Final Meeting Summary

Eleventh Meeting of the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force

September 1, 2004
Saint Paul, Minnesota

Task Force Participants

Federal
Benjamin Grumbles, Acting Assistant Administrator, U.S. Environmental Protection Agency, Office of Water
Mack Gray, Deputy Under Secretary for Natural Resources and Environment, U.S. Department of Agriculture
Rob Magnien, National Ocean Service, National Oceanic and Atmospheric Administration (Sitting in for Admiral Conrad Lautenbacher)
David Vigh, MVD Environmental Team Leader, U.S. Army Corps of Engineers – Mississippi Valley Division
Kameran Onley, White House Council on Environmental Quality
Chris Shabacker, U.S. Department of the Interior

State
Sheryl Corrigan, Commissioner, Minnesota Pollution Control Agency
Patty Judge, Secretary of Agriculture, Iowa
Charles Chisolm, Environmental Programs Director, Mississippi
Chuck Bernie, Wisconsin Department of Natural Resources (Sitting in for Secretary P. Scott Hassett)
Charles Hartke, Director, Illinois Department of Agriculture
Len Bahr, Executive Assistant, Louisiana Governor's Office of Coastal Activities
Earl Smith, Chief, Arkansas Soil and Water Conservation Commission

Opening Remarks

Benjamin Grumbles, Acting Assistant Administrator of the U.S. Environmental Protection Agency (EPA), Office of Water, chaired this meeting of the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force. In his opening remarks, Mr. Grumbles noted that the Task Force members and meeting participants are sending a powerful message to the country by meeting in Minneapolis-St. Paul, Minnesota, at the farthest end of the Mississippi River watershed from the Gulf of Mexico, to discuss the Action Plan. He also thanked Sheryl Corrigan, Commissioner of the Minnesota Pollution Control Agency, for the hospitality and leadership of upper basin states.

Ms. Corrigan said the governor of Minnesota places the highest priority on water quality. In a pictorial presentation, Ms. Corrigan also shared her impressions of the Mississippi River as it winds through the state of Minnesota. She highlighted how the river is tied to the history of Minnesota, and she described Minnesota's efforts to reduce nutrients and other pollutants entering the river. See Attachment A.

Mr. Grumbles stated that the approach of the Task Force to meeting the goals of the hypoxia Action Plan is sound science and steady progress. These meetings provide opportunities to review the science and move forward by integrating new information and adapting management.

Opportunities in the USDA Farm Bill for Nutrient Reductions – Mack Gray, Deputy Under Secretary for Natural Resources and Environment, U.S. Department of Agriculture

Mack Gray identified U.S. Department of Agriculture (USDA) programs that help to clean up waters in this country, specifically the Farm Bill's conservation programs. Mr. Gray outlined the history of cost-share programs and other federally funded conservation programs and noted that conservation funding from USDA has significantly increased over the past 5 years. He gave several examples: the Conservation Reserve Program (CRP) is seeking to enroll the maximum number of acres under the Farm Bill (39.2 million acres) by the end of the Farm Bill period in 2007; the Environmental Quality Incentives Program (EQIP) will be funded at roughly $1 billion dollars this year; the Wetland Reserve Program is authorized to enroll 250 million acres. Despite these unprecedented funding

opportunities, many states continue to have a backlog of farmers waiting to enroll in Farm Bill programs. Mr. Gray said he believes that Farm Bill programs will continue to be funded. He also noted that data collected in the National Resources Inventory (NRI), which USDA conducts every 5 years, indicates that soil erosion and erosion rates in the country have declined by two-thirds since 1985, showing that conservation programs are working.

After the Storm Video

EPA and the Weather Channel cooperatively created a video program *After the Storm* as part of an education effort to help the public connect weather and watershed protection. It was aired on the Weather Channel in the summer of 2004, and is now being made available to the public and other broadcasters. At the meeting, participants watched a 10-minute segment that focuses specifically on the efforts to control and reduce the hypoxic zone in the Gulf of Mexico through watershed actions throughout the Mississippi River watershed.

The Current State of Hypoxia in the Gulf – Darrell Brown, EPA

Darrell Brown presented the findings of Nancy Rabalais of Louisiana Universities Marine Consortium on the current state of the hypoxic zone. He reported that the size of the hypoxic zone for this year was a little bit above the 5-year running average and that the zone extends from the mouth of the Mississippi River to the western edges of Louisiana. Dr. Rabalais' findings are supported by several other scientists and government agencies that are concurrently conducting research in the Gulf of Mexico.

