

Former Mad River Ash Pond Emergency Action Plan

Ohio Edison Company
Former Mad River Power Station
Clark County, Ohio

May 2026

Table of Contents

Certification/Statement of Professional Opinion	ii
1.0 Basic Information	1
2.0 Statement of Purpose	1
3.0 Emergency Action Plan Overview	2
4.0 Emergency Detection, Evaluation, and Classification	3
4.1 Water Depth in the Former Ash Pond	4
4.2 Rainfall Depths	4
4.3 Observation Frequency	4
4.5 Additional Emergency Conditions	4
4.6 Relaxation of Emergency Conditions	5
5.0 Notification Procedures	5
5.1 Former Ash Pond Owner/Responsible Individual Responsibilities	6
5.2 Responsibility for Notification and Other Activities	6
5.2.1 Owner/Responsible Individual	6
5.2.2 Clark County Emergency Management Coordinator	6
5.2.3 Clark County Sheriff’s Office and Mad River Township Fire and EMS Department...	6
5.3 Responsibility for Termination and Follow-Up	6
5.4 Owner/Responsible Individual Responsibility	7
5.5 Methods for Notification and Warning	7
6.0 Downstream Area Map	7
7.0 Face-to-Face Meeting	7

Figure 1 Inundation Map

Certification/Statement of Professional Opinion

This Emergency Action Plan (EAP) for the former Mad River Ash Pond was prepared by GAI Consultants, Inc. (GAI). The EAP may contain findings and determinations that are based on certain information that, other than for information GAI originally prepared, GAI has relied on but not independently verified. This Certification/Statement of Professional Opinion is therefore limited to the information available to GAI at the time the EAP was written. On the basis of and subject to the foregoing, it is my professional opinion as a Professional Engineer licensed in the State of Ohio, that this EAP has been prepared in accordance with good and accepted engineering practices as exercised by other engineers practicing in the same discipline(s), under similar circumstances, at the same time, and in the same locale. It is my professional opinion that the EAP was prepared consistent with the requirements of § 257.73(a)(3) of the United States Environmental Protection Agency's "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," published in the Federal Register on April 17, 2015 with an effective date of October 19, 2015 and amended on May 8, 2024 with an effective date of November 8, 2024.

The use of the words "certification" and/or "certify" in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not to be interpreted or construed as a guarantee, warranty or legal opinion.



Arica L. DiTullio, P.E.
Engineering Director



1.0 Basic Information

Name of Structure:	Former Mad River Ash Pond
State ID No.:	N/A (none assigned by the state)
Hazard Potential Classification:	Significant Hazard (as defined by the CCR Rule)
Owner:	Ohio Edison Company
Address:	341 White Pond Drive Akron, OH 44320
Telephone:	1-800-633-4766
Responsible Individual	Waste Programs Supervisor
Telephone:	724-830-5257
Clark County Emergency Management Agency	Michelle Clements-Pitstick (Director)
Address:	3130 East National Road Springfield, OH 45505
Telephone:	937-521-2175
Clark County Sheriff's Office (Mad River Township Patrol Unit)	Deputy Brandon Baldwin
Address:	260 E. Main Street P.O. Box 34 Enon, OH 45323
Telephone:	937-864-7429
Mad River Township Fire & EMS Department	John Heath (Fire Chief)
Address:	260 E Main Street P.O. Box 395 Enon, OH 45323
Telephone:	937-864-7429
Ohio Environmental Protection Agency – Clark County Emergency Response	Andrew Barienbrock (Operations Manager)
Address:	220 E. Monument Avenue, Suite 400 Dayton, Ohio 45402
Telephone:	614-836-8761

2.0 Statement of Purpose

The former Mad River Ash Pond (Ash Pond) is a legacy coal combustion residuals (CCR) surface impoundment located in Springfield, Clark County, Ohio (OH) and owned by Ohio Edison Company (Ohio Edison). The former Ash Pond was associated with the former Mad River Power Station (Station), which was also located in Springfield, Clark County, OH. The former Ash Pond was used for the management, storage, and disposal of CCR when the former Station was operational. The former Station generated power through coal combustion from approximately 1926 to 1982 and was demolished on or around 2010. The former Ash Pond was located at approximate coordinates 39°55'15.76" North and 83°50'50.03" West.

