

# Carbondale & Rural Fire Protection District Profile

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## Planning Team

Name	Title
Bill Gavette	Carbondale Fire Dept – Fire Marshal
Mike Wagner	Carbondale Fire Dept – Deputy Chief of Operations
Chad Whiting	Garfield County Sheriff's Department
Paul Herr	Carbondale Fire Dept – Prevention Specialist

## Location and Geography

The Carbondale & Rural Fire Protection District covers a territory of approximately 300 square miles. The District's coverage area encompasses approximately 15,000 residents throughout Garfield County, Pitkin County, and Gunnison County. The coverage area includes public land (Bureau of Land Management, United States Forest Service, etc.) as well as private land. The urban area of Carbondale lies within the District's boundaries. The District maintains five stations:

- Station #81 (Headquarters) in Carbondale
- Station #82 in Redstone
- Station #83 in Marble
- Station #84 Near CMC Road & Highway 82
- Station #85 in Missouri Heights

The stations listed above are also identified as the district's critical facilities.

## ***Carbondale***

- The Town of Carbondale is approximately two square miles in area and lies at the northern side of the District boundary.
- Carbondale's population grew from 6,516 people in 2015 to an estimated 6,785 in 2019, an increase of 269 people at an average annual growth rate of 0.8 percent. Carbondale's population accounted for 11.5 percent of Garfield County's population in 2019.
- Several regional transportation routes run through Carbondale, including Highway 133 and Highway 82. The community also has a network of recreational trails.

## Transportation

The District includes Highways 82 and 133 which surround the community of Carbondale and provide the major transportation avenues through the district.

## Development Trends

In the past five years the district has seen some changes to its facilities including the expansion of Station 83 and 84. Each station added additional bays for trucks and improved local equipment including engines and tenders. Station 83 also now has an expanded command center and training facility. Currently under construction is a multi-purpose training facility by Station 81. This facility going to be used by both fire, local emergency management, and the public for education and outreach activities. The district has been discussing options to expand services to other underserved areas.

In the next five years the district noted local priorities are focused on staffing and increasing staff capacity. Carbondale Fire is currently working on some grant funding assistance to help cover employment costs. Additionally, there is a district owned lot near Aspen Pines which is currently in the discussion phase with Verizon to build an additional cell tower and improve local communication capabilities.