Status of Sub-basin Committees

Upper Mississippi River Sub-basin Team – Dean Lemke, Iowa Department of Agriculture and Land Stewardship

Dean Lemke identified networking as an overarching mission that spans all of the team's efforts. At this initial stage, the team is focusing on providing technical networking opportunities that will allow experts to share information on nutrients (specifically nitrogen and phosphorus) throughout the region. Key topics of discussion will include recommendations on nitrogen and phosphorus use, existing programs and technology targeting nutrient reduction, and ongoing research studies. An expected goal for this team is to hold a technical conference to promote better understanding of these topics and to share information among the states at the regional and national levels. The team is also working to create an inventory of current programs addressing point and nonpoint source pollution and their effectiveness. Another effort undertaken by the team is in the area of policy and legislation. The team is seeking to identify common positions among states on policy matters and funding decisions to inform decision makers about effective programs. Lastly, the team is working to develop a management structure that will bring in broader areas of interest. See Attachment B.

Green Lands, Blue Waters Initiative – Steve Morse, University of Minnesota

Steve Morse described the factors that spurred the creation of the Green Lands, Blue Waters initiative as well as the strategies being implemented to reduce runoff and increase the productivity of lands in the basin. Mr. Morse commented that conventional large-scale row cropping has problematic environmental impacts because of crucial time periods when the soil is exposed to runoff and erosion. The Green Lands, Blue Waters initiative builds on innovations identified by existing science and challenges people to look at production agriculture through new lenses. The program coalesces multiple goals for agriculture, including improved water quality in the basin, increased economic options and profitability for agricultural producers, improved habitat, reduced flooding potential, and increased vitality of rural communities. The program is working to accomplish this vision by supporting the development and transition to new systems that integrate perenniality into the agricultural landscape. This concept promotes interspersing crop locations and crop rotations so that there is minimal time when bare soil is exposed. Methods that increase perenniality include grazing, buffer zones, biomass energy, trees and shrubs, perennial native lagoons, oilseed crops, wetland restoration, and cover crops. The key to the effort is to transition to this approach and target environmentally sensitive lands. This change in thinking at a systemic level has the potential to produce a dramatic reduction in nutrient loading and yield positive benefits for wildlife as well.

Comments

Members of the Task Force asked four questions: (1) Did "targeting environmentally sensitive lands" refer to lands contributing to hypoxic situations such as those with excess sediment and nutrient runoff? (2) How extensive did Mr. Morse think phosphorus was as a nutrient problem? (3) What impacts did Mr. Morse expect the Farm Bill to have on diversity? (4) Did Mr. Morse know of anyone conducting research on collecting the nutrient-rich runoff water to irrigate lands?

Mr. Morse responded that the Green Lands, Blue Waters initiative is in the process of setting criteria to identify environmentally sensitive lands, which would be lands that contribute to nutrient loading. On the second question he said he recognizes that phosphorus is a significant issue, but declined to comment on the level of significance, because he is a policy maker rather than a scientist. On the third question, he stated that there were real opportunities in the Farm Bill to promote diversity in production agriculture, particularly because the assistance given could contribute to making other revenue sources related to agriculture economically viable. On the fourth question, he said he would not be the best person to answer that question.

Further, Len Bahr of the Louisiana Governor's Office of Coastal Activities asked whether there has been any collaboration with Bill Mitch of Ohio State University, or other academic scientists. Mr. Morse said that although there has been considerable exchange with university researchers, the initiative had not yet contacted universities outside the region.

The Governors' Initiative – Sheryl Corrigan, Minnesota Pollution Control Agency

Sheryl Corrigan discussed the Governors' Initiative of the Upper Mississippi River Basin. The initiative encourages the states of Wisconsin, Illinois, Minnesota, and Iowa to work together to reduce nutrient and sediment impacts on the Mississippi River. This initiative encourages governors and other state officials to work from the top to create strategies that increase the effectiveness of state initiatives. The goal is to create a focused framework of strategies that everyone can buy into to that will make the existing work being done in the states as effective as possible.

Ms. Corrigan identified several programs that Minnesota is working on with the other states as part of this initiative. The efforts include establishing basin-wide Total Maximum Daily Loads (TMDLs), working with USDA's Natural Resources Conservation Service (NRCS) to leverage Farm Bill funding, participating in the Blue Waters, Green Lands, Blue Waters initiative, developing drainage system pilots and voluntary point source pollution reduction programs, and encouraging corporations and foundations to provide funding. The goal of the initiative is to raise awareness of the environmental issues concerning the upper Mississippi and the entire river corridor, to the same level of recognition that the nation has for the Great Lakes and the Florida Everglades.

