Ashtabula River Areas of Concern – Fish Tumor and Deformities Beneficial Use Impairment Removal Recommendation - Summary

**What is the Ashtabula River Area of Concern?** The lower two miles and adjacent Lake Erie nearshore of the Ashtabula River is designated as an Area of Concern (AOC) through Annex 1 of the Great Lakes Water Quality Agreement. AOCs were identified in 1987 of areas in the Great Lakes where legacy pollution and conditions were of highest concern to address and work towards restoration. The main goal of an Area of Concern is to become “delisted” and no longer have the AOC designation. To accomplish this, there are fourteen beneficial use impairments that need to be restored to accomplish delisting status, not all AOC’s have all impairments. The program is coordinated through partnership of the State of Ohio, a local Advisory Committee and the U.S. EPA and federal partners.

**How is the Ashtabula River Area of Concern doing?** The Ashtabula River has continued to improve over the past twenty years. Through restoration investments, the river continues to transform itself and be revitalized for new uses and opportunities. As a result of the restoration progress, the Ashtabula has only two beneficial use impairments (BUI) that remain (BUI #4: Fish Tumors and Deformities and BUI #7: Restrictions of Navigational Dredging). The State in partnership with the local Advisory Committee and U.S. EPA are working to evaluate and remove these final BUIs.

**What is the Beneficial Use Impairment for Fish Tumors and Deformities?** The IJC listing criteria stated that this BUI should be listed as impaired when “incidence rates of fish tumors or other deformities exceed rates at unimpacted control sites or when survey data confirm the presence of neoplastic or preneoplastic liver tumors in bullheads or suckers.”

The current criteria for this BUI states that a listing of impaired shall occur if “DELTs (Deformities, Eroded Fins, Lesions and Tumors) or bullhead liver tumor incidence levels exceed regional target values or values found in either Lake Erie fish populations and are due to contaminant sources from within the boundaries of the AOC.

**How was this BUI evaluated?** Ohio EPA, in partnership with U.S. Fish & Wildlife Service has conducted sampling and analysis of conditions in the Ashtabula since 2011. The Deformities portion of the BUI is evaluated using sampling data conducted by Ohio EPA and its progression to meeting the BUI restoration target goal. For the Tumor portion of the BUI, OEPA, in partnership with U.S. Fish and Wildlife Service, utilized a method to analyze the conditions previously used in other Great Lakes AOCs for this BUI to assess its status. The approach, a statistical equivalence method, compares the AOC with a control site and takes into account the age and gender of the sampled fish, multiple years and multiple locations. If analysis determines the AOC data within a range of being statistically equivalent to the reference non-AOC it is considered to be meeting the removal criteria for the tumor portion of the impairment.

**What is the recommendation for this BUI?** Based upon the evaluation and analysis by both OEPA and federal partners, the Ashtabula AOC is recommended to remove the BUI for Fish Tumors & Deformities. The AOC meets both of the Deformities and Tumor restoration targets with established methods of evaluation.
For more information on the Ashtabula Beneficial Use Impairment Removal Recommendation for Fish Tumors and Deformities, there will be a public meeting on August 26, 2019, at 6 p.m. in Meeting Room A at the Harbor-Topky Memorial Library, 1633 Walnut Blvd., Ashtabula. Comments can be submitted to Melanie Barbis at Ohio EPA Northeast District Office, 2110 E. Aurora Road, Twinsburg, OH 44087, or melanie.barbis@epa.ohio.gov. Comments can be presented at the public meeting or submitted in writing by September 9, 2019.