



WATER RESOURCE
AND GEOTECHNICAL
SERVICES





AK HYDRO SERVICES

We specialize in comprehensive assessments, inspections and final design services for water resource and geotechnical projects, focusing on repairs, modifications, and replacement structures to improve the safety of our communities

SERVICES AND CAPABILITIES

Design Services

- Spillways
- Lake Drains
- Canals & Levees
- Embankment Modifications
- Overtopping Protection
- Slope Remediation
- Drainage Improvements
- Erosion Protection
- Dam Removals

Engineering Analysis

- H&H
- Geotechnical
- Flood Studies
- Alternative Evaluations
- Dam Break
- Inundation Mapping
- Potential Failure Mode

Inspections and Assessments

- Detailed Site Inspections
- Dam Assessments
- Risk Assessments
- Master Planning

Document Preparation

- Construction Drawings
- Project Specifications
- Cost Estimates
- Emergency Action Plans
- Operation, Maintenance, and Inspection Manuals
- Levee Accreditation
- Permitting

Construction Services

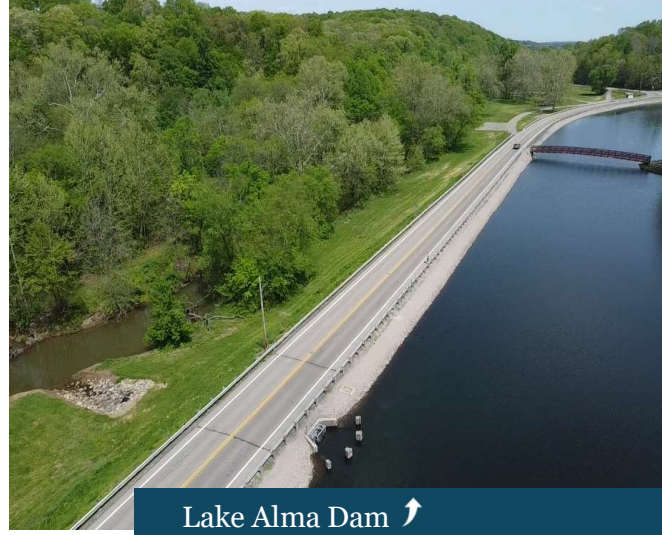
- Construction Administration
- Inspection and Oversight
- Dispute Resolution

KEY PROJECTS

Lake Alma Dam Rehabilitation, Vinton County, Ohio. Lake Alma Dam, a high-hazard structure in Lake Alma State Park, does not have sufficient capacity to convey the PMF through the spillway. AK Hydro is working on the design of a replacement spillway to convey the PMF without requiring sufficient modifications to the embankment that supports a state road.

Muskingum Lock and Dam No. 7 Rehabilitation, Morgan County, Ohio. The current sheetpile run-of-the-river dam exhibited severe deterioration. A concrete, stepped dam was designed to replace the current dam prior to complete dam failure. The replacement dam is a mass concrete structure that is anchored into underlying bedrock using post-tensioned anchors. The replacement dam design is also intended to reduce the likelihood of recirculating rollers. Construction of the replacement stepped dam is anticipated to be completed in Fall 2025.

Adams Lake Dam Rehabilitation, Adams County, Ohio. Adams Lake Dam has undergone multiple repairs and rehabilitations, with the most recent modification occurring in 1993 after a seepage dam failure occurred. AK Hydro is designing a spillway to replace the principal spillway with more hydraulic capacity to convey the PMF. AK Hydro is also developing the design of a replacement control tower structure since the current system is inoperable.



Lake Alma Dam ↗

↙ Muskingum Lock and Dam No. 7



Adams Lake Dam



Our roots run deep in the industry, anchored by the experience and expertise of Don Green, Brian Afek and Joe Kudritz. With over 75 combined years of dedicated focus in Dam Safety Engineering.

Key Staff



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