

## **St. Peters Tributaries Geomorphic Analysis and Capital Improvement Plan**

St. Peters, Missouri

Concerned with increasing streambank erosion, sediment deposition and related threats posed to streamside property and infrastructure, the City of St. Peters hired Intuition & Logic to conduct a geomorphic and hydrologic analysis of approximately 12,000 feet of stream channel in three separate watersheds.

The geomorphic analysis identified the dominant fluvial processes driving erosion and instability along each project reach. The two smaller tributaries at Margaret Brown Court and McClay Village were adjusting by means of channel incision, while the reach of Dardenne Creek was experiencing ongoing channel widening. Both processes require different management methods, and the final report provided recommendations and management strategies for each.



The final report addressed stream erosion and sediment deposition with 14 recommended interventions. The interventions were assigned priorities and grouped into four construction phases by location, priority and cost to allow for future planning and budgeting by the City. The proposed construction phases focus on protecting threatened infrastructure and property and improving the stability of each reach without excessive interventions.