The purpose of this Emergency Action Plan (EAP) is to provide critical information and a plan of action in the event of an emergency at the former Ash Pond. The EAP:

- Defines the events or circumstances representing a safety emergency;

- Describes procedures used to detect a safety emergency;
- Defines responsible persons, responsibilities, and notification procedures;
- Provides contact information for emergency responders;
- Delineates inundation areas downstream of the former Ash Pond embankment; and
- Provides for an annual face-to-face meeting between Ohio Edison representatives and local emergency representatives.

This EAP was prepared in accordance with the applicable requirements at § 257.73(a)(3) and § 257.100(f)(2)(v) of the United States (US) Environmental Protection Agency's (EPA's) regulations at 40 Code of Federal Regulations (CFR) Part 257, Subpart D, *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments* (CCR Rule). Pursuant to § 257.73(a)(2) of the CCR Rule, an initial hazard potential classification assessment was performed for the former Ash Pond in May 2026. The assessment of the former Ash Pond resulted in a hazard potential classification of "significant hazard" under the CCR Rule.

3.0 Emergency Action Plan Overview

Three safety emergency stages, ranked by severity, will be established for the former Ash Pond.

Emergency Stage Definitions

Stage 1: Non-Emergency – failure of the embankment is unlikely and/or storm development is slow in advancing to a potential emergency. This stage indicates a situation in which the embankment is not in danger of failing presently, but failure could be possible if the situation progresses.

Stage 2: Potential Failure – failure of the embankment is possible and/or storm development is quickly accelerating. This stage indicates a situation that could result in an embankment failure.

Stage 3: Imminent Failure – failure of the embankment is expected or occurring and/or a storm has developed that will result in flooding that will threaten portions of the Mad River downstream of the embankment.

Stage 2 conditions include Stage 1 conditions and responsibilities, and Stage 3 conditions include both Stage 1 and Stage 2 conditions and responsibilities.

The Owner/Responsible Individual may use the following table to assess weather conditions and operational conditions at the former Ash Pond to determine the appropriate actions for notifying emergency personnel during potential and actual emergencies.

Table 1: EAP Procedures

Step 1: Emergency Condition Detection	Event Detection: See Section 4		
Step 2: Emergency Level	Assess Situation: Determine Emergency Level using Section 4		
	Stage 1	Stage 2	Stage 3
	Non-emergency incident Slowly developing situation See definition above	Potential failure situation Quickly developing situation See definition above	Urgent Embankment failure is imminent or in progress See definition above
	Stage 1	Stage 2	Stage 3
Step 3: Notification and Communication	Notification list See Section 5.0	Notification list See Section 5.0	Notification list See Section 5.0
Step 4: Expected Action	Inspect embankment and rain gauge weekly. Monitor and listen to weather forecasts	Inspect embankment and rain gauge daily. Notify emergency responders	Inspect embankment and rain gauge hourly. Continuous contact with emergency responders
Step 5: Termination and Follow Up	Termination of monitoring conditions at the embankment and proceed to evaluate damages and plans for repairs.		

Rain Gauge – A rain gauge having internet accessible data is located at the Springfield-Beckley Municipal Airport (KSGH) in Wilmington, Ohio (Springfield-Beckley gauge) and operated by the National Weather Service (NWS). Rain gauge monitoring in this EAP therefore references obtaining rainfall data from the Springfield-Beckley gauge. If the Springfield-Beckley gauge is unavailable, an appropriate alternate source of rainfall data may be used.

Normal methods of detecting potential emergency situations at the embankment consist of regular inspections and surveillance monitoring. For conditions beyond the normal range of operations, contact the Clark County Emergency Management Agency’s (CCEMA’s) Director for assistance in evaluating the conditions. Step by step procedures are listed in Table 1.

4.0 Emergency Detection, Evaluation, and Classification

The Owner/Responsible Individual is responsible for operation and maintenance of the former Ash Pond. The former Ash Pond Owner/Responsible Individual is responsible for monitoring conditions at the embankment and notifying the CCEMA when emergency stage conditions are activated.

