DEVELOPMENT OF A TOTAL MAXIMUM DAILY LOAD FOR THE ROCK RIVER BASIN (WISCONSIN)

Response to Public Comments on The Wisconsin Department of Natural Resources' December 15, 2006 DRAFT Proposed Revisions to Scope of Work

BACKGROUND

The Wisconsin Department of Natural Resources (WDNR) held a public meeting on December 12, 2006 to introduce the Rock River Basin TMDL project and to solicit feedback on proposed revisions on the Scope of Work originally contracted by U.S. EPA. The WDNR released a DRAFT Proposed Revisions to Scope of Work on December 15, 2006 for public comment.

PUBLIC COMMENT

Questions and comments were documented at the December 12 meeting, and five written comments were subsequently received. All comments are summarized below, presented in Sections 1-5, following the outline of 5 topics in the December 15, 2006 DRAFT Proposed Revisions to Scope of Work. Miscellaneous comments on the Scope of Work are found in Section 6. Section 7 contains other questions and comments not directly related to the Rock River TMDL Scope of Work.

Where possible, comments of a similar nature were combined to minimize duplication of responses from the WDNR. The source of each comment is identified in parentheses. The key for comment source is:

MMSD = Madison Metropolitan Sewerage District
Strand = Strand Associates, Inc, Earth Tech and Michael Doran Techknowledge, LLC
MEG = Municipal Environmental Group – Wastewater Division
MEA = Midwest Environmental Advocates
Madison = City of Madison Engineering Division
Dec.12 = public comments/questions at December 12, 2006 meeting

(1) Selection of Waterbodies

A. Comment: Rather than prioritize by pollutant if data and/or budget are limiting, suggest that other factors be considered, including existing data, contributing watershed, degree or impairment and likelihood of achieving meaningful biological improvements. (MMSD& Strand)

Response: The prioritization is based on complexity and not necessarily by pollutant. The TMDLs listed for phosphorus are caused by both point and non-point sources and are more complex than the sediment only TMDLs that are mostly caused by non-point source agriculture. Given the controversy surrounding point source and non-point source allocations, it is WDNR's belief that the phosphorus TMDL's are best addressed by an independent consultant. If budget constraints do not permit the inclusion of water bodies impaired solely by sediment, the WDNR will likely address them internally.

B. Comment: If the scope of water bodies addressed in this TMDL is limited due to data and/or budget constraints, concern that this will result in inequality in how stakeholders are affected during implementation. (Strand)

Response: The selection of phosphorus impaired water bodies as the first priority was done to minimize potential inequality and address like and similar impairments throughout the basin. However, it is important to note that in establishment of a TMDL, different sources maybe subjected

to different allocations based on the nature of the specific receiving water. Not all permitted discharges may receive the same allocations.

C. Comment: Disagree with inclusion of Crawfish River because it is not on the 303(d) list for phosphorus or sediment. (Strand)

Response: Every two years WDNR must review water quality information and submit updates to the state's list of impaired waters to U.S. EPA. The process for listing and de-listing has evolved significantly over the past ten years, and some waters that are impaired may not have been included for many reasons. While the Crawfish River is not currently on the 303(d) list, its ambient water column concentrations of total phosphorus are among the highest in the state, and for this reason it is the Crawfish River will be recommended for inclusion on the 2008 303(d) list. Because of these high phosphorus concentrations, WDNR believes it is necessary to include the Crawfish River in this TMDL to adequately address any of the listed downstream waters.

D. Comment: Oppose inclusion of the East Branch Rock River unless it is on the 303(d) list for phosphorus or sediment. (Strand)

Response: The East Branch Rock River was included on the most recent 303(d) list that was approved by U.S. EPA in October 2006.

E. Comment: Request clarification on how the TMDL will address phosphorus loading from the Madison lakes – which are not on the 303(d) list – to the Yahara River system which is listed. (Strand)

Response: The TMDL represents an expansion and continuation of the 2000 Rock River Study. In the 2000 Rock River study the entire Yahara River system was simulated including the chain of lakes. The previous modeling effort simulated the Madison Lakes using hydraulic operational data for the dams and relied on first order settling and fate and transport equations to simulate the movement of TSS and phosphorus through the system.

