

**Ohio EPA Response to Comments
Draft Biological and Water Quality Report – Lower Mahoning River Watershed (2013 Survey)
December 2018**

The Draft Lower Mahoning River Watershed Biological and Water Quality Report was made available for stakeholder review and comment from October 2, 2018, to November 1, 2018. The Agency received comments from Eastgate Regional Council of Governments and the Midwest Biodiversity Institute.

The comments are summarized and grouped into categories with the name of the commenter following the comment in parenthesis.

Typographic Concerns

Comment 1: p. 101 “This Mill Creek joins the Cuyahoga River 4.3 miles upstream from the RM 7.2 Big Creek Confluence”

Eastgate staff believe the reference to the Cuyahoga in the statement is a typo/error in citing our planning region’s Mill Creek’s confluence location. (Eastgate Regional Council of Governments)

Response 1: This has been corrected.

Comment 2: p. 121 “The sampled reach, located east of Youngstown at Gladstone St. in Liberty Park...”

Eastgate staff crosschecked the sampling reach with Gladstone St. and the park referenced should read Lincoln Park, not Liberty Park. Liberty Park is located in the Little Squaw Creek HUC12. (Eastgate Regional Council of Governments)

Response 2: This has been corrected.

Comment 3: p. 138 Eastgate staff identified the City of Campbell’s water intake reference error in the City of Warren’s section. Eastgate believes this should reference the city of Warren’s intake on the Mosquito Creek Reservoir. (Eastgate Regional Council of Governments)

Response 3: This has been corrected.

Comments Related to Lead

Comment 4: Are the exceedances related to lead an issue that needs continual monitoring or further studies? More detail on the lead exceedance would be valuable for understanding potential water quality hazards. (Eastgate Regional Council of Governments)

Response 4: Ohio EPA does not believe additional water quality sampling by the Division of Surface Water specific to this reach is warranted at this time. The chemistry of both surface water and sediment has ties to several legacy issues in this area, not ongoing existing discharges. Lead concentrations at River Mile 21.14 on the Mahoning River had three elevated values: 74.4 µg/l, 67.9 µg/l, and 15.8 µg/l. None of these values individually exceeded a water quality standard, which ranges from 174 µg/l to 267 µg/l for the OMZM and 348 to 535 µg/l for the IMZM, based on the water hardness value. The average OMZA value was exceeded in June and July however the June sample was based on only one result which becomes both the average and maximum. Ohio EPA collected 615 stream samples for lead during this survey of those, 519 were below the reporting limit (RL) of 2 µg/l. The median concentration was below the RL as was the 75% value. The 85% value was 2.1 µg/l, just over the RL.

Comments Related to Dams

Comment 5: Eastgate commented on the total number of dams discussed in the text, they indicated that there were 9 dams on the main stem of the Mahoning River while the report mentioned 7. (Eastgate Regional Council of Governments)

Response 5: The report mentioned that 7 served the steel industry historically. We eliminated the references to dam purpose and just mention 9 dams on the river. We agree that this was a bit confusing.

Overall/General Comments

Comment 6: A comment letter was received from the Midwest Biodiversity Institute (MBI). In general, the report indicated support for Ohio EPA's comprehensive assessment program and encouraged its continuation.

Response 6: Thank you for your support of the water quality assessment process employed by the Ohio EPA.

Comment 7: MBI included a comment related to use of the Area of Degradation Value (ADV) and Area of Attainment Value (AAV) to illustrate trends. (Midwest Biodiversity Institute)

Response 7: Ohio EPA does not currently use those values for evaluation and inclusion in water quality reports.

Comment 8: MBI indicated that it would be useful to provide electronic access to the data generated during this study. (Midwest Biodiversity Institute)

Response 8: Water chemistry data collected by Ohio EPA's Division of Surface Water (DSW) is regularly reviewed and uploaded to the national STORET Data Warehouse. Approved data collected from 2005 to present can be queried and downloaded from STORET via the Water Quality Portal. This data can be found under the organization ID "21OHIO_WQX".

Comment 9: The report needs more analysis and discussion about the influence of chloride on aquatic life which is a common issue in urban areas of the state. There is a growing base of literature dealing with the salinization of the waters in the northern U.S. Salt is accumulating in near surface groundwater and riparian soils resulting in elevated summer chloride concentrations. As such summer “effect thresholds” of ~100 mg/L of chloride or less are often associated with exceedances of the current EPA criterion in the winter months. This is an emerging problem in especially in Ohio’s urbanized and urbanizing watersheds. (Midwest Biodiversity Institute)

Response 9: Elevated salt and or conductivity were not directly identified as causes of impairment in this report. Salinization is an issue which merits further evaluation on both state-wide and national levels as you indicate.

Comment 10: The discussion about the improvement in game fish species will be of interest to the general public. The habitat in the Lower Mahoning River supports the potential importance of this river for recreation uses and sport fishing in NE Ohio. As an additional analysis we recommend the agency look at indicators concerning fish size such as the maximum weight of selected species in samples through time – we have had some positive results with this in other Ohio rivers. (Midwest Biodiversity Institute)

Response 10: Thank you, while game fish are an important part of Ohio’s fishing community, additional discussion related to this would be more appropriately be handled by ODNR. Ohio EPA’s focus in this report was evaluating fish communities in relation to the IBI and MIwb.

End of Response to Comments