AGENDA
OURAY CITY COUNCIL

Monday, August 18, 2025 - 6:00 PM

Ouray Community Center
320 6th Ave
Ouray, CO 81427

VIRTUAL OPTION - https://zoom.us/j/9349389230
Meeting ID: 934 938 9230 Passcode: 491878 Or dial: 408 638 0968 or 669 900 6833

Ouray City Council Regular Meeting

- Changes to this agenda can be found on the bulletin board at City Hall
- Electronic copies of the Council Packet are available on the City website at www.cityofouray.com. A hard copy of the Packet is also available at the Administrative Office for interested citizens.
- Notice is hereby given that a majority or quorum of the Planning Commission, Ouray Economic Development Committee, Beautification Committee, Tourism Advisory Committee, Main Streets Committee, and/or Parks and Recreation Committee may be present at the above noticed City Council meeting to discuss any or all of the matters on the agenda below for Council consideration

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. CEREMONIAL/INFORMATIONAL
5. APPROVAL OF MINUTES - August 4, 2025 Meeting
6. CITIZENS' COMMUNICATION
7. CITY COUNCIL REPORTS/INFORMATION - Tamara Gulde, Peggy Lindsey, Michael Underwood, Josh Smith, and Ethan Funk
8. DEPARTMENT REPORTS
    a. City Administrator
    b. Director of Finance and Administration
    c. Community Development Director
    d. Information Technology Director
9. ACTION ITEMS
    a. Ratification of Declaration 2, Series 2025 - Stage 2 Fire Restrictions
    b. Ordinance 3, Series 2025 - Adding Penalties and Fines Section to Chapter 7-7-K of the Ouray Municipal Code
    c. Resolution 16, Series 2025 - 835 2nd Street Deed Restriction Approval
    d. Resolution 17, Series 2025 - Approving the Swiss Village Deed Restriction, Affordable Housing Loan of $200,000, Promissory Note, Deed of Trust, and Subordination Agreement
    e. Resolution 19, Series 2025 - Adopting the Hazard Mitigation Plan
    f. First Addendum to City Administrator Employment Agreement
    g. Special Counsel Retention Agreement with Nathan, Dumm, & Mayer, P.C.
    h. Ratification of Letter of Support for Rural Homes
10. DISCUSSION ITEMS
    a. Dead Tree Removal
    b. Future Agenda Items
11. ADJOURNMENT

Ouray City Council Regular Meeting

Monday, August 4, 2025 6:00 PM
Ouray Community Center, 320 6th Ave, Ouray, CO 81427

Ethan Funk:	Present
Tamara Gulde:	Present
Peggy Lindsey:	Absent
Josh Smith:	Present
Michael Underwood:	Present

Also present were: City Administrator Michelle Metteer, Finance and Administration Director Melissa Drake, Public Works Director Joe Coleman, Parks and Recreation Director Joe Brown, Interim Police Chief Daric Harvey, Community Development Director Dan Murphy, Destination Marketing Director Kailey Rhoten, IT Director Rich Willis, Deputy City Clerk Sara Waldman and City Attorney Carol Viner.

1. **CALL TO ORDER**

Mayor Funk called the meeting to order at 6:00 pm.

2. **ROLL CALL**

3. **PLEDGE OF ALLEGIANCE**

The Pledge of Allegiance was recited.

4. **APPROVAL OF MINUTES - Meetings of May 5 & 19, June 18, and July 21, 2025**

Councilor Gulde noted changes for May 19th meeting - Mr. to Ms. Hart on discussion items, and for July 21st meeting - typographical corrections in Mayor's Report and Consent Agenda.

