

Peak Alliance for a Sustainable Future

Mission: Promote the economic, social and environmental vitality of the Pikes Peak region by advancing “Looking to our Future – Pikes Peak Region 2030” (PPR2030), a strategic roadmap for achieving regional sustainability through collaboration and outreach.

Areas of Emphasis:

- Agriculture
- Arts & Culture
- Built & Natural Environment
- Economic Development
- Education
- Energy
- Health
- Materials Management & Procurement
- Transportation
- Water Quantity

Board Members:

Mary Barber
Brent Kennedy
Konrad Schlarbaum

Why support PASF?

Community needs for achieving PPR 2030 -

- Awareness & knowledge
- Involved citizens
- Connected people & organizations
- Innovation & creativity
- Funding tied to plans
- Action!

Who will benefit?

- Businesses
 - Government
 - Non-Governmental institutions
 - Community
 - People
- ...now & in the future

Web Site

peakallianceco.org

Programs & services offered -

- Grow awareness of sustainability & the PPR 2030
- Teach the value & fundamentals of sustainability
- Inspire action to achieve goals
- Cooperate with other agencies & organizations
- Communicate to tell our stories, celebrate successes & share lessons learned
- Collaborate to bring partners and resources together to put sustainability into practice
- Motivate & guide leaders, employees & citizens
- Demonstrate new & innovative technologies & processes
- Promote actions leading to a resilient, sustainable community, environment & economy

Find more information about Pikes Peak area sustainability on Facebook at [Sustainable and Resilient Pikes Peak Region](#)

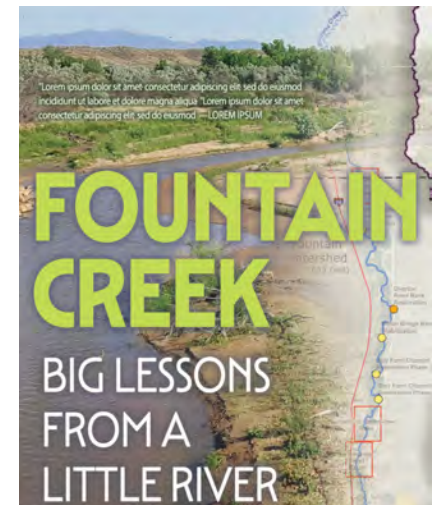
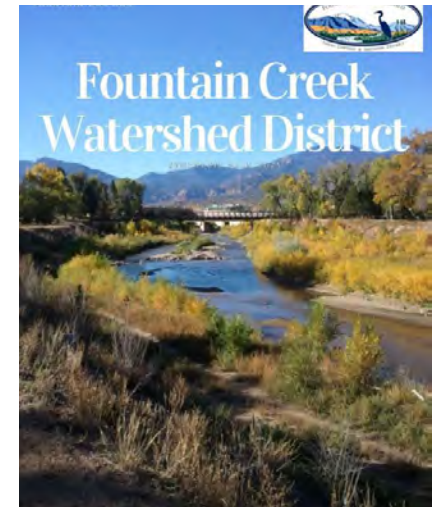
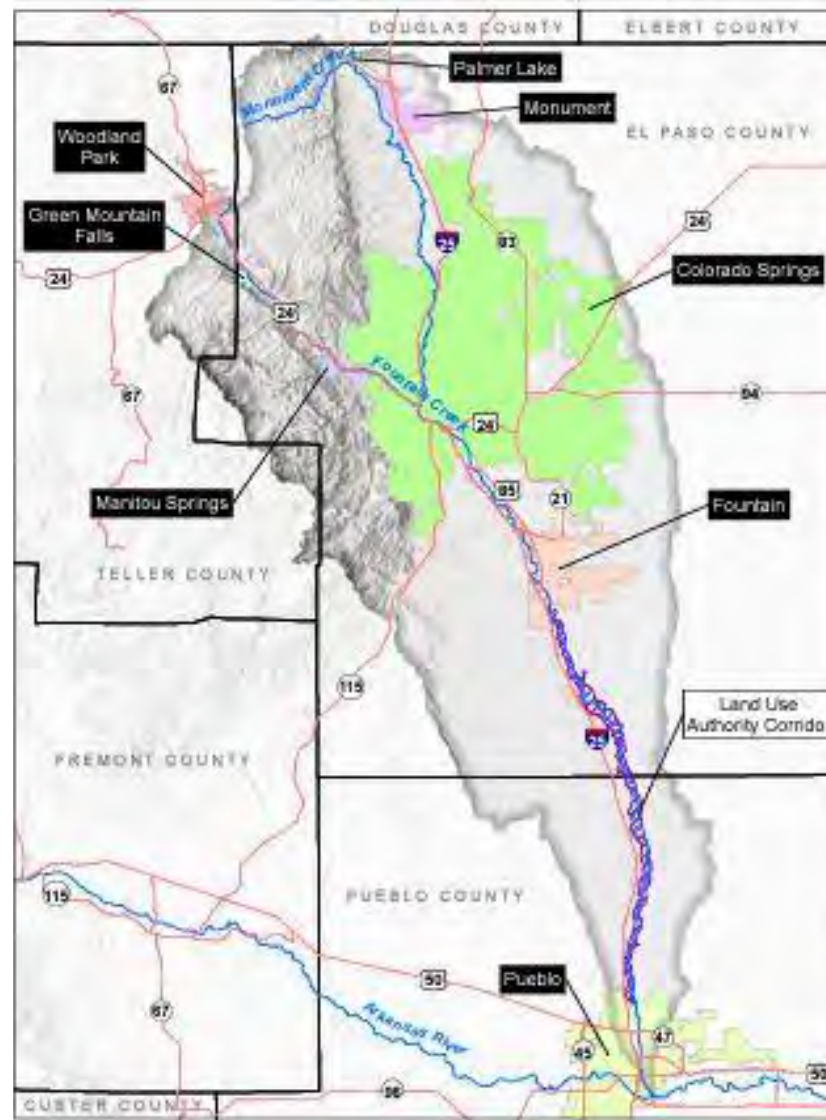
PASF is a nonprofit 501(c)(3) organization. Tax deductible donations can be made by contacting peakalliance.co@gmail.com

