



Resilient Glenwood Springs

PRESENTATION TO COLORADO
MUNICIPAL LEAGUE



Today's Presenters:



Shelley Kaup
City Council
Glenwood Springs



Lisa Langer
Director of Tourism
Promotion
Visit Glenwood Springs



Matt Langhorst
Public Works Director
Glenwood Springs



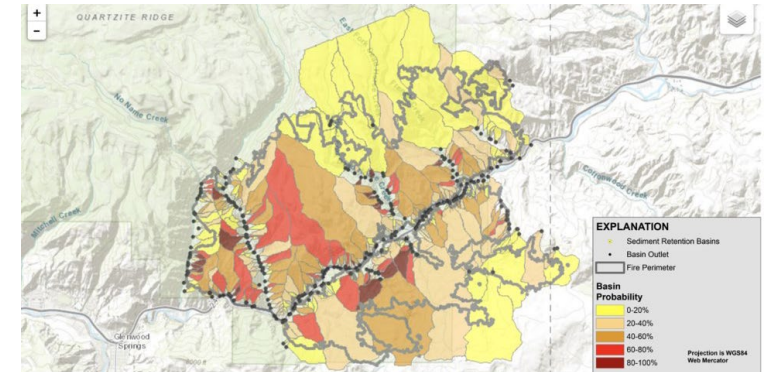
Leanne Veldhuis
Eagle-Holy Cross District
Ranger



Jenn Ooton
Assistant City Manager
Glenwood Springs

Robust, Resilient Glenwood Springs

- Glenwood Springs has a history of Resilience and Innovation
- Strategic Plan
- Facing the aftermath of the Grizzly Creek Fire
 - Protecting the City's Water Supply
 - Changing impacts due to debris flow and working with partners
- Unprecedented partnership with the U.S. Forest Service to protect Hanging Lake from overuse through a system that limits the daily traffic to the state's best loved travertine lake and waterfall.
- In June 2019, Glenwood Springs became the seventh city in the United States to be powered by 100% renewable energy – purchasing all clean wind power from the Municipal Energy Agency of Nebraska (MEAN).
- Fiber to the Home project – Potential to Work with Town of Eagle to provide support to their roll out to Fiber to the Home



History of Resiliency in Glenwood Springs



Shelley Kaup
City Council
Glenwood Springs

Resiliency and Innovation:

- The City has seen its share of wildfires and mudflows over the years.
- This 1937 Mudslide led to the construction of the 12th St. Ditch designed to protect the East side of the city from major mudflows.

A trail along the ditch enhances residents & visitors pedestrian experience in town.



Photo courtesy of the Glenwood Springs Historical Society and Frontier Museum

The City continues to engineer for future impacts of mudflows.



History of Resiliency in Glenwood Springs

- Glenwood Springs has seen 10 wildfires in the past 20 years, the Storm King Fire in 1994 killed 14 Fire Fighters and the Coal Seam Fire of 2002 destroyed homes and threatened several major city facilities.
- The last 5 years saw 5 wildfires with the Grizzly Creek Fire impacting the city's natural watersheds and I-70 transportation.
- Glenwood Springs continues to work to mitigate the threat of future wildfires and is working with regional partners on emergency evacuation plans for fast moving fires that may threaten the city in the future.



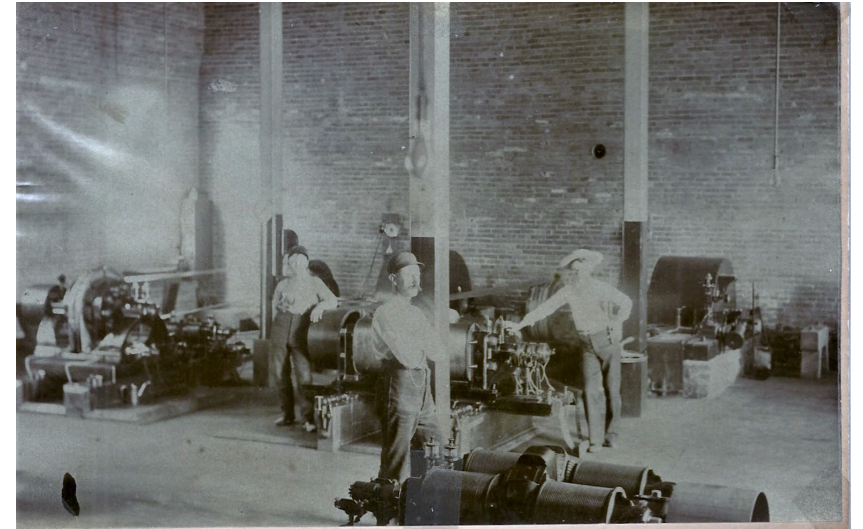
History of Resiliency in Glenwood Springs

