

In the beginning.....



Our philosophy...

- These are state projects
- There is no “right” way to do a TMDL
(however, there are “wrong” ways to do them!)
- Perfection need not be attained - do the best you can with what you’ve got
(defensible, not arbitrary and capricious)
- Simple is good
- Just ask



Where to start

- It all begins with the 303d list/Category 5
- Make sure the TMDL is clear what pollutants/impairments are being addressed in the TMDL, and what are not.

Bevens Creek	Headwaters (Washington Lk) to Silver Cr	02	07020012-515			Aquatic life	Chloride	2003	2007	5A
Bevens Creek	Headwaters (Washington Lk) to Silver Cr	02	07020012-515			Aquatic recreation	Fecal coliform	2003	2007	5A
Bevens Creek	Headwaters (Washington Lk) to Silver Cr	02	07020012-515			Aquatic life	Turbidity	2003	2007	5A

LAKE ERIE LUNA PIER BEACH

County: MONROE

Location: City of Luna Pier Beach, Lake Erie.

NHD Reach Code: 04100001001145

Problem Summary: Pathogens (Rule 100).

TMDL Year(s): 2007

WBID#: 060101D

SIZE: 1 M

Table 1.01: Chippewa River Watershed Impaired Reaches Descriptions and Assessment Summaries

Reach	Description	Year listed	River Assessment Unit ID	Monitoring Station Used for Assessment	# months with ≥ 5 Obs.	# months geomean > 200cfu/100ml	Years of Data
Chippewa River	Watson Sag Diversion to Minnesota R	94	07020005-501	MNCH-5, BB12A71, S000-175	7	4	82-93
Chippewa River	Headwaters to Little Chippewa R	06	07020005-503	S002-190	6	3	99-05
Chippewa River	Unnamed Cr to E Br Chippewa R	06	07020005-505	S002-193	6	3	99-05
Dry Weather Creek	Headwaters to Chippewa R	06	07020005-509	S002-204	6	4	99-05
Chippewa River, East Branch	Mud Cr to Chippewa R	06	07020005-514	S002-196	6	2	99-05
Shakopee Creek	Shakopee Lk to Chippewa R	06	07020005-559	S002-201	6	3	99-05
Unnamed Ditch (Judicial Ditch 29)	Headwaters to CD 29	06	07020005-566	S002-206	4	1	97-05
County Ditch 29	Headwaters to Unnamed Ditch	06	07020005-567	S002-197	4	1	97-05
County Ditch 27	Unnamed Ditch to Unnamed Ditch	06	07020005-570	S002-198	4	2	97-05
Chippewa River	Cottonwood Cr. To Dry Weather Cr.	Not listed	07020005-508	S002-203	6	3	99-05

Watershed info

- Watershed size and description
- Land use
- Population characteristics (i.e., rural, ag, urban, urbanizing, etc)
- Sources – known and suspected (including background and/or naturally occurring)



Water quality standards

- Need to clearly ID the WQS that is violated
 - Provide the citation, and paste in the standard
 - Include all classes that apply to the water
 - Explain why a particular class is most protective
- WQS ≠ assessment criteria – e.g., don't add a 10% exceedence unless it is in the WQS

Example

A water is classified 1C, 2Bd, 3B, 3C, 4A, 4B, 5, and 6. Since Class 2Bd is the most restrictive, the fecal TMDL will be written to that WQS.

Problem: This assumes that EPA (and public) knows your WQSSs.

Better: A water is classified 1C, 2Bd, 3B, 3C, 4A, 4B, 5, and 6. Class 1C requires chlorination and has no fecal limits, and Classes 3, 4, 5, and 6 do not have fecal limits. The limit for 2Bd is 200 geomean /2000 daily...Therefore, the numeric limits for fecal for Class 2Bd are the WQSSs applicable to this TMDL.

Questions?

