

STORMWATER



2D FLOODPLAIN MAPPING

St. Joseph, MO

RIGHT-SIZED SOLUTIONS

Stormwater management is an evolving, complex challenge facing jurisdictions across the country. Both rural and urban areas have increasing concerns about the destructive power of water such as flooding, erosion, and water quality issues. But with proper planning, stormwater management challenges can become opportunities to improve the overall health of aquatic systems.

As a natural resource and an integral part of the water cycle, stormwater must be preserved and protected. We take this responsibility seriously—bringing together industry best practices, design standards, and the natural environment to create smart, right-sized solutions.

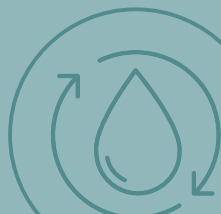
IMPROVING WATER QUALITY

Proper planning is a critical component of any water quality-conscious design. Our seasoned engineers are capable of working with all types of stormwater infrastructure including natural streams, man-made drainage systems, dams, traditional facilities, underground structures, and contemporary micro-scale and vegetative-based techniques. We're committed to applying our vast expertise to help you solve complex stormwater challenges.



WATER

DRINKING WATER
ENVIRONMENTAL
RIVERS, LAKES, & STREAMS
STORMWATER
WASTEWATER





LOW HEAD DAM MITIGATION

Ames, IA

HOW WE CAN HELP

SYSTEM MODELING

The powerful capabilities of advanced hydraulic and hydrologic modeling software help us identify and optimize proposed drainage system improvements. Intake placement, pipe size, and storm sewer outlet locations are designed for maximum system efficiency, keeping project goals and future needs in mind.

FLOODPLAIN MANAGEMENT & PERMITTING

Close working relationships with the U.S. Army Corps of Engineers and state and local floodplain regulators, helps us mitigate potential permitting issues, gain important insight on proposed projects, and maintain project schedules. Identifying and addressing potential floodplain issues early on during project development helps us navigate the regulatory process.

Our extensive floodplain management services include:

- FEMA compliant floodplain modeling & mapping
- FEMA map revisions
- Bridge & culvert hydraulics
- Pump stations
- Determination of base flood elevations
- Analysis for no-rise certifications

STORMWATER PLANNING

Our approach considers a variety of practices and implements what's most effective and best suited for your needs. Sometimes, hard infrastructure is the most appropriate and practical solution. But, considering other management practices can help maximize limited resources, resulting in a system that's an amenity rather than just infrastructure.

FUNDING ASSISTANCE

Putting plans into action can be daunting when comparing project costs and available budgets, but numerous funding resources can help. We've guided clients to obtain funding for stormwater improvements through multiple sources including local soil and water conservation district grants and the FEMA Hazard Mitigation Grant Program.

WATERSHED MANAGEMENT AUTHORITIES (WMA)

WMAs bring jurisdictions together to improve water quality and reduce flooding. We're proud to help facilitate these improvements and are excited to apply our experience to additional watersheds.