### Critical Facilities and Infrastructure

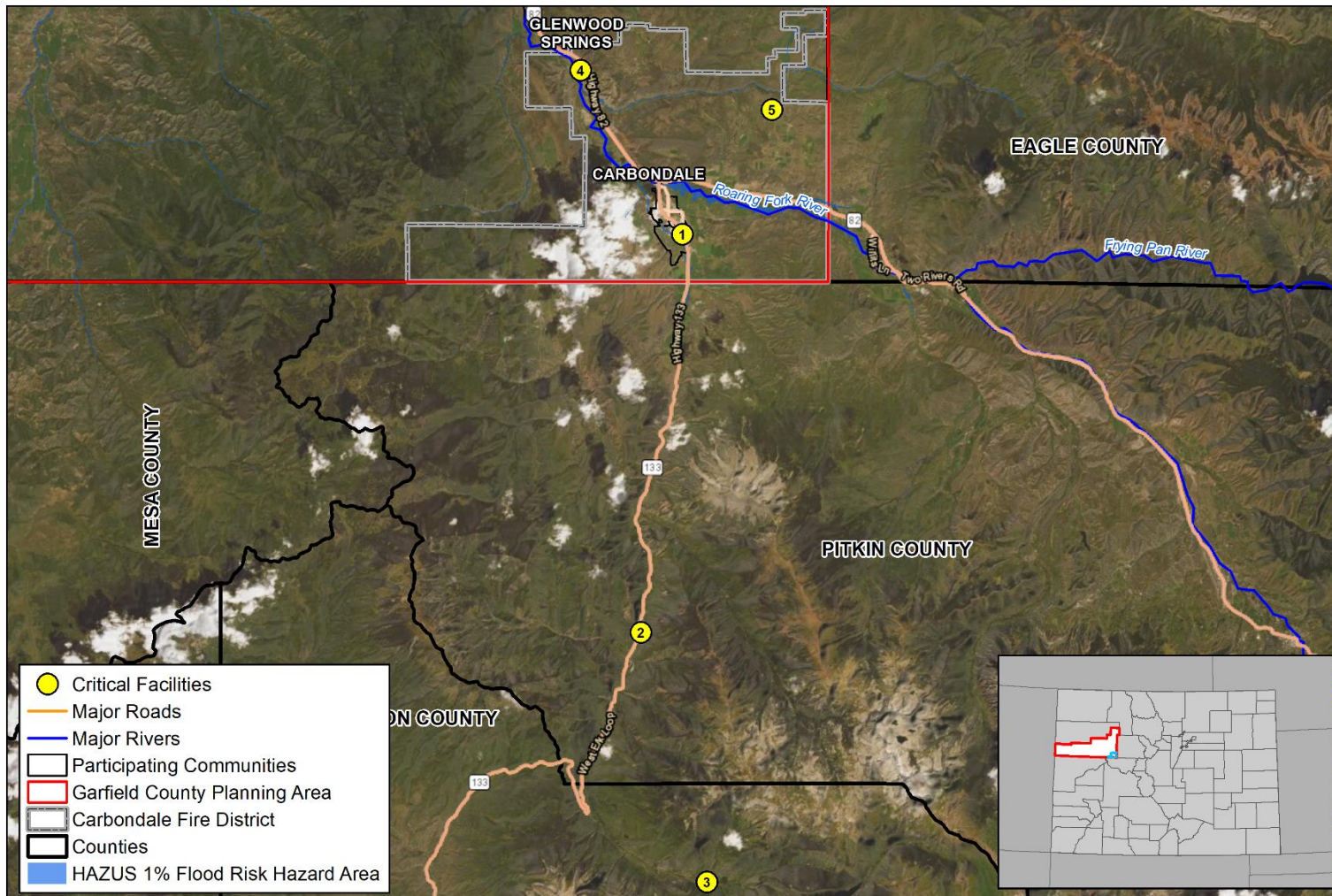
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction’s functions to normal during and after a disaster. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The following table and figure provide a summary of the critical facilities for Carbondale & Rural Fire Protection District and whether they are in known hazard areas.

**Table CRFPD.1: Critical Facilities**

Number	Name	Generator (Y/N)	Floodplain	Dam Inundation	Wildfire Hazards	Geologic Hazards
1	Station 81	Y	No	No	Low	None
2	Station 82	N	No	No	Moderate	None
3	Station 83	N	No	No	Low	None
4	Station 84	N	No	No	Low	None
5	Station 85	N	No	No	Moderate	Soils

Although not listed in the table above, critical infrastructure may also include power substations, cell towers, alert sirens, or key transportation corridors in the district. While these assets are typically owned and maintained by other agencies, they are key resources for emergency response and mitigation strategies to reduce natural hazard risk.

Figure CRFPD.1: Critical Facilities



Created By: MW  
 Date: 1/28/2022  
 Software: ArcGIS 10.8  
 File Name: CarbondaleFireCriticalFacilities.mxd  
 This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

## Carbondale & Rural Fire Protection District

### Critical Facilities

0 2.5 5 Miles

## **Hazard Prioritization**

The Garfield County Hazard Mitigation Plan evaluates a range of natural and man-made hazards which pose a risk to the county and communities. However, during the planning process, the local planning team identified specific hazards of top concern for Carbondale Fire District which required a more nuanced and in-depth discussion of local events, vulnerabilities, and mitigation actions the community wishes to pursue. The following section expands on the hazards of top concern identified by the Carbondale FPD's local planning team, including:

- Wildfire
- Flood
- Landslide, Mud/Debris Flow, and Rockfall
- Soils
- Severe Winter Weather
- Avalanche

For a review and analysis of other natural hazards, please see the county-wide summary in *Section Four: Risk Assessment*.

### **Wildfire**

Wildfire is the primary concern and fire response is the primary directive of the district. The district is located within a fire prone area and there are many residents located within the wildland urban interface.

The Carbondale FPD noted that many subdivisions throughout the district have adopted more stringent and proactive household wildfire mitigation actions, including defensible space, more visible roadway or street number signs, and fire-resistant siding or roofing building materials. Pre-construction lot inspections are also becoming much more common as homeowners request assessments from the fire district on fire mitigation strategies and best practices. The Elk Springs subdivision in the area has completed and enrolled in the Firewise Program. Other notes of concern included:

- River Valley Ranch – local conditions mirror those burned during the Waldo Canyon Fires in Glenwood Springs
- WUI areas extend northward into the Spring Valley area. Two new subdivisions, Homestead Estates and High Aspen Ranch, are not served by a specific FPD but draws in the area lead to both Glenwood Springs and Carbondale FPDs.
- Currently the department has a reduced number of trained and certified volunteers to serve the FPD.