Motion to approve minutes of May 5th and June 18th. This motion, made by Tamara Gulde and seconded by Michael Underwood, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea
Motion to approve minutes of May 19th, changing Mr. Hart to Ms. Hart in Discussion Items. This motion, made by Josh Smith and seconded by Michael Underwood, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea
Motion to approve minutes of July 21st, changing the motion phrasing of the consent agenda, and correcting typographical errors in the Mayor's Report. This motion, made by Josh Smith and seconded by Michael Underwood, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

5. **CITIZENS' COMMUNICATION**

Linda Wise spoke about her concerns about the noise from the Gold Belt Restaurant. She stated that the noise ordinance was not effective, and they asked the council to revisit the decibel level of the ordinance. Paul Smith asked when the public meeting for wayfinding signs feedback was scheduled. Mayor Funk said it has not been scheduled because the installation date for the signs has not been set. Mr. Smith said that was not a satisfactory answer and said the council should be open with the public about where the city is in the process. Patty Lewis stated the modern elements that have recently been added to the city do not fit with the character. Sandy Woodman said business owners in town who live outside of town do not have a vote in town,

and asked what can be done about that. Mayor Funk said US citizens can't legally be able to vote in more than one location, but suggested working with the committees to make their voices heard. Mr. Smith stated he believed there was a Colorado Supreme Court case that allowed property owners to have a vote in local matters, regardless of the owner's residency. John Pulbratek asked how the allowable limits are tested for the odors from the wastewater treatment plant. Mr. Coleman said he could pass along contact information for the Colorado Department of Public Health and Environment, who is assessing the odor levels. Councilor Gulde stated that city staff have been working hard to resolve the issues. Ralph McCormick asked why there was going to be a $20,000 recruiting process when Interim Chief Harvey is doing a great job right now. Mr. Pulbratek asked about the sludge that comes out of the Wastewater Treatment Plant. Mr. Coleman said the sludge is the byproduct of amoebic breakdown. Mayor Funk closed the floor.

6. **CITY COUNCIL REPORTS/INFORMATION - Tamara Gulde, Peggy Lindsey, Michael Underwood, Josh Smith, and Ethan Funk**

Councilor Gulde - met with Panoramic Heights residents to witness odors on July 25th. Asked residents to continue reporting odors to the City, and assured the residents that the City is prioritizing the issue. Attended an executive training on July 31st for emergency management plans in Ouray County. The next IPAT meeting wil be on August 6th.
Councilor Underwood - attended the same emergency meeting as Councilor Gulde. PARC field day will be August 23rd from noon to 4:00 pm. The next meeting is tomorrow.
Mayor Pro Tem Smith - Next Main Street Committee meeting on Wednesday.
Mayor Funk - candidate petitions will go out tomorrow for City Council. Asked the public for patience as the City works out the Wastewater Treatment Plant odors, since the biological processes can't be adjusted overnight. Mayor Funk reminded the audience that the funding for the wayfinding signs comes from the tourism fund, and is not available to spend on affordable housing, or other things that do not enhance the tourist experience.

7. **DEPARTMENT REPORTS**

a. City Administrator

Ms. Metteer gave an overview of her report. Ms. Metteer clarified for Mr. McCormick that she does not want to use the recruiting firms to hire the Chief of Police position, but to fill other positions, and that the City would offer the Chief of Police position internally only first for Interim Chief Harvey to apply if he chooses.

b. Interim Police Chief

Interim Police Chief Harvey gave an overview of his report. Councilor Gulde complimented Chief Harvey on the great job he is doing, and the community seems to like him. Anna Cooling, district attorney of the 7th Judicial District, has a great relationship with him and spoke in support of him.

c. Fire Chief

Report in packet.

d. Public Works Director

Report in packet.

e. Parks and Recreation Director

Mr. Brown announced a Via Ferrata Meeting on September 3rd at 5 pm. PARC meeting tomorrow, August 5th.

f. Marketing & Communication Director

Report in packet. Mayor Pro Term Smith said he attempted to design the shuttle signs, but had a question for Ms. Rhoten, and even with all her other duties, Ms. Rhoten did an amazing job improving his mockup. Paul Smith said the domain ouray.com is available for purchase, and asked if the council wanted to purchase it to replace visitouray.com. Councilor Gulde said the "visit" preceding the town name is very common in the industry.

g. Finance & Administration Director

Ms. Drake presented the financial reports. The candidate information for City Council elections is in the packet. Ms. Drake introduced Ms. Waldman, the new Deputy City Clerk, and announced her own retirement in September.