F. Comment: TMDL may need to be reopened to address future changes to the 303(d) list. (Strand)

Response: The anticipated completion date of the Rock River Basin TMDL is March 2008. Wisconsin's next submittal of a revised 303(d) list is scheduled for April 2008. Depending on the degree of differences, adjustments to the TMDL may be considered although commitment to changing the TMDL will be dependent upon the resources available at that time.

G. Comment: WDNR is required to establish a TMDL for all impaired waters. All impaired waters in the Rock River Basin should be addressed at this time, rather than investing additional resources to establish individual TMDLs later. (MEA)

Response: Most impaired waters in the Rock River Basin are on the 303(d) list due to sediment or phosphorus or both. A small number of waters are listed due to other pollutants, including PCBs, metals, or bacteria. The WDNR recommends that the most effective use of the funds provided by U.S. EPA is to address waters impaired by phosphorus and sediment since a wealth of applicable loading and water quality data exist from previous studies to address those pollutants. Developing TMDLs for waters with impaired by PCBs, metals, and/or bacteria requires additional data, different approaches for modeling and assessment, and different implementation strategies. As resources become available, the WDNR will develop TMDLs for the waters in the basin impaired by the other pollutants.

H. Comment: The Horicon Marsh is an area of international importance and economically significant to the basin. It should be a top priority for TMDL development. (MEA)

Response: The WDNR recognizes the importance and significance of the Horicon Marsh system and has not ruled out its inclusion in this TMDL. However, there are insufficient data available at this time to establish meaningful phosphorus water quality targets for marsh communities and their unique fish and aquatic life populations. A significant infusion of additional resources will be needed to properly address the necessary load reduction, and that could detract from efforts to address other waters in this TMDL. If U.S. EPA funds are limited, WDNR proposes that development of a TMDL for the Horicon Marsh not displace or re-direct the limited resources available for the other waters in the basin. Regardless, the completion of a TMDL for most other phosphorus and sediment impaired waters in the basin will be helpful for future efforts to develop a Horicon Marsh TMDL by evaluating upstream sources of the pollutants. Although it will only be one factor considered for a TMDL specific to the marsh, this alone will be extremely valuable when evaluating and allocating nutrient and sediment loads.

(2) Water Quality Target Values and Sensitivity Analysis

A. Comment: Since TMDL is being done prior to the state establishing specific water quality standards, suggest that WDNR commit to adjusting the TMDL if the target values used are lower than whatever specific water quality standards are later established. (MMSD)

Response: The water quality targets WDNR has proposed for this TMDL are based on the best available science at this time. The data used to establish the target values for the Rock River will be considered – along with other data from the rest of the state – in efforts to develop statewide water quality standards. It is premature to forecast if there will be differences between target values and promulgated criteria. If there are differences of a significant magnitude, the WDNR will consider making adjustments in the requisite pollutant reduction goals as appropriate.

B. Comment: The target values are low and may be unachievable, so a Use Attainability Analysis should be included in the Scope of Work. (MMSD, Strand)

Response: A Use Attainability Analysis (UAA) is a process authorized by the Clean Water Act to allow a modification to a designated use. Any changes made as a result of a UAA are subject to the public participation requirements of Chapter 227, Stats., and formal approvals by the Natural Resources Board, the Wisconsin Legislature, and U.S. EPA. The WDNR has not proposed modification of any designated uses within the Rock River Basin as a component of this TMDL initiative. The technical feasibility of achieving in-water nutrient goals will be addressed in the TMDL. The economic feasibility will be considered at the time an implementation strategy is developed. If the cost of implementation would cause widespread adverse social and economic impacts to the populous of the Rock River Basin, it may be possible to pursue a UAA to identify alternate phosphorus reduction goals.

