

Key Minnesota River holistic considerations that played a role in development of the TMDL for low dissolved oxygen:

Watershed Understandings:

- Modeled “Current Day Scenario” estimated low flow loading at:
 - >65 % from point sources
 - ~16% from agricultural sources
 - ~14% from Urban stormwater (10 pending MS4s)
 - ~4% non-compliant onsite systems
 - ~1% other (natural or gentle landuses)
- ~ 150 NPDES discharge permits for wastewater
- 40 WWTP permits control 98% of the TP load from all WWTPs
- In upstream reaches internal loading from high flows considered to be not significant
- Effluent data sets not as robust as desired (year to year variability, number of samples per month, number of samples at different flow regimes,...)

Legal Issues:

- TMDL authority is for summer low flow conditions
- MN does not have a Phosphorus Standard for Rivers (MPCA Policy: Phosphorus strategy)

Other Issues:

- Pending Lake Pepin TMDL (2009)
- Reopening 1985 WLA (2010)
- Pending MN River Turbidity TMDL (2009)

Stakeholder Guiding Themes:

1. The conditions and health of the whole basin should be considered
2. Each sector contributes something to the problem, and therefore should contribute something to the solution
3. Large concern for timing, planning and cost of solutions
4. Failing ISTS compliance should be at least 90 percent, majority suggesting a 100 percent goal, since raw sewage poses problems for public health
5. Focus on desired flexibility at an individual level rather than blanket requirements across the entire list of parties in a source category