8. **CONSENT AGENDA**

Motion to approve the Consent Agenda. This motion, made by Michael Underwood and seconded by Tamara Gulde, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

a. Modification of Premises for Sidewalk Service for Friends of the Wright Opera House dba Wright Opera House

b. Liquor License Renewal for The Drinking Cup LLC dba The Drinking Cup

c. Liquor License Renewal for Fedel Provisions #2 dba Ouray Liquors

d. Victim's Advocate Memorandum of Understanding

e. Intergovernmental Agreement with Ouray County Clerk and Recorder for Election Services for Coordinated Fall Election

9. **ACTION ITEMS**

a. Resolution 13, 2025 - Adopting Parks & Rec Department Fee Schedule

Susette Warynick stated how difficult it is for the audience to follow along with the agenda, and their voting speed.

Motion to approve Resolution 13, Series 2025, correcting the spelling of profit and adopting the headings from the second page. This motion, made by Josh Smith and seconded by Tamara Gulde, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

b. Contract for Recruitment Services Professional Services Agreement - Duffy Group

Melissa Barker spoke briefly about the Duffy Group's recruitment process. Councilor Underwood asked how their methods differ from other recruiting firms. Ms. Barker said they will specifically target people working in similar communities who have the right expertise and present the opportunity and why they've been selected. Mayor Funk asked how long the PSA would last. Ms. Barker said it would last until their rate changes, at which point an amendment would be made, but noted that their government rate hadn't changed in 13 years. Ms. Viner noted that the PSA agreement expires at the end of the year and would need to be re-signed.

Motion to approve the Contract for Recruitment Services Professional Services Agreement with Duffy Group. This motion, made by Josh Smith and seconded by Tamara Gulde, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

c. Resolution 15, 2025 - Clarifying Interim Police Chief Position

Motion to approve Resolution 15 Series 2025. This motion, made by Tamara Gulde and seconded by Michael Underwood, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

d. Third Addendum to 99-Year Library Lease to add Rooftop Space

Mayor Pro Tem Smith clarified his position about the library's plans and how he wanted to collaborate and add on to their plans without taking anything away from their plans. Sandy Woodman expressed her support for Mayor Pro Tem Smith's idea. Phylis Fagrelius, a Library board member, said the prior city administrator told the library that they did not want to collaborate on a design when they started talking about the library expansion. Jenny Hart thanked the citizens who came to the council meeting and encouraged everyone to keep coming. Mayor Pro Tem Smith said that rooftop decks are labor-intensive to remove snow in the winter. Councilor Underwood said the council has been involved in the discussion of the library expansion since last spring.

Motion to approve the Third Addendum to 99-Year Library Lease. This motion, made by Josh Smith and seconded by Tamara Gulde, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

e. Addendum to Facility Needs Assessment Contract

Motion to approve Addendum to Facility Needs Assessment Contract. This motion, made by Michael Underwood and seconded by Josh Smith, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

f. Contract for Building Inspection Services Professional Services Agreement

Mr. Murphy spoke of a new technology called RVI (Remote Virtual Inspection), so the inspection can be real-time within 24 hours on the phone, and they can do plan reviews. Ms. Metteer spoke of an on-staff person to help with technology on site, but ask the contractors to go on the roof/up ladders for the inspection. Mayor Pro Tem Smith asked if plans would be submitted directly to the SAFEbuilt portal, or first through City staff. Mr. Murphy said City staff would intake all submissions and upload them to SAFEbuilt's portal. Eric Funk has concerns about image ownership and privacy, since they would be subject to public records requests. Paul Smith has concerns about third-party records and prohibited actions of the contractor, and asked about the in-person building inspection timeframes. Mr. Murphy confirmed we will have a staff member for on-site inspections.

Motion to approve contract for Building Inspection Services Professional Services Agreement. This motion, made by Michael Underwood and seconded by Josh Smith, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

g. Approval of Letters of Support for the Crystal Reservoir Conveyance

Councilor Gulde suggested addressing the letter to all 3 representatives to show to each of them that they have all received the letter. Jenny Hart asked how the City would fund repairs for the reservoir were the Federal Government to give it to the City. Mayor Funk said the City has already been contributing to maintenance costs while owned by the US Forest Service.

