

RESOLUTION NO. 20-11-1439

ADOPT ADDENDUM TO MIAMI COUNTY EMA MITIGATION PLAN

EMERGENCY MANAGEMENT AGENCY

Mr. Mercer introduced the following Resolution and Mr. Simmons moved for its adoption:

WHEREAS, on May 29, 2018, by Resolution No. 18-05-668, the Board of Miami County Commissioners adopted the Miami County EMA Mitigation Plan – 5 Year Update, dated February 2018, prepared by Mote & Associates, Inc., Greenville, Ohio; and

WHEREAS, the Federal Emergency Management Agency (FEMA) directed that in order for the City of Piqua to be eligible to receive certain types of federal funding, the Miami County Hazard Mitigation Plan needed to be updated/amended to include specific information pertaining to the City of Piqua; and

WHEREAS, the Miami County Emergency Management Agency and the City of Piqua Engineer collaborated to prepare an Addendum to meet FEMA's requirements as reflected in Exhibit A; and

WHEREAS, said Addendum was approved by the Federal Emergency Management Agency on September 28, 2020; and

WHEREAS, the City of Piqua adopted said Addendum by Resolution R-115-20 on October 20, 2020 (attached).

NOW, THEREFORE BE IT RESOLVED, by the Board of Miami County Commissioners, to adopt the attached Addendum/Exhibit A to the Miami County Hazard Mitigation Plan, as an official part of the 2018 Hazard Mitigation Plan of Miami County, Ohio; and

BE IT FURTHER RESOLVED, that this Resolution shall take effect and be in force from and after the earliest period allowed by law.

The Board voted as follows upon roll call:

Mr. Mercer, Yea;

Mr. Simmons, Yea;

Mr. Evans, Yea.

DATED: November 19, 2020

CERTIFICATION

I, Leigh M. Williams, Clerk to the Board of Miami County Commissioners, do hereby certify that this is a true and correct transcript of action taken by the board under the date of November 19, 2020.

Leigh M. Williams  
Leigh M. Williams, Clerk

Cc: Journal  
Files  
EMA – Joel Smith

## EXHIBIT A

2020 Addendum to Miami County Hazard Mitigation Plan

September 28, 2020

This addendum constitutes an addition to the 2018 Miami County Hazard Mitigation Plan, Section 2.17 Dam/Levee Failure. It is provided in order to summarize the content of three studies conducted by the City of Piqua and describe how these studies were incorporated into the 2018 Miami County Hazard Mitigation Plan. This addendum was developed jointly by Miami County and the City of Piqua. Miami County's Emergency Management Director prepared the addendum in conjunction with the City of Piqua's City Engineer and Water Plant Superintendent.

The existing 2018 Miami County Hazard Mitigation plan, Section 2.17 Dam/Levee Failure contains a subsection labeled Vulnerability Analysis and Loss Estimate and reads in part as follows:

### ***Vulnerability Analysis & Loss Estimation***

*There are three Class I Dams in Miami County, all of which are located near the City of Piqua. The City has been requested to perform a dam inundation study for all three of the Class I Dams to determine the vulnerability and loss estimation should a dam failure occur. Based on current information, the chances of a dam failure within the County are anticipated to be low to moderate. Since the 2011 Mitigation Plan Update, the City of Piqua has completed the following studies:*

- *City of Piqua Emergency Action Plan for Swift Run Lake, Echo Lake & Franz Pond Dams & Hydraulic Canal Levee. Prepared December 2014, Revised May 2016.*
- *City of Piqua Subsurface Exploration & Analysis for Dams – July 2014.*
- *City of Piqua Source Water Assessment & Protection Plan – March 2011.*

This addendum adds the following:

### **1) City of Piqua Emergency Action Plan for Swift Run Lake, Echo Lake and Franz Pond Dams and Hydraulic Canal Levee, Prepared December 2014, Revised May 2016**

This document is an action plan focused on minimizing the impact of a dam or canal levee failure in terms of loss of life and property damage. The Emergency Action Plan details detection and surveillance measures to identify indicators of dam failure and initiate remedial actions that could prevent or lessen the degree of failure. The Emergency Action Plan also describes the procedures to be followed and actions to be taken if a dam or levee failure occurs. This document includes an inundation study that used modeling to investigate the impact of failures of each dam and the canal levee on the City of Piqua. The results of the inundation study enabled the identification of a list of at-risk roadways and major facilities.

The results of this study highlighted to the Miami County Hazard Mitigation Committee (MCHMC) the significance that a dam or levee failure would have on the City of Piqua and contributed to the MCHMC's decision to include action items in the Miami County Hazard Mitigation Plan directly related to the City of Piqua's three High Hazard Dams and Hydraulic Canal Levee (see Action Item Numbers 2PQ, 5PQ, 6PQ, and 7PQ).

## **2) City of Piqua Subsurface Exploration and Analysis for Hydraulic Canal Levee, July 2014**

This study is focused on the Hydraulic Canal Levee that connects the City of Piqua's three Class I dams. The study comprised a geotechnical field exploration of the levee, a laboratory investigation of soil samples, and embankment seepage and slope stability analyses. Seepage and slope stability were found to be inadequate. The study concludes by identifying a conceptual remedial option.

While not specifically mentioned in the Miami County Hazard Mitigation Plan, the Hydraulic Canal Levee is part of the system that includes the City of Piqua's three Class I dams. The results of this study highlighted to the Miami County Hazard Mitigation Committee (MCHMC) the importance of remedial action for the Hydraulic Canal Levee and contributed to the MCHMC's decision to include action items in the Miami County Hazard Mitigation Plan directly related to the City of Piqua's three High Hazard Dams and Hydraulic Canal Levee (see Action Item Numbers 2PQ, 5PQ, 6PQ, and 7PQ).

## **3) City of Piqua Source Water Assessment and Protection Plan, March 2011**

This study is focused on the quality of the City of Piqua's water supply, including the surface reservoir system of Swift Run, Echo Lake, and Franz Pond Dams and the Hydraulic Canal Levee. The study constitutes a source water assessment and protection plan. It includes discussion of risks to the city's water supply and identification of management and educational strategies for protecting water quality.

This study serves as background information only with regard to risk to the City of Piqua's dams and levees; therefore, it does not relate to any specific mitigation activities in this Hazard Mitigation Plan.

These existing plans, studies, reports and technical information have helped to develop a more comprehensive approach in reducing the effects of potential disasters. Taken as a whole, these three studies conducted by the City of Piqua contributed to the Miami County Hazard Mitigation Committee's determination that the promotion of dam and levee safety maintenance programs would be one of the seven high priority Activity Categories addressed in Section 3.5 Identifying Mitigation Activities of the Miami County Hazard Mitigation Plan.