**Bokes Creek TMDL Appendix E.**
**Responsiveness Summary to Public Comments**

**Written Comments from the Public from the May, 2002 Comment Period**

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<th>Date</th>
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<td>June 5, 2002</td>
<td>Larry Antosch</td>
<td>Ohio Farm Bureau Federation</td>
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**Comment:** The Ohio Farm Bureau Federation supports the use of scientifically based and economically sound conservation practices to protect surface and ground water resources that are delivered in a flexible and voluntary manner. We support and encourage our members to become involved in the implementation of state water quality initiatives such as the TMDL program.

We applaud your efforts to allow the watershed coordinator and watershed action planning process to build off of the TMDL process and direct the establishment and implementation of restoration and protection actions. It is crucial to the success of the program that Ohio EPA reaches out to ensure that local stakeholders are involved in the development of any implementation plans that are developed for this basin. We do wish to express our concerns about the process. In order for the watershed action planning process to work, the local watershed group has to be formally empowered to the point that the state accepts the plan as developed as long as the ultimate goal is reached - improved water quality. We encourage you to establish and formalize an empowerment process for watershed action plans.

**Response:** Ohio EPA agrees that the watershed coordinator and the watershed action planning process are vital to implementation of actions necessary to meet TMDL targets. Ohio EPA will be using watershed action plans as means to prioritize future funding under the 319 grant program and investment of state low interest loan funds. Ohio EPA has an obligation to local stakeholders, the general public, and USEPA to review the content of CWA funded planning activities and make sure that certain areas outlined in grant agreements are met, such as proper public participation, adequate inventory of pollutant causes and sources, and an action plan that truly addresses methods to reduce water quality and aquatic life use impairment.

**Comment:** The Bokes Creek watershed is a predominately agricultural watershed. The TMDL report should recognize that any proposed remediation measures to be implemented in the basin must take into account both environmental benefits and possible economic impact on the agricultural community.

**Response:** Actions that are necessary for Bokes Creek to achieve the targets established in the TMDL will for the most part be implemented voluntarily by local landowners. By developing a TMDL Report and comprehensive watershed plan and restoration strategy with proper local support, the local watershed group
and partners place themselves in the best position to compete for 319 grant funding and low interest loan moneys from Ohio EPA (and other state and federal funding hopefully). This should potentially help offset the costs of the implementation plan to local land owners in the Bokes Creek basin with the result that restoration efforts are more likely to be economically achievable.

Comment: The Bokes Creek TMDL report states that the most significant causes of aquatic life use impairment in the Bokes Creek basin are nutrient enrichment, low instream dissolved oxygen, sedimentation and habitat alteration. It goes on to state that the measure of attainment of water quality standards will be based on numeric biocriteria not numeric chemical criteria. In addition, habitat assessment (QHEI scores) will be used as a surrogate. A review of Table D-2 in Appendix D of the report reveals that only 7 out of 22 habitat assessment scores are at or above the established TMDL target value of 60. Has Ohio EPA conducted a restorability rating factor analysis for the streams in the watershed? Is a QHEI target value of 60 appropriate or should it be lowered based on the restorability analysis? Has the correct aquatic life use designation been assigned?

Response: Ohio EPA no longer determines restorability rating for all water bodies. However, a comprehensive attainability analysis was performed for the Bokes Creek basin based on the comprehensive biological, chemical, and physical data that was collected in the 1999 intensive water quality survey. Where it has been appropriate to adjust the aquatic life use designations as a result of that survey, Ohio EPA has recommended the implementation of those aquatic life uses. The QHEI target value of 60 is appropriate for warm water habitat (WWH) streams. It has not been recommended for streams that are not designated as WWH.

Comment: Appendix F of the 2000 Water Resource Inventory indicates that there is a high likelihood that several of the assessed streams in the Bokes Creek basin will be able to have their aquatic life restored to an acceptable level whereas some of the smaller headwater tributaries will not. How has this been factored into the TMDL development process? Can biocriteria serve as the measurement of success if restorability based on the observed Qualitative Habitat Evaluation Index (QHEI) values is not likely?

Response: Observed QHEI values documented during the intensive water quality survey play a role in predicting future (unpolluted) capabilities of streams to achieve the biocriteria. The observed QHEI values can be used as a guide to steer future habitat improvement efforts, which will improve the chances that biocriteria values will be achieved.

Comment: The QHEI is a multi-metric tool used to evaluate the quality of a stream’s habitat. Six variables evaluating both the stream and the riparian zone are scored and combined to obtain a numeric value for the overall health of the stream. Investigation of the scores for each of the individual metrics can be a useful tool to help in the identification of the principal factors limiting habitat quality. The analysis would also lead to the identification of the types of
possible remediation actions that could take place. For example, if the riparian/erosion metric scores low, then the proposed remediation actions should focus on stream bank erosion control and riparian buffer establishment. Has such an analysis been conducted for the streams in the Bokes Creek basin? If so, how has it been factored into the establishment of the TMDL targets?

Response: Ohio EPA concurs that an evaluation of the 6 metrics that make up the QHEI score could be a useful tool for watershed groups/county agencies as an indicator of which types of remediation actions should be stressed. Evaluation of the habitat in the Bokes Creek watershed, along with chemical and biological assessments, occurred during the 1999 intensive water quality survey. Where habitat scores fall below levels that Ohio EPA has determined are generally supportive of an aquatic life use, TMDL targets have been set using the QHEI to provide local stakeholders with a quantifiable goal against which they can measure their progress. Appendix D of the TMDL report provides the individual metric scores for the QHEI scores for streams in the Bokes Creek watershed. Also included in Appendix D is a suggested procedure that can be evaluated for using the QHEI as a means to determine appropriate remediation activities in order to meet the QHEI targets.