Motion to approve the Letter of Support, modifying one letter to be addressed to all three applicants, for the Crystal Reservoir Conveyance. This motion, made by Tamara Gulde and seconded by Josh Smith, Carried.
Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

10. **DISCUSSION ITEMS**

a. Community Calendar

Marketing and Communications Director Kailey Rhoten and Tera Wick of Ridgway spoke of a county-wide calendar proposal for Ouray, Montrose, Ridgway and Telluride, and spoke of the need for Ouray's inclusion in a consolidated local community calendar. Mayor Funk asked who would administer ADA compliance. Cassie from Localist said their platform has a high level of compliance with state and federal ADA requirements, but was unsure how the legality would fall if a situation came up. The cost would be $5192 per entity, equally shared. Councilor Gulde spoke of the need for constancy in an events calendar. Mayor Funk agreed that the City needs this.

b. Review of City Committees

c. Future Agenda Items

11. **ADJOURNMENT**

Motion to adjourn at 9:14 pm. This motion, made by Josh Smith and seconded by Tamara Gulde, Carried. Ethan Funk: Yea, Tamara Gulde: Yea, Josh Smith: Yea, Michael Underwood: Yea

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Ethan Funk, Mayor

ATTEST:

_____

Melissa M. Drake, City Clerk

CERTIFICATION

I, Sara Waldman, do hereby certify that I am the Deputy City Clerk of the City of Ouray, Ouray County, State of Colorado, and that the above minutes are a true and correct summary of the meeting of the Ouray City Council held on Monday, August 4, 2025. I further certify that the meeting was duly called and held, and that a quorum was present.

Dated this Monday, August 4, 2025.

_____

Sara Waldman, Deputy City Clerk

CITY OF OURAY COLORADO

P.O. Box 468
320 6th Avenue
Ouray, CO 81427
(970) 325-7211

Date: August 18, 2025
To: Ouray City Council
From: Michelle Metteer, City Administrator
Re: City Council Administration Report

Land Use 101 with Planning Commission
Community Development Director Dan Murphy led a land use educational session with the planning commission on August 6, 2025 which I attended. We discussed the value of the commission, the advisory nature of the work the commission conducts and how to ensure the quasi judicial review process is followed. Also covered were the tools for use by the planning commission, Ouray Municipal Code, Community Plan, etc. and how to use those tools as part of the decision making process.

Ice Park Advisory Team Meeting (IPAT)
I attended the quarterly IPAT meeting on August 6, 2025. The group was provided the update of next steps pertaining to the OWOF initiative and once the City staff has the engineered drawings for the pump, we will move forward with our review of anticipated annual maintenance and labor costs. We will also review the recommended steps for moving the Ice Park out of the Pool Enterprise Fund.

City Committee Recommendations
Since bringing forward the recommendations for consolidation of City committees, primarily folding in the Ouray Economic Development Committee (OEDC) and the Tourism Advisory Committee (TAC), we've had the opportunity to hear from committee members who believe there is value in maintaining individuality in certain committees, especially the OEDC.

My goal with this initiative was to find ways to increase efficiency in the variety of the City committees. Additionally, I will always support community involvement, so we are at a point where there may need to be a reconsideration of how best to move forward. I did speak with the State of Colorado DOLA Main Street representatives who advised the following; the Main Street Committee is best when it consists of a board between 7-11 members. At-large seats are allowed and there are no specific state mandates for any particular seats (like having seats from other committees, etc.).

