

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

Key Points for Municipal and Industrial Dischargers

Municipal and Industrial Dischargers in the Lower Fox River Basin:

- There are 20 industrial dischargers that contribute 20.8% of TP and 1.7% of TSS loading to the LFR Basin.
- There are 14 municipal dischargers that contribute 15.9% of TP and 0.8% of TSS loading to the LFR Basin.
- Current loads were calculated using an average of actual loads reported to WDNR in Discharge Monitoring Reports (DMRs) between the years 2003-2007 (1-5 yr averaging period).
- Numeric targets for this TMDL were based on a science-driven process. Targets chosen were consistent with the proposed statewide phosphorus criteria.

Allocating TP loads to Municipal and Industrial Wastewater Treatment Facilities:

Effluent discharge to LFR Mainstem:	Effluent discharge to tributary streams:
If the annual effluent concentration is < 0.2 mg/L, WLA is equal to the facility's average annual current load.	If the annual effluent concentration is < 1.0 mg/L, WLA is set to the facility's average annual current load.
If the annual effluent concentration is > 0.2 mg/L, and <ul style="list-style-type: none"> • Annual load accounts for < 1% of the total load for the watershed, the WLA is set to the facility's average annual current load. • Annual load accounts for > 1%, the WLA is set to meet a 0.2 mg/L average annual effluent concentration and corresponding load. 	If the annual effluent concentration is > 1% and <ul style="list-style-type: none"> • Annual load accounts for < 1% of the total load for the watershed, the WLA is set to the facility's average annual current load. • Annual load accounts for > 1%, the WLA is set to meet 1.0 mg/L average annual effluent concentration and corresponding load.

Allocating TSS loads to Municipal and Industrial Wastewater Treatment Facilities:

WLAs were assigned to be equal to their current average annual loads. It is likely that additional treatment for solids will not be necessary as treatment plants install technology to address their TP WLA.

How will the TMDL affect municipal and industrial dischargers in the LFR Basin?

- Discharge wasteload allocations will be expressed in permits as annual and possibly monthly or weekly averages along with daily maximum mass effluent limitations, *consistent* with the WLAs that are in the approved TMDL.
- Permits will be drafted to reflect the WLA as they come up for reissuance.
- Since a WLA from an approved TMDL is expressed as a WQBEL in the WPDES permit, the permittee may seek a variance from the limit pursuant to s. 283.15, Wis. Stats.
- 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 available treatment technologies to meet water quality goals as defined in the TMDL.

Reserve Capacity

- The reserve capacity for municipal and industrial waste water dischargers is ~6,300 lb/yr TP and ~53,000 lb/yr TSS.
- The TMDL reflects current conditions using the best available science and information, while also trying to account for possible changes in the near future.
- TMDLs can be revisited in the future, as new data is available, WQ criteria are revised, or if conditions have changed substantially.