C. Comment: A technical advisory panel should be formed soon to provide more feedback on the selection of target values. (MMSD, Strand)

Response: Wisconsin does not yet have promulgated numeric water quality for phosphorus. However, it does have the narrative authority in NR 102.04 to control activities that may result in harm to humans and/or fish and other aquatic life. Using that authority, the WDNR has evaluated the best available scientific data that are applicable to the Rock River system and has proposed water

quality target values in lieu of numeric criteria. *The WDNR reaffirms that this approach is specific to the Rock River Basin TMDL and is not being used in place of the requirements of Wisconsin Statutes as they relate to the development of statewide numeric water quality criteria.*

At the December 12, 2006 meeting of project stakeholders, the WDNR provided detailed information regarding the available science and the resulting target values recommended for use in developing the Rock River Basin TMDL. Stakeholders were encouraged to review the information and provide additional data – if available – to the WDNR for consideration. No additional data were submitted during the comment period that would warrant further delays in moving forward. To allow for timely completion of the Scope of Work and to allow the U.S. EPA contractors to move ahead, no additional stakeholder panels are being planned for the development of target values.

D. Comment: TMDL is premature until water quality standards are established for phosphorus or sediment. If TMDL moves forward, a process is needed to adjust the TMDL when water quality standards are developed. WDNR should make it clear that levels selected in a TMDL process are not rules and are not applicable statewide. (MEG)

Response: As noted in the previous response, the target values for phosphorus and sediment being used to develop a Rock River Basin TMDL are **NOT** to be construed as statewide numeric water quality criteria. The phosphorus target values are specific to the Rock River Basin only and are based upon relevant data linking phosphorus concentrations to a myriad of biological responses that are representative of the fish and aquatic life communities of the Rock River Basin.

It is probable that the Rock River Basin TMDL will be complete and submitted to U.S. EPA prior to the promulgation of statewide numeric water quality criteria for phosphorus. At this time, there is no schedule for the development of numeric water quality criteria for pollutants associated with sedimentation. In the absence of numeric criteria, for sediment TMDLs already completed and approved by EPA, DNR has utilized the existing narrative water quality criteria and a combination of modeling and reference streams to provide numeric reduction goals. A similar approach will be used for the Rock River; however, for water bodies where phosphorus is also listed, the control and reduction of non-point phosphorus will require the control of sediment beyond what is generally needed solely to address sedimentation issues. This is because the silt and clay fraction of sediment is responsible for transporting a large portion of the phosphorus loads.

In response to the request for a process to adjust the TMDL, the WDNR believes it would be premature to make a commitment of that nature until more is known about the differences in water quality goals – if any. Conversely, the WDNR is committed to a future evaluation of any differences and their impact on meeting the goals of the Clean Water Act.

E. Comment: Attainability of the TMDL should be part of the analysis, with consideration of actual costs of treatment. (MEG)

Response: EPA requires that the TMDL include a "Reasonable Assurances" section in the report to show that the load and waste load allocations will be achieved at a level necessary to implement water quality standards. For waters impaired by point sources, the NPDES permit provides the reasonable assurance that the waste load allocation specified in the TMDL will be achieved. Currently there are no regulations stating that a reasonable assurance must be shown for non-point sources of pollution, or the load allocation portion of the TMDL formula. EPA does not require actual costs of treatment in the TMDL before they issue final approval of the report.

F. Comment: Rather than basing proposed target values on statewide data in the USGS report, the target values should be based on only monitoring stations in the Rock River Basin, or only those in the Southeastern Wisconsin Till Plains ecoregion. (Strand)

Response: The Rock River Basin contains a wide range or streams and stream phosphorus values. In comparison to the statewide data base, the Rock River Basin only lacks the lower concentrations found in the northern part of the state. The state "wadeable" stream analysis was conducted using both statewide data and ecoregion data. Except of the clayey soil areas of the state, the ecoregional results did not differ greatly from the statewide results.

For non-wadeable streams and rivers, there are too few sites in the Rock River Basin to conduct a meaningful data analysis. In addition, there wouldn't be a sufficient number of good quality streams in the Rock River Basin to use in the analysis. A comparison of the Rock River, Yahara River and the Crawfish River to other rivers in the SWTP ecoregion was made and presented at the meeting.