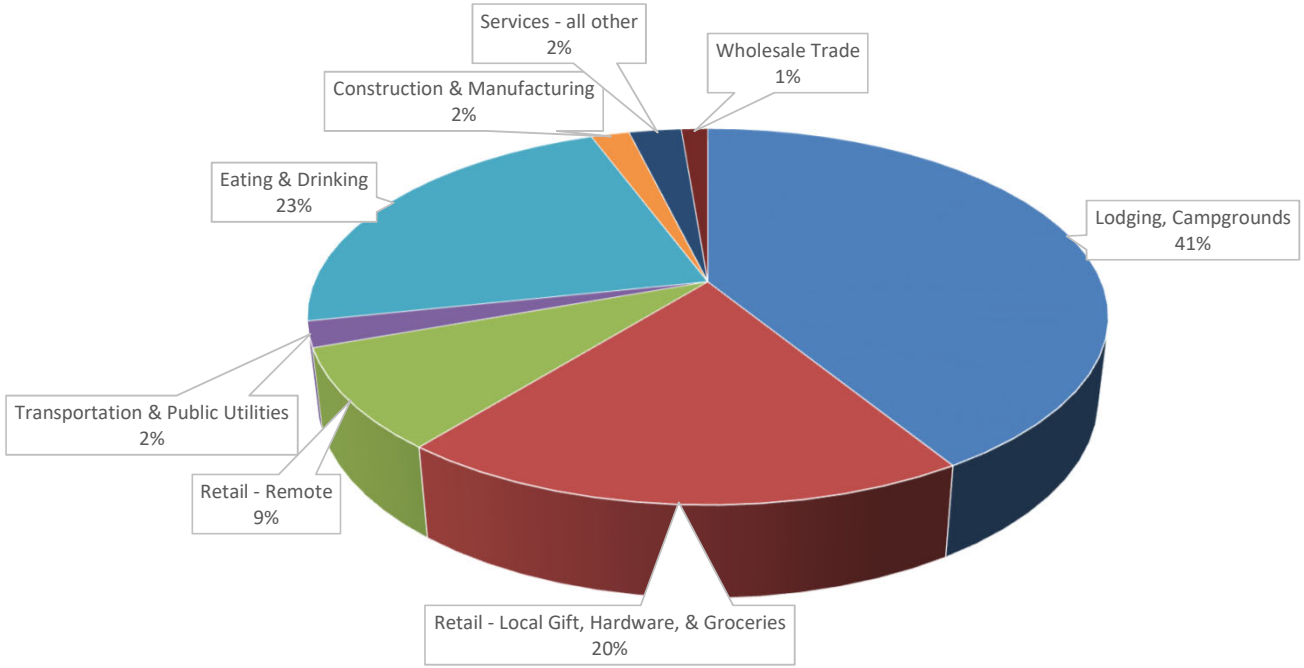
Also, with my limited time in Ouray, it sounds like there was never an issue maintaining a quorum with the TAC committee, so I'd like to make that correction - my apologies for this error. There may still be a value to incorporating TAC into Main Streets as the Main Street Committee is allowed to have sub committees. I can elaborate on this effort further during staff updates.

Wastewater Treatment Plant (WWTP) Review
Staff continues to work on improvements at the WWTP. We have found ourselves in a holding pattern on a few items that are either out for repair or being reviewed by the manufacturer, so we are taking this time to do a deeper dive into the root issue of the odor. We believe bringing in a forensic engineer will help our team evaluate the facility to find possible culprits to this issue.

Free In-Town Shuttle Update
Council member Josh Smith and I met with the Telluride representative to discuss next steps in getting the shuttle service up and running. This is a bigger lift than some folks seem to understand so I want to break out the action items we are executing to bring this program to fruition.

- Temporary Shuttle Stop signage has been delivered and we are awaiting the sign bases for installation.
- A 14-passenger shuttle with ADA accessibility has arrived and a test drive was conducted on August 12, 2025.
- Shuttle signage is being ordered which will identify the vehicle as the “Free in-Town Shuttle”
- CDOT permit application is being submitted for approval.

