

# Fountain Creek Watershed

Flood Control & Greenway District

## FACT SHEET

## Stormwater Management



### 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.

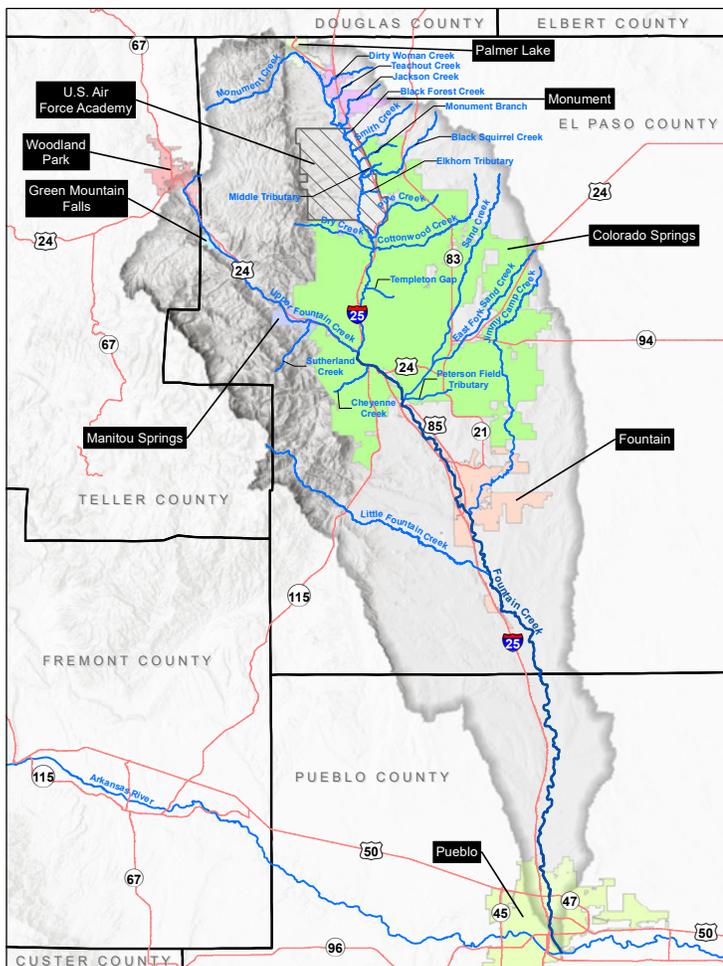
### OUR UNIQUE WATERSHED REQUIRES ADVANCED STORMWATER MANAGEMENT

Fountain Creek drains a 927-square-mile watershed. That's impressive, but it's not unique. What IS unique is the extraordinary range in elevation. This watershed starts at 14,115 feet – the top of Pikes Peak – and runs downhill to 4,640 feet (the confluence of Fountain Creek and the Arkansas River in Pueblo).



### WHY SHOULD YOU CARE?

- Comprehensive stormwater management strategies will reduce flood risk, sedimentation and erosion; rehabilitate riparian areas; create off-channel diversion and water storage; and preserve existing wetlands as well as create additional wetlands.
- Improved stormwater management throughout the Fountain Creek Watershed will better control flooding and erosion, which directly impacts infrastructure and water quality.
- Improved water quality is critical for our drinking water, for farmers who irrigate the crops we eat, and for a healthy wildlife habitat.
- Advanced stormwater management strategies will set the stage for outstanding recreational opportunities, which will result in a watershed that each of us can use and enjoy for recreation.



## UNSTABLE CREEKS IMPACT LOCAL COMMUNITIES

Given the elevation change and other pressures – such as development and naturally erosive Pikes Peak granite – many of the creeks in our watershed are not stable. They exhibit frequent changes in streamflow rates and sediment loads, which has negative consequences for local communities and those downstream.

For example, there's an increasing volume of stormwater runoff into these creeks due to increased urbanization, which comes with more impervious surfaces (e.g., asphalt and concrete). Hard surfaces are unable to absorb rainfall and snowmelt; instead, that water rushes into storm drains and into creeks. This makes our creeks much more "flashy." Before development, that precipitation was able to slowly soak into the ground. As development continues – and the amount of impervious areas with runoff increases – flood events are expected to increase.

In addition, the region has experienced two major fires in recent years: the 2012 Waldo Canyon Fire and 2013 Black Forest Fire. The Waldo Canyon Fire burned more than 18,000 acres and 346 structures in the urban-wildland area of western Colorado Springs. The Black Forest Fire scorched

more than 14,000 acres and 511 structures in northern El Paso County. These fires contributed greatly to an increase in erosion and sedimentation in the Fountain Creek Watershed – after a fire, much of the scorched soil becomes impervious and can no longer absorb water.

Unfortunately, this increased runoff also includes pollutant loads such as vehicle fluids, fertilizers, pet waste, and litter. In order to start reversing this trend, state-of-the-art stormwater management practices must be utilized. The Fountain Creek Watershed District is addressing these issues through a variety of programs – such as Creek Week and Scoop the Poop – which help to bring awareness and encourage our citizens to make behavior changes.

Stormwater management is imperative to the long-term health of creeks throughout the Fountain Creek Watershed. In fact, one of the key reasons the Fountain Creek Watershed, Flood Control and Greenway District was established was to improve stormwater management techniques and land use regulations. Since 2009, the District has collaborated with other agencies, organizations, and citizens to address this challenging issue.

## ARE THE CREEKS IN OUR WATERSHED STABLE?

In 2009, the US Army Corps of Engineers published a detailed study of 22 creeks in our watershed: *Fountain Creek Watershed Study – Watershed Management Plan*. The agency's report presented a summary of each creek's current conditions as well as the expected degradation (the loss of sediment via erosion) and aggradation (the accumulation of sediment).

At the time of the study, a handful of creeks were relatively stable, yet many were expected to undergo both accelerated degradation and aggradation in various reaches throughout the creek system. Many were expected to endure significant increases in flow due to increasing nearby development. For example, Monument Creek was expected to sustain a 168% increase in 2-year peak flow volumes. It was expected that some creeks would endure a 400% to 500% increase!

This study highlighted the fact that many of our region's creeks were NOT stable. Without comprehensive stormwater management practices, creeks throughout the Fountain Creek Watershed will continue to experience erosion, sedimentation, and flooding issues.

Since the time of this study the District and the City of Colorado Springs have worked together to dramatically improve the management of stormwater, which affects the entire Fountain Creek Watershed.

## MAJOR CREEKS AND TRIBUTARIES IN THE FOUNTAIN CREEK WATERSHED

Black Forest Creek	Middle Tributary
Black Squirrel Creek	Monument Branch
Cheyenne Creek	Monument Creek
Cottonwood Creek	Peterson Field Tributary
Dirty Woman Creek	Pine Creek
Dry Creek	Sand Creek
East Fork Sand Creek	Smith Creek
Elkhorn Tributary	Sutherland Creek
Fountain Creek	Teachout Creek
Jackson Creek	Templeton Gap
Jimmy Camp Creek	Upper Fountain Creek
Little Fountain Creek	

## 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](http://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](http://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](http://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](http://www.Fountain-Crk.org) or call 719-447-5012.