G. Comment: Purpose of TMDL is to bring a water body into compliance with water quality standards including designated uses, which often related to fish communities. Concern that phosphorus targets do not appear to be linked to biotic integrity, based on lack of correlation in USGS report. (Strand)

Response: For the non-wadeable streams, such as the Rock River, the analysis presented by USGS showed significant correlations between total phosphorus and a number of fish community measures, including the fish IBI, % intolerant fish, riverine fish and others. The values recommended as targets for this TMDL are based on the best available information, and strongest correlations in the USGS report.

H. Comment: Clarify the details of the two approaches for how a sediment target will be established, and who will conduct this analysis. (Strand)

Response: One approach that has been used frequently is to use TSS or NTUs as a surrogate for sedimentation. That may not be a good approach for some of the smaller impaired streams, but it is possibly a better approach for the Rock River. Minnesota, for example, has a water quality standards criterion for turbidity of 25 NTUs (about 20 mg/l TSS). The Rock River at Fort Atkinson in 2003 had a median value of TSS or 51 mg/l. At Afton, downstream of Lake Koshkonong and the confluence with the Yahara River, the median concentration was about 23 mg/l. The Yahara is fairly turbid near its confluence with the Rock and had a median concentration of 48 mg/l TSS. Although TSS includes algae in addition to suspended sediment, the use of a 20 or 25 mg/l TSS target could guide TMDL development. The Rock downstream from Koshkonong would meet, but upstream a 50+% reduction would be needed. Similarly, the Yahara would need a 50% reduction, if it was impaired by sediment. All of this is based on limited info on hand.

The Sugar Pecatonica used a "reference watershed" approach. That is, we back-calculated the change and level of management needed to duplicate the change that occurred in two "reference" streams. The percent reduction varied by the individual watersheds. However, the desired load per unit area was the same for all.

I. Comment: The proposed water quality target values for phosphorus are not protective of fish and aquatic life. Specifically, the USGS and WDNR reports show that the breakpoint for response of fish to total phosphorus is between 0.055 to 0.067 mg/L in wadeable streams. The WDNR data shows that response of certain fish indices to total phosphorus occurs at concentrations as low as 0.055 mg/L in nonwadeable streams. A TMDL based on WDNR's proposed target values will fail to be

protective of fish or restore water quality. The target concentrations for phosphorus should be lowered to at least 0.055 mg/L. (MEA)

Response: All of the measures used are indicators of fish and aquatic life. That is, they included measures of water column and stream bottom quality vital to fish and insects. They also included a variety of measures for fish and aquatic insects. To take one fish measure over other fish measures or fish measures over other aquatic life measures is not consistent with the intent of the Clean Water Act.

The analysis included all correlations that were statistically significant. Each significant correlation was weighted based on the relative strength of the correlation. For example, for non-wadeable stream the correlation of total phosphorus with number of species of intolerant fish was given the most weight. The breakpoint for that correlation has a value of 0.139 mg/l TP, one of the highest in the group. The best information available at the time showed a weighted average of 0.012 mg/l total phosphorus.

For wadeable streams, the correlations are not as strong as those with non-wadeable streams. The correlations are similar for benthic diatoms, aquatic insects and one indicator for fish. Overall, the correlations for fish are not relatively uniformly high. To base all of the targets on one indicator of fish quality and not include other aquatic life indicators is not justifiable. Those with the stronger correlations ranged from 0.055 to 0.091 mg/l. The weighted average for all significant correlations was 0.08 mg/l total phosphorus.

(3) Data for Analysis

A. Comment: All data provided to contractors should be of sufficient quality to meet intended objectives – e.g. analyzed by certified laboratories, preference to more recent data. (MMSD)

Response: The WDNR has provided data to the contractor that it believes are representative of the water quality found in the Rock River Basin. Both historical and current data will be used as appropriately to develop the most effective and relevant pollutant reduction plan.

