



Division of Surface Water Response to Comments

Project: Big Walnut Creek Watershed TMDL Report Modification

Agency Contacts for this Project

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Ohio EPA held a public comment period from April 5, 2021 to June 4, 2021 regarding modification of the Big Walnut Creek TMDL report. This document summarizes the comments and questions received during the associated comment period.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

To help you review this document, the questions are grouped by topic and organized in a consistent format.

Water Quality Sampling

Comment 1: I am a Morrow County resident whose property lies along the Alum Creek corridor downstream from the proposed outfall of the SoMoCo discharge. I and my grandchildren fish and wade in the Alum Creek waters. We marvel at the abundant biodiversity and varied habitats that it contains within its banks and forested riparian corridor. The proposed SoMoCo discharge could threaten the bio integrity and water quality of Alum Creek if clear and enforceable guidelines are not implemented prior and following its approval by OH EPA. Among these are:

- A) The recognition by OH EPA of Qualified Data Collector level 3 methods (performed by Midwest Biodiversity Institute and Mad Scientist Associates) that will be submitted for fish and macro invertebrates upstream, downstream and at the proposed SoMoCo outfall location during September of 2020, as valid base line data for the determining the bio integrity and water quality of Alum Creek.**

- B) That further future sampling and analysis be conducted and funded by OH EPA or SoMoCo for a minimum of 5 years following an approval of the discharge, to maintain the veracity of biological condition of Alum Creek.**
- C) That the reclassification of the Alum Creek sub watershed to Superior High Quality Water status be established if the fish and macro invertebrate data support this classification. (Tony DiNovo)**

Response 1: Ohio EPA has not yet received the water quality data collected by Midwest Biodiversity Institute and Mad Scientist Associates. Once the data is submitted, Ohio EPA will review the data. If the data is approved as Level 3, the Agency may use the data for regulatory purposes.

Ohio EPA performs biological and water quality surveys of watersheds throughout the State. Samplings sites bracketing point sources such as the SoMoCo Wastewater Treatment Plant are typically included in such surveys. When Ohio EPA returns to the Alum Creek watershed for analysis, a plan of sampling locations will be made available for review and comment. To receive notification of water quality sampling and TMDL activities, please subscribe to the TMDL Ohio River Basin or TMDL Statewide interested parties lists at:

<http://ohioepa.custhelp.com/ci/documents/detail/2/subscriptionpage>

Alum Creek from the headwaters to West Branch at river mile 42.8 is currently classified as a Superior High Quality Water in Ohio's Antidegradation rule (Ohio Administrative Code (OAC) 3745-1-05). Please see the clip of Table 5-4 in rule OAC 37456-1-05 below. A Superior High Quality Water possesses exceptional ecological value, assessed based upon a combination of the presence of threatened or endangered species and a high level of biological integrity.

Table 5-4. Superior high quality waters.

Water body name	Flows into	Drainage basin
Alum creek - headwaters to West branch (RM 42.8)	Big Walnut creek	Scioto

Comment 2: This watershed and particularly downstream of the outfall location in Alum creek has a diverse and healthy fish and macroinvertebrate community. Both were sampled according to QDC level 3 methods in summer 2020, and data is in preparation to submit. Stream reaches were found to be just under exceptional (IBI = 46) or within exceptional (IBI = 52) range. There is also a large population of Bigeye Chub, which is an Ohio declining fish species. This coupled

with borderline exceptional fish IBIs is likely grounds for classifying this subwatershed as a Superior High Quality Water (SHQW). We need to preserve special and in-tact waters like this! We expect current conditions to be maintained and we hold the agencies, counties, and WWTPs accountable. (Jenna Odegard)

Response 2: As stated in the response to Comment 1 above, the headwaters of Alum Creek to West Branch is listed as a Superior High Quality Water in Ohio's Antidegradation rule OAC 3745-1-05. Any National Pollutant Discharge Elimination System (NPDES) permits issued to point sources within this stream reach will be developed and issued in accordance with the Antidegradation rule and the specific considerations pertaining to Superior High Quality Waters.

