

## Section 2: Introduction

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### 2.1 Background

The City of Canby completed a Storm Drainage Master Plan (SDMP) in 1994. However, due to changing conditions and regulations, particularly with respect to UICs, the 1994 plan is considered outdated and an updated Stormwater Master Plan is required. In addition, Canby is a Designated Management Agency (DMA) and a new SWMP is mandated in the implementation manual. The City expects to receive an individual UIC Water Pollution Control Facility (WPCF) permit from Oregon Department of Environmental Quality (ORDEQ) in late 2013 and has the goal of adopting the SWMP before issuance of that permit.

### 2.2 Authorization

On 15 January 2013, Kennedy/Jenks Consultants (Kennedy/Jenks) was authorized by the City of Canby to update the City's existing Storm Drainage Master Plan.

### 2.3 Purpose for Study

The purpose of this current SWMP is to analyze the City of Canby's existing stormwater system for current hydraulic adequacy, as well as to model and analyze the system hydraulic performance under existing and future land use scenarios. Identified existing hydraulic deficiencies include known areas of recurring flooding and pipes identified as in need of maintenance, undersized, or in unknown condition. This updated SWMP is intended to aid the City in properly planning and budgeting for needed improvements to address key issues required in maintaining an effective and efficient storm drainage system, as well as meeting future needs.

### 2.4 Scope of Work

The scope of work needed to accomplish this study was defined by the City of Canby and Kennedy/Jenks' project team. These objectives aided in guiding the project and were used as a measure of project accomplishment. The scope of work included:

- Gather and review stormwater system inventory data pertinent to this study.
- Review existing system data including the existing system map.
- Describe the existing stormwater system as well as an inventory of known problem areas.
- Determine the capacity of the existing detention pond at the west end of NW 3<sup>rd</sup> Ave.
- Update and develop the system service areas and basin boundaries.
- Develop a hydrologic and hydraulic model of the capacity of the existing collection system that discharges to surface water. Develop flow projections for the existing and future

conditions for the six discrete drainage basins where stormwater is discharged to surface water.

- Calculate the required size of a treatment wetland proposed on the Fish Eddy property at the Willow Creek outfall.
- Identify and prioritize capacity deficiencies and needs.
- Groundwater depth modeling and protectiveness demonstration.
- Identify UICs that require retrofit and list the proposed retrofit solution for each of these UICs.
- Develop a CIP identifying recommended capital improvements and estimated project costs for a 20-year planning period.
- Prepare a Stormwater Master Plan report summarizing the findings and recommendations.