“UNLESS someone like you cares a whole awful lot, nothing is going to get better. It’s not.” – Dr Seuss, author of *The Lorax*

Future of Fountain Creek

A panel discussion & community conversation exploring the future of Fountain Creek

- History
- Environmental, Economic & Cultural Importance
- Challenges & Opportunities
- Conservation, Protection & Restoration
- Community Collaboration

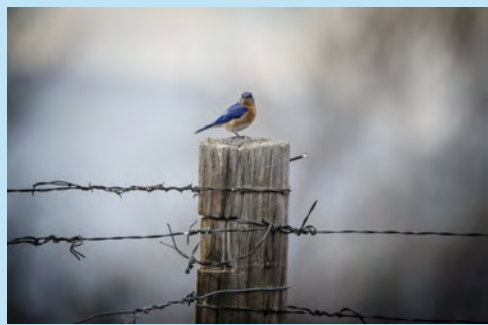




Fountain Creek Watershed District

**For the thriving life of the watershed
and all it touches**

**Alli Schuch
Executive Director**





**FOUNTAIN CREEK
WATERSHED DISTRICT**



Many downstream neighbors... The ocean starts in Colorado





FOUNTAIN CREEK
WATERSHED DISTRICT



Snapshot of the Fountain Creek Watershed

- 927 square miles of land and water
- Two counties, seven municipalities
- Elevation change from 14,115' to 4,695' over 71 miles
-] Extremes in slopes, soil types, temperatures, precipitation, ecosystems and multitudes of water uses
- Second most studied, and one of the most erratic watersheds in the US

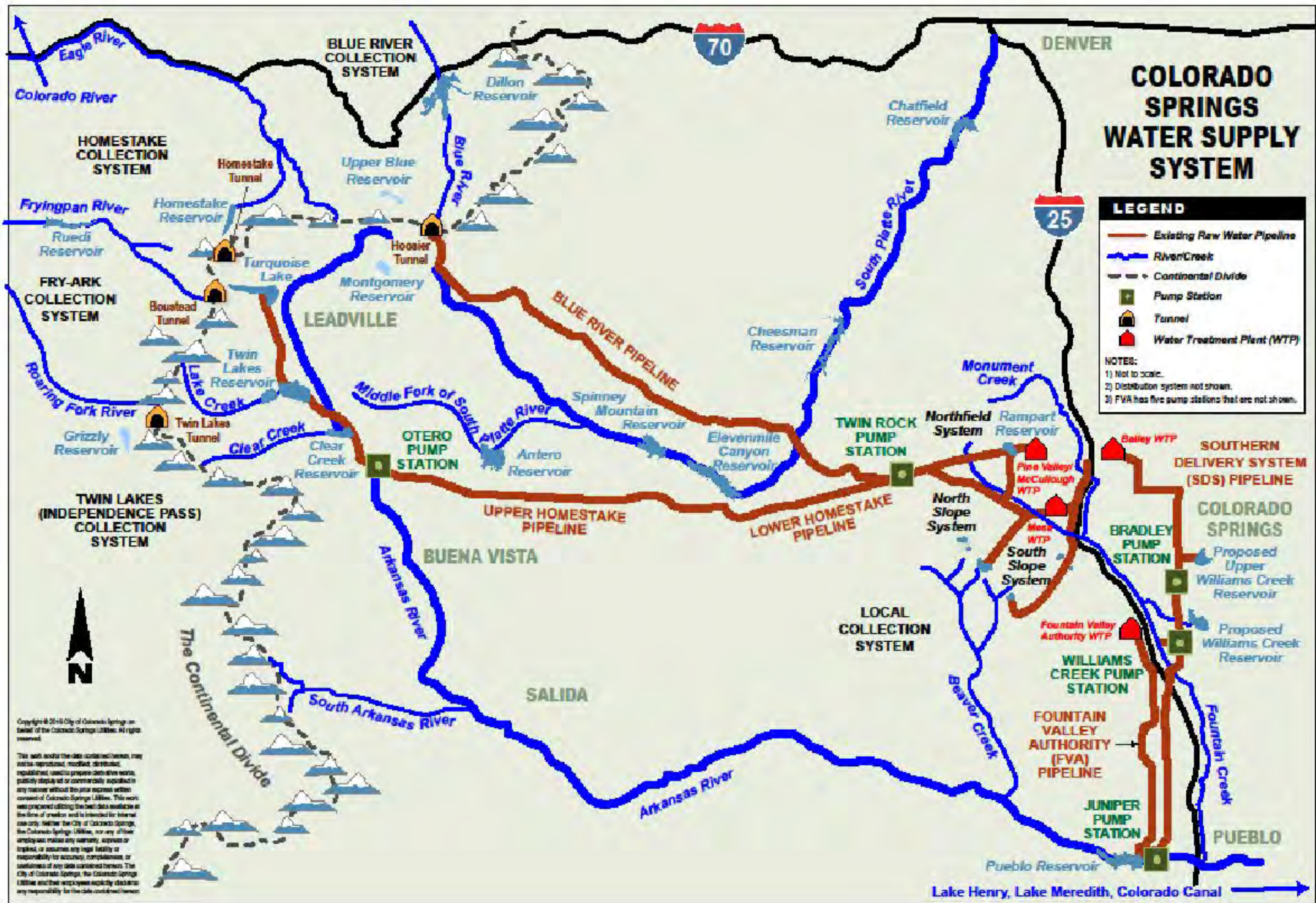


Cutler Hall CC Campus

“I shall never forget my sudden sense of hopeless disappointment at the moment when I first looked on the town....small, straight, new, treeless.”