### **Flood**

Local concerns focus on the proximity of the Roaring Fork and Crystal rivers, especially around the town of Redstone and along Route 83. The local planning team indicated that the Crystal River is prone to springtime flooding. High flows increase the likelihood of rescue situations. The Town of Redstone was identified as prone to flooding. Local concerns exist for potential damages or blocked transportation routes from mudflows and debris flows. Based on their location, access between Station 81 and Station 84 can be blocked during flood events. The district has a swift water troop with rescue boats and equipment that would be needed during high water events or debris. Overall training is an ongoing priority for rescue maneuvers.

The Carbondale Fire Protection District is not an eligible participant for the National Flood Insurance Program and thus does not participate.

### ***Hazardous Materials***

Hazardous materials are regularly transported along the I-70 corridor and Highway 82. Chemical fixed sites in the district boundaries hold chlorine, oxygen, diesel, propane, and gasoline. The local planning team noted chemicals including jet fuel is commonly transported through the district. Other areas of concern include McClure Pass and gas drilling sites in Gunnison County. There are mutual aid agreements in place for the district and surrounding fire protection districts. Currently the nearest full HAZMAT team is located in either Grand Junction or along the front range. During a major event a full team would require up to a full day for HAZMAT to arrive and assist with containment and cleanup. The majority of cleanup and remediation from hazardous chemical spills is being done by private companies.

### ***Landslide, Mud/Debris Flow, Rockfall***

Rockfalls are a concern for the southern end of the district. There are occasional mudslides and rockfalls along highway 82 and the surrounding cliffsides. Fifteen years ago, a rock went through a car, killing a child. Netting has been installed at critical sites including in McClure Pass and the state has continued to implement rock mitigation projects along state highways. Additionally burned areas around Lake Pristine have increased risk of mud and debris flow along burn scars. The district has a plan in place for the upper Cattle Creek area.

### ***Soils***

The Iron Bridge subdivision was identified as having significant sinkhole problems. This leads to a decrease in property value, and subsequently, fewer funds for the district. As soils throughout the community of Carbondale and throughout the district contract or expand, they also put gas lines at risk of shifting or breaking.

### ***Severe Winter Weather***

The primary concern regarding winter storms including the hindrance of response and lack of access. Severe winter weather typically results in an increase frequency of rescue calls. There is typically an increase in carbon monoxide poisoning calls during these periods.

During the ski season, there are thousands of people bused from the district to Aspen. In the event of a severe winter storm, hundreds of tourists may be stranded at one time. This would strain response resources and local housing resources.

### ***Avalanche***

Avalanches are a concern in the southern end of the district, which has a high alpine geology. Avalanches have the potential to cut off transportation routes and hinder rescue operations. Areas of specific concern are: the mine near Marble, County Road 3 in Gunnison, and Pitkin County near Redstone.

### ***Additional Concerns***

Emergency communications are a concern for the district. There are two forms of radio communication within the district, both 800 MHz and VHF. Additional towers or repeater sites are needed throughout the county is needed to provide good radio coverage, especially in the Crystal Valley area. This complicates the coordination of actions with other agencies including: State Patrol, CDOT, other fire departments, etc.

There is a large elderly population located within the district. In Carbondale, there is a 90-bed nursing home and 60-bed Alzheimer’s center. A new Sopris Lodge facility has been built in Carbondale which also includes an Alzheimer’s center. These populations would be difficult to mobilize in the event of an evacuation.

### Capability Assessment

Due to the unique structure of fire protection districts, the typical capability assessment table was not used. The following table summarizes the district’s overall capabilities. The Carbondale and Rural Fire Protection District will continue to utilize existing relationships with local, county, state, and federal agencies to aid in the implementation of mitigation projects.

