TMDL Development for the Lower Fox River Basin: Restoring Our Water Heritage through a Watershed Approach

Key Points for Agricultural Community

Agriculture in the Lower Fox River Basin:

- Currently, half of the land in the LFR Basin is used for agriculture (50%).
- 45.7% of the phosphorus (TP) and 65.8% of the sediment (TSS) loading to the LFR Basin comes from cropland, barnyard and agricultural practices.
- Current nonpoint source loads were calculated by SWAT using a 23-year (1977-2000) long-term hydrologic simulation period and land use data from 2004-2005.

Assigning Load Allocations to Agriculture:

- The modeling and TMDL analysis identified average annual load reductions needed to meet the water quality targets.
- Reductions in TP loading range from 39% to 86% of current loads depending on the land use in the watershed.
- Reductions in TSS loading range from 8% to 75% of current loads depending on the land use in the watershed.

CAFOs:

- Currently, there are 15 CAFOs in the Lower Fox River Basin.
- The WLA for CAFOs is zero (from the production areas).
- Any land application of manure is accounted for within the load allocation for a TMDL. Additional controls will be needed through nutrient management plans to address the spreading of manure from CAFOs.

What do agricultural producers need to do to meet the TMDL?

Land areas contributing TSS and TP to local waterbodies will need best management practices (BMPs) installed to control the pollution. Pollution controls may be targeted to areas causing the greatest amounts of pollutant loading. A targeted approach will address the worst areas first and be the "biggest bang for the buck." Models used in the TMDL identify the watersheds contributing the highest amounts of loading to the local waterbodies. Field-scale models, like SNAP-Plus, can help producers determine the most appropriate BMPs for their land. Landowners will have the flexibility to select practices and then put them where they are needed most. Producers are expected to comply with existing state (NR 151, NR 243) and local regulations (local ordinances).

> **Who will be affected by the TMDL?**
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> Not every farmer or every land parcel in the TMDL area will necessarily be affected. Significant reductions in TSS and TP loading are needed from agriculture in areas of some of the subwatersheds in the LFR Basin. Only those landowners in the TMDL subwatersheds with polluted runoff problems may need to do more to address TSS and TP.

How much is it going to cost and will cost sharing be available to meet the TMDL?

- Costs to meet the TMDL will vary from property to property. Costs will depend on the BMPs needed to meet the pollutant load reductions identified in the TMDL. Landowners are encouraged to seek low-cost and innovative approaches to improve water quality.
- Cost sharing is available through a variety of federal, state and local funding programs. The Targeted Runoff Management Grant Program is DNR's main program to fund TMDL-related BMP projects. Some of the other funding programs have nonpoint source pollution and prevention goals that also overlap with TMDL goals.
- Adaptive management strategies, as allowed by law, may be recognized as a mechanism to achieve water quality goals in an equitable manner. Implementation planning may consider factors such as, but not limited to: cost effectiveness, pollutant trading opportunities, obtainable resources, and best management practices to meet water quality goals as defined in the TMDL.

Who from the agricultural sector will need to be involved and committed to implement the TMDL?

Successful implementation of the TMDL depends on the commitment and involvement of farmers, crop consultants, county land and water conservation staff, DNR, DATCP, NRCS, and other interested parties (such as Dairy Business Association, Farm Bureau and Dairy Producers of Wisconsin). Partners and stakeholders are encouraged to get involved with the development of TMDL implementation plans, which will provide more details on a smaller geographic scale on how to achieve TSS and TP load reductions.