Ohio River Basin – Peter Tennant, Ohio River Valley Water Sanitation Commission

Peter Tennant provided a brief status report on the Ohio River Basin Team. Mr. Tennant started out with the positive note that the environmental agency commissioners from the eight member states as well as EPA Region 3 have reaffirmed their commitment to this project. The team is moving forward through four workgroups. Mr. Tennant reported that the Nutrient Criteria Group has been focusing for a while on developing numeric criteria for the Ohio River. Numeric nutrient criteria, he explained, are the basis for the local level work that will be done; however, developing these numeric criteria for large rivers is proving difficult. He also reported the good news that the Nutrient Criteria Group has looked at phosphorus loading and observed some reductions based largely on reduction efforts near the Great Lakes. He also noted that nutrient trading looks like a promising approach to reduce nutrients. With respect to the Outreach Group, Mr. Tennant does not believe there is enough support for the level of outreach that he would like to see. Looking forward, he observed that one of the key challenges facing the team is to bring the agriculture community on board. Mr. Tennant also remarked that he saw great potential in idea sharing among Sub-basin Committees and he thought that it would be a good idea to establish routine contacts among members. See Attachment C.

Lower Mississippi River Basin – Phil Bass, Mississippi Department of Environmental Quality

Before Phil Bass gave an overview of the team's activities, he thanked Len Bahr for his support in getting the team off the ground. The team has gained the support of the state agencies it is working with, as well as a number of nongovernmental organizations, academia, and some consultants. The team's overall goals include compiling information on nutrient loading programs, promoting existing efforts, and establishing an open process to allow greater participation. Since the last meeting, the team has been looking at locally led watershed approaches under way in each of the states represented on the team. In an effort to highlight the progress that is being made in the lower Mississippi River Basin, the team will be showcasing key watersheds where there is a great story to tell. Mr. Bass gave a brief report on the showcase watersheds, which include the Bayou Bartholomew in Arkansas, Cabin Teal in Louisiana, Lake Washington in Mississippi, St. Francis River in Missouri and the Dry Creek watershed in the Hatchee River Basin of Tennessee. In addition to showcasing these watersheds, the team has received some funding from EPA. With the funds, the team plans to hire a full-time coordinator, provide travel support, focus on outreach activities, and produce an annual report for the Task Force as well as a detailed report of current progress that will be completed following this meeting. See Attachment D.

Missouri River Sub-basin – Darrell Brown, EPA

Darrell Brown said that the Missouri River Basin activities are in the formative stage at this time. The Missouri River Basin Association (MRBA) may be a viable organization to host the Sub-basin Team's hypoxia-focused efforts. The MRBA is a coalition of governor-appointed representatives from each of the eight Missouri River Basin states and tribal representatives as well as representatives of eight federal agencies that serve in an advisory role. The MRBA provides a forum for discussion of issues related to the Missouri River, and since 1995 it has engaged representatives of major river interests to participate in planning to enhance the sub-basin's economic and environmental resources. EPA Region 7 and Region 8 offices have provided funding to be used for a meeting later this year to explore linkages between the MRBA and the hypoxia Task Force.

Discussion of the Monitoring, Modeling, and Research (MMR) Committee – Rob Magnien, National Oceanic and Atmospheric Administration

Rob Magnien announced the release of the report "A Science Strategy to Support Management Decisions Related to Hypoxia in the Northern Gulf of Mexico and Excess Nutrients in the Mississippi River Basin," referred to as the MMR Report. Mr. Magnien recognized Herb Buxton, other workgroup members, and scientists for their efforts to complete the report. It is available on the Web and will be published in hard copy in the next few months.

Mr. Magnien briefly outlined the report's purpose and gave a brief overview of its contents. The report's main contributions are in organizing information on basin-wide monitoring, providing suggestions on how to make data more readily available, helping to coordinate existing programs, and helping to determine the need for new programs. The report will help the science aspect of Action Plan reassessment efforts. Mr. Magnien said that the implementation of report recommendations is now under way.

The Louisiana Coastal Area Study: Nutrient Reduction Actions by the U.S. Army Corps of Engineers – David Vigh, U.S. Army Corps of Engineers

Before David Vigh spoke, Benjamin Grumbles reviewed the history of the Task Force's involvement with the LCA Study. At the last meeting (in St. Louis, Missouri), it was suggested that the Task Force agree to support the Louisiana Coastal Area Study. The goal of the LCA comprehensive plan is to reverse the current degradation of the coastal ecosystem by rehabilitating coastal ecosystems and promoting the structural and functional integrity of the estuarine basins.

Mr. Vigh began by mentioning some of the Corps of Engineers' Environmental Programs and how they can contribute to better watershed management. He provided a brief summary of the LCA study and an update on the status of the report. He reported that the study is a plan to reverse current degradation of the Louisiana coastal ecosystem. A stable ecosystem will support nationally significant living resources, provide a sustainable and diverse array of fish and wildlife habitats, reduce nutrient delivery to offshore waters, and provide infrastructure protection and the sustainable resource base necessary to support ecosystem restoration projects. The LCA program takes two

approaches: (1) a hydrogeomorphic approach that works to establish natural patterns of fresh and salt waters, address sedimentation, and maintain natural landscape features; and (2) an ecosystem approach that focuses on increasing land and water ratios, and connectivity and material exchanges, and reducing nutrient delivery to the continental shelf. Some projects included in the LCA plan are freshwater diversions, sediment pumping, beneficial uses of dredged material, monitoring, shoreline stabilization, and barrier island work.

