

# RIVERS, LAKES, & STREAMS

## STREAM RESTORATION & STABILIZATION *Cedar Rapids, IA*

## IMPROVING WATER QUALITY

We approach environmental challenges with a vast knowledge of how to restore rivers, lakes, streams, and ponds through creative, long-term solutions. Considerable experience with the construction, maintenance, and removal of dams also helps us guide clients toward effective infrastructure solutions, while identifying opportunities for environmental improvement. Focusing on sustainable water resource management, we'll help you achieve your project goals in a way that harmonizes with the natural world.

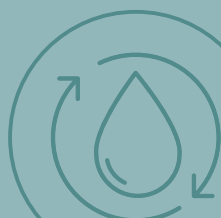
## OPTIMIZING ENVIRONMENTAL SYSTEMS

With extensive expertise, we're able to design projects grounded in sound engineering while optimizing the environmental quality, economic vitality, and aesthetics of natural systems. A strategic approach to overcoming project challenges propels us to develop high-quality, cost-effective solutions fostering stewardship. By establishing strong relationships with various regulatory agencies, we're able to navigate the environmental permitting process with ease and efficiency to keep your project on time and within budget.



### WATER

DRINKING WATER  
ENVIRONMENTAL  
RIVERS, LAKES, & STREAMS  
STORMWATER  
WASTEWATER





## DAM REHABILITATION

*Summit Lake, Creston, IA*

### HOW WE CAN HELP

#### SHORELINE STABILIZATION & RESTORATION

A lack of shoreline stabilization creates water quality issues, hazardous access conditions, and aesthetic concerns. After evaluating the existing conditions of your stream or lake, we'll design environmentally friendly improvements to reduce erosion, increase aquatic habitat, and improve access and usability.

#### CHANNEL REALIGNMENT

Some projects require realigning an existing drainage channel. We design these channels to protect public safety, meet all permit requirements, and match the preexisting channel conveyance and habitat as closely as possible.

#### RECREATIONAL ENHANCEMENTS

Our planners and landscape architects can help weave recreational features such as boat ramps, docks, and fishing piers into all types of water resource projects.

#### DREDGING

Dredging is often the only solution available to bring a lake back to its original storage capacity. We understand how dredging equipment, pumping needs, and dredged material storage must work to achieve project success and can assist with the design of wet or dry dredging improvements.

#### SEDIMENTATION CONTROL/ WATER QUALITY IMPROVEMENT

Design of constructed wetlands, sediment basins, forebays, check dams, and other control improvements assist with sediment removal to improve water quality. A properly designed forebay can add years to the life of a pond through easily accessible sediment control.

#### BREACH ANALYSIS

An evaluation of downstream safety in the event of dam failure, which is often required by regulators when a dam is constructed or modified.

#### INFRASTRUCTURE EVALUATION & DESIGN

We'll determine the condition and capacity of existing infrastructure elements and provide maintenance or upgrade recommendations to achieve the system lifespan you desire.

#### DAM REMOVAL, REPAIR, & MODIFICATION

To meet today's evolving environmental conditions, our team of hydraulic and structural engineers collaborate to complete critical infrastructure repair or modifications based on an analysis.