



Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Division of Natural Areas and Preserves

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June 3, 2021

Kevin L. Boyce, President
Franklin County Board of Commissioners
373 S. High Street
26th Floor
Columbus, OH 43215

Dear President Boyce:

The Scenic Rivers Program within the ODNR Division of Natural Areas and Preserves appreciates the opportunity to submit the following comments on the Mando Ditch Petition project located in Brown Township, Franklin County, Ohio. Portions of this project are located within 1,000 feet of the Big Darby Creek State and National Scenic River and therefore may require approval in accordance with the Ohio Scenic River Law, Ohio Revised Code (ORC) Section 1547.82.

Big Darby Creek is one of the highest quality and ecologically diverse rivers in Ohio. Together with the Little Darby Creek, it provides habitat to the greatest diversity of freshwater mussels of any river of its size in the Midwest, including five federally endangered species. Two of these species, the clubshell (*Pleurobema clava*) and northern riffleshell (*Epioblasma torulosa*), are known to exist within this section of Big Darby Creek.

Artificial drainage projects have the potential to degrade the river's exceptional high quality by increasing the volume of runoff and the rate by which it is delivered to the river. This increases bank erosion, destabilizes the stream substrates in which mussels reside and decreases base flow during dry periods. Increased runoff also accelerates the delivery of pollutants such as sediment, nitrogen and phosphorous. These impacts can result in degraded stream habitat and nutrient enrichment leading to excessive algal growth or algal blooms. The included recommendations are intended to reduce or eliminate these impacts.

Furthermore, these recommendations are consistent with the goals of Governor Mike DeWine's H2Ohio program. This statewide initiative seeks to improve Ohio's water quality through projects such as wetland and riparian restoration that reduce phosphorus and nitrogen pollution. Thus far, over \$64.5 million have been invested to filter 100,000 acres of agricultural land. H2Ohio grant funding is anticipated to become available in the Ohio River basin portion of the state in the second half of 2021. Ohio Scenic Rivers Program staff will be available to assist in developing funding proposals that may benefit projects such as this.

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The following are comments for your consideration:

- During design, modeling should take place to determine changes in pre and post-project discharge rates and pollution loading for nitrogen, phosphorous and sediment. Designs that incorporate flow attenuation to minimize increases should be prioritized. Modeling should account for future upgrades to the outlet of the Metro Park quarry pond through which the project discharge will flow and may be incorporated to improve these outcomes.
- Design should include wetland restoration and/or create detention areas within the project watershed to offset any increased discharge and pollutant loading.
- Ditch channel designs that slow the delivery of water to the Big Darby Creek and provide for pollutant assimilation should be incorporated as part of this project. Over wide channels or two stage ditches with vegetated riparian buffers should be given consideration over traditional ditch designs.
- The existing Patterson Ditch portion of the project runs through a thirty-acre area that now supports a high-quality woodland on the south side of Patterson Road. Few woodlots of this size remain in Brown Township. Woodlands help absorb and slow precipitation and offset increased runoff from land use changes elsewhere. If possible, this woodland should be avoided and alternative route for this portion of the ditch should be explored.

Thank you once again for this opportunity to provide comments. Should you have any questions, please contact Ms. Heather Doherty, Central Regional Scenic River Manager, at (740) 258-0567 or heather.doherty@dnr.state.us.oh.

Sincerely,



Jeffrey A. Johnson, Chief
Division of Natural Areas and Preserves

cc: Mr. Jim Ramsey, Franklin County Engineer's Office
Mr. Steven Gray, Deputy Director, ODNR
Mr. Robert L. Gable, Jr., Scenic Rivers Program Manger
Ms. Heather Doherty, Central Regional Scenic Rivers Manager
Mr. Steve Studenmund, Columbus and Franklin County Metro Parks