Innovation in electricity and city services:

We are seeing the effects of the extreme drought and Climate Change in our region. We are working reduce our impacts on the environment. To that end – the city continues its innovation in its City Electric Utility.

History: Glenwood Springs was one of first handful of towns in the State of Colorado to provide city-wide electricity in 1886.

The city was powered primarily by hydroelectric power from 1888 until 1950 with water brought from No Name Creek and later Grizzly Creek by tunnel and by flume. Nationally, Glenwood Springs preceded New York City in being lighted with electricity.

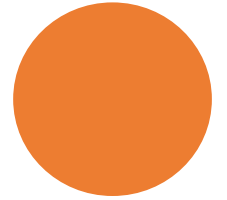


Early Hydroelectric plant in Glenwood Springs



100% Renewable Electricity

- Glenwood Springs adopted its first Climate Action Plan in 2009. It added 35% renewable power to its purchased electricity in 2013. 7% WAPA hydro and 28% wind power.
- June 2019, Glenwood Springs became the seventh city in the United States to be powered by 100% renewable electricity – purchasing all clean wind power from the Municipal Energy Agency of Nebraska (MEAN) through Power Purchase Agreement (PPA)
- As other communities have followed in Glenwood's path, MEAN is increasing its renewable power portfolio on their grid to benefit all the members.
- According to MEAN, switching to 100% wind power saves the environment approximately 77,156 tons of CO2 emissions annually vs. MEAN fossil fuel plants to generate power.





Resiliency in Glenwood Springs

Fires in the West and the cascading impacts of debris flow and severe weather are increasing.

The City of Glenwood Springs is implementing changes to:

- Reduce our impacts on the environment
- Allow us to be resilient to the natural disasters we are facing immediately.
- Prepare us for the future



Increased Focus on Resiliency

Our sustainability efforts are in service to "walk the walk" by making physical changes, but also making sure that we are looking at leadership and regulations within the community

- Working with Regional Partners to optimize transportation routes for resiliency and evacuations
- Member of Garfield Clean Energy – regional partnership promoting energy efficiency and renewable energy.
- Economic Diversity provides strength and resiliency to changes. City adding Broadband Enterprise to serve residents and businesses
- Riparian setback and protection to support healthy rivers
- Making improvements for redundant water sources.



Water Resiliency and facing the aftermath of the Grizzly Creek Fire



Matt Langhorst
Public Works Director
Glenwood Springs



Latest and largest Glenwood Springs area wildfire at 32,631 acres.

Ignited August 10, 2020

On steep slopes near I-70 & the Colorado River
Between River's confluences with No Name &
Grizzly Creeks

No Name and Grizzly Creek are the City's
primary raw water sources

The fire burned through November 2020. Rugged
terrain.

Fire threatened City intakes and above grade raw
water pipe lines.

Firefighters' limited watershed burns above City's
intakes to:

9.2% of the No Name watershed above intake

2.9% of the Grizzly Creek watershed above
intake



Water Resiliency and facing the aftermath of the Grizzly Creek Fire

Existing Water rights from No Name and Grizzly were temporarily transferred up stream on the Roaring Fork River to City pump station.

