

Harpeth River Watershed Stakeholder Meeting
 Wednesday, September 6, 2017
 TWRA Main Conference Room @ Ellington Ag Center

Attendees:

In person:

TDEC:	Regan McGahen, Jennifer Dodd, David Duhl, Stephanie Durman, Katherine Barnes
HC (HRWA)	Dorie Bolze, Jim Redwine, Dan Fitzgerald, David Lemke
EPA:	Amanda Howell, Tim Wool, Glenn Fernandez
Franklin:	Mark Hilty, Michelle Hatcher, Shauna Billingsley, Doug Noonan, Jeff Willoughby
USGS:	Shannon Williams
WADC:	Rocky Bowker, Saya Qualls
Metro Nash:	Mary Bruce
Sierra Club:	Scott Heflinger, Craig Jervis, Marcia Jervis, Charlie High
TSRA:	Laurie Bruno
BCUI:	Stacy Crouch, Bruce Meyer (also Cartwright Creek)
Other:	Mike Vaughn, Rep. Bo Mitchell

On conference line:

EPA:	Amy Feingold, Elizabeth Belk
Franklin:	Bill Hall

Welcome:

TDEC (Jennifer Dodd)

- Introduction
- Short overview of project
- Modeling & TMDL will be done with stakeholder input

Update on TMDL Sampling (TDEC, Franklin, HRWA, WADC, Metro, USGS):

Review map and monitoring commitments/status.

USGS (Shannon Williams)

- USGS is primarily focused on continuous monitoring
- At sites 1a, 3a, and 4a. The latter two include monthly sampling for nutrients in coordination with Metro (i.e., non-duplication)
- Added nutrient sampling to assist with process until end of October
- Will send details of where they are going to monitor & for what parameters
- HC Noted that USGS monitoring is being done through the TWRA foundation from Cartwright Creek and Harpeth Wastewater Cooperative settlement agreement funds.
- Group agreed to stop USGS water quality monitoring at the West Harpeth River Site. USGS will provide amount of funding that remains and can be contributed to grab sampling through the end of October to help with the process.

Metro (Mary Bruce)

- Have been monitoring at #5 (three samples so far), will be moving to #4a
- Clarification: they are doing BOD₅ not BOD_U
- Parameters listed on the map are correct

Franklin (Michelle Hatcher)

- Working on Inter-local Agreement with TDEC in order to allow them to sample outside of their urban growth boundary
- Looking into chl-a sampling and potential labs (TTU & ESC mentioned)
- Planning to do BOD_U at #2, #3 and adding in #7 if inter-local agreement is approved
- Site 2 includes sampling under the permit, with additional parameters
- Using 30-day BOD for BOD_U
- Considering SOD sampling at 3 sites if needed after inter-local agreement is approved (site locations not yet identified)

Harpeth Conservancy (Dan Fitzgerald, Dorie Bolze)

- Benthic algae study being done at 4 sites (1, 1a, 2, 4a), but is delayed due to rain
- Algae study to measure chl-a is being done by Dr. Lebkuecher at APSU. The protocol follows Standard Methods for the Examination of Water and Wastewater.
- Planning to go ahead with SOD sampling at locations identified by their consultant and where modelers say are the best locations (Using AquAeTer)
- Not doing BOD_U
- Due to overlap at site #2 now that Franklin has started sampling there, HC will stop sampling there

WADC (Rocky Bowker)

- Sampling began 7/11 and parameters on map are correct
- Used Tennessee Tech for chl-a analysis (using method 445.2) ~1 mi d/s of Jones Ck WWTP
- Is doing BOD_U. Using 30-day BOD for BOD_U. (Using TTU-new)
- Will sample until end of October

Update on TMDL Modeling:

EPA (Tim Wool)

- It is okay to use 30 day BOD for BOD_U
- SOD measurements will be used to validate model
- Request 3 locations for SOD - headwaters, midway & downstream
- Will provide a template for data to be submitted to EPA
- Would like to have sampling location #7 covered
- After that, sites #10 and #6 would be helpful, but do not need #10 for model
- Will probably need to monitor for another growing season (2018) at the same locations
- It would be best if everyone used the same lab or at least be using the same protocol/methods
- Chlorophyll results should be "corrected"
- To use algae as an endpoint may require an index. It took KY 10 years to develop one.
- Still trying to determine best location for data to be uploaded
 - Storet – can be hard to discern quality and hard to retrieve
 - Excel – easier to use, template can be provided

