EPA Region III Stakeholder Meeting on Indian Creek Sediment TMDL Development – Existing Loads August 3, 2017 1 PM - 3 PM PADEP South East Regional Office in Norristown, PA Meeting Notes

Welcome:

- Jennifer Sincock: EPA welcomed all stakeholders to today's meeting to discuss the Indian Creek watershed sediment TMDL development including sediment sources and existing loads. We appreciate everyone taking time out of their busy schedule to learn more about the sediment TMDL and to provide their feedback. We also appreciate PADEP offering the meeting space today. As mentioned in the email invitation, EPA is seeking feedback on the draft report called "Preliminary Draft TMDL for Sediment in the Indian Creek Watershed, Montgomery County, PA – Existing Loads." EPA requested feedback by August 28th but stakeholders requested an extension to August 31st.
 - Please see attachment to email sent July 31, 2017 at 5:42 PM (filename: *Draft Indian Creek Existing Sediment Loads Report 073117.pdf*)
- All participants introduced themselves. Please see participant list at the end of meeting notes.

Indian Creek Watershed Existing Sediment Loads Stakeholder Meeting Presentation

• Please see attached presentation by Jennifer Sincock, EPA and Jim Kern, MapTech (filename: *ExistingLoads_Stakeholder Meeting_080317_final.pdf*)

Stakeholder Feedback and Questions:

Question and comment period opened to participants during and following the presentation by Jennifer Sincock, EPA and Jim Kern, MapTech.

- How do we know that Indian Creek is really impaired for sediment? Was sediment ever directly sampled?
 - EPA will provide more information in the TMDL Report.
- Are the rainfall years representative of current weather trends? Can we see that data? Was it calibrated?
 - Yes, EPA will provide the weather data and the associated analysis.
- Do the model input parameters correlate with the reality of Indian Creek? How can we trust the model? Will this lead to successful aquatic life restoration?
 - The model simulation of hydrology is compared against observed flows and found to be consistent. The modeling of sediment erosion is consistent with the available local data, GIS information provided by stakeholders, and field observations (for example stream channel condition).
- Figure 4.5 of the TMDL report: GWLF predicts higher extremes of streamflow than does USGS measured flow from the downstream, larger watersheds. Because the modeled

flow predicts higher extremes, are the loads from streambank erosion an overestimate? How does this flow data impact the streambank erosion estimates?

- Streambank erosion in GWLF is calculated using a factor (a) that depends on various watershed characteristics (including percentage of development) and the monthly streamflow. The daily streamflow in GWLF model is simulated using daily precipitation data and averaged to determine the monthly values. Because these averaged estimates are consistent with the measured averages, this concern should be negated. GWLF is not an event model, rather it uses monthly averages for streambank erosion calculations
- Some stakeholders were not aware that sediment from streambank erosion is a source of sediment to Indian Creek.
 - EPA explained that stormwater flow largely from impervious land causes flashy and high energy stream flow, which erodes the streambanks and deposits that sediment further downstream. The large sediment deposits found in Indian Creek are caused by the upstream eroded banks.
- How do we know that the streambank erosion we currently observe is not a product of watershed activities from the past? In other words, are the BMPs that we recently installed already in the process of solving the issue?
 - The BMPs which stakeholders have provided to EPA have been included in the model. Modeling and assessment results show that the watershed continues to be impaired by sediment. If stakeholders are aware of additional BMPs, please provide these BMPs to EPA.
- Stakeholders expressed concern regarding the need to continue implementing the sediment TMDL even if aquatic life is restored.
 - EPA states that the goal of the TMDL is an unimpaired stream. When the aquatic life use is met and the IBI is met, the stream is no longer impaired. The TMDL functions as a guide towards that goal.
 - Bill Brown from PADEP agreed.
- Stakeholders ask if existing BMPs are included in the model.
 - Yes, if BMPs were provided by stakeholders. GWLF model was also updated to include county determined Practice (P) factors, which were used in Penn State's MapShed model.
- Stakeholders would like the differences between the two different ecoregions (level IV) in Indian Creek and Birch Run to be explained in the TMDL report.
 - EPA will provide a description and explain why the differences do not matter in terms of Birch Run being an acceptable reference watershed.
- Stakeholders stated that an IBI of 74.6 in Birch Run is much higher than the benchmark of 50 and is overly conservative and protective.
 - EPA worked with PADEP to determine an appropriate reference watershed for Indian Creek. Birch Run was chosen because it is comparable to Indian Creek and is unimpaired. An Index of Biological Integrity (IBI) is a methodology to determine if aquatic life is supported; an IBI is not a water quality standard. The IBI indicates that Birch Run is unimpaired and therefore is an acceptable reference watershed.
 - <u>NOTE</u>: During the webinar on February 11, 2016, similar concerns were raised that Birch Run was a pristine watershed and should not be used. Gary Walters of

PADEP stated that Birch Run is an example of an unimpaired stream within southeastern Pennsylvania. The IBI score of 74 indicates that the stream is not impaired, but it is not high quality. The description "pristine" is not accurate based on the IBI score.

