



Miesville Ravine Eco-Restoration & Management Plan

Project Location: Miesville Ravine Park Reserve - Dakota County, MN **Consulting Firm** Emmons & Olivier Resources, Inc. - St. Paul, MN

Project Clients: Minnesota Trout Unlimited - St. Paul, MN & Dakota County Parks - Apple Valley, MN

The Miesville Ravine Park Reserve occurs in an agricultural dominated watershed, yet contains diverse and unique natural features including oak savanna, bedrock bluff prairie, mesic hardwood forest, sedge meadows, groundwater springs, and a coldwater trout stream that connects to the "Wild and Scenic" Cannon River.

The eco-management plan and stream restoration efforts collectively serve to preserve and restore diverse native plant communities and a groundwater-fed creek that supports coldwater dependent species including brook trout and slimy sculpin, while also enhancing connectivity and expanding a mosaic of habitats that supports numerous rare species discovered in the park.

In total, 5,600 LF of stream habitat was restored using bioengineering practices designed for the unique character of the ravine corridor such as talus slope benches and rock outcrop refugia. Other habitat enhancement features included vernal pools, snag trees, brush pile dens, and nesting banks for aquatic biota. The project also included over 10 acres of invasive species removal and seeding of native vegetation.

Additionally, special stream construction techniques were employed upon the discovery of a state-threatened plant which required meticulous delineation of existing populations and successful transplanting of plants within the work area.

EOR implemented a truly integrated restoration design and developed innovative ecological management techniques to preserve diverse native plant communities and restore a resilient riparian corridor that intimately aligns with the County's mission of "conserving and preserving for all the unique natural features, fauna, and flora for future generations to enjoy and access".