City's response: "The Project – 4 Separate Phases of work"

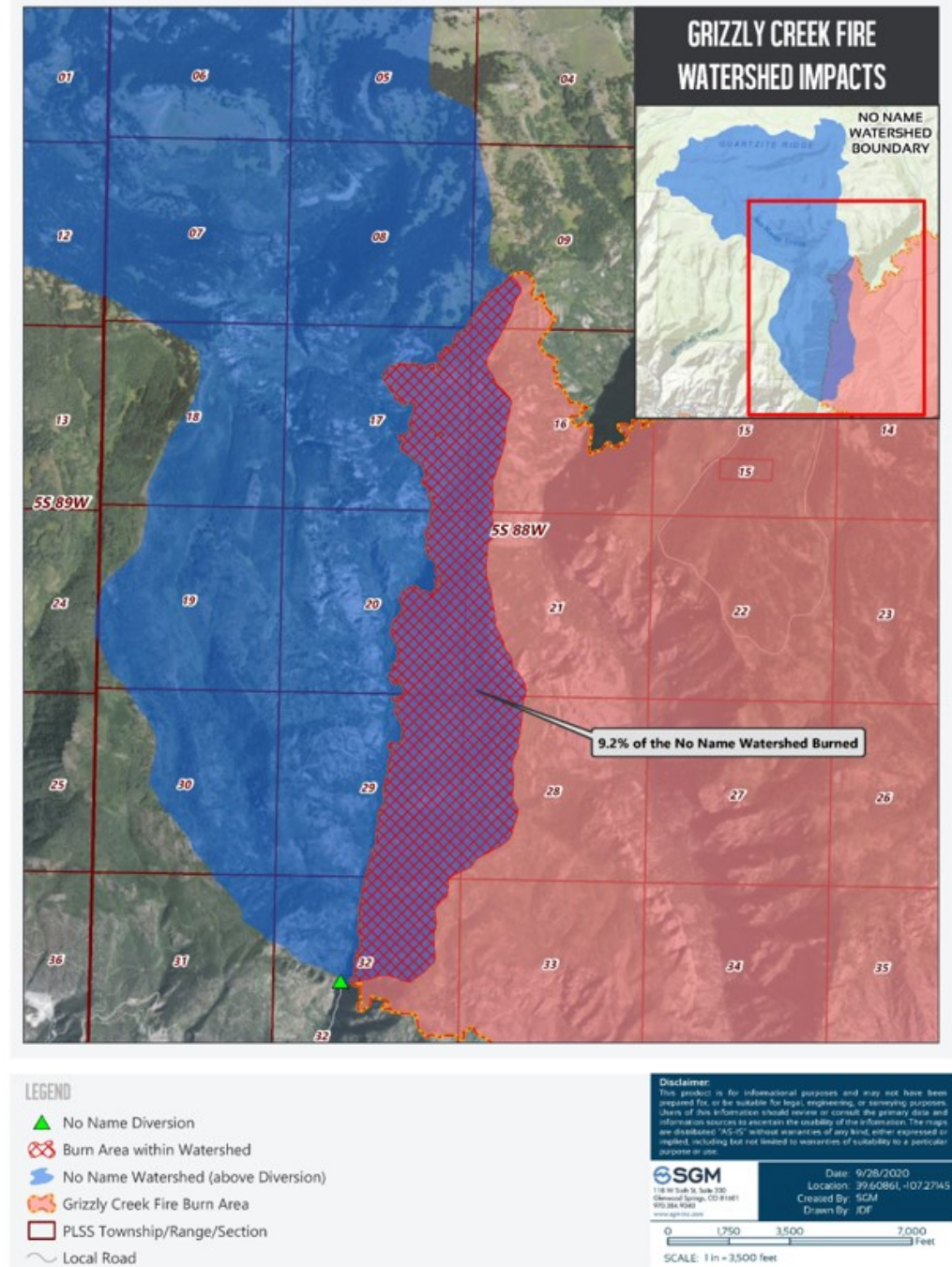
- Restoration & Intake protection

- Water Plant Treatment system improvements

- Addition of pre-treatment system

- Alternate raw water supply system improvements

Phase 1-3 Completion Date: May 31st, 2021, pre-runoff.

