, and are not rewarded for implementing the most number of BMPs. The WRI report is due out in January/February of 2003.



Ms. Greenhalgh also suggested that the Task Force should consider putting a quantitative cap on nutrients within a region/watershed as a goal and further, that any unappropriated funding in the Farm Bill should be seized for Hypoxia issues, or related efforts. On a positive note, she said EPA's nutrient trading initiative is encouraging and that the cooperation evident between USDA-EPA is commendable.

Cynthia Sartou, Gulf Restoration Network

Ms. Sartou noted that the hypoxic zone is beginning to affect the economy, livelihoods and community life on the lower river as the problem continues to grow.

In the last year, it is commendable that the state of Louisiana has taken a vanguard role on this problem by putting together the first state Hypoxia-focused subbasin team. This is an example that other states can learn from and replicate.

Ms. Sartou expressed concern that this meeting has not set enough priorities for actions that need to happen within subbasins. She also pointed out the disconnect she heard about in addressing pollutants within states and at the inter-state level. While USDA state technical committees are tasked with deciding priority watersheds, they focus on addressing phosphorus as a priority pollutant while nitrogen is more of a concern at a larger scale. She called on the USDA to facilitate more coordination between programs that deal with in-state problems and inter-state problems.

Ms. Sartou also called for state and federal agencies to make plans jointly, and coordinate using interagency funds to create partnerships. She emphasized innovative inter agency decision making to address national issues, and set priorities for basin and subbasin level projects. She believes that it is possible to work within existing programs to achieve success.

Mark Muller, Institute of Agriculture and Trade Policy,

Mr. Muller sees two trends in the Farm Bill that will impinge on the Hypoxia issue: (1) Increase in production (corn, soybean in the midwest) (2) Conservation Title (dollars available for conservation projects)

In Minnesota for example, the Conservation Security Program focuses on soil erosion (sediment issues) and phosphorus. There is a disconnect in terms of addressing nitrogen here where it's not seen as the primary problem. One way to use the Conservation Reserve Program to address hypoxia goals would be to give high scores to producers who implement nitrogen reduction methods so that they are rewarded with the program's benefits.

In the Blue Earth River Basin of south-central MN, the Third Crop Project has farmers being given incentives to grow crop alternatives, besides corn and soybeans, for example, perennial crops. It is also a way to give farmers more diversity in rural communities.

### Eddie Scher, Clean Water Network

The Clean Water Network is comprised of about 1000 groups across the country, of which 50% fall within the Mississippi River basin and are interested in the problem of Gulf Hypoxia. The network has put together a letter for the Task Force. Mr. Scher distributed the letter to the Task Force while it was outlined for the meeting by Nancy Stoner.

### Nancy Stoner, Natural Resources Defence Council

Ms. Stoner said the aforementioned letter focuses on funding needs. In response to the idea that there are not enough federal monetary resources some suggested responses were:

- Using federal money to tackle this interstate water problem. States' individual efforts will not work, and additionally state budgets are extremely tight.
- Using Farm Bill money towards projects that target Hypoxia. Funds from the Farm Bill, Section 319 funds, Clean Water State Revolving Fund can be used in smarter ways.
- Using market incentives to get most nutrient abatement out of every tax dollar spent.
- Using existing regulatory tools and programs can be utilized, including Section 404 programs, 402 programs, the swampbuster, and TMDL programs.
- Increased use of recognition programs, and leadership programs to get people involved (e.g., farmers demonstrating good environmental stewardship programs). Such programs provide incentive, highlights innovators, provides examples for other producers.

Ms. Stoner also supported increased nutrient trading, but with sufficient safeguards and accountability. She also favored selecting priority watersheds with a view towards reducing nitrates in the Gulf of Mexico. She cautioned that some regulatory trends at the federal level appear to be moving in a direction that is contrary to Hypoxia reduction goals. These include

- Clean Water Act: While science shows that waters are all connected hydrologically, yet there are discussions about narrowing the scope of the CWA's applicability. This is bound to degrade waters and Ms. Stoner requested the TF oppose such moves.
- The TMDL rule: TMDLS are the basic tools needed to clean up impaired waters. The TF should be aware of the need to oppose derailing TMDL regulations.

## **Federal Funding Opportunities and Accountability**

### **Mike O'Neill, USDA-CSREES**

Mr. O'Neill presented an overview of opportunities for water quality research funding available through CSREES programs from the USDA.

### **Anne Dubey, USDA-NRCS Farm Bill Coordinator**

Ms. Dubey presented key features of the 2003 Farm Bill and its implementation.

## Next Steps and Wrap Up

Mr. Mehan and Mr. Wayland, EPA listed the following as next steps:

- Export Louisiana's voluntary point source reduction program, called the Leadership program to other states. Recognition programs such as this one offers great potential for pollution control. EPA's Office of Wastewater Management should get more involved.
- Encourage and expand the involvement of the Restoration Workgroup.
- Review and contribute to the revision/implementation of strategies from the Monitoring, Modeling and Research Workgroup from Oct 2002.
- Collude further on forming subbasin teams out of Missouri for the Missouri River, ORSANCO for the Ohio River, and Louisiana for the Lower Mississippi River.
- At this stage we are beginning inter-agency discussions on nutrient trading. By next meeting we hope to have more substantial things to report that will impact discussions on Gulf Hypoxia.

Note: In response to the request made by Wildon Fontenot for input on LMVI and the watershed approach, EPA and interested parties should channel comments on the watershed approach to Mr. Tom Christensen for Mr. Fontenot.

### *Comments:*

Len Bahr:

Mr. Bahr said it was important to bring in the U.S. Army Corps of Engineers into this discussion even more. The new Commander of the Mississippi River Division: Don Riley, in Vicksburg, MS, would be a good candidate to bring in. Mr. Mehan mentioned that George Dunlop, Deputy Assistant Secretary, USACE from the Pentagon participated in the Saint Louis workshop of the MMR group. Chip Smith was sitting in during the morning sessions of this meeting for him. Reinforce the participation of the USACE.

Karen Studders:

Ms. Studders emphasized that the role of assessment in the ongoing work, is key to adaptive management. Only by accounting for the changes evident in water quality due to work already undertaken is it possible to see effectiveness of actions. She acknowledged a lack of resources for monitoring efforts, but emphasized measurement, perhaps as a way of securing future resources by showing performance results and tracking results of fiscal investments.

Joe Engeln

Mr. Engeln commented that for the development of the Action Plan, Mr. Goolsby was able to figure out nutrient concentrations plus flows and figure out loads from 42 of 113 six digit Hydrologic Cataloging Units of the Mississippi River basin. Only 12 to 15 of those are now being monitored due to budget cuts. While the MMR Workgroup plans are implemented it will be imperative to get the achieve whatever maximum results are possible with modest sums of money.

G. Tracey Mehan

Mr. Mehan said that even though monitoring resources are cut, it is important to factor in the time lags associated with changes evident in water quality that monitoring may not be able to capture in the short term. Modeling is vital to indicating what may be expected within particular time frames.

Joe Engeln

Financially, nutrient reduction efforts may hinge on what happens with the Farm Bill. If we cannot show what works to reduce nutrients, it will make our request for budget funds in 2005 more problematic. Phosphorus has a huge uncertainty. Nitrogen shows much quicker response.

G. Tracey Mehan

The next meeting is slated for the late spring of 2003 and will be held in the Mississippi River Basin. At the next meeting, EPA representation will be reflected, as Bob Wayland, Division Chief of OWOW will be retiring and Diane Regas will replace on the coordination committee. Mr. Mehan also offered up the chair and governance of the Task Force to other interested parties.