Helen Hunt Jackson





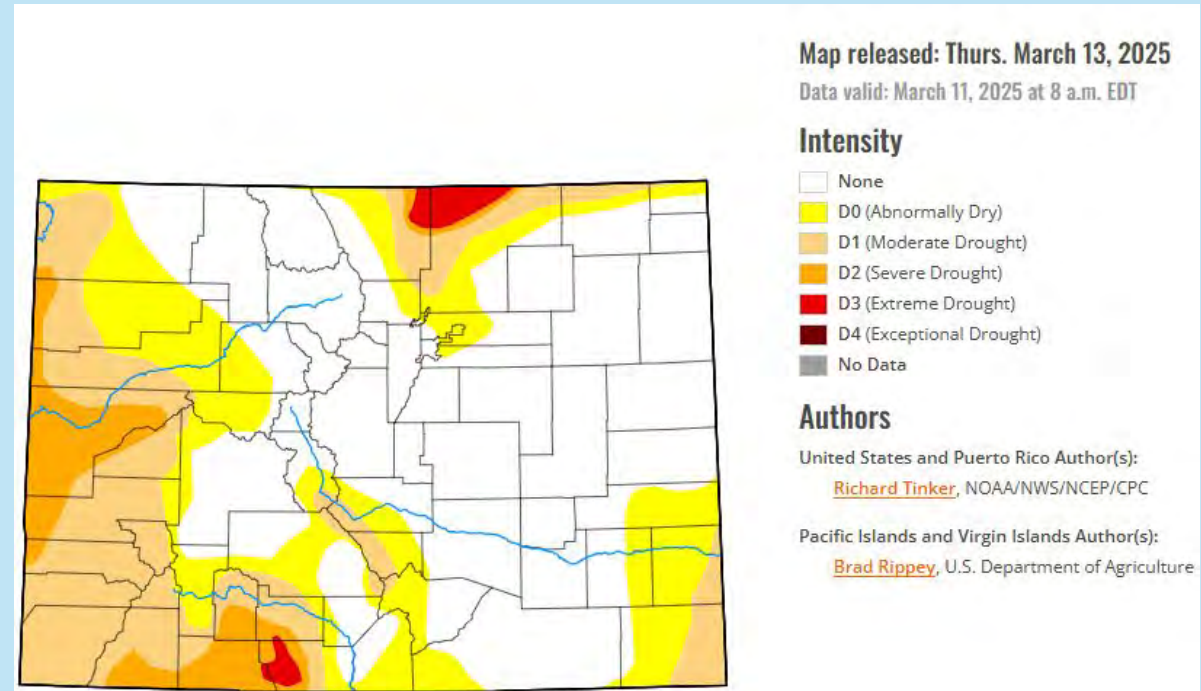
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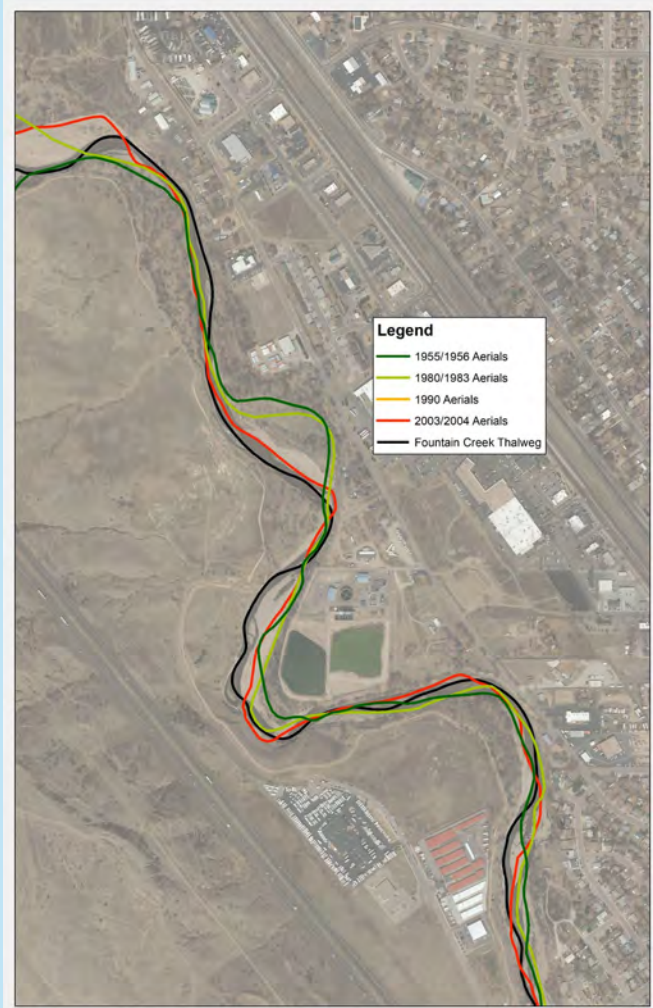
- Population growth
- Drought
- Post-fire conditions
- Wildfires
- Urban canopy
- Sedimentation/erosion
- Stormwater pollution
- Increased impervious surfaces
- Habitat fragmentation
- Water quantity
- Invasive species
- Increasing frequency/severity of storms