The public review period of the study ended in late August. At this time, comments are being reviewed and addressed. Mr. Vigh reported that most of the comments are supportive of the aims of the LCA project.

Clean Water Act Authorities and Sierra Club Petition regarding the Mississippi and Missouri Rivers – Benjamin Grumbles, EPA

Benjamin Grumbles explained that one of the operating principles of the Task Force is to use existing authorities to make progress toward the Action Plan's goals. He reported that on February 26, the Ozark chapter of the Sierra Club submitted a petition to EPA requesting that EPA set water quality standards based on numeric criteria for portions of the Mississippi and Missouri Rivers using the authorities of the Clean Water Act (CWA). The Sierra Club's petition noted the challenge posed by inconsistency among the states along the Mississippi and Missouri Rivers and cited a need for EPA to lead states in a broader and more uniform approach. Mr. Grumbles drew attention to the petition and the response from EPA. The Agency took the petition extremely seriously and conducted an exhaustive review of the science. EPA recognizes the challenges posed by nutrients, pathogens, and sediments, and acknowledges that more work is in fact necessary. On June 26, EPA denied the request to establish preemptive numeric criteria for the identified portions of the rivers; however, EPA did commit to work closely with the states and advance the science of numeric criteria. One of the key commitments is to hold a national workshop in 2005 with the affected states with a view to establishing the best possible, scientifically based numeric criteria. EPA recognizes that solutions transcend political boundaries and that a strong federal role is needed for these large rivers, while respecting the rights of the states. EPA will provide a post-workshop report to the Task Force.

Further discussing CWA activities, Mr. Grumbles emphasized the decentralized approach and gave an overview of federal regulations playing out in the Mississippi River watershed. EPA recognizes that problems are first addressed or even prevented through local, state, nongovernmental, and voluntary solutions that deserve support; however, federal authorities also have a role to play. For example, an important aspect of the CWA sets pollution budgets through the TMDL program. For impaired waters, under the CWA, EPA hold states responsible for developing TMDLs. Mr. Grumbles cited the statistic that over 600 TMDLs for nutrients and sediments have been developed and approved in the Mississippi River watershed. He also emphasized that TMDLs are designed to bring local or affected stakeholders into the process of planning for pollution budgets. Another important aspect of federal authorities, he noted, was the issuance of permits for concentrated animal feedlot operations (CAFOs). EPA finalized the CAFO rule in December 2002; the rule requires large CAFOs that act like regulated point sources to operate under permits with conditions and regulated discharge limits. EPA, he said, makes it a priority to work with states and the agricultural sector to fully implement the permit issuing process, which is expected to lead to significant reductions in nitrogen, phosphorus, and sediment discharges. As for pathogen standards for water, EPA is working to set a more updated standard for states that have not yet done so. EPA expects to have a final rule by the end of the year.

Comments

Len Bahr explained that the Mississippi River functions in two distinct and different ways. In most of the states, it functions as a collecting basin, a watershed, where it is appropriate to deal with standards to improve the quality of the water. However, once it reaches the Louisiana border, its function changes to that of a distributary basin. He expressed concern that standards that may be appropriate in most of the river's basin states may not be appropriate in Louisiana for this reason. He noted that this idea has not been significantly addressed. He stressed that flexibility is necessary in developing standards.

Louisiana Industry Report – Dugan Sabins, Louisiana Department of Environmental Conservation

Dugan Sabins described the efforts of Louisiana's large industrial point source community to develop solutions that reduce discharges of pollutants to the river. Through voluntary efforts, these industries are working to avoid serious

repercussions down the road. He cited the example of phosphate fertilizer companies that have spent several million dollars to cap their gypsum stacks to reduce runoff and discharge of phosphoric acid to the Mississippi River. In over 5 years, they have cut discharges by 80 percent. Through the environmental leadership program, large refineries and chemical plants have also been working to reduce nitrogen discharges. The state is continuing to work with other industries to reduce their discharges. The next step would be to start working with municipal discharges. Mr. Sabins said that industries want to be a part of the Action Plan and are willing to come to the table to discuss point source reductions.

Comments

Len Bahr pointed out a unique opportunity for some industries to feed the back swamps. Along the industrial corridor between Baton Rouge and New Orleans, almost every plant uses river water for cooling. A couple of companies have agreed to voluntarily redirect the cooling water into swamp forests to slow their current rate of degradation. More opportunities to develop these types of partnerships need to be explored.