City of Ouray
June 2025 Sales Tax Revenues by Business Category
(received in August 2025)



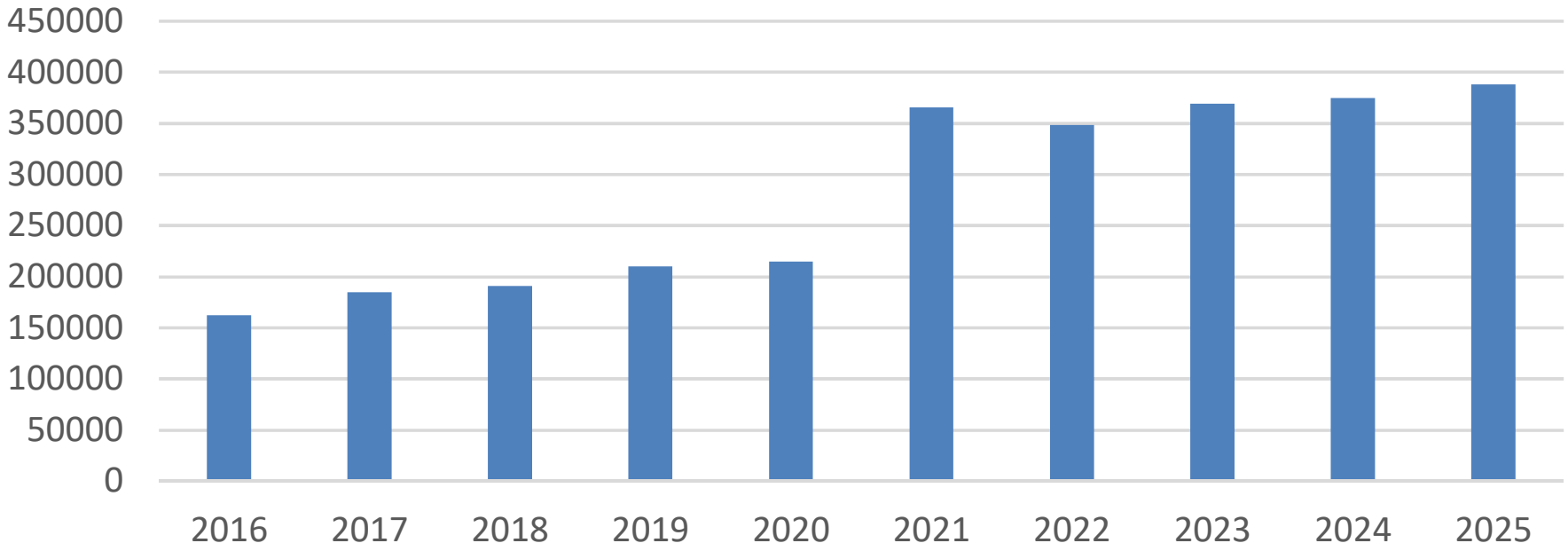
CITY OF OURAY

2025 MONTHLY SALES TAX REVENUES BY BUSINESS CATEGORY

(1) Month tax received from State of Colorado, representing sales from two months earlier (e.g. tax shown as APRIL is mostly from FEBRUARY)

2025 SALES TAX REVENUES BY BUSINESS CATEGORY							
(1)	Funds received by City in: July (mostly re: May)						
Business Category	January	February	March	April	May	June	
Lodging, Campgrounds	$ 32,707.60	$ 61,038.62	$ 52,880.88	$ 47,165.36	$ 53,355.64	$ 39,389.08	
Retail - Local Gift, Hardware, & Groceries	$ 27,124.53	$ 33,924.66	$ 29,458.68	$ 28,756.14	25,277.20	$ 20,566.19	
Retail - Remote	$ 22,614.06	$ 31,898.09	$ 24,812.28	$ 22,337.10	20,371.33	$ 24,363.75	
Transportation & Public Utilities	10,901.88	13,647.55	14,514.51	13,677.96	12,126.16	10,515.25	
Eating & Drinking	18,360.30	27,751.32	28,404.66	23,271.59	23,548.03	16,249.14	
Construction & Manufacturing	7,048.89	6,716.06	4,621.87	6,097.70	7,755.39	5,042.42	
Services - all other	1,882.55	3,060.50	2,443.60	1,598.30	2,643.93	1,562.54	
Wholesale Trade	1,038.43	1,568.99	1,779.29	1,518.80	1,801.78	1,207.52	
TOTAL	**$ 121,678.24**	**$ 179,605.79**	**$ 158,915.77**	**$ 144,422.95**	**$ 146,879.46**	**$ 118,895.89**	
Business Category	July	August	September	October	November	December	Year-to-date
Lodging, Campgrounds	$ 121,534.63	$ 159,933.29					$ 568,005.10
Retail - Local Gift, Hardware, & Groceries	$ 47,958.17	$ 75,910.08					$ 288,975.65
Retail - Remote	$ 25,889.20	$ 33,652.45					$ 205,938.26
Transportation & Public Utilities	8,693.28	8,567.91					92,644.50
Eating & Drinking	43,940.63	88,021.73					269,547.40
Construction & Manufacturing	7,587.41	7,146.22					52,015.96
Services - all other	1,662.10	9,802.80					24,656.32
Wholesale Trade	2,283.05	4,948.72					16,146.58
TOTAL	**$ 259,548.47**	**$ 387,983.20**	**$ -**	**$ -**	**$ -**	**$ -**	$ 1,517,929.77