Watershed Risks... Not IF but WHEN

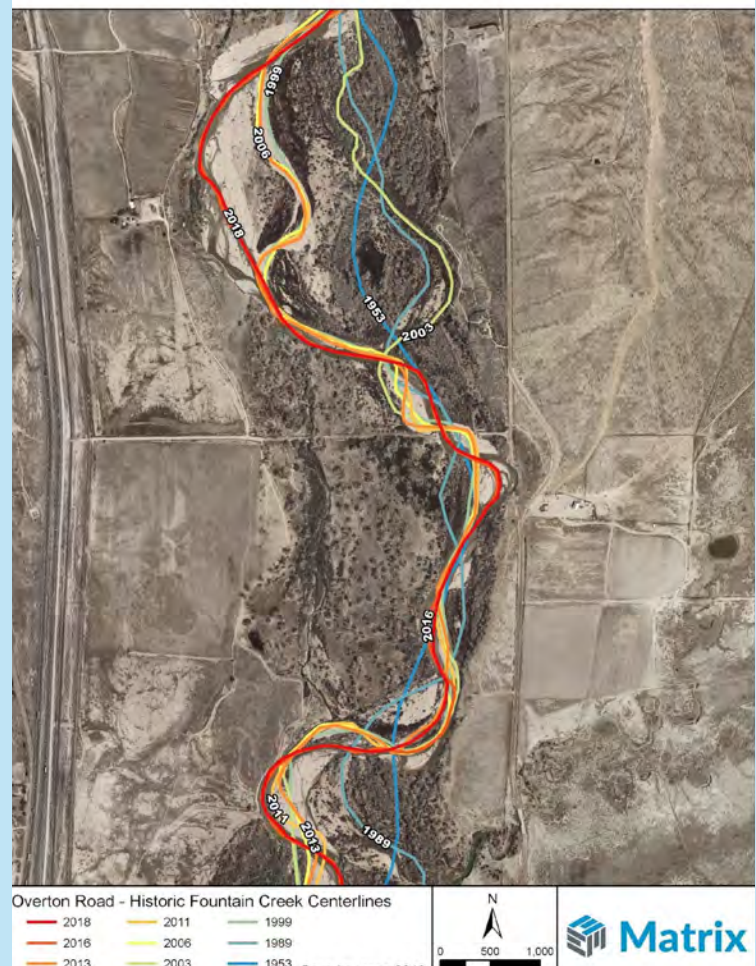
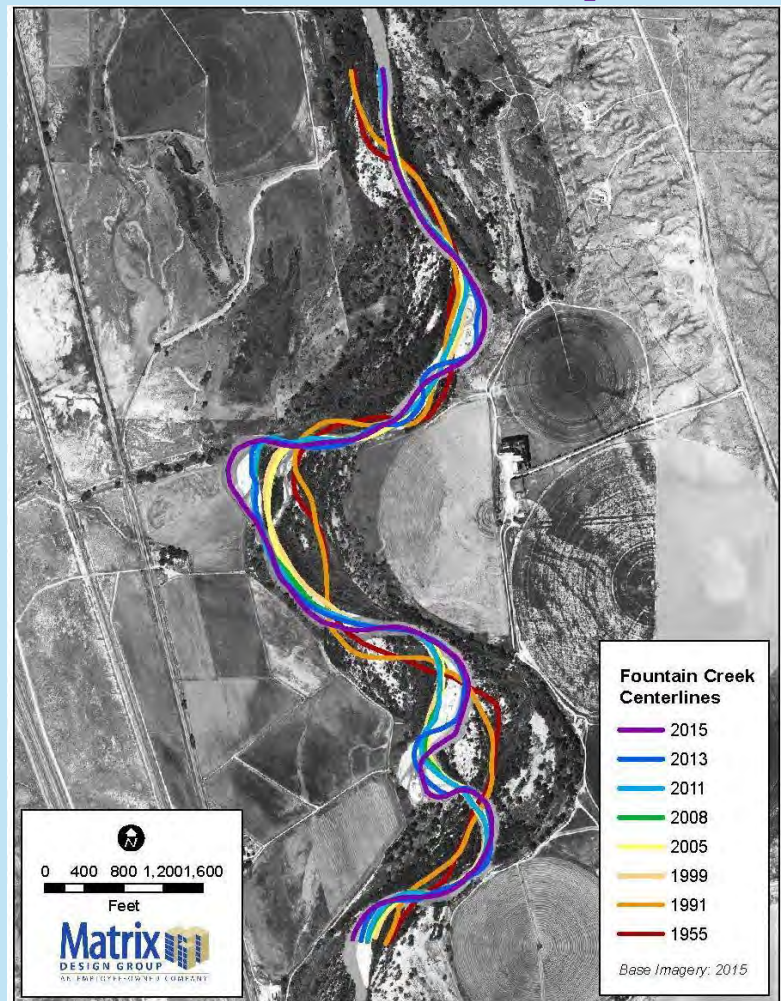


FC HISTORIC CHANNEL

MASCIANTONIO TRUST Pueblo County



**SOUTHMOOR DR
Fountain**



**VERTON RD
Pueblo County**



FOUNTAIN CREEK
WATERSHED DISTRICT



Fountain Creek... Predictably Unpredictable





District Formation

- 2006 Senator Ken Salazar visit – Fountain Creek Watershed as a “Crown Jewel”
- 29-member Consensus Committee + Task Force – 2 years of monthly meetings
- Identified needs for additional funding and more dedicated management





District Formation – Happy 16th Birthday!