The Owner/Responsible Individual may initiate this EAP based on the issuance of a flood watch or warning in the area or if conditions at the former Ash Pond indicate that water levels will rise to various pre-determined levels. Embankment erosion or any of the other conditions described in this section may also dictate initiation of the EAP. While it is the Owner’s/Responsible Individual’s responsibility to initiate this process, the CCEMA may contact the Owner/Responsible Individual to inform the team that a flood watch has been issued locally by the NWS, and team members would initiate their duties as required in this EAP.

Visual indications of water depth in the Mad River and/or former Ash Pond are the best indication of flood conditions and should be used as an indicator of the potential impacts downstream. In the absence of actual depth in the former Ash Pond, measured rainfall depths in inches monitored and

reported at the Springfield-Beckley gauge may be used to determine the emergency level. Visual observations should be made by a team member so that accurate information can be provided to the CCEMA.

4.1 Water Depth in the Former Ash Pond

Pool level in the former Ash Pond is the prime indicator of flooding conditions.

Initiate a Stage 1 Condition when the pool level in the former Ash Pond reaches EL 900.12 feet (water surface elevation in former Ash Pond anticipated from the design storm event).

Initiate a Stage 2 Condition when the pool level is EL 904 feet (elevation of the lowest portion of the existing embankments).

Initiate a Stage 3 Condition when the water level in the former Ash Pond overtops the embankment.

4.2 Rainfall Depths

Rainfall depths for various storm durations are another indicator of potential flooding conditions.

Initiate a Stage 1 Condition upon issuance of NWS flood warnings or for a continuous rainfall longer than 24 hours of any depth at the Springfield-Beckley gauge.

Initiate a Stage 1 condition if severe thunderstorms, heavy rains with local flood warnings, tropical storms and hurricanes, or heavy rains with frozen ground and/or snow covering are occurring.

Initiate a Stage 2 Condition for a rainfall exceeding 7.14 inches in a 24-hour or less period.

4.3 Observation Frequency

Embankment observations shall occur at frequencies determined by the Emergency Stage condition:

Stage 1 conditions – observations shall occur weekly.

Stage 2 conditions – observations shall occur daily.

Stage 3 conditions – observations shall occur hourly.

Observers should use safety measures and be aware of the potential for flooded roads along the route to the embankment. Monitoring and surveillance of conditions at the embankment will continue under emergency conditions if safety is not in question.

4.5 Additional Emergency Conditions

The following table is to be used to initiate emergency conditions during events other than those related to precipitation and pool levels. If any of these conditions are observed, Ohio Edison's Corporate Environmental Team should be contacted for further discussion, observation, and/or technical direction.

Table 2: Additional Emergency Conditions

Event	Situation	Stage Level
Seepage	New seepage areas on or near the embankment	1
	New seepage areas with cloudy discharge or rapidly increasing flow rate	3
Sinkholes	Observation of new sinkhole on embankment	1
	Rapidly enlarging sinkhole or development of multiple sinkholes	3
Embankment Cracking	New cracks in embankment greater than ¼ inch wide without seepage	1
	Cracks in embankment with clear seepage	2
	Cracks in embankment with rapidly increasing seepage	3
Embankment Movement	Visual movement of the embankment slope	1
	Sudden or rapidly progressing slides of the slopes	3
	Overtopping flow eroding the embankment slope	3
Vortex in Pond	Whirlpool with discharge downstream	3
Earthquake	Measurable earthquake felt or reported on or within 50 miles of the embankment	1
	Earthquake resulting in visible damage to the embankment	1
	Earthquake resulting in potential uncontrolled release of water or CCR from the embankment	3
Security Threat, Sabotage, and Vandalism	Verified bomb threat that, if carried out, could result in damage to the embankment	1
	Detonated bomb that has resulted in damage to the embankment or its appurtenances	1
	Damage to the embankment or appurtenances with no impact to the functioning of the embankment	1
	Damage to the embankment or appurtenances that has resulted in seepage flow	1
	Damage to the embankment or appurtenance that has resulted in potential uncontrolled water or CCR release	3
Flooding	Water levels within the former Ash Pond are at or above the external embankment crest at any location	3

4.6 Relaxation of Emergency Conditions

Emergency conditions can be rescinded when the following events occur:

- The NWS ends a flash flood warning.
- After heavy rains have ended, the water level in the former Ash Pond is at or below the internal embankment crest, and the water level is receding.