CITY OF OURAY
JUNE SALES TAX REVENUE COMPARISON
Over Past 10 Years



Notes: Figures represent revenue received in August
Sales Tax increased from 3% to 4% on January 1, 2016

CITY OF OURAY

SALES TAX REVENUES BY BUSINESS CATEGORY 2016-2025

SALES TAX REVENUES BY BUSINESS CATEGORY

Business Category	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lodging,campgrnds.	$ 55,324.64	$ 63,765.37	$ 68,542.45	$ 78,071.91	$ 68,221.11	$ 129,779.20	$ 120,413.40	$ 153,753.34	$ 153,487.93	$ 159,933.29
Retail - Local Gift, Hardware, & Groceries				40,820.67	46,147.82	80,564.94	$ 77,459.81	$ 77,029.12	$ 80,730.09	$ 75,910.08
Retail - Remote				24,312.87	34,366.94	40,279.62	$ 33,912.32	$ 29,745.62	$ 28,168.78	$ 33,652.45
Retail - groceries,liquor, candy, hardw	22,822.35	25,816.91	31,692.02							
Retail - gift, souvenir, variety, books	15,458.95	16,464.30	16,126.98							
Trans & Pub. Util.	6,497.76	7,278.84	6,461.56	8,159.57	7,004.14	8,758.71	8,968.41	8,903.44	8,656.73	8,567.91
Eating & Drinking	31,311.17	38,079.29	37,277.57	53,058.86	42,780.09	77,486.17	81,135.99	75,236.23	79,577.26	88,021.73
Const. & Manufacturing	17,055.95	19,305.80	17,779.93	1,785.74	3,246.39	8,930.58	7,405.18	4,834.01	8,682.42	7,146.22
Services - all other	7,532.16	7,776.20	6,437.73	2,508.36	10,635.22	15,429.77	13,784.39	11,907.70	11,502.76	9,802.80
Finance, Ins. Real Estate	5,928.52	6,384.33	6,072.96							
Wholesale Trade	372.21	179.77	369.08	1,734.70	2,179.91	4,394.10	5,437.80	7,595.64	4,033.59	4,948.72
Mining		-								
All Other	321.00	-								
TOTAL	**$ 162,624.71**	**$ 185,050.81**	**$ 190,760.28**	**$ 210,452.68**	**$ 214,581.62**	**$ 365,623.09**	**$ 348,517.30**	**$ 369,005.10**	**$ 374,839.56**	**$ 387,983.20**
			$5,980.84 out-of-period	$7,610.97 out-of-period	$6,064.44 out-of-period	$10,302.66 out-of-period	$15,651.62 out-of-period	$12,457.87 out-of-period	$7,916.00 out-of-period	$7,476.43 out-of-period

Year to Date Sales Tax Comparison

			Percentage Change from 2024
June 2024 Activity	$	374,839.56	
June 2025 Activity	$	387,983.20	**3.51%**
Jan-June 2024 Activity	$	1,164,747.04	
Jan-June 2025 Activity	$	1,216,645.74	**4.46%**