**Table CRFPD.2: Capability Assessment**

Overall Capability	2017 Plan Limited, Moderate, High	2022 Plan Limited, Moderate, High
Does the jurisdiction have the financial resources needed to implement mitigation projects?	Moderate	Moderate
Does the jurisdiction have the staff/expertise to implement projects?	High	High
Does the jurisdiction have the community support to implement projects	High	High
Does the jurisdiction have the time to devote to hazard mitigation?	Moderate	Moderate

### Plan Integration

Plans listed in below were reviewed by the local planning team to identify opportunities to integrate the HMP with current planning mechanisms. These documents were also used by the local planning team to assist in identifying risks, vulnerabilities, and potential mitigation actions. The documents directly contributed to the hazard prioritization and mitigation action items sections of this community profile. When these plans and other relevant district planning mechanisms are updated, the local planning team will review the HMP for opportunities to incorporate the goals, risk and vulnerability data, and mitigation actions into the plan update as appropriate.

The Carbondale and Rural Fire Protection District participated in the 2021 Garfield County CWPP and the Upper Crystal River Valley CWPP in 2011. These plans identify areas within the district with an increased risk of wildfire and identifies strategies to mitigate wildfire impacts. Risk data and mitigation actions from the Garfield County CWPP were integrated into the HMP. The Carbondale and Rural Fire Protection District will continue to participate in these planning efforts during future updates.

The fire district also has a Master Plan which outlines goals and priorities for future growth of the department. The plan does not outline or include other types of hazards. The plan has not been integrated into the HMP, but the district will ensure the goals and actions identified are consistent with the Master Plan in future updates.

## Mitigation Action Items

Short and long-term action items identified through the planning process are an important part of the mitigation plan. Action items are detailed recommendations for activities that local departments, citizens and others could engage in to reduce risk. Although not all the actions below fit the definition of mitigation, they add to the overall resilience of the district and are thus included within the hazard mitigation plan.

### Completed Actions

Action and Description	Hazards Addressed	Goals	Estimated Cost	Potential Funding	Timeline	Priority	Lead Agency	Status
<b>Community Wildfire Protection Plan:</b> Participate in the ongoing development of an updated Community Wildfire Protection plan to ensure that future updates to the CWPP and the Garfield County Natural Hazard mitigation plan are coordinated to reflect the best available data and comprehensive set of risk reduction actions.	Wildfire	1,2,3,4,5	Unknown	Fire Districts' Budget, Garfield County General Fund, Title III Fund	1-2 years	High	Fire Chief	Carbondale & Rural FPD has participated in the Garfield County CWPP and plans to continue participating in CWPP updates in the future.

***New and Ongoing Actions:***

Action and Description	Hazards Addressed	Goals	Estimated Cost	Potential Funding	Timeline	Priority	Lead Agency	Status
<b>Fuel Management:</b> Implement fuel management projects in vulnerable areas.	Wildfire	1,5	Varies by project	Fire District's Budget	Ongoing	High	Fire Chief	This is a continued mitigation action. Swiss Village mitigation program completed in spring 2020 in addition to Pitkin County and BLM. The fire district has supported this financially. In the future looking to assist with fuels mitigation projects at Redstone campgrounds.
<b>Firewise:</b> Develop Firewise (Ready, Set, Go!) program for vulnerable communities	Wildfire	1,5	Staff Time	Fire District's Budget	5+ years	High	Fire Chief	This is a continued mitigation action. The District has helped Elk Springs become a Firewise community. The Carbondale & Rural FPD currently works with interested communities to help them meet the requirements of the Firewise program.
<b>Improve Communication Capabilities:</b> Improve	All Hazards	1,5	Unknown	Verizon, Fire District Staff Time	1-2 years	Medium	Fire Chief	This is a continued mitigation action. The District is working with local



Action and Description	Hazards Addressed	Goals	Estimated Cost	Potential Funding	Timeline	Priority	Lead Agency	Status
communication capabilities & radio interoperability.								cell phone providers to develop a cell phone tower at a district owned property.
<b>Backup Generators:</b> Purchase additional generators for fire stations to provide redundant power.	All Hazards	1,5	\$25,000+	Fire District's Budget, HMA	5+ years	Low	Fire Chief	This is a new mitigation action.
<b>Implement CWPP Projects</b> Implement fuel management projects in vulnerable areas and projects identified in the Garfield County CWPP.	Wildfire	1,5	Varies by project	Fire District's Budget	Ongoing	High	Fire Chief	This is a new mitigation action. The fire district implements fuel management projects as funds or resources are available. See the Garfield County CWPP for a list of specific fuel management projects identified for the district.