16. Fountain Creek Watershed

16.1. Introduction and Overview

The Fountain Creek Watershed is about 930 square miles and is located in the western portion of El Paso County and the northwestern portion of Pueblo County. This area is classified as a semi-arid environment. The two primary creeks in the watershed are Monument Creek and Fountain Creek, which flow into the Arkansas River. About 85% of the drinking water (supplied by Colorado Springs Utilities) is from transbasin diversions. The creek and alluvial aquifer wells tributary to Monument Creek and Fountain Creek provide a small source of drinking water for Colorado Springs and are a source of irrigation for more than 100 farmers and ranchers. Fountain Creek alluvial wells provide more than half of the water supply to Security, Widefield, Fountain, and Stratmoor Hills.

The Fountain Creek Watershed is one of numerous watersheds within the Arkansas River Basin and contains two of the largest metropolitan areas along the Front Range: Colorado Springs and Pueblo (DOLA, 2010).

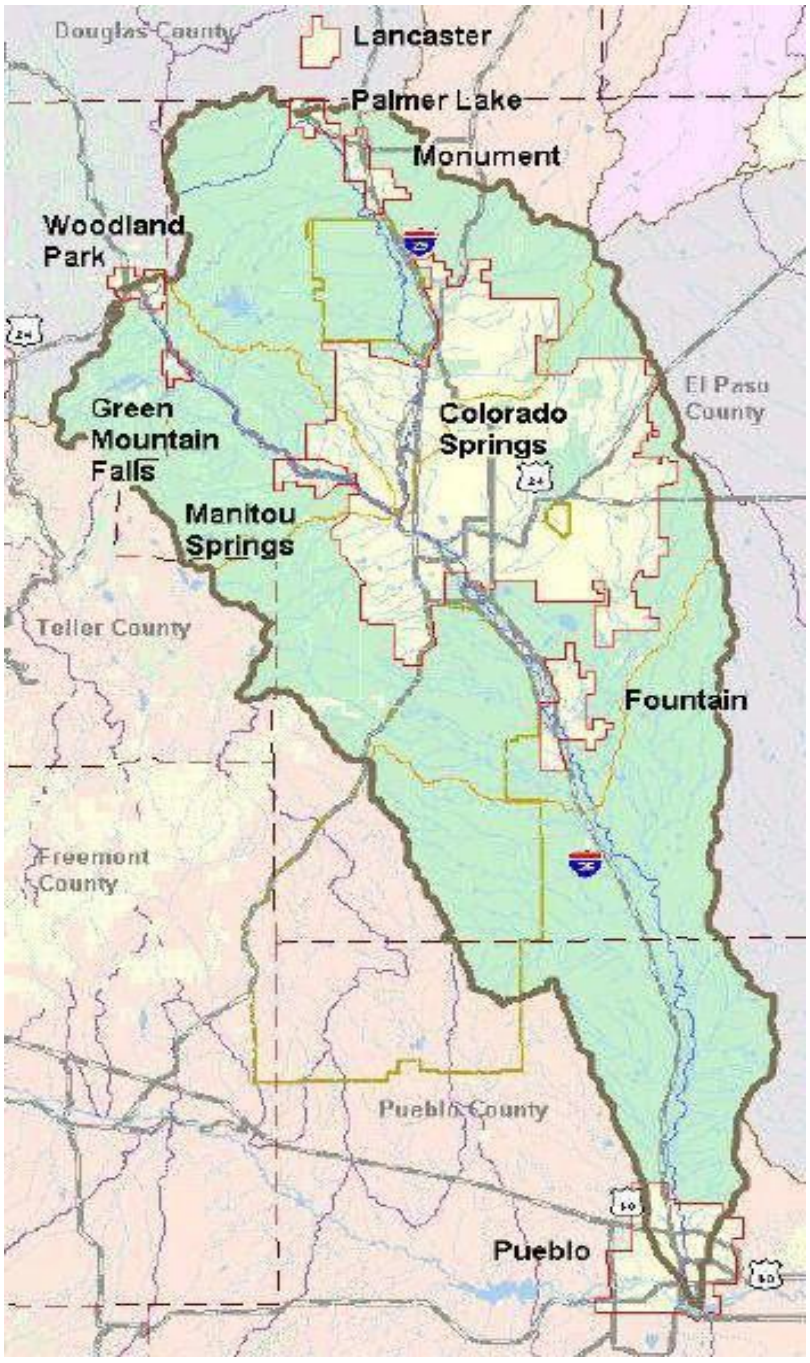
16.1.1. Land Use

The Fountain Creek Watershed reflects a variety of possible land uses: residential (high, medium, and low density), commercial and office, industrial, parks and open space, schools and institutions, agricultural, and undeveloped land. Most of the agricultural land is located along the lower portion of Fountain Creek. The amount of residential and commercial development is increasing in the watershed. Residential and commercial development in unincorporated El Paso County has undergone large increases between 2002 and the present.

16.1.2. Population and Socioeconomic Characteristics

Anticipated growth in the region reinforces the importance of not only understanding the correlation between population growth and watershed health but also formulating a plan to minimize the adverse effects of future growth. Many critical issues from transbasin diversion rates to impervious cover and resulting stormwater runoff rates are reflections of regional population dynamics. Population projections serve as the basis for determining the amount of water necessary to meet the forecasted demand for 20 to 40 years.

16.2. Figure: Fountain Creek Watershed Reference Map



16.3. Characterization of Watershed Issues

The primary issues to address in the Fountain Creek Watershed are water quality, erosion, sedimentation, and flooding. However, the importance of each of these issues is different throughout the watershed and is based upon the different physical processes operating in the watershed, the management practices in use, and the technical strategies being applied.

It has become evident that as the Fountain Creek Watershed becomes increasingly urbanized, problems and issues associated with the main streams draining the basin have become more common. Erosion, sedimentation, and flooding problems have highlighted the need to understand the consequences of development activities in the watershed.