- SB09-141 under Title 32 of the CRS April 2009
- Authorized to manage, administer, and fund the capitol improvements necessary in the Fountain Creek Watershed to:

- Mitigate flooding, erosion, and sedimentation

- Address water quality issues

- Improve drainage





District Management

■ Board of Directors – all Jurisdictions Represented

Member governments contribute General Fund \$ based on population size

- Terry Hart, CAG Representative, Chair
- Jessica Mills, Lower Arkansas Water Conservancy District, Vice Chair
- David Leinweber, Treasurer, City of Colorado Springs
- Tamara Estes, City of Fountain Secretary
- Miles Lucero, Pueblo County
- Bill Wysong, El Paso County
- Roger Gomez, City of Pueblo
- Jim Romanello, Small Municipalities (Monument, Palmer Lake, Green Mountain Falls, and Manitou Springs)
- Dr. Barr, Pueblo County Landowner

■ Monetary Mitigation Fund Advisory Committee

■ Technical Advisory Committee



District Funding

- 9 member governments contribute annually to the District's General Fund, based on population size
- \$50 million from Colorado Springs Utilities to offset impacts on Fountain Creek due to increased return flows per the Southern Delivery System 1041 Permit Condition 6
 - New projects on Fountain Creek
 - Create significant and not merely incidental benefit to Pueblo County
 - Improvement of water quality, flood control, prevention of erosion and sedimentation
- Grants, sponsorships, in kind support from member governments and partners



FOUNTAIN CREEK
WATERSHED DISTRICT



Project Selection

■ Conditions Assessments

■ Opportunities

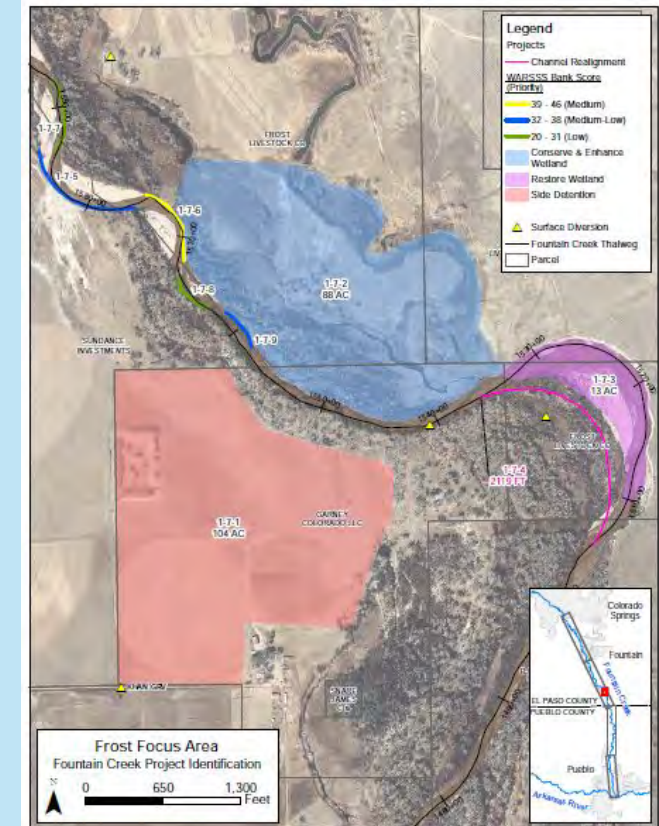
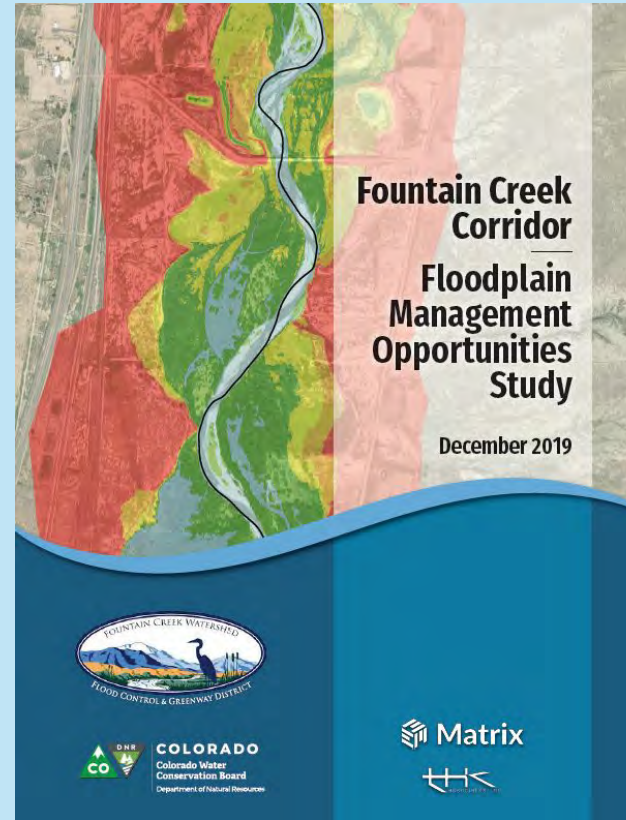
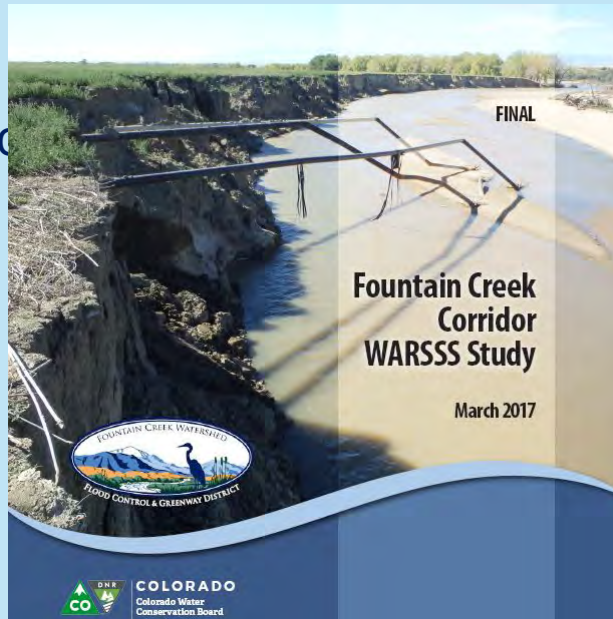
Strategic Plan
for the
Fountain Creek Watershed



