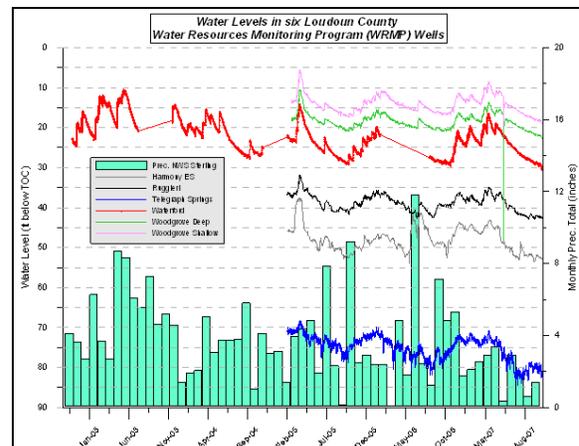
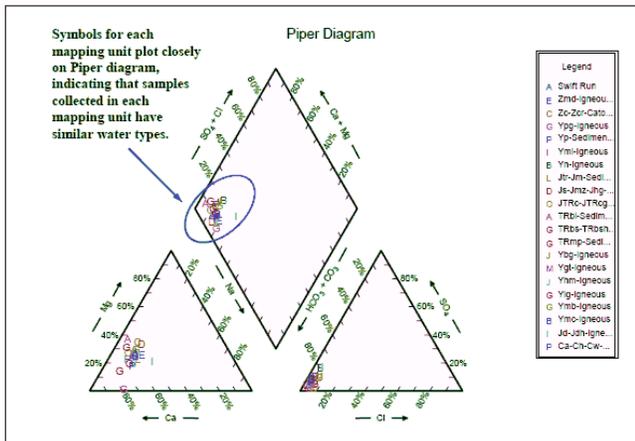
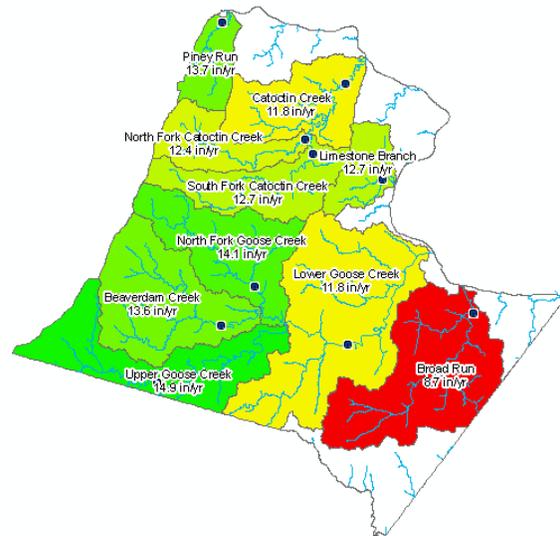
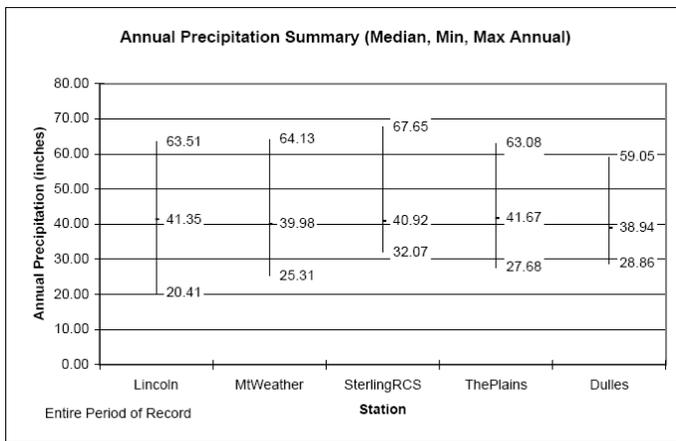




Initial Results of Statistical Analyses of Hydrologic, Water Quality, and Hydrogeologic Data Loudoun County, VA



September 4, 2007

Department of Building and Development, Engineering Division, Water Resources Team

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Introduction

The information contained in this document is a working/draft set of primarily statistical analyses and represents the initial phase of a comprehensive evaluation of water resources in Loudoun County, Virginia. The approach taken for this initial effort was to identify and compile all pertinent and available hydrologic, water quality, and hydrogeologic data for the county and conduct basic statistical analyses on those data sets that were considered to be the most complete and representative. These results, along with additional data and analyses, will be evaluated in upcoming months to help develop a baseline of water resource conditions in the county. These data and analyses will also be used to help guide the development of a proposed county-wide watershed management plan.

Tasks identified in the chapter cover sheets (e.g., Task B.3.2) refer to tasks in a contract scope of work that is being conducted for the County by the engineering and environmental consulting firm CH2M Hill, Inc. The primary goals of that contract are to assess the conditions of water resources in the county and to develop a county-wide watershed management plan. The information in this document will be evaluated and incorporated into that scope of work.

Data sets referenced near the beginning of each data group chapter (e.g., “data set 2.2” listed on the third and fourth pages of the Precipitation data chapter) refer to the outline numbers in which the data sets are organized in the accompanying document *Summary of Water Resource and Related Data in Loudoun County, VA*.

Unless otherwise indicated, the data in this document were compiled and analyzed by staff of the Water Resources Team in the Engineering Division of the Department of Building and Development. This work was funded by the County of Loudoun and a grant from the U.S. Environmental Protection Agency.