These activities alter the basic parameters most affecting channel changes and controlling erosion and sedimentation problems in the Fountain Creek Watershed, all of which are interrelated, include:

- Increased baseflow discharge;
- Increased sediment supply and transport;
- Floodplain encroachment by development;
- Channel realignment; and
- Channel bank protection and grade control.

16.4. Overview of Watershed Activities

Several ongoing efforts at technical and policy levels are trying to address the problems and issues within the Fountain Creek Watershed. The Fountain Creek Watershed Greenway and Flood Control District was created in 2009 by the Colorado State Legislature. The district is discussed further in Section 8.5 (Water Quality Management Associations and Watershed Planning Groups). More information on the Fountain Creek Watershed Greenway and Flood Control District and their projects can be found at: http://www.fountain-crk.org

Some of the primary activities since the last update of the 208 Plan are:

- Barr Farm Channel Restoration Project

The Project is located on Fountain Creek in northern Pueblo County along Barr Property, approximately 2.6 miles south of Pinon Bridge and immediately west of Overton Road. Erosion at this location is threatening an overhead power line with one pole within a few feet of the

cut bank. Currently, in design, the primary project goals are bank stabilization and erosion reduction.

- Pinon Bridge

The Project is located on Fountain Creek immediately upstream of Piñon Bridge, extending at least 1,200 feet upstream of the bridge. Since its construction, the new Piñon Bridge experiences increased risk due to flood flows in Fountain Creek that has caused lateral migration and widening of the creek upstream of the bridge. Work at Piñon Bridge will focus on realigning the creek to modify and enhance sediment transport capacity through the bridge and to promote long-term channel stability. Project components will include constructing a stable meander planform, bank stabilization, and revegetation.

- Pueblo Channel at 13th

This reach was identified as requiring localized bank reshaping and extensive riparian revegetation. Work will include channel meander planform and cross-section modifications including bank hardening and the potential for in-channel grade control. The anticipated restoration efforts will provide channel stability, reduced erosion, and corresponding sedimentation, restoration, and protection of adjacent wetlands, and the restoration and enhancement of riparian habitat. Project goals also include the protection of recreational assets and transportation infrastructure and the mitigation of future impacts from storm-induced runoff.

The City of Colorado Springs Stormwater Enterprise is also responsible for the completion of numerous stormwater-related projects in the watershed. Current information regarding these projects can be found at the following links:

https://coloradosprings.gov/water-resources-engineering-stormwater/page/stormwater-project-map?mlid=33511

https://coloradosprings.gov/water-resources-engineering-stormwater/page/intergovernmental-agreement?mlid=28726