In the event of an earthquake, overtopping of the embankment, or other serious problems resulting in the triggering of emergency conditions, the embankment must be inspected by a knowledgeable professional engineer of the site.

Termination of emergency conditions occurs when all entities notified of the emergency condition have been communicated with and informed of current non-emergency conditions.

5.0 Notification Procedures

This section is intended to clearly outline the responsibilities of parties involved in all EAP procedures, including notification, surveillance, classification, evacuation, and termination. Figure 1 shows the areas

where inundation could be anticipated during a rain event leading to a hypothetical breach of the former Ash Pond in its most critical location. Note Figure 1 indicates that neither loss of human life nor buildings/structures is anticipated in the event of an embankment failure.

5.1 Former Ash Pond Owner/Responsible Individual Responsibilities

1. The former Ash Pond Owner/Responsible Individual IS RESPONSIBLE for notifying the CCEMA and the OH Environmental Protection Agency (OH EPA) of any problem or potential problem at the former Ash Pond site.
2. The former Ash Pond Owner/Responsible Individual WILL DETERMINE when Stage 1 conditions are met at the former Ash Pond and WILL INITIATE surveillance accordingly.
3. The former Ash Pond Owner/Responsible Individual WILL DETERMINE when Stage 2 conditions are met at the former Ash Pond.
4. The former Ash Pond Owner/Responsible Individual WILL DETERMINE when Stage 3 conditions are met at the former Ash Pond.

5.2 Responsibility for Notification and Other Activities

The Owner/Responsible Individual and the CCEMA will notify responsible parties as listed in this section.

5.2.1 Owner/Responsible Individual

5. The former Ash Pond Owner/Responsible Individual WILL NOTIFY the Ohio Edison Corporate Environmental Team that Emergency Conditions have been implemented.
1. The former Ash Pond Owner/Responsible Individual WILL NOTIFY the CCEMA when Stage 2 or Stage 3 conditions are met, to alert them to perform actions required for the stage.
2. The former Ash Pond Owner/Responsible Individual WILL NOTIFY the OH EPA that Stage 2 or 3 conditions have been implemented.

5.2.2 Clark County Emergency Management Coordinator

1. The CCEMA WILL NOTIFY the Clark County Sheriff's Office and the Mad River Township Fire and EMS Department when Stage 2 or Stage 3 conditions are met.

5.2.3 Clark County Sheriff's Office and Mad River Township Fire and EMS Department

1. The Clark County Sheriff's Office and Mad River Township Fire and EMS Department WILL NOTIFY residences and businesses along the Mad River downstream of the former Ash Pond if an emergency situation is anticipated.

5.3 Responsibility for Termination and Follow-Up

Once the Stage 3 condition has been met, the former Ash Pond Owner/Responsible Individual will continue to provide the CCEMA with information concerning water level rise and former Ash Pond overtopping potential, as provided by the observer. The observer will remain at the former Ash Pond until the termination of surveillance.

Regional flooding may occur prior to an incident at the former Ash Pond and could continue for long periods of time. The observer needs to have plans for staying or returning to the former Ash Pond as conditions worsen. The termination responsibility will be handled by the dam observer. The dam observer will terminate surveillance of the site conditions when:

- The NWS ends a flash flood watch or warning; and

- Heavy rains have ended, the water level in the former Ash Pond is below elevation 904 feet (elevation of the lowest portion of the existing embankments), and the water level is receding.
- After personal inspection by a knowledgeable professional engineer of the dam site, following an earthquake, overtopping of the dam, or an evacuation of the inundation area as a result of this EAP, or other serious problems resulting in a notification of a dam site emergency.

Upon termination of surveillance, the former Ash Pond Owner/Responsible Individual will notify the CCEMA.

Post flood event discussions should be used to determine strengths and weaknesses in the EAP.