B. Comment: WDNR should provide the contractors with data that reflects the seasonal variation in phosphorus loadings, rather than 12 month rolling averages. Using 12 month rolling averages would allow in-stream loads to exceed acceptable water quality levels during certain times of the year. (MEA)

Response: The contractors will be provided the raw monitoring data that consists of continuous sampling at some gaging stations and grab samples collected at varying intervals. By federal law and by definition, the TMDL cannot be 12-month rolling averages. The eventual load allowed for any given water or segment will be expressed as a daily load.

C. Comment: Actual coverage by and compliance with NR 151 must be considered in evaluating baseline loads and reductions for urban and agricultural runoff. (MEA)

Response: Evaluation of the implementation of NR 151 performance standards is part of the proposed scope of work.

(4) Allocations

A. Comment: Recommend that Scope of Work specify that multiple allocation methods will be evaluated. Allocation methods that consider cost effectiveness and lowest total cost should be used. If first phase of TMDL only makes a gross allocation between point and non-point sources, WDNR should commit to a second study to optimize allocations, with consideration to lowest cost. (MMSD, Strand)

Response: The WDNR agrees that multiple allocations methods should be evaluated. EPA's Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) lists 19 allocation schemes for developing waste load allocations, but also indicates that any reasonable allocation scheme that meets the antidegradation provisions and other requirements of State water quality standards can be used. During the allocation process, EPA encourages authorities to consider a range of allocation options that are technically feasible and demonstrate programmatic consistency.

Allocations are likely to be based on competing measures of desirability such as cost effectiveness, and equity. Final allocation determinations are policy decisions and should reflect public perceptions about acceptable tradeoffs between these measures. As an example, allocation strategies that minimize costs may be deemed unfair if particular sources are burdened with most of the cost, while allocations based on equal load reductions may be more costly.

B. Comment: When allocating to wastewater treatment plants, WDNR should consider rated capacity or design flow, and phosphorus limit in WPDES permit. (MMSD)

Response: A TMDL is a mass load allocation and thus considers phosphorus loads and not just concentrations. Thus, the rated flow capacity and concentration set in the WPDES permit are combined to produce an overall load.

C. Comment: TMDL needs to give credit for phosphorus reductions that have been made by wastewater treatment plants to comply with NR 217. Achieving additional reductions will be costly. (MMSD)

Response: As previously stated, the TMDL will credit previous phosphorus reductions obtained through implementation of NR 217. Factors that shall be considered when making allocation decisions include relative source contributions, ability of small entities to pay, and prior load reductions.

D. Comment: TMDL development process should evaluate different allocation methods, and consider reductions made to-date and relative contributions of point and non-point sources. (MEG)

Response: Addressed above in comments 4A and 4C.

E. Comment: If consensus cannot be reached on the allocation method for this phase of the TMDL process, WDNR should accelerate the next phase which would include allocation refinement and implementation planning. (Strand)

Response: The final allocation is a WDNR policy decision and should reflect public perceptions about acceptable tradeoffs between competing measures; however, WDNR does not need consensus prior to implementing an allocation plan. Factors that shall be considered when making allocation decisions include relative source contributions, uncertainty about the relationships between loads and water quality through a margin of safety, reasonable assurance to implement reduction strategies, ability of small entities to pay, and prior load reductions.

F. Comment: Stakeholders should be provided with an opportunity to discuss the proposed approaches to allocations in more detail. (Strand)

Response: The WDNR has requested the multiple allocation approaches be considered in developing the TMDL. Prior to finalization of the report, interested parties will have an opportunity to review the recommendations and the WDNR will consider substantive comments and make revisions as necessary.

