

Fountain Creek Watershed

Flood Control & Greenway District

FACT SHEET

Erosion



ABOUT THE FOUNTAIN CREEK WATERSHED

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, flood prevention, creating recreational opportunities and nature habitat for wildlife.

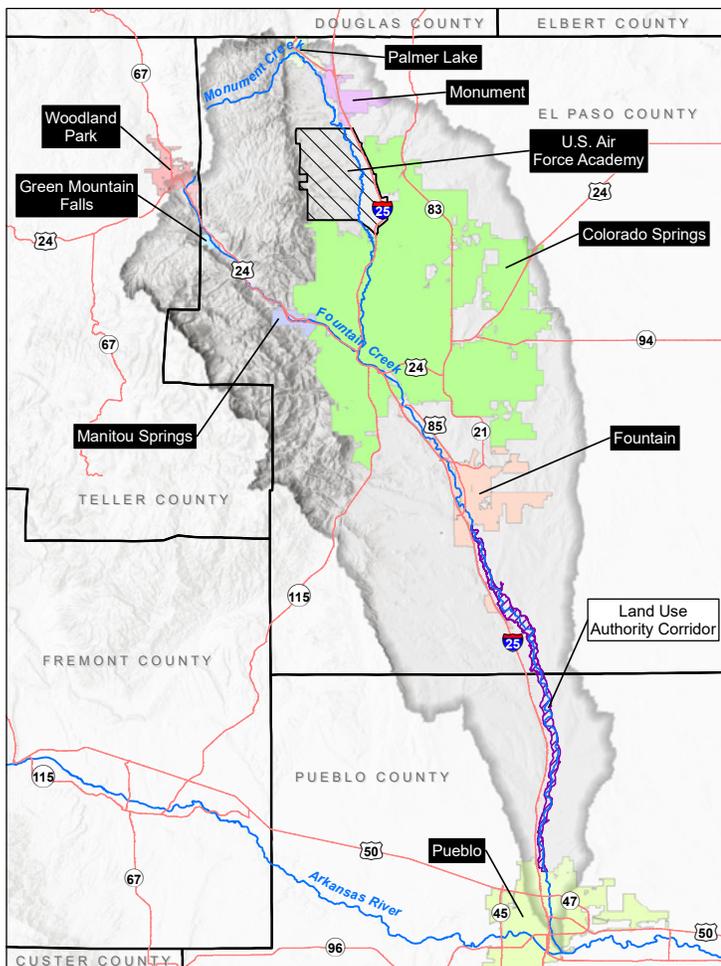
EROSION & SEDIMENTATION CONTROL IS KEY TO WATERSHED HEALTH

Environmental activist David Suzuki pointed out that “We all live downstream.” When it comes to the Fountain Creek Watershed, this statement is not an abstract metaphor – it’s a concrete reality and a growing concern. Throughout the watershed, extensive erosion issues upstream lead to extensive sedimentation issues downstream.



WHY SHOULD YOU CARE?

We all live “downstream.” When it comes to caring for our environment, everyone in the watershed community must be part of the solution. In the Fountain Creek Watershed, erosion and sedimentation issues are damaging water quality, infrastructure such as bridges and roads, and riparian and wetland habitats. Supporting mitigation projects on Fountain Creek and its tributaries can help to restore and enhance our home watershed – our precious community resource. Plus, working together to mitigate these issues will result in a watershed that we can all use and enjoy for recreation.



INCREASED URBANIZATION IS DEGRADING OUR CREEKS

Our watershed is becoming increasingly urbanized – there is a significant increase in impermeable surfaces such as concrete and asphalt, which increases runoff. Plus, our region has experienced two major fires in recent years – the 2012 Waldo Canyon Fire and 2013 Black Forest Fire – which have contributed greatly to an increase in erosion and sedimentation in the Fountain Creek Watershed.

Creeks throughout the Fountain Creek Watershed are experiencing increased degradation (loss of sediment via erosion) and increased aggradation (accumulation of sediment). In addition to urbanization and major fires, other factors have led to an increase in erosion and sediment transport including floodplain encroachment, ground-disturbing activities such as construction, and high-flow events.

These numerous factors have led to an increase in the day-to-day volume of water (“base flow”) and more high-volume flooding events (“flood flows”). These higher flows increase erosion and, subsequently, the sediment transport capacity.

As creeks adjust to additional flows, they alter their meander patterns. This increases bank erosion and down-cutting of the creek bed – evident processes taking place in Fountain Creek and its tributaries. The additional sediment loads widen floodplains, degrade water quality, damage infrastructure, and overwhelm critical riparian and wetland ecosystems.

Here are a few sediment-load measurements of creeks in our watershed – note the significant increase in sediment as you move downstream:

- 6,400 tons/year in Monument Creek at Woodman Road (Monument Creek is the largest tributary of Fountain Creek)
- 60,200 tons/year in Fountain Creek at Security
- 148,000 tons/year in Fountain Creek at Pueblo

Thankfully, communities, organizations, and visionary leaders collaborated to form the Fountain Creek Watershed Flood Control and Greenway District to fund and manage capital improvement projects to mitigate erosion and sedimentation issues.

THE WATERSHED DISTRICT IS TACKLING THIS ISSUE HEAD-ON

The Fountain Creek Watershed District collaborates with other agencies, organizations, and citizens to address these issues. Since its founding in 2009, the District has planned and/or implemented more than a dozen construction projects to address critical erosion and sedimentation issues.

Various project aspects involve restoring the main channel, realigning the creek, stabilizing steep cut banks, revegetating, protecting wetlands, restoring and enhancing riparian habitats, and applying multiple strategies to reduce erosion.

A few project highlights:

- Pueblo Levee sediment collection and removal, which removes some 15,474 tons of sediment per year
- Frost Ranch, Masciantonio Trust, and Barr Farm bank stabilizations to prevent more than 120,000 tons of sediment a year from entering the waterways
- Highway 47 and Pinon Bridge bank stabilization and channel realignments to prevent more than 50,000 tons of sediment a year from entering the waterways.



DISTRICT CONTACTS

Technical Advisory Committee (TAC): Technical experts who provide recommendations to the Board on public policy or expenditure of funds for the benefit of the watershed and to carry on other investigations. (Learn more: www.fountain-crk.org/about/technical-advisory-committee).

Citizen's Advisory Group (CAG): Citizens representing various interests within the watershed who offer advice to the Board on managing the watershed. (Learn more: www.fountain-crk.org/about/citizens-advisory-group).

District Board: Representatives from Pueblo County, El Paso County, City of Pueblo, City of Colorado Springs, City of Fountain, and others as defined by statute. (Learn more: www.fountain-crk.org/about/district-board).

For more information about the statutory authority and purpose of the Fountain Creek Watershed, Flood Control and Greenway District, see Colorado Revised Statute 32-11.5. You can also visit www.Fountain-Crk.org or call 719-447-5012.

