Wisconsin Department of Natural Resources

Framework for Action - Page 4

The first guiding principal in the action plan is to "Encourage actions that are voluntary, practical and cost-effective." On the surface this seems logical; however, will "voluntary" programs achieve a meaningful reduction in nutrient loads to the Gulf? Where would we be today if we ask industry and municipalities to voluntarily reduce their pollutant loads to surface waters 30 years ago? We must develop and insist in implementation of some "base level" of best management practices for nutrient runoff from non-point sources if we are ever going to make serious inroads in nutrient reductions in surface waters.

We have a general comment concerning nutrient reduction strategies to improve the Gulf Hypoxia problem. Although the Action Plan is specific to the Gulf, additional emphasis needs to be placed on the need to reduce nutrient impacts in the basin <u>including the mainstream of the Upper Mississippi River</u>. It will only be through the recognition and acceptance that the nutrient reduction strategies (for both N & P) are not only important for the Gulf, but are also necessary to improve the quality of our basin's lakes, impoundments, wetlands, rivers and streams that this Action Plan will become effective.

Within Basin Goals - Page 5

A specific action for reducing nutrient reductions should be for basin states to develop and implement nutrient criteria for phosphorus AND nitrogen.

Critical Needs - Page 6

The Action Plan suggests that targeted nutrient reductions should be directed towards "States" of the basin with the greatest loadings of N & P to the Gulf. We would suggest that this targeted effort be directed towards specific "river basins" showing high unit area loadings of N and P rather. This would focus the needed attention on "critical watersheds" rather than political boundaries.

Conclusions from the Reassessment – Page 14

What is the purpose of capitalizing "NORTHERN GULF OF MEXICO" in the second bullet on this page?

Also, under this section what is meant by "Channelization and impoundments of the Mississippi River throughout the basin?" Are you talking about the "mainstem" of the Mississippi or its watershed? It is not immediately clear how impoundments are contributing increase nutrients delivered to the Gulf.

With respect to the Missouri River, how has the substantial reduction in sediment loading due to mainstem reservoir construction influenced light penetration (reduced TSS loading) and algal growth potential in the Gulf's costal waters?

Phosphorus – It is interesting that research has shown a need to address both N & P to address the Gulf Hypoxia problem. Although many States see a need to address P to reduce eutrophication impacts (largely from lake research), there seems to be less interest by the States to address N. We believe both P & N reductions are needed to address eutrophication issues for riverine and wetland communities and support this recommendation.

Nitrogen flux – The nutrient strategy suggests a 45% reduction in riverine total N. We are thinking it would be more relevant to place the emphasis on nitrate+nitrate-N since this is the primary form of N in the Mississippi River and is a form that is readily assimilated by algae and is recognized to "fuel primary production leading to the spring hypoxia problem," (later bullet).

Wetland Creation and Reconnect Backwater Areas to Absorb Nutrients - Page 18. Although this sounds like a logical idea, we need to be careful that we are not just transferring a nutrient impairment problem in the Gulf to our basin's wetlands or backwater areas along the basin's floodplain. It is interesting that the report mentions this concern about introducing nutrients into the costal wetlands (page 21) for the vary same reason. In other words there is "no free lunch," these nutrients have to be reduced not just transferred to another location to create future eutrophication problems in another aquatic habitat.

Actions to Advance the Science and Track Progress – Item 5 - page 24 - "Who else will help"?

There is an organization that is missing in this listing. The Upper Mississippi River Conservation Committee is similar to the LMRCC and has river managers from the Five Upper Mississippi River basin states of Minnesota, Wisconsin, Iowa, Illinois and Missouri. The Water Quality Technical Section of the UMRCC has been instrumental in developing system-wide data bases of fish contaminants, sediment and water quality data for this reach of the Mississippi. Members of the UMRCC not only include river biologist and technical staff from the five UMR States, but also technical representatives from the USFWS, USGS, USCOE who work on the Mississippi River.