Prepared by the Fountain Creek Vision Task Force

Finalized on March 10, 2009

Available online at www.fountain-crk.org





FOUNTAIN CREEK
WATERSHED DISTRICT



Master Plans

Matrix DESIGN GROUP
HK CONSULTANTS
UPPER FOUNTAIN CREEK AND CHEYENNE CREEK FLOOD RESTORATION MASTER PLAN
 Fountain Creek Watershed Flood Control and Greenway District
 Project No. 14.526.004
 June 26, 2015
 Submitted to:
 Larry Small, Executive Director
 Fountain Creek Watershed Flood Control and Greenway District

FINAL REPORT

Colorado Springs Utilities
 COLORADO Colorado Water Conservation Board
 EL PASO COUNTY
 COLORADO Springs Utilities
 COLORADO Department of Land & Water

The Fountain Creek Corridor Restoration Master Plan
 October 18, 2011

Colorado Springs Utilities
 Fountain Creek Watershed Flood Control and Greenway District

Prepared By:
associates inc.
 1000 North Academy Street, Suite 200
 Colorado Springs, CO 80907
 www.associatesinc.com

Matrix DESIGN GROUP
HK CONSULTANTS
MANLY DESIGN GREEN

FOUNTAIN CREEK CORRIDOR GREENWAY MASTER PLAN
 DECEMBER 2022

HK CONSULTANTS
 Fountain Creek Watershed Flood Control and Greenway District

Matrix DESIGN GROUP
HK CONSULTANTS
MONUMENT CREEK WATERSHED RESTORATION MASTER PLAN
 October 31, 2016

Submitted to:
 Larry Small, Executive Director
 Fountain Creek Watershed Flood Control and Greenway District
 www.fountain-cfk.org

Colorado Springs Utilities
 COLORADO Colorado Water Conservation Board
 EL PASO COUNTY
 COLORADO Springs Utilities
 COLORADO Department of Land & Water



Project Selection

- Prioritization
- Condition 6 of SDS Permit
- MME criteria, EMOS Focus Areas

Table A-3. MMF Tier I and Tier II Project Evaluation Criteria

Tier 1 - Criteria
Project satisfies one or more of the following criteria per SDS 1041 permit terms.
Water Quality
Improves Water Quality (Sediment)
Improves Water Quality Constituents of Concern
Flooding
Reduces Flooding Risk
Improves Floodplain Connectivity
Protects Life and Property
Addresses Potential Loss of Public Infrastructure (in Pueblo County)
Impacts to Water Rights are Resolved (for detention related projects only)
Feasibility to Protect Infrastructure in Place is Better Than Cost of Relocating
FC Stability
Addresses Erosion and Sedimentation
Address Sediment Source
Protect Streams with Unchanged Hydrology

Tier 2 – Criteria
Environment and Habitat
Improves habitat quality or rehabilitates native vegetation
Protects high quality ecological systems
Wetland and/or oxbow restoration
Establishes riparian corridor connection
Project Partners
Additional funding partners
Provides opportunity to partner on project implementation
Recreation
Provides creek access opportunity
Provides regional trail connectivity
Provides new recreational facilities
Plan Relevance
Project identified in Fountain Creek Corridor Master Plan
Projects identified in Army Corps of Engineers study for flood control, erosion, and sedimentation
Sediment, erosion, or flood control found acceptable by District
Rate of return for dollars spent for sediment removed
Other Criteria
Holistic solution - connectivity v. remote small sites
Feasibility
Public Interest
Benefits X# of communities/stakeholders
Other Benefits to Pueblo County
TBD



FOUNTAIN CREEK
WATERSHED DISTRICT



Project Selection

Watershed-wide input from
Technical Advisory Group, Citizen
Advisory Group, recommendations
to Board of Directors



FOUNTAIN CREEK
WATERSHED DISTRICT

For the thriving life of the watershed and all it touches.

FOUNTAIN CREEK WATERSHED DISTRICT
WATER ACTIVITY ENTERPRISE

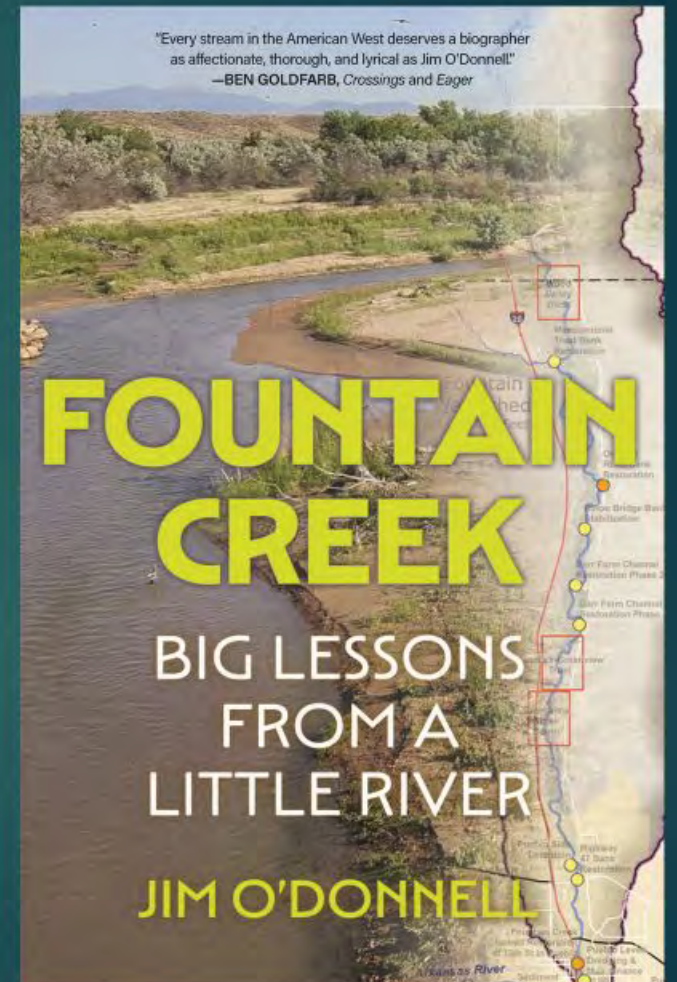
2025 CAPITAL IMPROVEMENT PLAN

October 2024

This Document Prepared by the Monetary Mitigation Fund Advisory
Committee for the Fountain Creek Watershed District Water Activity
Enterprise Board.