David Vigh asked about state regulatory involvement given the voluntary efforts of companies. Mr. Sabins replied that at this stage, most industries have participated voluntarily because they recognize that if they do not change their practices, regulations will follow. However, some companies have gone to the point of agreeing to have their voluntary reductions reflected in their permit limits, thus ensuring that they will not return to their former discharge levels.

Federal and State Programs – Benjamin Grumbles, EPA

Both federal agencies and states have allocated resources toward the conservation, protection, and restoration of the Mississippi River Basin. Mr. Grumbles commented on some of EPA's funding programs listed among the 2004 federal funding programs and FY2004 funding levels, which was included in the meeting packet. He highlighted the State Revolving Fund (SRF) Program, and EPA's Targeted Watershed Grant Program. In the Mississippi River Basin, projects funded by the latter program include the Fourche Creek watershed project in Arkansas, the DesMoines/Lobe watershed project in Iowa, and the Upper Sangamon River watershed project in Illinois. These programs use innovative technology and build new partnerships to optimize nutrient management.

Afternoon Session

Nutrient White Paper – Jim Giattina, EPA Region 4

Jim Giattina explained the context of the Region 4 white paper that the public may have heard about, and clarified the conclusions that may and may not be drawn from the information in it: the paper was developed in response to his request that a study be conducted to determine how Region 4 could support implementation of the Action Plan. Review of the study indicated that the Mississippi river is highly enriched with both nitrogen and phosphorus. The eastern part of the hypoxic region of the Gulf is phosphorus limited and the western zone is nitrogen limited, which suggests that a dual nitrogen and phosphorus reduction strategy would be appropriate. Mr. Giattina noted that these findings are not new and that the science on which the original Action Plan was based reaches these same conclusions. He strongly emphasized that the white paper's analysis is not the final word, not least because it has not been through any external peer review process.

Although the findings are not new, Mr. Giattina and the Region 4 staff felt the findings raised the focus on the roles of nitrogen and phosphorus in Gulf hypoxia, which merited further investigation. As a result, Mr. Giattina recommended that the Monitoring, Modeling, and Research (MMR) Workgroup conduct a review of the topic under Task Force guidance. In discussions yesterday, the Task Force agreed that the paper should undergo a peer review by independent scientific panels and professional associations on a fairly rapid track. The MMR Workgroup would set this effort in motion.

Mr. Giattina emphasized the importance of monitoring, modeling, and research to increase understanding and measure progress and noted that resource limitations have curtailed our capabilities in these areas over the past 4

years. Mr. Giattina also clearly stated that the white paper in no way offers the conclusion that the activities currently under way should be slowed or stopped.

Comments

Benjamin Grumbles further emphasized the need for further independent peer review of the Region 4 white paper, which can provide a fresh look and provide a scientifically defensible assessment. He echoed that it would be unfortunate for anyone to use this paper to suggest disincentives for anyone taking steps to reduce nitrogen and phosphorus. Discussions on this topic are constructive, and the MMR workgroup will ensure that the white paper receives a truly independent peer review.

Rob Magnien reiterated that the MMR workgroup accepted the request to get the paper reviewed as well as to conduct a wider review of the science. He noted that the paper is only one piece of information in a larger body of scientific information that would need to be considered in its entirety to evaluate this issue. This paper will be put on a fast track for independent scientific review, and the issue will be evaluated in light of the broader body of scientific information as part of the upcoming science reassessment.

Len Bahr summarized some of the findings that Nancy Rabalais presented to the Task Force's Executive Session on current trends in the analysis of hypoxia. Ms. Rabalais cited several researchers who are working on correlating the hypoxic area with various nutrients. They have been largely successful. Nitrogen has been the only nutrient found to have any reliable correlation, and there still remains a great deal of uncertainty about the dynamics causing hypoxia.

Jim Giattina noted that some mischaracterizations have been floating around based on early drafts of the Region 4 white paper suggesting that the issue should shift its focus from nitrogen to total phosphorus. He confirmed that the paper does not recommend such a shift in approach. In fact, he saw no reason to slow nitrogen reduction activities. Instead, he said the question of greatest significance is whether the dual strategy provides any advantages to reducing the hypoxic zone more quickly.

The 2005 Reassessment – Diane Regas, Office of Wetlands, Oceans, and Watersheds and Darrell Brown, Coastal Protection Division/EPA Hypoxia Team Leader

Diane Regas described Item 11 of the Action Plan, which calls for a reassessment of progress in achieving the goals of the Action Plan. The purpose of the 5-year reassessment is to ensure that the Task Force reevaluates the approach taken, as well as incorporates new data and scientific assessments to verify that they are on the right track, or make necessary changes. Ms. Regas handed the podium over to Darrell Brown to present the proposed approach for this reassessment to the Task Force.

