Fountain Creek Watershed

Flood Control & Greenway District

FACT SHEET

Flood Control

A watershed is a region that drains into a river, river system or other common body of water. The Fountain Creek Watershed is located along the central front range of Colorado. It is a 927 square mile area of land and water that drains to the Arkansas River at Pueblo and ultimately to the Gulf of Mexico. The watershed's boundaries are defined by the shape of the land – Palmer Divide to the north, Pikes Peak to the west, and a minor divide 20 miles east of Colorado Springs. Why is watershed protection important? Improving our waterways helps with water quality, stormwater management, creating recreational opportunities, and





ABOUT THE DISTRICT

natural habitat for wildlife.

We can all agree that healthy, clean, safe, quality waterways and greenways are worthy aspirations . To that end, the Fountain Creek Watershed Flood Control and Greenway District was created in 2009 to manage, administer and fund improvements in the watershed. The District's charge is to mitigate flooding, erosion and sedimentation, address water quality issues, improve drainage, partner for protection of open space and develop recreational opportunities. The District is not only concerned with local area mitigation, but also impacts on downstream neighbors.

Summer floods in 2013, coupled with the 2012 Waldo Canyon and 2013 Black Forest fires altered creek beds, banks, floodplains and structures throughout the region. This led to extensive flood damage, including property and infrastructure damage, erosion and sedimentation resulting in a net loss of flood capacity. To mitigate the effects of fire and flood damage, a planning effort by the District was undertaken to provide protection of at-risk assets and public safety, health and welfare.







FLOOD CONTROL EFFORTS

Floods are commonly described in terms of their probable recurrence: a 10-year flood, a 100-year flood, a 500-year flood, etc. In any given year, there's a 10 percent chance of a 10-year flood, a 1 percent chance of a 100-year flood, and so forth. In 1965, the water in Fountain Creek rose to such a level that millions of dollars in damage to homes, businesses and farmland occurred. Another flood in April 1999 washed out the Piñon Road bridge, again causing significant damage and costing Pueblo and El Paso counties millions.

It was a different story in 2013 when the "Front Range Flood" affected areas along the Colorado front range, including the Fountain Creek Watershed. This time, creek water was better contained with minimal damage compared to earlier floods, due to the Fountain Creek Watershed Flood Control and Greenway District's flood mitigation efforts. Recognizing "we're all downstream from somewhere," the District created:

- 1. The Upper Fountain Creek and Cheyenne Creek Flood Restoration Coalition
- 2. The Upper Fountain Creek and Cheyenne Creek Flood Restoration Master Plans
- 3. The Monument Creek Watershed Restoration Master Plan.

UPPER FOUNTAIN CREEK AND CHEYENNE CREEK FLOOD RESTORATION MASTER PLANNING

Through a collaborative effort, the Upper Fountain Creek and Cheyenne Creek Flood Restoration Master Plans identified more than 165 capital improvement projects and areas needing restoration and improvement. Coalition partners, local communities and enthusiastic residents identified projects to restore Upper Fountain and Cheyenne Creeks to pre-flood conditions and provide resilient, stable and healthy riparian corridors throughout both watersheds. Projects include bridge and culvert replacement, offline drainage improvements, flood risk reduction measures, bank restoration priorities for sediment reduction, field-identified head cuts requiring grade control, exposed and vulnerable utilities, existing unstable cut-banks and steep slopes. Projects are ranked from "low" to "high" with high action projects amounting to 10% of the overall list, to facilitate focus on the highest priority projects first.

RECENTLY COMPLETED FLOOD CONTROL PROJECTS

THE PIÑON BRIDGE PROJECT

The project is located on Fountain Creek immediately up stream of Piñon Bridge, extending at least 1,200 feet upstream of the bridge. Built in 2004, Piñon Bridge replaced an earlier bridge that washed away in the 1999 flood. Since its construction, the new Piñon Bridge was at risk due to flood flows in Fountain Creek that caused lateral migration and creek widening upstream. The main design of the restoration project was creek realignment and bank stabilization and revegetation to protect the banks on both sides of the bridge. Estimated project cost was \$2.3 Million.

PUEBLO LEVEE DREDGING & MAINTENANCE PROJECT

Extending from East 8th Street to the confluence with the Arkansas River, and covering approximately 8,700 linear feet, this project in Pueblo was a joint effort between the District and the City of Pueblo. Accumulated sediment in the creek and heavy vegetation growth along adjacent banks and flood control levee caused concerns of potential flood risk for parts of southern Pueblo. This project was co-funded by the City of Pueblo and Colorado Springs Utilities, and managed by the District. Total project cost was \$5.2 Million.

The primary purpose of this project was to comply with maintenance obligations related to the Fountain Creek levee system constructed by the United States Army Corp of Engineers in the 1980s, and to improve Fountain Creek capacity. The project design lowered the creek bed approximately three feet across the bankfull channel section, removed invasive vegetation, such as Phragmites, Russian Olive and Tamarisk, moved a sediment collector device from a previous pilot dredging project and removed two bridge piers from an abandoned railroad crossing.

Some dredged material was repurposed for other City of Pueblo projects: 45,000 cubic yards were hauled to Lake Minnegua Park site to complete the Lake Minnegua Park Master Plan, and 10,000 cubic yards were taken to Plaza Verde site for grading purposes. Total sediment dredged and hauled offsite was approximately 127,000 cubic yards.

MONUMENT CREEK WATERSHED RESTORATION **MASTER PLANNING**

Monument Creek flows south into Colorado Springs where it joins up with Fountain Creek at America the Beautiful Park. The Monument Creek Watershed is the largest sub-watershed within the Fountain Creek Watershed. Located along the steep eastern edge of Colorado's Southern Front Range and abutting cities and communities in El Paso and Douglas Counties, the Upper Monument Creek (UMC) Landscape of 67,000 acres in the Pikes Peak Ranger District is extremely important to area residents as a network of watershed recreational areas. The goal of the Monument Creek Watershed Restoration Master Plan was to identify 250 capital improvement projects within Monument Creek that are self-maintaining, cost effective and sustainable. Achieving the vision requires a balance in ecosystem health. social and political will to prioritize the watershed, along with funding and financing to champion efforts to restore and conserve the watershed and to accelerate the pace of urgently needed forest restoration by forging collaborative agreement on science-based management recommendations for a high priority area on the United States Forest Service's (USFS) Pike National Forest.







PROJECT CONTACTS

The Technical Advisory Committee (TAC) includes technical experts appointed by the District Board to provide recommendations on public policy or expenditures for the benefit of the watershed. They also conduct investigations, make measurements, collect data, make analyses, studies, and inspections pertaining to facilities, projects and property within and outside the district. The TAC generally meets at 1 p.m. on the 1st Wednesday of the month, Fountain City Hall, Fountain, CO, 116 Main Street, 2nd floor. The meeting date, time and location are subject to change so please check the calendar for changes.

For more information about the statutory authority and purpose of the Fountain Creek Watershed, Flood Control and Greenway District see C.R.S 32-11.5. You can also visit https://www.fountain-crk.org/ and call 719-447-5012.