G. Comment: Suggest that distribution of load reduction requirements be completed using an optimization model, in order to optimize both the reduction and the cost of that reduction. (Madison)

Response: Under the current contract, an optimization study has not been budgeted however depending on the results of the TMDL, an additional optimization study maybe warranted. EPA has already developed a spreadsheet modeling framework to identify optimal allocations under a variety of watershed conditions and it can be used to help evaluate the tradeoffs associated with different allocations. The model is stochastic and incorporates Monte Carlo simulations to account for sources of uncertainty. EPA's model can be obtained at: http://www.epa.gov/waterscience/models/allocation/download/index.htm

H. Comment: How will average annual loading be turned into an average daily load? Recommend that a method be used which will relate average annual loads to a TMDL that can be practically implemented by sources that discharge only during rain events, to avoid exceeding discharge limits during those rain events. (Madison)

Response: The average annual loads in the previous 2000 Rock River study are computed from daily loads. The SWAT model used in the 2000 study utilized a daily time step for generating pollutant loads from both point and non-point sources.

(5) Expanded Public Participation and Technical Meetings

A. Comment: Supports WDNR recommendation for expanded public participation, and asks that Madison Metropolitan Sewerage District be part of the technical advisory panel. (MMSD)

Response: The WDNR has requested additional public meetings be included in the revised Scope of Work. Membership on advisory panels will be determined to ensure broad representation of the many interests in the Rock River Basin.

(6) Miscellaneous

A. Comment: Calculations and/or modeling of in-place sediment sources and sinks of phosphorus should be included in the TMDL scope. (Strand)

Response: The 2000 study which provides the framework on which this TMDL will be built included modeling of wetlands and all major impoundments, which will address this issue.

B. Comment: Assessment of other sources of phosphorus and sediment – such as streambank erosion, gully erosion and livestock concentration areas – should be included in the scope of work. (Strand)

Response: Where identified as a contributor by stream assessments and surveys, streambank erosion shall be factored into the sediment load. Permitted livestock operations shall be accounted for in the point source allocation.

C. Comment: Additional information should be provided to explain how phosphorus and sediment targets will be adjusted to consider existing and potential attainable designated uses. (Strand)

Response: For purposes of completing the TMDL, the WDNR will utilize the promulgated use designation for all waters included in the basin. The WDNR does not foresee revisions to the use designations for those waters during the contract period.

D. Comment: The Scope of Work should be expanded to include a structured achievable plan for successful implementation of the TMDL, and actual implementation. (MEA)

Response: The final TMDL which WDNR submits to EPA as a result of this process will include a general implementation plan. Funding available in this contract is not sufficient to include a detailed implementation plan. Ideally, WDNR would obtain additional grant funding to develop a detailed plan and actual implementation of the TMDL may occur after the TMDL is approved by EPA.

E. Comment: Does the scope end with load allocations, or will in-stream loading and movement be considered, and included? (Dec.12)

Response: The TMDL development ends with an allocation of loads to point and nonpoint sources. Phosphorus will be evaluated throughout.

F. Comment: What approach will be used to allocate between point and nonpoint sources? (Dec.12)

Response: *Response provided by Cadmus during the meeting*: the contractor is unable to provide a definitive answer to this question and will not be able to do so until later in the TMDL development process. A number of different approaches have been used nationwide for other TMDLs, including proportional reduction, and considering cost or achievements of point source reductions. The WDNR will request that the contract consider and present the findings of multiple approaches and recommend the best approach that will yield a suitable pollutant reduction for the Rock River Basin.

(7) Other

Note: The following comments were received, but are not specifically related to the Scope of Work.

A. Comment: WDNR should revisit issue or watershed based trading as an implementation tool for this TMDL. (MMSD)

Response: Trading may be a viable option for implementation for selected sub-watersheds within the basin. The WDNR will consider any such options independently and will support those that have a reasonable chance of successfully reducing the pollutant load as needed.

B. Comment: Implementation of this TMDL should be phased, with an initial focus on controlling nonpoint contributions. (MMSD)

Response: Implementation of the Rock River TMDL is not anticipated to be phased, but is expected to be a long-term process for both point and nonpoint source loadings. All available tools for

reducing phosphorus and sediment input into impaired waterbodies will be used to achieve the goal of having individual waterbodies meet their water quality goals and be removed from the 303(d) list.

