EPA Region III
Indian Creek Sediment Allocations Update Webinar
February 11, 2016 2PM-3PM
Webinar Meeting Notes

Welcome/Confirm Call Participants:

- Jennifer Sincock: EPA welcomes all stakeholders to today's webinar to discuss Indian Creek sediment allocations project updates and the recent request for data. We appreciate everyone taking time out of their busy schedule to learn more about this project and to provide their feedback. As mentioned in the email invitations, EPA is seeking readily available data to support development of existing sediment loads and potential sediment allocations for the proposed reference watershed called Birch Run.
    - Please see attached data request (filename: *Chester County_Indian Creek Sediment Allocations Data Request_012916.pdf*)
- All call participants were confirmed. Please see participant list at the end of meeting notes.

Indian Creek Sediment Allocations Presentation:

- Please see attached presentation by Jennifer Sincock, EPA, Kelsey Hensley, EPA and Jim Kern, MapTech (filename: *Indian Creek Sediment Allocations Webinar_Final 021116.pdf*)

Jim Kern, MapTech, presented on the GWLF model that will be applied for Indian Creek and the reference watershed. Jim noted the following during his presentation:

- GWLF model is spatially lumped, meaning that similar land uses are treated in a similar manner (i.e. agricultural, residential). The model cannot single out specific farms, etc.
- It's important to have a reference watershed with similar watershed characteristics. However, characteristics won't be exactly the same. A watershed with exactly the same characteristics would likely also be impaired.

Kelsey Hensley, EPA, presented on the data that was collected in the Indian Creek and Birch Run watersheds. Kelsey noted the following during her presentation:

- Streambank erosion typically has high contribution to total sediment load in urban areas.
- Regional curve values for mean channel depth for streams in urban and non-urban areas are a general characterization and can be used for TMDL development. EPA decided to get site specific data for both Indian Creek and Birch Run for greater accuracy.
- EPA developed a standard operating procedure (SOP) for collecting channel depth measurements in the Indian Creek and Birch Run watersheds. EPA staff measured channel depth at each stream. Additional data were collected at each site including land

uses, flow condition, riparian vegetation and streambank conditions. This information will be used to validate GIS data, and could be helpful later on in TMDL implementation.

- If regional curve values were used, mean channel depth in both Indian Creek and Birch Run would be 0.27m. Using site-specific measurements, the mean channel depth in Indian Creek and Birch Run is 1.5m and 0.6m, respectively, which are both greater than the regional curve value.

Jennifer Sincock: After new sediment allocations are presented, which is anticipated in September 2016, the stakeholders will meet to discuss options for revising the TMDL, completing a sediment reduction plan, or alternative restoration plan.

Stakeholder Feedback and Questions:

Question and comment period opened to participants following webinar presentation by Jennifer Sincock, EPA, Kelsey Hensley, EPA and Jim Kern, MapTech.

- George Witmayer: [With regards to the average site-specific streambank height measurements being greater than regional curves] Is this a legacy sediment problem?
    - Jennifer Sincock (JS): This is a good question, and something we will have to think about moving forward.

- Gus Meyer: Is there still a nutrient TMDL for Indian Creek?
    - JS: There is a nutrient TMDL for Indian Creek that was established in 2008. The nutrient TMDL was reconsidered in 2014 and the reconsideration concluded that the nutrient TMDL is appropriate.

- Stakeholder asks if presentations will be made available. JS confirms that the final presentation was sent out to the stakeholder group earlier in the day.

- Mark Fournier: What percentage of the Birch Run reference stream is urban area such as high to medium density development? Is this data available? What percentage of Indian Creek is high to medium density development?
    - Jim Kern (JK): Local data is not available yet for Birch Run. All comparisons made to-date use the national data covers.
    - Conservation District: [For Birch Run, the urban area high to medium density development percentage is] mostly zero. The area is mostly wooded, with sparsely placed residents and some residential developments appearing.
    - JK: There is 19% agriculture land use in the Birch Run watershed.
    - JS: The goal is to find a reference watershed that ultimately has a lower sedimentation rate than an impaired watershed.
    - JK: The TMDL will set a target load for sediment at which the stream will be unimpaired for aquatic life. Indian Creek has a benthic IBI score of 30/100 and needs to be improved.

- Mark Fournier: The Birch Run watershed seems like a pristine watershed. It is hard to find a [benthic IBI score of] 74 in southeastern Pennsylvania. Concerned that we might be using a pristine waterbody as a goal for Indian Creek. Are there parts of Birch Run that are urbanized?
    - JS: A reference watershed needs to be unimpaired.
    - Gary Walters: 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.
    - NOTE: While not said on the call, EPA will develop a land use comparison for Indian Creek and Birch Run.

