

# STREAM AND RIVER RESTORATION

## APPROPRIATE, SUSTAINABLE DESIGN

Gravity, nature, weather events, and development can all impact the resilience of rivers and streams. Understanding and applying natural stream form and function is critical to the sustainable management of our stream and river systems. Whether the goal is to restore critical aquatic and riparian habitat, meet surface water quality goals, develop urban/suburban green corridors and linear parks, or reduce long-term maintenance costs, stream and river restoration is emerging as the best practice for the management of these critical green infrastructure systems.

SWCA's stream and river restoration staff specialize in fluvial geomorphology, natural channel design, watershed hydrology, open channel hydraulics and sediment transport, bioengineering, and aquatic and riparian biology.

## WHY CHOOSE SWCA?

- **Offices Nationwide.** We offer stream and river restoration services throughout the U.S.
- **Top Experts.** Our scientists bring an interdisciplinary approach to restoration assessment and design.
- **Creative Solutions.** We apply our expertise to design methodologies best suited to your unique project.



## STREAM ASSESSMENT

- Fluvial Geomorphologic Assessments
- Reference Reach Surveys & Design
- Regional Curve Development
- Watershed Assessment of River Stability and Sediment Supply (WARSSS)
- Stream Monitoring
- Aquatic Habitat Assessment & Functional Bioassessments
- Water Quality Assessment & Monitoring

## STREAM & RIVER DESIGN

- Natural Channel Design
- Hydraulic Structures Design
- Soil Bioengineering
- Stream Crossing Design
- Fish Passage Design
- Erosion & Sediment Control
- Construction Oversight

## HYDROLOGIC & HYDRAULIC

- 1-D & 2-D Hydraulic Analysis
- Steady & Unsteady Flow Analysis
- Bridge Scour Analysis
- FEMA Floodplain Mapping
- Sediment Competency, Capacity, & Budget Analysis

## CONTACT

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