Mr. Brown said the proposed reassessment plan, developed by the Coordination Committee, would be conducted by two teams that would meet quarterly over the course of the year to review a number of different activities. The Science Team would look at the conditions related to the hypoxic zone, provide updates on nutrient loads and monitoring and modeling efforts, and evaluate new information. The Management Action Team would prepare inventories of implemented management actions, look at innovative management actions, take into account appropriate indicators, and review education and outreach programs. While the Coordination Committee would oversee the process, the Sub-basin Committees would provide input to the process. Mr. Brown expressed the need for funding throughout the process.

Mr. Brown presented a schedule for completing the reassessment but emphasized that creating a quality product is more important than meeting the December 2005 deadline. As an additional change to the schedule, the Coordination Committee would provide a detailed timeline and scoping document with 45 days.

Comments

Members of the Task Force expressed agreement with decisions made about the reassessment process, specifically, the review of the white paper, the inclusion of reports and information from Sub-Basin committees, and putting priority on producing a quality product over meeting the December deadline, while still striving to meet that

deadline. They also stressed the importance of linking the science reassessment with the management program reassessment to ensure that actions being taken are in keeping with program goals.

Report from Industry-Led Solutions – Jim Harsdorf, Dairy Farmer and Former Secretary of the Wisconsin Department of Agriculture

Jim Harsdorf reported on proposed actions that Industry-Led Solutions (ILS) would take to support the hypoxia Action Plan. He began by outlining the creation and growth of ILS. The group began with a meeting of dairy producers who came together to address dairy issues affecting water quality. Shortly after the initial meeting, other livestock producers and crop producers joined the group. ILS today consists of industry members working together to address challenges related to the agricultural industry.

ILS has a formal statement of objectives, which states that through collaboration and cooperation, ILS will work to develop, lead, and carry out a voluntary, locally-based strategy across the entire river basin, to manage nonpoint source nutrients in each state's critical watersheds, ultimately reducing the delivery of excess nutrients to the Gulf of Mexico.

The group would like to use the existing Action Plan structure to work with the Task Force in the following ways:

Action 1: ILS will work through producers in the agricultural industry to secure financial support for the nutrient reduction framework outlined in the Action Plan.
Action 2: ILS will take immediate steps to help key agricultural producers become members of existing and developing Sub-basin Committees and will work with the Task Force to help promote and sustain committees in sub-basins not currently supported.
Action 3: ILS will support future research related to the loss of nutrients on privately held agricultural lands, which will require a focused working relationship with key producers and agricultural landowners in the Mississippi River Basin.
Action 5: ILS will work through producers in the agricultural industry to help secure legislative support for monitoring efforts and modeling techniques designed to help identify management actions that mitigate nutrient losses.
Action 6: ILS will mobilize its membership to develop an environmental stewardship initiative known as the planned intervention microwatershed approach (PIMA).
Action 7: ILS will lend its support to the development and execution of the Corps of Engineer's studies as a major component to reduce hypoxia.
Action 8: ILS will aggressively advocate a strategic best management approach as an essential element of the nutrient reduction strategy.
Action 11: ILS will offer the services of key agricultural producers to assist the Task Force with assessments. In addition to assisting in these ways, ILS will prepare a supporting business plan creating a framework to mobilize and sustain interactions between ILS and the federal agencies ILS works with.

In conclusion, Mr. Harsdorf believes the Task Force would gain momentum by implementing some of its actions cooperatively, and producers would benefit by being directly involved in the decision-making process. See Attachment E.

Comments

Sheryl Corrigan noted that the presentation demonstrated the commitment of agricultural producers to the hypoxia issue as well as to water quality improvement. Other Task Force members noted that they would like to see agricultural producers on the Sub-basin Committees, continued involvement of producers in monitoring efforts, and contact between producers participating in the PIMA program and researchers working on targeting environmentally sensitive land in the Green Lands, Blue Waters initiative explained by Steve Morse. The Task Force would also like to see ILS participate in future meetings to give an update on ILS's efforts.

Public Comments

Cliff Snyder, Potash and Phosphate Institute

Mr. Snyder emphasized that the fertilizer industry is committed to using nutrient resources wisely and that they are very interested in having solid science to back up decisions and activities. He reminded the Task Force that relating nutrients with the size of the hypoxic zone is a very complicated issue. Their studies of statistical relationships between the amount of nitrogen and phosphate fertilizer sold and nutrient flux into the Gulf of Mexico conclude that fertilizer nitrogen is not clearly related to hypoxia.

Mr. Snyder brought up a USGS model that tracks the transformation of fertilizer nitrogen and predicts the discharge of nitrate nitrogen into the Mississippi River Basin. Based on this model, he concluded that fertilizer nitrogen sales might be responsible for only 8 percent of the nitrate flux. He also noted that the nitrate flux is strongly related to water flow variables. He suggested that water systems and drainage management is therefore, a very important factor in considering nutrient management.

