

**CITY OF PHILOMATH
Storm Drainage System Master Plan**

**Section 1
INTRODUCTION**

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1.1 Background

The City of Philomath has experienced rapid growth in recent years in part because of its proximity to Corvallis, as well as the quality of life provided by the City and the surrounding area of Benton County.

The City of Philomath is located on Highway 20 approximately five miles west of Corvallis in Benton County, Oregon. The current population of Philomath is approximately 3300 (Oregon Blue Book, 1997-98). The City was founded in 1882, and in the past much of the economic activity of Philomath has centered around the forest products industries. With the decline of the forest products industries in western Oregon, future prosperity of Philomath appears to be tied to diversified light industries together with a growing residential community. Many of the residents of Philomath work in Corvallis and other nearby communities.

The storm drainage system in the downtown core area of Philomath has not been upgraded as the City has grown up around it. Storm drainage management within the City of Philomath has received little attention over the years. Without the benefit of a master plan, storm drainage system funding mechanisms or even an overall storm drainage utility map, storm drainage improvements were constructed as they were needed without analyzing overall system needs and impacts. Although this approach has alleviated isolated problems, the majority of the existing system is old and still experiences numerous problems. Continuing development, particularly within the upper reaches of the drainage basins, is further overtaxing the presently undersized drainage system.

Although the City has developed master planning documents for both water and sanitary sewer systems, the City does not currently have a storm drainage master plan document. The City's current development standards require findings that adequate capacity is available in the utility systems prior to development occurring. Without a storm drainage master plan which identifies basin-wide improvements required with a schedule guiding their construction, implementation of these policies is difficult. Without a basin-wide understanding of how the drainage system works and how development within the basin impacts its performance, it is difficult at best to determine what improvements to the storm drainage system are required by new development.

1.2 Authorization

In April of 1997, the City of Philomath authorized Westech Engineering, together with KCM, Inc., to prepare a comprehensive storm drainage master plan for the City. The master plan will guide the City's efforts to manage storm water runoff, and to protect public and private property from damage.

1.3 Project Objectives

The purpose of this study is to evaluate the City's storm drainage system with respect to its existing and future needs, identify improvements and associated costs necessary to meet those needs, and provide the City with a design guide for future growth of the City's storm drainage system. It is intended that the information contained herein assist the City in the planning and implementation of capital improvements to the storm drainage system, as well as ongoing system maintenance.

This evaluation and master plan accomplishes the following specific objectives.

- Identify and delineate the boundaries of the major drainage basins and subbasins within the Planning Area.
- Map the existing storm drainage system based on field data collection and as-built drawings
- Identify current and future storm drain system deficiencies on a prioritized basis, particularly in the following areas:
 - Surcharging, localized flooding, flow routing capacity
 - System reliability
 - Maintenance considerations
- Analyze the major trunk drainage systems under fully developed (buildout) conditions to determine the most cost effective approach to drainage management within the study area.
- Provide an evaluation of the options for correcting these deficiencies with preliminary construction cost estimates for recommended alternatives.
- Provide specific recommendations to the community and City Council for action.

This report does not include wetland inventory or delineations, on-site environmental investigations or geotechnical investigations.

1.4 Prior Studies and Work

The most recent studies, reports and documents utilized in the preparation of this master plan are as follows:

- Local Wetlands Inventory for the City of Philomath, for City of Philomath, Oregon by SRI/Shapiro, Inc., August 1996 (Draft).
- Mill Site Conversion Project, Conceptual Development Plan for Willamette Industries Mill Site, for Rural Development Initiatives, Inc. by KCM, Inc., November 1995.
- Topographic Aerial Maps, City of Philomath, Oregon. Panels 332/1256, 332/1259 & 330/1259, April 1989, 330/1256, April 1975.
- Flood Insurance Study, City of Philomath, Benton County, Oregon, by Federal Emergency Management Agency, December 1981.
- Flood Insurance Study, Benton County, Oregon, Unincorporated Areas, by Federal Emergency Management Agency, August 1986.