C. Comment: Are the new SLAMM models and RUSLE2 similar and compatible with the proposed SWAT modeling approach? (Dec.12)

Response: SWAT and RUSLE match well. Municipalities and their consultants may want to consider doing phosphorus modeling now, in anticipation of TMDL implementation. See comment (7) G below for additional clarification.

D. Comment: Tendency to separate TMDL development and TMDL implementation. When are achievability and cost evaluated? Can they be considered during the development of this TMDL? (Dec.12)

Response: WDNR agrees that feasibility needs to be considered prior to implementation. The Lower Fox River Basin is currently doing a study using an optimization framework. The WDNR will look at reasonable and cost-effective approaches, and may consider a second phase of this TMDL development to assess implementation optimization.

E. Comment: Can EPA commit to an implementation optimization study? (Dec.12)

Response: Such a study is not a formal part of the EPA TMDL process, so it would not necessarily be funded by EPA. The WDNR recognizes the need to have a TMDL implementation plan that considers what is reasonably achievable, where there are gaps, and what will be most effective.

F. Comment: Agricultural community needs to be involved. How will the WDNR work to change their practices? (Dec.12)

Response: The WDNR has an ongoing commitment to apply all available implementation tools to address agriculture-related sources of pollution. These include implementation of Chapter NR 151 agricultural performance standards, cost-sharing for installing BMPs to achieve compliance, and wetland restoration.

G. Comment: Should communities be monitoring for phosphorus? (Dec.12)

Response: The WDNR is not requiring communities to conduct monitoring for phosphorus. However, the DNR recommends that permitted municipalities attempt to quantify their phosphorus loads where modeling is already being conducted to meet the 20% and 40% total suspended solids reductions. The modeling conducted for the municipalities to meet their NR 216 Permit requirements will likely be more detailed then the municipal modeling performed under the TMDL. The DNR would like to use the more detailed modeling results to supplement the TMDL study and better evaluate potential management options and costs. If using the SLAMM model, to evaluate phosphorus simply check the total phosphorus box under the “Pollutants” pull down menu.

H. Comment: Will there be monitoring once implementation is ongoing? (Dec.12)

Response: Yes, post-TMDL monitoring is required in order to determine if a waterbody is meeting water quality goals. Monitoring is normally part of the implementation plan and will provide the WDNR with the data necessary to de-list impaired waters after a TMDL is complete and on track to improving water quality.

I. Comment: NR 151 implementation is moving from voluntary to mandatory with cost-sharing. If funding is sufficient, Land Conservation can implement. Is there funding above and beyond current? (Dec.12)

Response: The Natural Resources Board requested additional state bonding in the WDNR's budget submittal to the Governor. If this request is included in the state budget process, there will be additional funds for cost-sharing. Regardless, the WDNR continues to explore other sources of funding to assist in implementation, including federal funding where available.

J. Comment: If TRM grants go to projects where there is a TMDL, how will this affect counties without TMDLs, but with other water quality priorities? (Dec.12)

Response: The WDNR is currently evaluating how to modify the Targeted Runoff Management Grant Program for the purpose of funding TMDL implementation activities while preserving the ability to also fund TRM projects in non-TMDL areas.

K. Comment: How confident is WDNR in the phosphorus target numbers from EPA? (Dec.12)

Response: To represent the water quality needs of Wisconsin without relying on more general national criteria, the WDNR has opted to develop state-specific numbers in lieu of simply recommending the U.S. EPA recommendations. However, a mandate is in place that requires WDNR to adopt water quality criteria by the end of 2008 or face over-promulgation by U.S. EPA with the federal criteria.

L. Comment: Encourages WDNR to develop a Phosphorus Advisory Committee soon to assist with development of state specific phosphorus standards. (MMSD)

Response: WDNR has received authority to pursue formal development of numeric nutrient water quality standards. Bureau of Watershed Management staff are compiling information necessary for that effort and will be convening a Technical Advisory Committee as required by state statutes. Solicitations for membership for that committee will be made later in 2007 after WDNR has compiled relevant information to advance this effort.