- Stakeholders wanted to know about the possibility of an alternative TMDL.
 - EPA is open to the discussion, but a TMDL alternative is a detailed plan that would need to be enforceable and permitted.
- Modeling files were requested to assist with review.
 - EPA agreed to provide.
- EPA requested delineated sewershed maps from the MS4s. Currently, EPA is using urban area boundaries from the 2010 U.S. Census data to represent land covered by MS4 jurisdictions. Therefore, all sediment loads originating from within these boundaries will be attributed to MS4s, regardless of the source. But ideally, sediment loads that travel directly to streams via surface runoff would be excluded from MS4 WLAs and included in the nonpoint source LA, while sediment loads that travel through the MS4 conveyance would be allocated to the MS4s. In the absence of sewershed boundary information, EPA cannot distinguish these loads. Consequently, EPA requests from stakeholders detailed sewershed delineation maps to identify serviced vs. non-serviced areas. With this information, EPA and stakeholders can separate potential nonpoint source LAs from MS4 WLAs. Unless EPA is provided with these maps, all sediment loads originating from land within the urban area boundaries will be attributed to MS4s, regardless of the source.
- Some stakeholders expressed discontent that agricultural interests were not represented during today's meeting. Stakeholders were concerned about equity and stated that MS4s should not be responsible for agricultural loads. They asked if conservation districts were engaged in this project.
 - EPA confirmed that Conservation Districts have been invited to the meeting and have provided data and information for the TMDL. EPA stated that MS4s are responsible for all pollutants that flow through their conveyance systems. If stakeholders are aware that agricultural land is not flowing into their conveyance systems, it would be helpful to send that information to EPA to better refine WLAs and LAs in the TMDL.
- Stakeholders commented that a 10% sediment load reduction is already required in upcoming permits (due mid-Sept).
- Stakeholders expressed discontent that all pictures in Appendix A of the TMDL Report were not made available.
 - EPA explained that some of the pictures listed in Table I and II of Appendix A were of the GPS unit or the field sheet and therefore not included in the Appendix. However, these photos are available and can be shared with stakeholders.
- Request from stakeholders to extend the comment period on the preliminary draft TMDL report regarding existing loads.
 - An extension to August 31st was provided. EPA noted this is not a formal comment period and will not include responses to comments. We are only requesting feedback on the existing loads at this point. There will be other opportunities for feedback as well as a formal public comment period.

Next Steps:

- EPA will provide meeting notes, the presentation, and an attendance list to the stakeholder group.
- Stakeholders may provide feedback to EPA on the "Preliminary Draft TMDL for Sediment in the Indian Creek Watershed, Montgomery County, PA – Existing Loads" by August 31, 2017. All comments should be sent to Jennifer Sincock at (Sincock.Jennifer@epa.gov)
- Stakeholders will provide any refinements to their sewershed maps so EPA can better allocate their WLAs.
- Lower Salford volunteered to host the next meeting. EPA will follow up with Lower Salford separately.
- EPA will reach out to Conservation Districts for insight in engaging agricultural interests in the watershed.
- EPA will set up a website to house modeling files, presentations, reports, all pictures of Indian Creek listed in Appendix A to TMDL, etc. as requested by stakeholders. The website address will be provided separately.
- Based on stakeholder feedback heard today, the next version of the preliminary draft TMDL report will include the following updates:
 - A more detailed explanation regarding the rainfall records, including how they impact the model and how they were determined to be representative.
 - Provide more information regarding sediment impairment in the TMDL Report. How does sediment impact aquatic life and the designated uses?
 - Add any available assessment data from PADEP regarding sediment in both watersheds.
 - \circ Describe the difference between the two Ecoregions (level IV).
 - Appendix A Table: Add units to the "Average" column.
 - Further explain the dam's impact on sediment and stream health in general.
 - Verify the designated uses for Indian Creek and Birch Run. Stakeholders do not consider Indian Creek to be TSF. EPA will follow up with PADEP.
 - Further explain the land-use maps and agricultural areas including crop/hay/pasture land uses.

Indian Creek Sediment TMDL Stakeholder Meeting on Existing Loads Attendance List August 3, 2017 1:00PM – 3:00PM

Participants:

Name	Organization	Email
Adair, Jillian	EPA R3	adair.jillian@epa.gov
Bentley, Katie	EPA R3	bentley.katherine@epa.gov
Brown, Bill	PADEP	willbrown@pa.gov
Czajkowski, Joe	LSTA	JoeC@lowersalfordtownship.org
Drago, Helene	EPA R3	drago.helene@epa.gov
Fields, Jenifer	PADEP	jefields@pa.gov
Forwood, Craig	LSTA	craig.forwood@comcast.net
Fournier, Mark	Telford Borough	markdfournier@comcast.net
Hall, John C	Hall & Associates	jhall@hall-associates.com
Heineman, Rich	PennDOT	rheineman@pa.gov
Kern, James	MapTech	jkern@maptech-inc.com
Kolodij, Orest	PADEP	<u>okolodij@pa.gov</u>
MacKnight, Evelyn	EPA R3	MacKnight.Evelyn@epa.gov
Marchand, Janene	Gilmore & Associates	jmarchand@gilmore-assoc.com
Ottinger, Liz	EPA R3	Ottinger.Elizabeth@epa.gov
	Michael Baker	
Paul, Sabu	International	spaul@mbakerintl.com
Roark, William	HRMML (LSTA)	wroark@hrmml.com
	Montgomery County	
Shaw, Drew	Planning Commission	dshaw@montcopa.org
Sincock, Jennifer	EPA R3	sincock.jennifer@epa.gov
	Conestoga-Rovers &	
Smith, Dan	Associates	dwsmith@craworld.com
Stover, Mary	CKS Engineers	mstover@cksengineers.com
Toy, Ashley	EPA R3	toy.ashley@epa.gov
Weand, Mark	Timoney Knox	MWeand@timoneyknox.com
Weimer, Connie	LSTA	connie.weimer@comcast.net
Witmayer, George	Franconia Township	gwitmayer@franconia-township.org