Comment 3: We are submitting these comments out of concern for the modifications to the Big Walnut Creek Watershed Total Maximum Daily Load (TMDL). These changes propose increases in Total Phosphorous and Fecal Coliform TMDLs for Alum Creek headwaters to a point above West Branch Alum Creek. These comments are being submitted on behalf of Central Ohio Chapter of the Izaak Walton League of America (IWLA) and the Friends of Alum Creek and Tributaries (FACT). To complete our review, we requested the assistance of the Midwest Biodiversity Institute (MBI) and MAD Scientist Associates (MAD) to sample and assess the biota and habitat in Alum Creek to establish a baseline in anticipation of the newly proposed Southern Morrow County (SoMoCo) wastewater treatment plant. Sampling points were located upstream and at two points downstream from the proposed SoMoCo outfall location in Alum Creek. This data was collected under an approved Level 3 Project Study Plan (PSP) and by Qualified Data Collectors (QDCs) using level 3 methods. In accordance with the Ohio Credible Data Law and Regulations, this data can be used to affect water quality standards (WQS) use designations and the application of TMDLs. As such, we are using these and previous Ohio EPA results to comment on the modified TMDL for upper Alum Creek.

Alum Creek is currently a very healthy stream that performs better than the minimum quality needed to meet its existing Warmwater Habitat (WWH) Use designation. Based on the data we collected upstream and downstream from the proposed discharge location, there is a large and thriving population of Bigeye Chub (*Hybopsis amblops*), which is an Ohio declining fish species. This, coupled with very good to exceptional fish IBIs (scores ranging 46-52), is, on its own, grounds for classifying this sub-watershed as a Superior High Quality Water (SHQW). MBI will be submitting the data to the Ohio EPA as part of the Credible Data process. While the macroinvertebrate data is currently still being processed, the initial

results show that multiple sensitive taxa were found, potentially indicating exceptional warmwater (EWH) status.

We believe that this data should be fully utilized by Ohio EPA for the NPDES permitting and final TMDL modification. Furthermore, we strongly recommend that periodic bioassessment be included in the SoMoCo NPDES permit conditions to ensure that the current high level of biological performance is maintained and as required by Chapters 3745-1-05 (antidegradation) and 3745-1-07 (maintenance of biological attainment) of the Ohio Water Quality Standards (WQS). In addition, to protect the current high quality of the receiving stream, we recommend that periodic bioassessment of the upper Alum Creek watershed be included in the NPDES permit conditions. This would better inform both the operation of the SoMoCo WWTP in terms of compliance with OAC 3745-1-05 and 3745-1-07 and also the Nine Elements Plan that is to be developed for the upper watershed. (Central Ohio Chapter of the Izaak Walton League of America (IWLA) and Friends of Alum Creek and Tributaries (FACT))

Response 3: The Big Walnut Creek TMDL report is being modified to transfer allocations of Total Phosphorus and Fecal Coliform from nonpoint source to point source. The total load of these pollutants is not being increased.

As stated in the response to Comment 1 above, the headwaters of Alum Creek to West Branch is listed as a Superior High Quality Water in Ohio's Antidegradation rule OAC 3745-1-05. As part of the Credible Data Program process, Ohio EPA will review the collected water quality data when it is submitted. Ohio EPA cannot use Level 3 Credible Data until it has been reviewed and approved by the Agency.

Ohio EPA will draft an NPDES permit for the SoMoCo WWTP in accordance with Ohio's applicable laws and rules. This includes the additional considerations under Ohio's Antidegradation rule for Superior High Quality Waters, a reserve of 35 percent of the remaining available pollutant assimilative capacity for all regulated pollutants for which water quality criteria have been established in the water quality standards rules. Stakeholders will have an opportunity to review and comment on the draft NPDES through a separate permit development process. Ohio EPA will conduct water quality sampling upstream and downstream of the proposed SoMoCo WWTP as part of its routine watershed surveys. In addition, applicable projects implemented under the Nonpoint Source Implementation Strategies Plan (9-Element Plan) that are funded by federal grants administered by Ohio EPA will have pre-project and post-project monitoring conducted by Ohio EPA.

9-Element Plan

Comment 4: D) That the development, maintenance and future assessment of the proposed 9-Element plan for nonpoint sources include local members of interested conservation and watershed individuals. (Tony DiNovo)

Response 4: Thank you for your interest in the Nonpoint Source Implementation Strategies Plan (9-Element Plan). Your contact information has been forwarded to Morrow County Commissioners and Ohio EPA's Nonpoint Source Program.