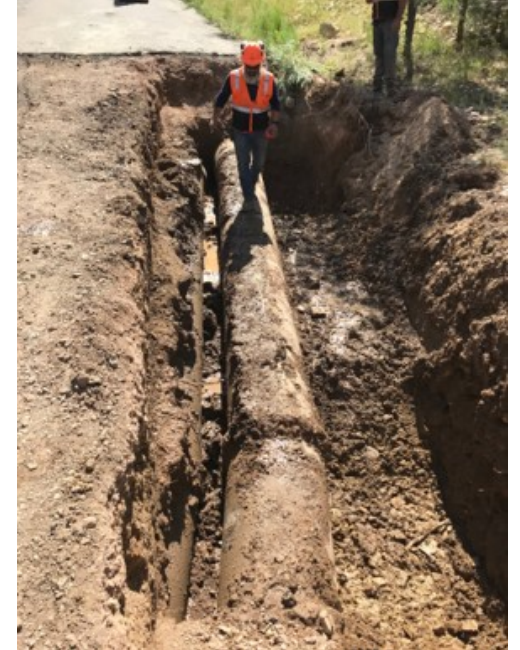


Phase One (2020) – Intakes Protection: Completed by City & Gould Construction - Stream dredging at intakes, streambank armoring, metal plating on/above intakes to protect valve stems & grates, pipe stabilization and structures protection. The City worked with United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) to sponsor an Emergency Watershed Protection (EWP) program project to protect critical infrastructure against debris flows from the burn scar.



Phase Two (2021) - Red Mountain WTP Process Upgrades: Plate settlers addition, improved solids removal capabilities, filter media upgrades, improved chemical pre-treatment (polymer addition).

Phase Three(2021) - No Name Tunnel Facilities Upgrades: Removal of micro-strainers & associated concrete, new plate settlers installed with discharge channel, solids removal points to send sediment back to No Name Creek. Protects raw water delivery system and improves plant performance.



Phase Four (2021-22): Secondary Raw Water Line from Roaring Fork River Pump Station to the Red Mountain Water Treatment Plant



