

## Cole Creek Channel Stabilization

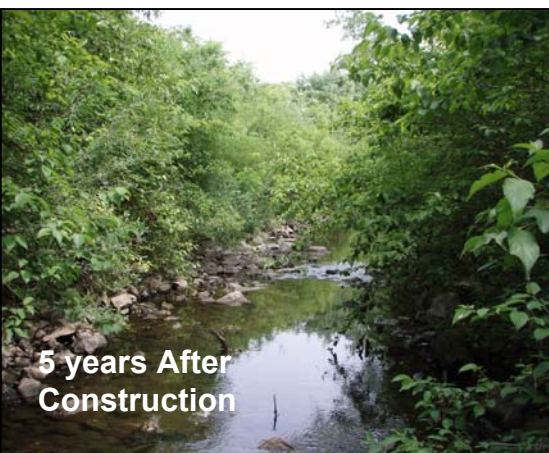
City of Saint Charles, Missouri



Cole Creek was a severely degraded stream in an urbanized residential area of St. Charles, Missouri. Intuition & Logic was retained to provide a natural channel restoration design alternative to protect critical infrastructure and property along more than 3,500 feet of Cole Creek.



The design included 16 grade control structures and over 5,000 feet of bioengineered bank stabilization. The restoration design focused on managing stream energy and restoring natural channel morphology. The grade controls set up the riffle-pool spacing and reach average slope for energy management, and allowed the channel to adjust between structures. Bank stabilization was designed for reaches where critical infrastructure and property concerns dictated a more robust solution. A composite revetment design comprised of rock, geogrid and native riparian plants, was used to provide a flexible armor that eventually grew into a robust riparian corridor.



Construction was completed in Spring of 2002.