

## **EXECUTIVE SUMMARY**

Salt Lake City's urban creeks and their associated riparian corridors are unique and important natural resources. To recognize the importance of these resources, Salt Lake City passed a Riparian Corridor Overlay Zone (RCO) ordinance in 2008. In conjunction with passage of the ordinance, the City Council authorized the Salt Lake City Department of Public Utilities (DPU) to conduct stream corridor studies to assess baseline conditions on the above-ground portions of City, Emigration, Parleys, and Red Butte Creeks within Salt Lake City's municipal boundaries.

This City Creek Riparian Corridor Study Management Plan document introduces the study and describes the importance of riparian functions (Chapter 1), presents the methods (Chapter 2 and Appendix A) and results (Chapter 3) of baseline assessment of stream and vegetation conditions, describes various recommended techniques to improve riparian conditions (Chapter 4 and Appendix B), presents the vision for the desired future condition of the corridor as determined from public and stakeholder input (Chapter 5), provides maps and recommendations for specific stream reaches within the City Creek riparian corridor (Appendix C), and includes approximate cost estimates for recommended projects (Appendix D).

Study findings indicate that tree cover and shading are generally good throughout the majority of the corridor, and that community members value and appreciate the corridor for its aesthetic, recreational, and ecological values. Common issues affecting riparian function include litter, gabion baskets, invasive plants, lack of understory cover, storm drain outfall erosion, foot compaction, eroded access trails, and road encroachment. Recommendations include invasive plant removal/control, stream cleanup and adoption, biotechnical slope stabilization, storm drain outlet protection, improved road runoff management, gabion basket retrofits/revegetation, improvements to streambed protection structures, reach-scale access control and trail stabilization, installation of educational and interpretive signage, and measures to increase public awareness.

This document is intended to be used as a tool to help guide and inform future efforts to enhance riparian conditions within the City Creek stream corridor and achieve the vision statement for the corridor. It is also intended to be used as a resource for DPU staff administering and reviewing permits under the RCO ordinance. Chapter 4 provides information on permitting requirements (Table 4.5), costs and benefits (Tables 4.6 and 4.7), maintenance and monitoring considerations (Table 4.8), and grant resources (Table 4.9) for different types of improvement projects. This information can be used in combination with reach-specific recommendations and objectives (Table 5.1, Table 5.2, Appendices C and D) to plan for funding and implementation of improvement projects. The tools in this document are intended to be flexible and useful for a variety of implementation approaches, including corridor-scale approaches that target a specific issue (e.g., planning for phased upgrades to storm drain outfalls throughout the riparian corridor) and reach-specific approaches that apply a variety of improvement measures to a specific section of stream (e.g., bank stabilization, invasive plant removal, and trash cleanup within a 1,000-foot-long stream reach between road crossings). Managers of specific portions of the corridor can also use resource references in the document (sidebars in Chapter 4) to help select appropriate improvement techniques, obtain necessary materials, and contact appropriate agencies/organizations for guidance and support.

Various action items are recommended for implementation (Chapter 5), including a recommendation to establish a riparian corridor working group. This entity may help identify more detailed funding approaches, leadership, and



schedules for individual projects. Dependent on available funding and to the extent possible, DPU's implementation efforts will be balanced among the City's four creeks (City, Red Butte, Emigration, and Parleys) and the Jordan River.

Cost estimates for the identified improvement measures are summarized in Table ES1. These cost values are highly approximate. Site-level design work and engineering are required for many projects, and cost estimates may vary substantially once detailed designs are prepared for a given study reach. In addition, the proposed improvement measures are not intended to be exhaustive, and as site-specific designs are completed, additional improvement measures may be included. Appendices C and D provide additional details about the recommended projects and cost estimates.

REACH NUMBER	REACH DESCRIPTION	REACH LENGTH (feet)	APPROXIMATE COST ESTIMATE FOR INITIAL IMPLEMENTATION OF IMPROVEMENT MEASURES *
UCC_RO9	Pleasant Valley	1,565	\$4,290
UCC_R10A	Pipeline	1,427	\$6,820
UCC_R10B	Eagles Rest	1,905	\$35,850
UCC_R1OC	Water Crest	1,612	\$53,230
UCC_R11A	Elbow Turn	1,836	\$77,760
UCC_R11B	Hidden Falls	1,207	\$32,470
UCC_R11C	Guard Shack Gate Area	1,357	\$149,620
LCC_RO1A	Below Bonneville Boulevard	1,686	\$118,070
LCC_RO1B	Upper Freedom Trail Area	836	\$162,600
LCC_RO1C	Lower Freedom Trail Area	1,303	\$180,650 <sup>b</sup>
LCC_RO1DO2A	Upper Memory Grove Park	681	\$199,000 °
LCC_RO2B	Lower Memory Grove Park	748	\$63,480
TOTAL FOR CITY CREEK CORRIDOR			\$1,083,840

## Table ES1. Summary of estimated approximate costs for improvement measures by reach.

\* Estimated cost values include materials and installation and 30% contingency for design, permitting, right of way, legal, administrative, etc., expenses. Values do not include annual monitoring or maintenance costs.

<sup>b</sup> Cost for this reach includes \$58,500 for replacement of one stream crossing culvert. See Appendix D for details.

° Cost for this reach includes \$117,000 for replacement of two stream crossing culverts. See Appendix D for details.