Lower Mississippi River
Sub-basin Committee on Hypoxia

Meeting 5
Tunica, Mississippi
June 13, 2005

Participants:

Keith Admire, USDA Natural Resources Conservation Service
Steve Ashby, US Army Corps of Engineers, ERDC
Len Bahr, Louisiana Governor's Office of Coastal Activities
Ken Brazil, Arkansas Soil & Water Conservation Committee
Darrell Brown, US EPA Headquarters
Kris Carter, EPA Region 4
Sarah Clem, Arkansas Department of Environmental Quality
Doug Daigle, LMRSBC Coordinator
Paul Davis, Tennessee Dept. of Environmental Control, Water Pollution Control
Joe Engeln, Missouri Dept. of Natural Resources
Steve Faulkner, US Geological Survey, National Wetlands Research Center
Bennie Fontenot, Louisiana Dept. of Wildlife & Fisheries
Vernon Hartley, Mississippi Farm Bureau Federation
Richard Ingram, Mississippi Dept. of Environmental Quality
John McClurkan, Tennessee Dept. of Agriculture
Dugan Sabins, Louisiana Dept. of Environmental Quality
Dexter Sapp, USDA NRCS
Cynthia Sarthou, Gulf Restoration Network
Mike Sullivan, USDA NRCS
Ken Teague, EPA Region 6
Larinda Tervelt, EPA/Gulf of Mexico Program
Ronnie Ulmer, The Nature Conservancy

Meeting Summary

Welcome & Introductions – Richard Ingram, MDEQ

Review of Agenda & Meeting Goals – Doug Daigle, LMRSBC – This is the fifth meeting of the Lower Miss. River Sub-basin Committee on Hypoxia. The Sub-basin Committee was formed in 2003, and has met twice in New Orleans, once in Baton Rouge, and once in Memphis.

The goals of this meeting are to update our efforts in the lower river basin, including continued development of nutrient strategies, progress on focus watersheds, and other efforts. A key point of focus is how to integrate these activities into the Hypoxia Action Plan Reassessment.

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SBC Structure & Mission – Doug Daigle, LMRSBC

The Sub-basin Committee was formed as part of the Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico (2001). We adopted a mission statement in 2003 that calls for aiding the implementation of the Action Plan in the lower river basin, establishing a process of communication and coordination between states, and promoting public and private water quality improvement efforts. We also committed to an open process that encourages participation by stakeholders and other interested parties.

At our last meeting in Memphis on November 3, 2004, the Sub-basin Committee formalized its structure, with the states on the Task Force as members, the federal agencies on the Task Force as ex officio members, and Industry-Led Solutions as a supporting member. Industry-Led Solutions is a coalition of agricultural producers who have committed to helping to implement the Action Plan, and have come to the table with resources and action on their own. The Sub-basin Committee works with a consensus process for decision-making.

Update on Hypoxia Action Plan Reassessment – Darrell Brown, EPA/OWOW (powerpoint)

The Task Force has set 2007 as the completion date for the reassessment of the Action Plan. Although the Action Plan called for the reassessment to take place in 2005, that deadline can't be met, and the feeling was that the substance of the process was more important than the deadline. There are two central teams carrying out the reassessment, a Science Reassessment Team, which will work with the Modeling, Monitoring, and Research Committee, and a Management Action Reassessment Team.

The Peer Review of the Region 4 white paper on the role of phosphorous in hypoxia has been completed, and the information will posted on the website. The next steps in the reassessment will involve an extensive science literature review, and the organization of symposia on the Upper River Basin, Gulf Science, and the Lower River Basin. A basin science synthesis will involve a peer review of the upper and lower basin symposia, along with public review.

Discussion Points from Participants

There are concerns about the delay in implementation of the Action Plan that this process could result in.

The results of the Upper River symposium could help inform discussion on the next Farm Bill.

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The McKnight Foundation is funding an independent study of Mississippi River water quality by the National Academy of Sciences, which can complement the Action Plan reassessment effort.

That NAS study also involves a policy element. They are asking for nominations for their committees. The deadline is June 30th. The contact person with the NAS study directors is jjacobs@nas.edu.

The Corps of Engineers is hosting a river symposium on July 26-27 in Vicksburg, looking at the hydrology and mechanics of the river.

An assessment of Farm Bill programs is being carried out by USDA, on roughly the same time line as the Action Plan reassessment, and should be integrated into that. The CEAP Assessment should have publicly available information in 1-2 years.

USGS is participating in a wetlands assessment for the lower Miss. River Valley, which should also be coordinated with the reassessment.

The Lower Miss. River Conservation Committee is developing a proposal for a Water Quality Assessment for the lower river.

A big rivers nutrient symposium is being held in St. Louis on Oct. 4-6, to look at a particular stretch of the river (in response to the Sierra Club petition last year.)