What is a River?

FOUNTAIN CREEK, COLORADO.
BIG LESSONS FROM A LITTLE RIVER





“People don’t pay attention. And then one day there’s an accounting. And After that, nothing is the same.”

- Cormac McCarthy

©JimO'Donnell







“Anyone who has ever struggled with poverty, knows how extremely expensive it is to be poor.”

- James Baldwin





You
can't
fix the
past,
but you
can
mend
the
future



1937

Image courtesy: Dr. Sarah Schanz, Colorado College



2009

Image courtesy: Dr. Sarah Schanz, Colorado College

An aerial photograph of a suburban residential development. The houses are densely packed, featuring light-colored siding and dark roofs. The terrain is hilly, and there are many trees, some with autumn-colored leaves. The word "Sprawl" is overlaid in large white text across the center of the image.

Sprawl



Water.
Always.
Wins.



“Trying to mitigate floods or improve water quality? There’s a beaver for that. Hoping to capture more water for agriculture in the face of climate change? Add a beaver. Concerned about sedimentation, salmon populations, wildfire? Take two families of beaver and check back in a year.”

- Ben Goldfarb, *Eager*



**blue area indicates
active stream
corridor**

Space to evolve

Blue = Fluvial Hazard
Zone

Image courtesy Dr. Sarah Schanz, Colorado
College



“WHEN WE SEE LAND (AND WATER) AS A
COMMUNITY TO WHICH WE BELONG, WE
MAY BEGIN TO USE IT WITH LOVE AND
RESPECT.”

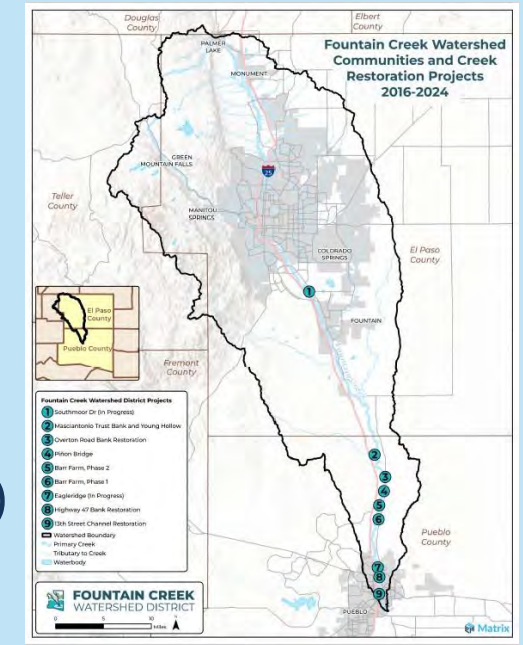
- Aldo Leopold



Construction Projects

- 1) Pueblo Sediment Collection/Removal (C 12/2011)
- 2) Pueblo Off-Channel Detention Basin (C 12/2011)
- 3) Frost Ranch Bank Stabilization (C 4/2014)
- 4) Pueblo Levee Dredging (C 8/2017)
- 5) Masciantonio Trust Bank Stabilization (C 4/2018)
- 6) HY47 Bank Stabilization and Channel Realignment (C 11/2018)
- 7) Pinon Bridge Bank Stabilization and Channel Realignment (C 6/2019)
- 8) Barr Farm Phase I Bank Stabilization and Channel Realignment (C 6/2020)
- 9) Barr Farm Phase II Bank Stabilization, Channel Realignment (C 6/2020)
- 10) Overton Road Bank Stabilization (C 6/2020)
- 11) Pueblo Channel at 13th Bank Stabilization, Channel Realignment (C 6/2021)
- 12) Fountain Creek at Hanson Trailhead (C 6/2021)
- 13) Pueblo Levee Floodplain Restoration (C 12/2022)

**\$35M+
invested**






Project Effectiveness


- Assess project objectives
- Project performance
- Lessons learned
- Bank assessment
- Compare to WARSSS

Project Effectiveness Evaluation
Summary of Findings

Prepared for:



Prepared by:



Excellence by Design
2435 Research Pkwy, Suite 300
Colorado Springs, CO 80920
719-675-0100
Contact: Tori Mack, PE

February 1, 2024

Summary

- **Lessons Learned**
 - Rock and boulder
 - Revise toe wood soil lift designs
 - Vegetative success is key

Project Site	Recommendation
Maschenredo Trust Bank and Young Hollow	Weed control for minimum of two years with focus on salt cedar and Russian olive.
Overton Road Bank Restoration	Monitoring of post-flood conditions in 2024. Weed control for minimum of two years with focus on salt cedar.
Pison Bridge	Monitoring of post-flood conditions in 2024. Vegetation monitoring and weed control for minimum of two years.
Barr Farm, Phase 2	Monitoring of bend migration in 2024 and annually. Vegetation monitoring and weed control for minimum of two years.
Barr Farm, Phase 1	Monitoring of toe wood bend and confined area in 2024. Vegetation monitoring and weed control for minimum of two years.
Highway 47 Bank Restoration	Additional action recommended. In discussion. Vegetation monitoring and weed control for minimum of two years. Interseeding areas with low native cover.
15 th Street Channel Restoration	Additional action recommended. In discussion. Vegetation monitoring and weed control for minimum of two years. Interseeding areas with low native cover.