- Mark Bowen: Is this process being modeled at the outlet, or is the modeling at several locations?
    - JK: The GWLF model, being applied to this project, is a lumped model, which simulates the total load coming through the system. An average streambank depth is needed throughout the watershed to be representative in the model.
    - Mark Bowen: Are the Indian Creek and Birch Run streambank depth values close enough?
    - JK: If the reference stream was identical to Indian Creek, it would be impaired. Using the regional curve values would represent a pristine stream in both watersheds, and the average channel depth values were a lot lower than both Indian Creek and Birch Run watersheds. The Birch Run reference watershed is in better condition than Indian Creek. Therefore channel depths for both watershed wouldn't be expected to be the same.

- Joe Czajkowski: What is the TMDL target for healthy aquatic life? Is it 50/100 IBI score?
    - JS: The goal is to have the stream not impaired for benthic community, and to come off of the impaired waters list.
    - Gary Walters: The 50/100 IBI score threshold is indication that the stream may be reaching attainment for the aquatic life use. There are other factors that are taken into account for delisting.

- Phil Rosenman: 1) Would meeting the 50/100 IBI score also apply to the nutrient TMDL target? 2) From a regulatory perspective, if streambank erosion contributes substantially to the sediment load in Indian Creek, how does this affect implementation and the municipalities? The concern would be regulating natural conditions from streambank erosion.
    - Gary Walters: The 50/100 benthic IBI score is used to determine attainment of aquatic life use. The difference is noting that under the 50/100 IBI score, a cause of impairment is identified.

- Joe Czajkowski: For others that aren't participating on this call (i.e. golf courses, agricultural community), are there any state or federal tools to involve those stakeholders? The concern is how to appropriately distribute responsibility among all communities.
    - JS: The purpose of the stakeholder group is to collectively identify ways to set allocations and reduce sediment. Local data solicitation will help properly and accurately identify the sources of sediment in Indian Creek.
- Mark Bowen: Allocations will be based on land uses in the model?
    - JK: Total load will be divided between wasteload allocations (WLAs) and load allocations (LAs) (non-permitted). The model will give information on where reductions are needed. An example scenario may look like: 25% reduction of sediment from streambank erosion, 30% reduction from pasture, etc.

No further questions or comments from participants.

Next Steps:

- Jennifer Sincock: Thank you for the feedback. The next steps would be for us to prepare our meeting notes so that we can share with our stakeholder groups. Additionally, we will send out a spreadsheet with stakeholder contact information. I recognize that many people on the line are new stakeholders and I encourage you to review the stakeholder list and let us know if there are any updates. If you have data please let us know by Tuesday February 16, 2016 and submit the data by Tuesday March 1, 2016. We want this to be an open process, we want to get your feedback and your information so that we can help restore Indian Creek. Thank you.

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February 11, 2016
2:00PM – 3:00PM

Participants:

Name	**Organization/Company**
Bowen, Mark	PennDOT
Brofee, Neal	PennDOT
Brown, Bill	PADEP
Bullard, Mike	Green Valleys Watershed Association
Burke, David	PADEP
Czajkowski, Joe	Lower Salford Township Authority
Day, Chris	EPA Region 3
DiGangi, Patrick	CKS Engineers
Drago, Helene	EPA Region 3
Everett, Alan	PADEP

Name	Organization/Company
Fazio, David	Franconia Township
Fountain, Michele	CKS Engineers
Fournier, Mark	Telford Borough
Hammer, Jon	Franconia Township
Hann, Steve	HRMML
Hensley, Kelsey	EPA Region 3
Kern, James	MapTech
Laubach, Victoria	Green Valleys Watershed Association
MacKnight, Evelyn	EPA Region 3
Markovich, Jon	EPA Region 3
Meyer, Gus	Montgomery County Conservation District
Miloser, Dan	Chester County Conservation District
Moldofsky, Jessica	Montgomery County Conservation District
Ottinger, Liz	EPA Region 3
Paul, Sabu	Michael Baker International
Peck, Michelle	EPA Region 3
Prescott, Richard	Lower Salford Township Authority
Rogalus, Meghan	Bucks County Conservation District
Rosenman, Phil	Hall & Associates
Schatschneider, Gretchen	Bucks County Conservation District
Scheirer, Krista	Montgomery County Conservation District
Shaw, Drew	Montgomery County Planning Commission
Sincock, Jennifer	EPA Region 3
Smith, Dan	Conestoga-Rovers & Associates
Strohmaier, Chris	Chester County Conservation District
Toy, Ashley	EPA Region 3
Walters, Gary	PADEP
Weand, Mark	Timoney Knox
Witmayer, George	Franconia Township