Leanne Veldhuis
Eagle-Holy Cross District Ranger

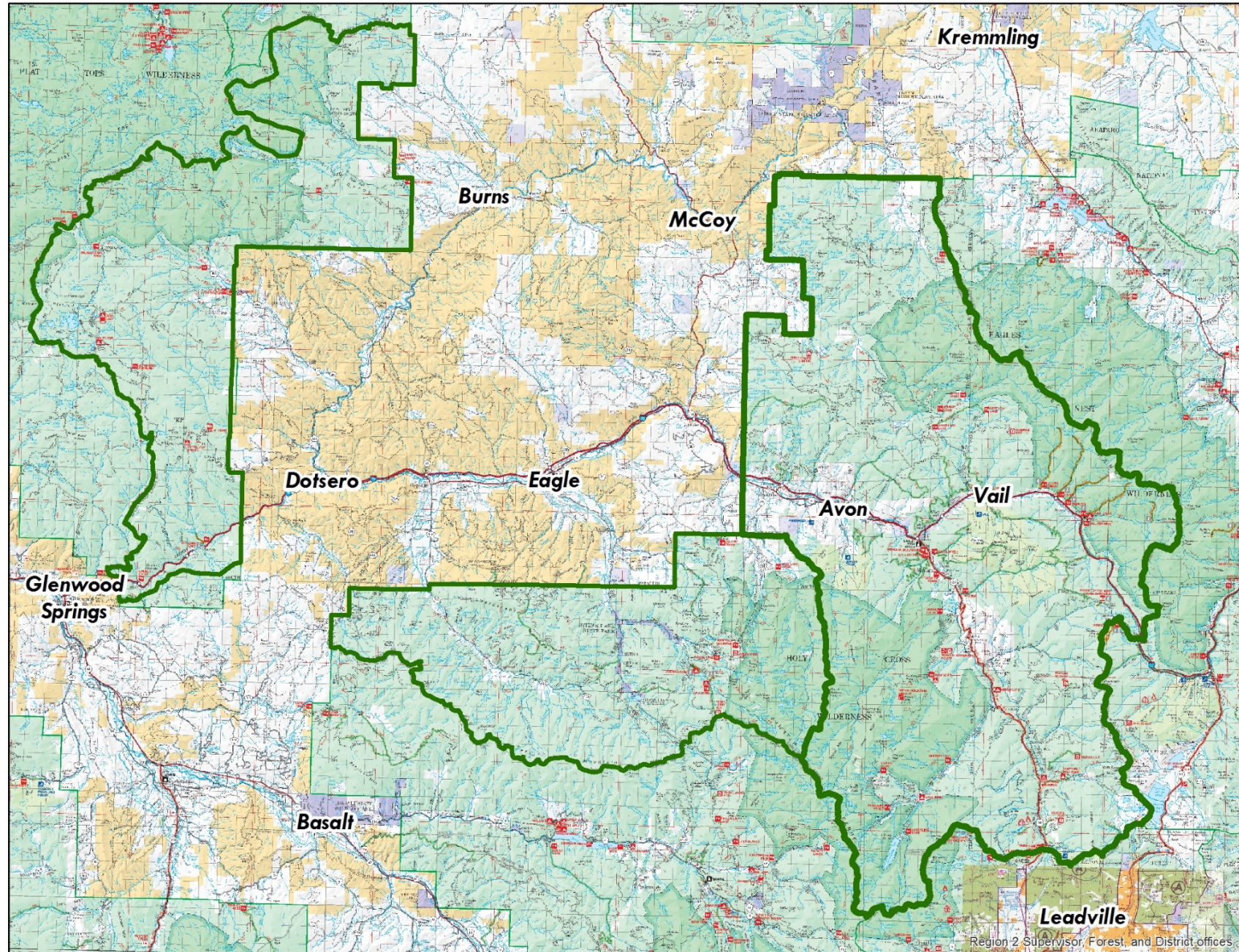


Eagle-Holy Cross Ranger District White River National Forest

Eagle-Holy Cross Ranger District

White River
National Forest

704,000 Acres





A photograph of a waterfall cascading down a rocky cliff face. The water is white and frothy as it falls, creating a misty spray at the base. The surrounding rocks are dark and jagged, with some green vegetation visible at the top of the cliff.

Hanging Lake Popularity

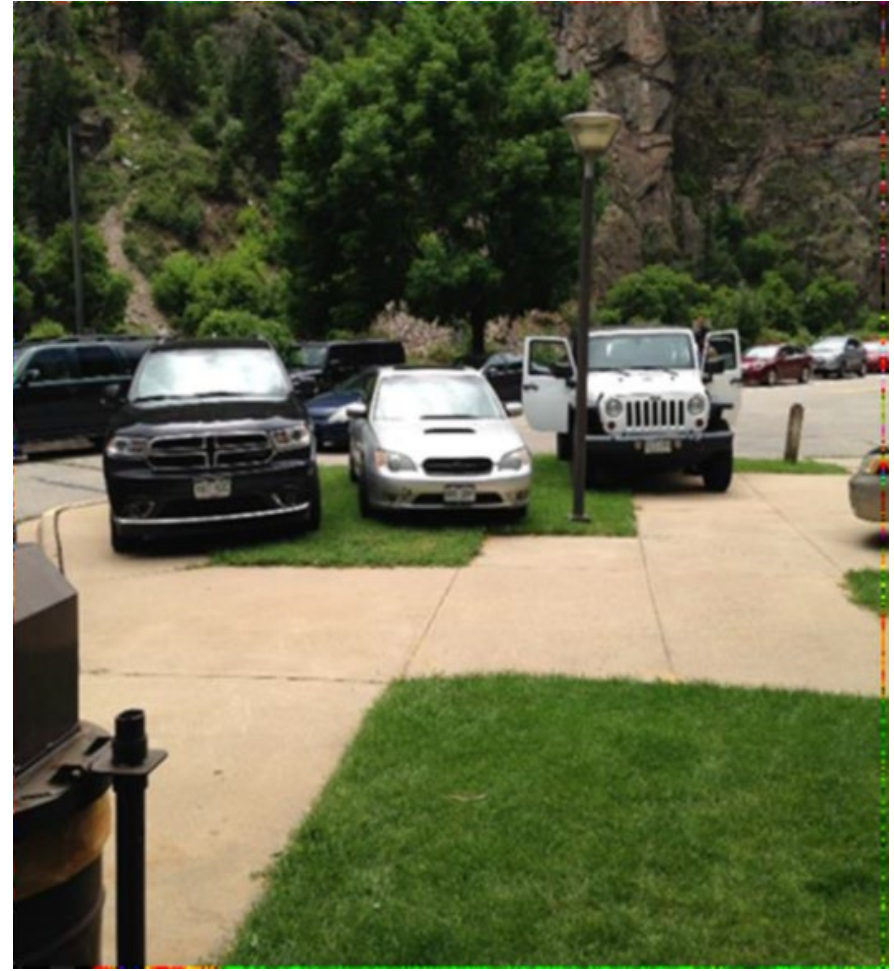
- ▶ Waterfalls and travertine lake
- ▶ National Natural Landmark-NPS
- ▶ Communities and proximity to I-70 corridor
- ▶ Attainable 1.2-mile hike
- ▶ High profile mountain communities
- ▶ Social media influence
- ▶ Diverse visitors



