

## **1.0 INTRODUCTION**

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The City of Creve Coeur experiences multiple stormwater problems within its boundaries. To benefit its citizens, the City has identified the need to assess the multitude of drainage related problems by updating its last Watershed Plan done in 1999 to develop a new path to implement comprehensive and technically sound solutions to these problems.

Many of the problems stem from increased runoff from development. Changes in land use have a major effect on both the quantity and quality of stormwater runoff. Urbanization, if not properly planned and managed, can dramatically alter the natural hydrology of an area because it increases impervious cover. Impervious cover decreases the amount of rainwater that can naturally infiltrate into the soil and increases the volume and rate of stormwater runoff. These changes lead to more frequent and severe flooding, streambank erosion, and therefore potential damage to public and private property.

One solution that helps mitigate these effects is to enacting ordinances requiring elements of low-impact development (LID). LID is a stormwater management system that works by utilizing the natural processes of the water cycle. LID treatment networks are designed not to exceed the carrying capacity of a site's landscape and can incorporate a number of stormwater best management practices such as rain gardens, vegetated filter strips, bioswales, pervious pavement, and green roofs.

The scope of the Watershed Management Plan Update has been to review the existing Master Plan, collect the available watershed information (including a stormwater questionnaire distributed to citizens in 2010), evaluate known problems, develop appropriate project alternatives to solve them and prioritize the projects in a fair and equitable manner.

### **1.1 Purpose**

The purpose of this report is to develop a current, prioritized master plan that incorporates any concerns from the previous master plan, problem areas identified in the recent stormwater questionnaire, and any other issues brought to the City's attention. In addition, the report will serve as a tool to determine appropriate stormwater funding and help determine which projects receive this funding.