5.4 Owner/Responsible Individual Responsibility

The Owner/Responsible Individual will be responsible for EAP-related activities, including (but not limited to) preparing revisions to the EAP, evaluating this EAP at a minimum of every 5 years, and coordinating annual face-to-face meetings between representatives of the Owner and local emergency responders. This person will be the EAP contact if any parties involved have questions about the plan.

5.5 Methods for Notification and Warning

The following notification and warning method(s) are to be used during an emergency;

- Telephone/Reverse 911 automated warning systems;
- Police/fire/sheriff radio dispatch vehicles with loudspeakers, bullhorns, *etc.*; and
- Radio/television broadcasts for an area involved (as required).

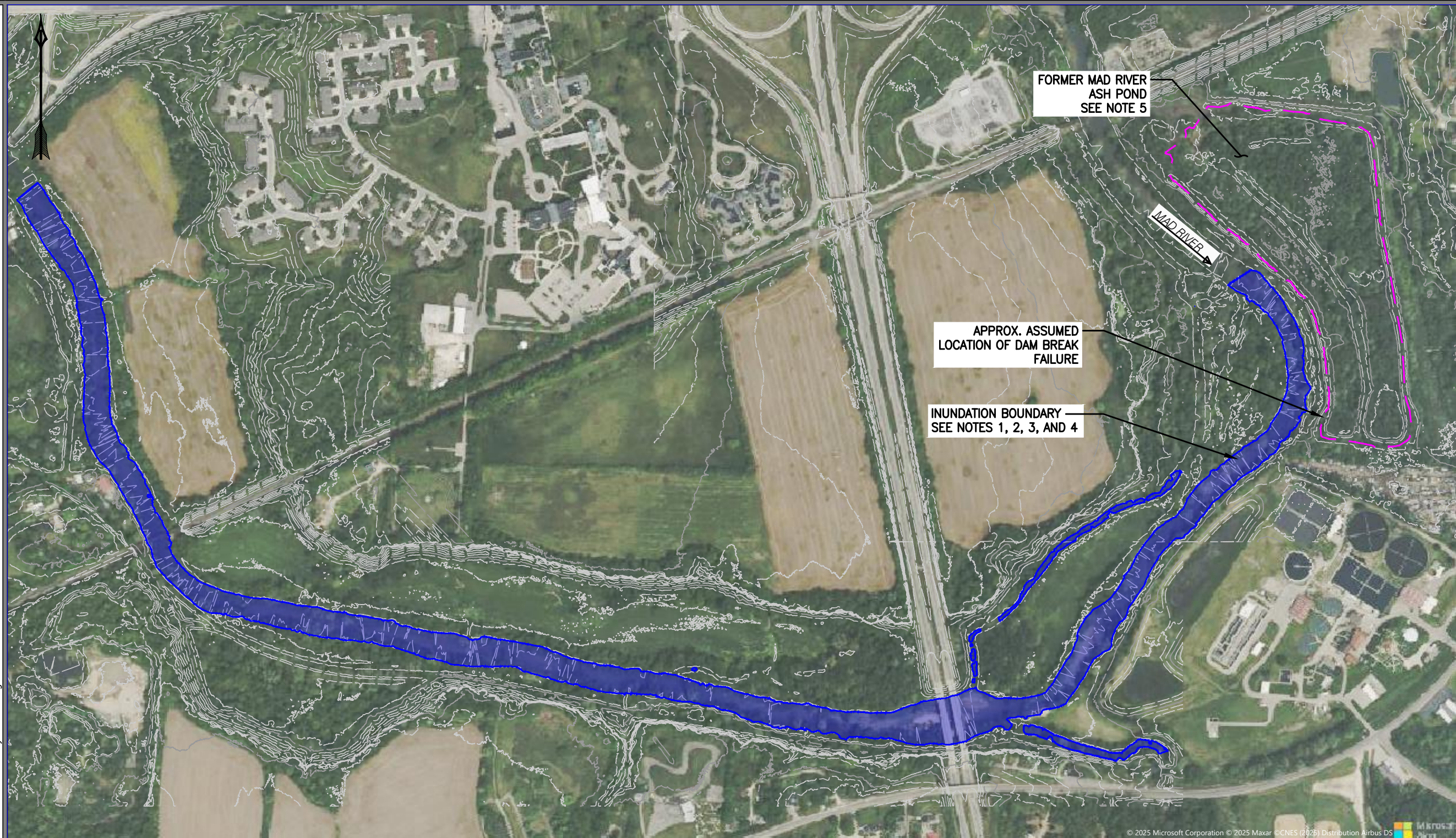
6.0 Downstream Area Map

A map of the downstream area is included as Figure 1.