Comment 5: We are interested in being kept up to date on developments of this TMDL modification and with the development of the NPDES permit for the proposed SoMoCo WWTP. We would welcome the opportunity to be involved with the Nine Element Watershed Plan given the inevitable development that will take place in the upper watershed. Our expectation is for Ohio EPA to require that the current high quality of Upper Alum Creek and its downstream reaches be maintained as is required by the Ohio WQS. (Central Ohio Chapter of the Izaak Walton League of America (IWLA) and Friends of Alum Creek and Tributaries (FACT))

Response 5: Thank you for your interest in the Big Walnut Creek TMDL Modification, NPDES permit and the Nonpoint Source Implementation Strategies Plan (9-Element Plan). Your contact information has been forwarded to Ohio EPA's NPDES Permitting Program, Morrow County Commissioners and Ohio EPA's Nonpoint Source Program. We also recommend subscribing to the TMDL Ohio River Basin or TMDL Statewide interested parties lists at: <http://ohioepa.custhelp.com/ci/documents/detail/2/subscriptionpage> to stay informed on activities in the Alum Creek and Big Walnut Creek watersheds.

Wastewater Treatment Plant Design and TMDL Modification

Comment 6: E) That if the "lagoon" continues as part of the treatment system and any proposed wetland treatment system is implemented, that provisions are made for effected community entities be provided involvement and input into the advisory process.

F) That the lagoon's integrity to retain the affluent be regularly tested for infiltration into the surrounding ground water and intermittent streams near the dike. (Tony DiNovo)

Comment 7: I do not agree with the decision to increase the TMDL and fecal coliform limits of the Big Walnut Creek Watershed. I know that a new outfall is being proposed for SoMoCo and I think that requiring the maintenance of current quality is of utmost importance. We cannot change water quality standards because they are hard to maintain or because it is more convenient. (Jenna Odegard)

Comment 8: We are concerned about the 0.7 and 1.0 mg/L total phosphorus limits being proposed for the SoMoCo WWTP in the modified TMDL. In accordance with the Ohio EPA technical report: Association Between Nutrients, Habitat, and the Aquatic Biota in Ohio Rivers and Streams (Ohio EPA 1999), the instream target for a headwaters stream in the Eastern Corn Belt Plains (ECBP) ecoregion is 0.07 mg/L. Given that the upstream flow for dilution is minimal, we do not believe that an effluent limit that is 100 times the target concentration for maintaining the WWH use will maintain the current high level of biological performance, let alone meet antidegradation provisions. We do understand that the limits for treatment technology cannot attain the instream target at the point of discharge, but consideration of a higher standard of phosphorus removal at the WWTP seems in order. This consideration is important because we realize that once a WWTP becomes established, it will likely expand over time as the upstream areas are developed. This and the bioassessment requirement should at least provide a better more protective strategy for maintaining the current high quality of Alum Creek.

We are also concerned about nutrients in this water. The shale substrates of this reach of Alum Creek are somewhat unique in that they do not as effectively assimilate excess nutrients as well as do the more porous gravel-cobble substrates in other parts of the ECBP ecoregion. As a result, you must take into account that this watershed, including the areas downstream, may be especially vulnerable to increased nutrient pollution and concentrations of bacteria that are likely be released from the outfall. (Central Ohio Chapter of the Izaak Walton League of America (IWLA) and Friends of Alum Creek and Tributaries (FACT))

Responses 6,7,8: The Big Walnut Creek TMDL report is being modified to include an allocation for the SoMoCo WWTP should the discharge from the proposed WWTP be permitted. The total allowable loads of Total Phosphorus and Fecal Coliform established in the Big Walnut Creek TMDL report are not being increased.

The NPDES permit development and Antidegradation review is in the beginning stages and there will be another opportunity for public participation. Further details on the proposed wastewater treatment system will be available during the draft NPDES permit comment period.

These comments have been forwarded to Ohio EPA's NPDES Permitting Program for consideration.

It should be noted that NPDES permits for sanitary wastewater treatment plants include the water quality standard for E. coli (the water quality standard for protection of the recreation use changed from fecal coliform to E. coli in 2010) as an effluent limitation at the end of pipe, meaning no dilution from the receiving stream is included in the development of the limit.

End of Response to Comments