Highway 47 Bank Restoration

- Completed November 2018
- Cost: \$6 million
- 3,000 feet
- Channel stabilization
- Infrastructure protection
- 30,000 tons/year sediment reduction
- Riparian habitat restoration



Before



After



FOUNTAIN CREEK
WATERSHED DISTRICT



Highway 47 2023 Storm Damage





Masciantonio Trust Bank Restoration

- Completed: April 2018
- Cost: \$2 million
- 1,500 feet
- 13,653 tons/year sediment reduction
- Channel stabilization
- 5,000 cottonwood and willows + native seeds



Before

After





Southmoor Drive – Fountain - Underway

- Due to complete May 2025
- Cost: \$4.2 up to \$6.2 million
- 55,088 tons/year sediment reduction
- Channel stabilization
- 21,000 willows, 222 cottonwood poles + native seeds
- Funding partners: City of Fountain, Colorado Water Conservation Board
- First project in El Paso County





Southmoor Drive – Fountain - Underway

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Challenges

- MMF \$ is running out. What to do with remaining \$9M?
- \$1B in project work identified across the watershed
- Sustainable funding
- Population growth
- Risks mounting





Opportunities

Water is a shared resource

We all have limited resources

We are on borrowed time

We must collaborate on shared solutions

We are here to help





WATER IS EVERYTHING

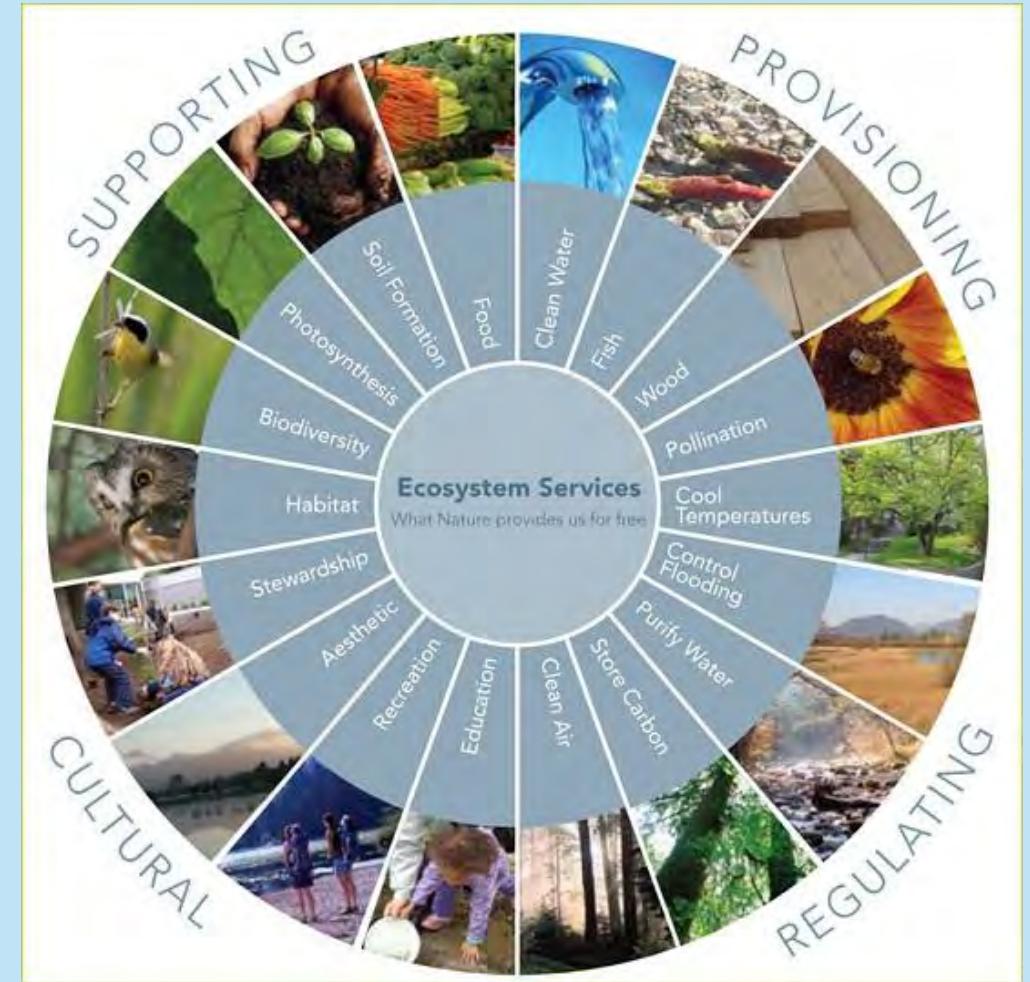
Powerful



Magical



Scarce





Protecting Your Watershed

- **Positive behavior changes leading to real impacts**
 - Scoop the Poop
 - Plant natives – reduce turf
 - Bag and tie your trash, don't litter
 - Conserve water – fix leaks, take short showers
- **Participate in District meetings, events**
 - Citizen Advisory Group, 2nd Fridays 930am virtual
 - Technical Advisory Committee, 1st Weds 1pm virtual
 - Liquid Lectures – Pueblo and Colorado Springs
 - Great American Cleanup Sat 5/3
 - Rain Barrel Sale
 - Join our e-newsletter
- **Talk to your neighbors, friends, family, and elected officials**
- **Get Jim's Book!**



FOUNTAIN CREEK
WATERSHED DISTRICT



Manitou Lake
Feb 2024

Thank You

Alli Schuch

fountainckdist@gmail.com

Thank you for attending today!

Join us again on April 16th on Zoom at 12pm. Ms Annie Berlemann, Colorado Springs Utilities, will be speaking about water quality in the watershed.

Sign up to receive our newsletter & more information about upcoming events.

Visit our website at peakallianceco.org.

Join the [Sustainable and Resilient Pikes Peak Region](#) on Facebook or find us on LinkedIn.

Photo courtesy Sunnye Buesing & Fountain Creek Watershed District 2021 Photo Winner