Discussion of Nutrient Reduction Strategies for Lower River Basin – led by John McClurkan, TN Dept of Agriculture

Discussion Points:

One issue to investigate is how fertilizer application rates are set in each state, how recommendations are made – is this a problem? One idea is to conduct a survey of the lower river states to see how each handles this.

It's important to measure input and output of nutrients into the river by states in the lower basin.

The Modeling, Monitoring, and Research (MMR) Report gave broad guidelines on this, which can help shape more detailed discussions, and in turn help get better data.

We need to get back USGS data collection on the river and tributaries that's been lost due to budget cuts.

The MMR recommended that the USGS monitoring network be brought back.

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Discussion of Nutrient Reduction Strategies (continued) -

Proposed hydrological changes for some tributaries and basins – such as the White and Yazoo – will have effects on nutrients.

A number of programs are aimed at stopping sediment loss, but that doesn't directly address nitrates.

The tile drainage efforts in the Midwest need to be included [work of the Agricultural Drainage Management Task Force].

Locally-led watershed management efforts need to be an integral part of our efforts.

Land-use change is another significant factor, and influences internal loading of N&P.

Designations of impairment by adjacent states of the same water body don't always agree.

Several facilities along the industrial corridor in Louisiana developed a process for point source reduction of nitrates, which can be applied to municipal facilities as well. The Water Environment Federation has been given the information to help disseminate it.

The Sub-basin Committee could help with that dissemination.

We need to do an inventory of the major municipal sources along the lower river, which is a very finite number of cities.

We can compare actions here with those described by the Minneapolis Sewer System at the Task Force meeting last September.

In urban areas, a significant concern is lawn chemical (over-)use.

Several lawsuits by NGOs are forcing an examination of the metropolitan sewage district in St. Louis.

All municipalities are going to get hit by nutrient criteria. Perhaps we could facilitate discussions by large metropolitan sewage districts.

On the agriculture side, the Corps 4 program is being widely used.

The CEAP assessment will include wetlands.

The Ohio River Sub-basin Committee is working on a trading component for their strategies.

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Nutrient Strategy Discussion (continued)

We need to focus on significant sources relative to their impact on the hypoxia problem, which will clarify the scope of what we're looking at.

Who are the stakeholders we should be engaging?

The Farm Bureaus in each state have developed priorities for their programs.

People of influence within communities should be engaged.

In several states, there are agriculture field days that are important outreach opportunities.

The Center for Watershed Protection has developed model programs that can be applied.

A non-point list serve would be a very useful way to disseminate information; has EPA developed a hypoxia list-serve?

Lower Mississippi River Basin Symposium – Darrell Brown, EPA (powerpoint)

Symposia had been discussed as part of the Action Plan reassessment, for both management and science. Some of the science that went into the Action Plan is now 10 years old.

2 symposia are currently planned – Upper Basin and Gulf Science.

The Upper River Sub-basin Committee developed a list of 14-15 questions that their symposium would focus on, largely dealing with nutrient science.

We're looking for co-sponsors for the Gulf Science Symposium, such as Sea Grant colleges.

The summer of 06 has been suggested as the time frame for a Lower River Symposium.

The 3 symposia would feed into the reassessment process. We're still working out the peer review process for the symposia. The Gulf Science symposium would be peer reviewed in a journal; not sure yet how to do peer review for the Upper and Lower River symposia.

Discussion:

In the lower river, we should focus on the plumbing system/hydrology.

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There is support in the operations division of the Corps for a focused symposium on nitrogen-removal, especially for management activity in the middle river. We also need to look at research needs for the lower Mississippi.

Perhaps a series of questions should be developed, like those developed by the upper basin group.

Another goal would be to prioritize critical things to be learned and done in the next 5 years.

Focus Watershed Project Updates

Vermillion Watershed Project, La. – Dexter Sapp, NRCS (powerpoint)

Lake Washington Project, MS – Richard Ingram, MDEQ (powerpoint)

St Francis River, MO – Joe Engeln, MDNR – NRCS is working with timing or irrigation and fertilizer application in this watershed, to reduce loss; also working with local landowners

Hatchie River, TN – John McClurkan, TN Dept of Ag. – The Hatchie River Alliance was formed, with federal and state agencies, Soil & Water Conservation Districts, county governments; also participating is the West Tennessee River Basin Authority; there are efforts to educate farmers about no-till and other techniques; focusing on small tributaries such as the Dry Creek Basin, just east of Memphis, working to address erosive soils and promote winter cover crops

Bayou Bartholomew, AR – Ken Brazil, ASWCC – Since our update at the November SBC meeting, a nine element plan has been drafted and submitted, which will help focus efforts within the watershed, concentrating on the most significant problems and the most return on funds.