Based on the nutrient consumption data collected over the past 20 years, the fertilizer industry has concluded that nutrient balance is a key element in managing nutrients. Mr. Snyder pointed out that the industry advises agricultural producers on optimum fertilizer use, which has lowered the use of phosphate fertilizer in some areas. See Attachment F.

Terry Francl, American Farm Bureau Federation

Mr. Francl addressed the EPA Region 4 white paper included in the meeting packet saying that its August date makes it the third draft. His comments will address the January draft.

He brought up the fact that the January white paper raises several questions about the exact role of nitrogen, phosphorus, and their relative ratio in the size and formation of the hypoxic zone. He said that the paper questions the sufficiency of the data on which recommendations in the Action Plan were made to reduce nitrogen inputs.

Mr. Francl stressed three points: (1) the science behind the original Committee on Environment and Natural Resources Research (CENR) needs to be thoroughly reviewed; (2) the review must include an examination of all the issues raised in the original January version of the paper; and (3) the review must be conducted independently of the CENR scientists.

In light of the Region 4 white paper, the Action Plan is losing credibility in the agricultural community, Mr. Francl noted. He said a balanced analysis of all the significant factors that contribute to hypoxia is needed to restore the confidence of the agricultural community. He also said that the Farm Bureau would support and review the research that is under way.

Gary Joachim, American Soybean Association

Mr. Joachim shared observations about changes in cropping. He observed that the change from a cropping system of diverse crops to one focused on corn and soybean rotation was based on economic factors of production, and is more efficient.

He also commented on the difficulty of predicting the effects of change in agricultural practices. In a system that has such a wide variety of variables, there is almost no way to predict the effects of any single change or combination of changes.

Looking into the future, Mr. Joachim expects energy and fertilizer costs to continue to rise. The increased costs will drive farmers to use inputs more efficiently. He also expects that farmers will be able to use advances in biotechnology to reduce fertilizer inputs. These trends would likely mean less residual nitrogen. He suggested that the Task Force interact more closely with biotechnology providers to keep abreast of advances and incorporate them as a factor in future research.

Dan McGuiness, National Audubon Society – Upper Mississippi River Campaign

Mr. McGuiness expressed the Audubon Society's interested in the Mississippi River. The Audubon Society supports the initiative that the governors' of Minnesota, Wisconsin, and Illinois kicked off at the Grand Excursion designed to bring the upper basin states together to do their part to address the hypoxia issue. The Audubon Society also supports the Green Lands, Blue Waters initiative and has been involved as an active participant in the initiative. He said the Audubon Society is interested in a different agricultural paradigm that supports farms while at the same time improving the health of the environment.

Doug Daigle, Mississippi River Basin Alliance

Mr. Daigle said that he was encouraged by accomplishments made at the meeting. He recognized the complexity and the challenge of the science. He also recognized the confusion surrounding the Region 4 white paper and the extent of its validity. He applauded the efforts of the Task Force to work in good faith, and also noted the encouraging participation by producers from the Industry-Led Solutions group.

He noted that funding was problematic. He would like to see the Task Force get money to the states that need it. He expressed the hope that the reassessment would provide an opportunity to evaluate funding needs in the basin in an orderly way, and he encouraged the Task Force to prioritize funding.

Susan Heathcoate, Iowa Environmental Council

Ms. Heathcoate said she was encouraged by the progress being made, especially in light of the limited resources available. She sees the Sub-basin Committees as an essential component of implementation. She would like to see increased participation in the Sub-basin Committees and suggested expanding the committees to include nonprofits, industry, and municipalities. She pointed out that funding is an essential element in implementation and requested that the Task Force step up its efforts to secure funding from federal, state, local, and private sources.

Cynthia Sartou, Gulf Restoration Network

Ms. Sartou identified the preliminary report of the Commission on Ocean Policy as a great opportunity for the Task Force. She presented a letter requesting the Task Force asking it to build on the report and request the funding needed to move the Action Plan forward.

Ms. Sartou requested that the Task Force look at monitoring capacity as part of the reassessment. The lack of funding has largely contributed to the loss of monitoring capacity. She pointed out the importance of monitoring to determine the impacts of management actions. She suggested that the reassessment produce concrete data on the programs implemented and the water quality improvements that have resulted from program implementation. She stated that with the significant water quality problems in the basin, it was imperative to demonstrate progress in improved water quality, in order to be able to secure future federal funds.

Ms. Sartou believes coastal restoration is one of the most significant problems facing the nation and that water quality issues in the Mississippi have the potential to affect coastal restoration. Excess nutrients can overwhelm restoration and cause degradation in coastal systems; therefore, the success of coastal restoration depends on the success of nutrient reduction efforts upstream.