Pre-Management Plan By the Numbers...

- Visitation doubled within 5 years!
- 2016, approximately 150,000 visitors
- 2017 approximately 184,000 visitors visited Hanging Lake.
- Average of 1,000 hikers per day May-Sept.
- 34,000 person increase in one year!
- Average of 4 hikers per 100 feet of trail 252 people and 62 hikers at the lake.







Waiting in Line...

Short-term vs Long-term solutions NEPA-public input



SOLUTION

- ▶ Adaptive Management Plan
- ▶ Innovative Public-Private Partnerships
- ▶ 3rd party contractor
- ▶ Shuttle
- ▶ Year-round reservations



Long-term strategy to effectively protect the natural and historic resources, reduce congestion, provide for public safety and quality recreation opportunities, all while achieving long-term sustainability for the area and its local tourism related economic benefits.



Enhanced Visitor Experience

Daily Capacity
615 people

Reservation
Shuttle
Bike/Hike
Customer Service

Educational Products
Welcome Center
Video and shuttle audio
Social Media
Branding logo
Brochures
Interpretation panels
Ranger/trail presence



Forming a Unique Partnership



Timeline and Process

- The Mayor of Glenwood Springs expressed interest to the Forest Service in having GWS run the Shuttle Service - All of 2017.
- The Forest Service District Ranger reached out to the City Manager to find a way forward together – Spring of 2018.
- Adaptive Partnership and Management Contract – October of 2018.
- RFQ for a Hanging Lake Shuttle Provider – October of 2018
- Joint Review Process
- Award of RFQ to H2O Ventures – February of 2019.
- First Shuttle on May 1, 2019.



Issues from a City Perspective

- Partnering with a Federal Agency – Cities work differently and have diverse missions.
- Not a Core Service and could negatively impact specific businesses.
- It is a service outside the city limits of Glenwood Springs.
- Included the use of a City Facility.
- No assurance that the pricing was appropriate, and that it would not be a failure.
- Selective memories of Elected Officials.
- All done in a Pressure Cooker – Constant media attention.





Totally Worth the Risk and Hard Work

- Responsible tourism matters to our quality of life. This effort helps halt loving the resource to death.
- Prior to the pandemic, the Shuttle Service was stable.
- The Hanging Lake Welcome Center in the City's Ice Rink worked well.
- The Partnership with the Forest Service is wonderful. Because of this relationship, there was flexibility to change during the pandemic and post Grizzly Creek Fire.
- The Partnership was awarded the 2019 Governor's Tourism Conference Award for the Outstanding Sustainability Initiative Program.
- Glenwood Springs one of 10 Communities throughout the Nation that just received Technical Assistance from the U.S. EPA under the Recreation Economy for Rural Communities assistance program to help revitalize Main Streets.