TDEC (Jennifer Dodd)

- If the group wants something quickly then TDEC could do dissolved oxygen as an endpoint fairly easily.
- Addressing nutrients will take more time and more data.
- Based on resources, some facilities may have to reduce monitoring frequency to every two weeks or monthly in 2018

Open Discussion & Questions:

Davidson County State Representative (Bo Mitchell):

- Relatively new to stakeholder meetings
- Feels as if communication is not frequent enough and was told that it does not include everyone
- Wanted to know if there were notes from past meetings (There are not notes available for all mtgs, but we do have notes for 6/5/17 technical meeting/call)
- Expressed concern about his constituents' drinking water
- Wanted to know if there was a plan in place for this process

Harpeth Conservancy (Dorie Bolze/Jim Redwine/Dan Fitzgerald):

- Stated that communication is not frequent enough and that they believe that it does not always include everyone
- Suggested use of website to make key documents (agendas, minutes, etc.), decisions, protocols, meeting dates, and TMDL progress readily available to all stakeholders
- Expressed interest in having a stenographer for future meetings
- Believes that ALL correspondence should go to ALL stakeholders
- Asked about a TMDL being done with algae and pathogens in same model
- Raised the need for a clearly defined TMDL organizational structure. Believes there should be a technical subcommittee to discuss specialized topics, make decisions on data collection protocols, ensure quality control and assurances, coordinate sampling effort, and provide analysis of collected data. There should also be a committee to oversee public participation in the TMDL process to ensure public acceptance.
- Asked about recreational uses and potential TMDL for bacteria. It may be helpful to identify any locational overlaps in high-recreation areas and bacteria impairment.
- Would like a shared location to ensure TMDL documents (including meeting notes) are readily available to everyone
- Trying to provide volunteers to assist in entering MOR data in coordination with Ann Morbitt in TDEC's Nashville EFO
- Stated that they would prefer a TMDL to be done based on good science and does not want to see the process rushed. Agree that this may take more time.

WADC (Saya Qualls)

- Explained that modeling for pathogens and nutrients cannot be done in the same model because they require different sampling conditions.

TDEC (Stephanie Durman/Jennifer Dodd/David Duhl/Regan McGahen):

- Re-iterated that multiple e-mails have gone out to entire group over the last year
- TDEC has reached out multiple times to clarify who is doing what at which locations
- TDEC, based on communication with Dan Fitzgerald, believed that although HC suggested sampling SOD previously, that they were not going forward with that process
- TDEC does not believe that all small questions regarding specific groups need to go out to entire group as we try to be respectful of stakeholders' time and not overwhelm in-boxes
- TDEC has been very open about communication and scheduling periodic stakeholder meetings to be sure that communication is ongoing and inclusive
- TDEC is limited in what it can do about non-point sources of pathogens. The current pathogen TMDL found agriculture to be the primary source. TDEC is already requiring point sources to comply with water quality standards for E. coli end-of-pipe

Metro (Mary Bruce)

- Sampling is going well
- Satisfied with amount and content of communication within the group

Franklin (Michelle Hatcher)

- Satisfied with amount and content of communication within the group
- Cannot commit to additional sampling until they have approval from their Board of Mayor and Alderman and are given permission

WADC (Rocky Bowker)

- Sampling is going well
- Satisfied with amount and content of communication within the group
- Will check on possibility of sampling again next growing season (2018)

Bill Hall (phone)

- Asked if model will be calibrated for plant growth since there is not much algae in the fall and wanted to know how the modeler is getting $\frac{1}{2}$ saturation constants

Next Steps/Action Items:

EPA (Tim Wool)

- Will be providing template for data to be submitted
- 1st cut of model is planned to be available in early 2018 using monitoring data from previous growing season
- 1st cut of model will mainly identify data gaps to address in 2018

TDEC (Jennifer Dodd)

- TDEC will circulate notes of this meeting and update the sampling map
- Next stakeholder meeting will likely be late fall, after monitoring is complete for this growing season
- Upcoming discussions will involve sampling in the next year's growing season. Each sampling organization should let TDEC know what they might be able to do in 2018, including frequency.
- Would like to have plan for 2018 sampling in place by end of February

Those to be included in SOD discussions:

Jennifer Dodd
Regan McGahen
David Duhl

Dan Fitzgerald
Dorie Bolze
Michelle Hatcher

Tim Wool (plus an EPA field person)
Joann Burkholder (@ HC invitation)
Dustin Bambic (@ HC invitation)