Les Everett, University of Minnesota Water Resources Center

Mr. Everett asked whether the Task Force has continued to look at the quantitative effects of policy. As an example, he noted the commodity programs of the Farm Bill. There are a limited number of conservation programs for working lands under the Farm Bill; however, these programs are very competitive.

Rick Robinson, Iowa Farm Bureau

Mr. Robinson expressed his disappointment at the lack of federal funds available for cost-share programs and emphasized the need for more support for voluntary efforts. As an example, he noted that in Iowa, farmers applied

to the four major cost-share programs for more than $100 million, but funds for the programs were not fully available.

He also expressed concern over the Region 4 white paper, which questioned the science behind; and, by extension, the credibility of many of the nutrient reduction goals set by the Task Force. He was pleased to hear that the questions raised by the Region 4 white paper will be addressed in the upcoming assessment and in a review conducted by third-party independent scientists not involved in the Gulf Action Plan.

Mr. Robinson observed that states, farmers, and the federal government have limited financial resources, and he stressed the need to make certain that these limited funds will be invested in programs that will actually make a difference in water quality. Mr. Robinson offered the Iowa Farm Bureau's support.

Task Force Summary Comments

Patty Judge thanked EPA staff members for their willingness to look at the new data, reexamine their positions, and answer new questions. She also appreciated the agreement to move forward with an independent review of the science and promised to keep an eye on the review process to see that it is completed. She reemphasized the need for improved monitoring as an essential indicator to track progress. She concluded with a word on funding. She emphasized that implementation of all these plans costs money and she challenged the Task Force to secure the resources necessary to fully fund the existing cost-share programs.

Charles Hartke expressed appreciation for the Industry-Led Solutions group, which was ready to get involved in the implementation process, but he stressed that federal funding would be needed to make implementation projects a reality.

David Vigh noted that there were correlations between the potash industry's data and the findings of Nancy Rabalais' research. He also reiterated the need for sound science, continued teamwork, improved water quality, coastal restoration, and sufficient funding. He was optimistic about the potential for capitalizing on the recommendations of the report by the Commission on Ocean Policy.

Summary of Action Items

Dianne Regas outlined action items to establish guidelines for, and agreements on, how the Task Force will move forward. Lead agencies, workgroups, and committees were assigned responsibility for the action items. Task Force members suggested modifications and addendums to the action items. See Attachment G.

Next Step 1: [Action Plan #2] Sub-basin Teams

Sustain and improve stakeholder networks within the existing Upper Mississippi, Lower Mississippi, Missouri, and Ohio Sub-basin Teams. *Lead: States*

Next Step 2: [Action Plan #7] Louisiana Coastal Area Study

Follow progress of the Louisiana Coastal Area Study and identify opportunities for coordination and support. *Lead: Army Corps of Engineers*

Next Step 3: [Action Plan #8] Water Quality Improvements

Identify water quality improvements existing at the state level that have an impact on the Gulf of Mexico's hypoxic zone and the Mississippi-Atchafalaya River Basin (MARB), by implementing existing programs, including those designed to set water quality standards throughout the basin. *Lead: Coordination Committee*

Next Step 4: [Action Plan #9/10] Comprehensive Inventory of Available Programs

Compile a comprehensive inventory of available state and federal programs, based on information to be submitted by Task Force members. *Lead: Coordination Committee*

Next Step 5: [Action Plan #11] Plan and Scoping Document

Prepare a detailed plan and scoping document for the reassessment to assess progress to date and chart a course for the future within 45 days. *Lead: Coordination Committee*

Next Step 6: [Action Plan #6] Participation of Producers and Stakeholders

Encourage active participation of producers and private entities in the activities of the Sub-basin Committees and the Task Force. *Lead: Coordination Committee*

Next Step 7: [Action Plan #6] Develop a "Friends of the Gulf Award"

Develop a "Friends of the Gulf Award" based on the five principles of the Action Plan. *Lead: Coordination Committee*

[Meeting adjourned]

List of Attachments

Attachment A – Presentation by Sheryl Corrigan, Minnesota Pollution Control Agency, *(Powerpoint, 4.9 MB)*
Attachment B – Presentation by Deam Lemke, Iowa Department of Agriculture, *(Powerpoint, 2 MB)*
Attachment C – Presentation by Steve Morse, University of Minnesota *(Powerpoint, 12 MB)*
Attachment D – Presentation by Phil Bass, Mississippi Department of Environmental Quality *(Powerpoint, 1 MB)*
Attachment E – Presentation by Jim Harsdorf, Industry-Led Solutions Group *(Powerpoint, 3.5 MB)*
Attachment F – Presentation by Cliff Snyder, Potash and Phosphate Institute *(Powerpoint, 5.5 MB)*
Attachment G – Presentation by EPA on Action Plan progress and reassessment next steps *(Powerpoint, 1 MB)*