- On August 18, 2021, the Forest Service announced an indefinite closure of the Hanging Lake trail due to significant damage from a late July storm in the burn scar area.
- Bridges have been destroyed or severely damaged
- Mudslides blocking large sections of the trail.
- Continued partnership to fund reconstruction is a priority for the Forest Service, Visit Glenwood and the City of Glenwood Springs.
- support.nationalforests.org/wrnf



Lisa Langer
Director of Tourism Promotion



Visit Glenwood Springs



Visit Glenwood Springs & Hanging Lake Communications

Tourism Marketing History of Hanging Lake:

“Our top attraction that we are not allowed to promote!”

Focus on **education** instead of marketing

- How to:
Leave no Trace & Care for Colorado
- Alternative hikes
- Best times and tips to visit

VisitGlenwood.com/HangingLake Top Visited Page

Although no promotional budget was allocated to Hanging Lake and all pages focused on education vs. advertising;

**Hanging Lake was still by far
the most visited page on VisitGlenwood.com**

Valuable traffic for community: Visitors stayed on site after reading Hanging Lake content.





Visit Glenwood Springs and Hanging Lake

Education & Protection vs. classic Marketing:

- **Compliance with our assets** (photos, videos, blog etc.)
- Helped fund a ranger during the peak-season (pre-management plan)
- Partner in the VOLPE & USFS management discussions
- Messaging for donations for trail restoration
- Pivoting Communications with COVID/FIRE/MUDSLIDES

The New York Times

Across the globe, travel providers and government agencies are responding to 'overtourism' with suggestions for less-crowded places and quieter seasons.



Too much of a good thing? For the hike to Hanging Lake, near Glenwood Springs, Colo., new restrictions now limit visitors. VisitGlenwood.com

By Elaine Glusac

Aug. 29, 2019



The hike to Hanging Lake, just east of Glenwood Springs, Colo., is short and steep, rising more than 1,000 feet in just over one mile.

The
New York
Times

The Gazette

PULITZER PRIZE-WINNING JOURNALISM, EST. 1872

NewHamburgIndependent.ca



9NEWS.com

5280



THE OKLAHOMAN

The Washington Times

Reliable Reporting. The Right Opinion.

FOOD & WINE

The Columbian

303MAGAZINE.COM

USA TODAY

msn | lifestyle
powered by Microsoft News

The Telegraph



WIRED



SFGATE

聯合新聞網

美味代價



NATIONAL POST

THE DENVER POST





- ▶ Development of branding and online brochure
- ▶ Informational videos & blogs
- ▶ CTO Partnerships with blogs, takeovers, field-guides
- ▶ Care for Colorado Principles
- ▶ PR, educational ads, social media marketing
- ▶ Closure Communications



Since 2019, Hanging Lake reservation page accounts for 1/3 of organic web-traffic

- Valuable traffic for tourism marketing of the community
- Retargeting with more things to do, where to stay, etc.
- While shuttle is in service: Visitors must come to Glenwood Springs
- Valuable tool for trail rebuild fundraising efforts.



970-945-6580 | HANGING LAKE | #VISITGLENWOOD | LOCATION

GLENWOOD SPRINGS COLORADO

VisitGlenwood.com

Home / Hanging Lake

HANGING LAKE

PICK APPROPRIATE OPTION BELOW FOR A PERMIT TO HIKE HANGING LAKE

From May 1st through October 31st, personal vehicles are not allowed to park at the trailhead!
You can park personal vehicles and board the shuttle at the Hanging Lake Welcome Center, or make a reservation to bike or hike to the trailhead!

From November 1st through April 30th, you may purchase a day permit and self-park at the trailhead.