7.0 Face-to-Face Meeting

Ohio Edison will coordinate with local emergency responders annually to meet and discuss the notification procedures as outlined in Section 5.0.


FIGURE




- NOTES:**
1. THE INUNDATION BOUNDARIES, WATER SURFACE ELEVATIONS, AND MAPPING OF FLOODED AREAS ARE APPROXIMATE AND SUBJECT TO THE ASSUMPTIONS, METHODS, AND PROCEDURES USED TO SIMULATE HYPOTHETICAL EMBANKMENT BREACH CONDITIONS.
 2. THE INFORMATION CONTAINED IN THIS MAP WAS PREPARED FOR USE IN NOTIFICATION OF DOWNSTREAM PROPERTY OWNERS BY EMERGENCY PERSONNEL. THIS INFORMATION SHOULD ONLY BE USED AS A GUIDE. ACTUAL AREAS INUNDATED WILL DEPEND ON FAILURE CONDITIONS AND MAY DIFFER FROM AREAS SHOWN ON THE MAP. NO LIKELIHOOD OF A FAILURE OF THE FORMER ASH POND IS IMPLIED.
 3. THE DESIGN EVENT FOR THE FORMER ASH POND IS THE 1,000 YEAR, 24-HOUR STORM EVENT. MODELS OF THE DESIGN STORM EVENT INDICATE THAT ALL PRECIPITATION IS CONTAINED WITHIN THE FORMER ASH POND WITHOUT OVERTOPPING THE EMBANKMENT.
 4. THE MAXIMUM WATER LEVEL SHOWN HEREIN IS THE RESULT OF AN ANALYSIS IN WHICH THE THEORETICAL MAXIMUM AMOUNT OF CCR AND WATER IS CONTAINED WITHIN THE FORMER ASH POND ON A DAY WITH NO PRECIPITATION COINCIDING WITH AN EMBANKMENT FAILURE EVENT.
 5. THE EXTENT OF THE FORMER ASH POND IS APPROXIMATE AND BASED ON EXISTING TOPOGRAPHY, FIELD OBSERVATIONS, AND LIMITED INFORMATION FROM INVESTIGATIONS CONDUCTED IN 2025. ADDITIONAL INVESTIGATION IS NECESSARY TO CONFIRM THE EXTENT OF CCR.
 6. MAPPING AERIAL IMAGERY WAS ACCESSED IN JULY 2025 FROM THE AUTOCAD CIVIL 3D GEOLOCATION FEATURE (BING 2025 MICROSOFT CORPORATION, 2025, MAXAR CNES DISTRIBUTION AIRBUS DS). TOPOGRAPHY WAS DEVELOPED FROM LIDAR DATA ACCESSED FROM OHIO GEOGRAPHICALLY REFERENCED INFORMATION PROGRAM DATED 2021. GIS IMAGERY IS INCORPORATED INTO MAPPING. INUNDATION BOUNDARIES ARE INTERPRETED.

PLOTTED ON: 3/30/2026 9:23:09 AM PLOTTED BY: Taylor Boring PLOT FILE: GAI.stb

NO.:	DATE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DESCRIPTION:

DRAWING TITLE		
FIGURE 1 - INUNDATION MAP		
PROJECT	 gai consultants	CLIENT
LEGACY CCR RULE COMPLIANCE FORMER MAD RIVER ASH POND FORMER MAD RIVER POWER STATION CLARK COUNTY, OHIO		OHIO EDISON COMPANY 341 WHITE POND DRIVE AKRON, OHIO 44320

ISSUE DATE:	DRAWN BY:
03/30/2026	OLMSTCC
SCALE:	CHECKED BY:
AS SHOWN	ROUNCLL
REVISION	APPROVED BY:
	DITUAL
	SHEET NO.:
	1 OF 1