HANGING LAKE SHUTTLE
Ride Shuttle to the Trailhead
from the [Hanging Lake Welcome Center](#)
[BOOK HERE](#)
Reservation includes Permit & Shuttle Ride

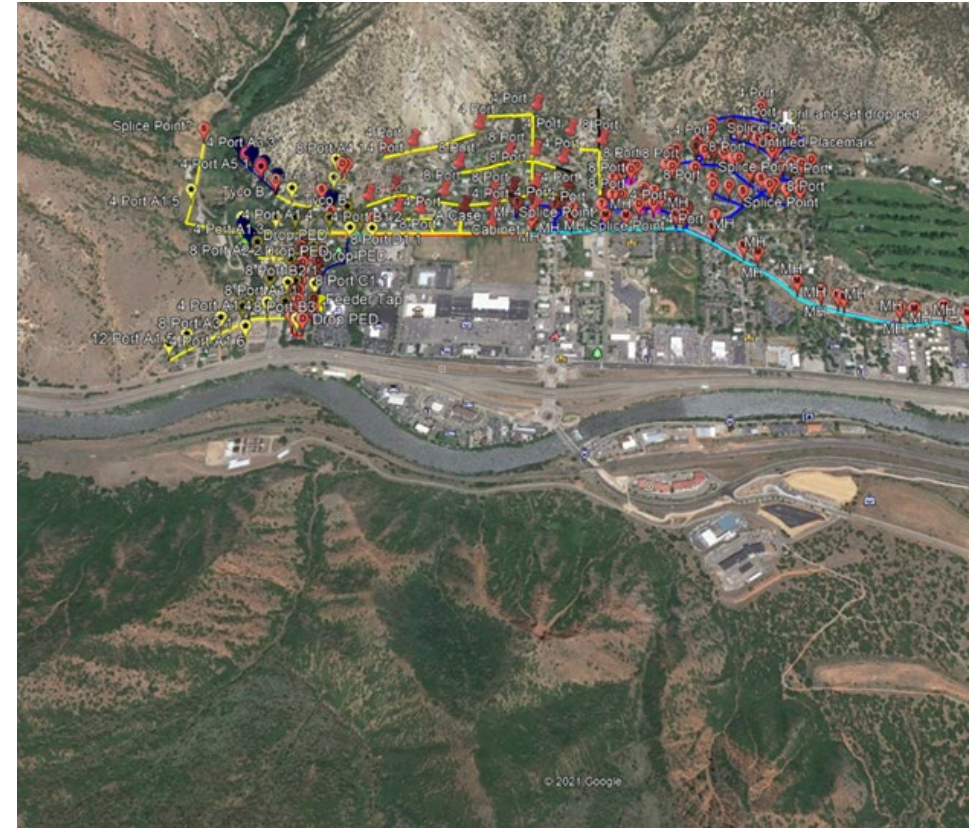
BIKE TO HANGING LAKE
Bike to Trailhead with personal bike
Need a bike? Contact [Local Rental Company!](#)
[BOOK HERE](#)
Reservation includes Permit

NOV - APRIL: DAY PASS
Park & Hike from the Trailhead
Choose this option to visit from November 1st through April 30th
[BOOK HERE](#)
Reservation includes Day Permit

Broadband

In 2020-2021 The City of Glenwood Springs is installing a new 150-mile-high speed broadband system to serve local businesses and residents throughout the community. The Community Broadband Network (CBN) anticipates full fiber-to-the-home City coverage by the end of 2021 or very early in 2022 (due to supply chain issues). Glenwood Springs Electric borrowed \$9 million to support the construction and soft costs of the project and is allowing CBN to override the electrical system to ease of construction and maintenance of the system.

The City of Glenwood Springs and its neighbor, the Town of Eagle, are in conversations about how Glenwood can provide back-end support to that community's fiber to the home project. This would include customer service representatives, emergency fiber repair, mapping integration, Broadhub Market Portal support, network performance reporting, billing support all within a single monthly per service fee to the Town.



Broadband

The City has been providing this same service in a smaller scale for the past 20 years and with the system coming to its end of life, we decided to take not replace the existing system, but to upgrade the system and charge a reasonable rate to all members of the community that wish to sign.

The City of Glenwood Springs is constructing this fiber system because council and staff see digital communication and connectivity as an essential service for our residents and businesses. There was no better time or event to prove this need for high quality, reliable and fast data than the pandemic, which forced billions of people to work from home.

The CBN system is a triple redundant system, meaning that if a long-haul line is cut in one location, the system automatically switches over to one of the other two lines for connectivity. When other systems go down around us, CBN is generally not affected.