City of Ouray Hot Springs Pool and Fitness Center - Visitor and Revenue Trends

(Source: Point of Sale Software)

VISITORS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	% change from 2024
January	9,287	36	9,392	8,553	8,149	4,961	5,258	6,871	7,152	7,958	11.27%
February	9,095	13	7,342	5,970	7,836	4,824	6,660	5,599	5,592	7,369	31.78%
March	10,087	58	10,468	9,118	3,638	7,697	8,621	7,148	8,426	10,250	21.65%
April	6,195	16	7,048	5,481	-	7,104	5,249	4,693	6,578	6,626	0.73%
May	12,065	2,984	13,346	11,397	-	11,580	9,549	10,602	11,201	12,418	10.87%
June	22,404	18,175	24,764	24,525	1,540	25,977	20,156	23,206	22,419	23,465	4.67%
July	36,116	37,483	35,943	36,986	6,416	30,994	26,286	32,117	32,654	29,525	-9.58%
August	22,353	25,486	23,936	23,274	12,622	22,179	19,101	21,170	20,874		
September	9,258	16,065	16,397	14,833	11,946	13,612	14,652	15,634	15,208		
October	62	9,834	8,771	9,596	10,699	9,368	10,135	11,035	12,238		
November	49	7,077	7,043	6,920	4,644	6,782	5,354	6,326	6,851		
December	47	10,753	9,046	8,174	4,439	6,317	6,510	8,152	8,816		
TOTAL YEAR	**137,018**	**127,980**	**173,496**	**164,827**	**71,929**	**151,395**	**137,531**	**152,553**	**158,009**		

REVENUE	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	% change from 2024
January	$ 85,983.09	$ 2,189.00	$ 89,885.46	$ 95,701.53	$ 99,306.81	$ 66,989.85	$ 63,150.43	$ 96,783.56	$ 121,260.10	$ 140,810.60	16.12%
February	$ 78,569.69	$ 724.00	$ 70,970.13	$ 65,918.59	$ 97,215.12	$ 61,086.55	$ 85,924.20	$ 112,926.04	$ 105,565.18	$ 153,097.35	45.03%
March	$ 84,745.80	$ 1,012.00	$ 102,232.15	$ 108,526.39	$ 47,810.30	$ 106,419.45	$ 126,759.01	$ 120,467.93	$ 145,888.18	$ 190,605.89	30.65%
April	$ 52,112.54	$ 2,234.00	$ 72,957.12	$ 62,025.47	$ -	$ 98,819.49	$ 152,003.71	$ 133,097.92	$ 119,178.58	$ 132,369.64	11.07%
May	$ 108,047.29	$ 123,474.60	$ 155,881.40	$ 138,237.34	$ -	$ 162,720.12	$ 143,279.82	$ 208,335.74	$ 275,871.30	$ 253,207.30	-8.22%
June	$ 211,853.56	$ 166,974.02	$ 317,542.31	$ 311,093.17	$ 19,273.04	$ 352,538.72	$ 321,377.13	$ 469,321.85	$ 469,363.01	$ 534,623.93	13.90%
July	$ 332,026.16	$ 479,802.39	$ 455,519.84	$ 474,330.32	$ 74,169.01	$ 428,489.09	$ 452,460.99	$ 646,348.28	$ 660,284.72	$ 672,522.79	1.85%
August	$ 198,465.34	$ 326,151.96	$ 308,882.04	$ 295,953.46	$ 165,977.58	$ 312,872.14	$ 316,183.52	$ 419,353.80	$ 423,754.26	$ -	
September	$ 80,149.87	$ 184,807.92	$ 200,777.07	$ 188,131.33	$ 158,666.78	$ 186,412.51	$ 238,796.90	$ 283,459.93	$ 278,649.03	$ -	
October	$ 2,737.00	$ 82,537.92	$ 99,235.68	$ 120,843.43	$ 145,302.53	$ 131,806.01	$ 170,555.12	$ 211,284.83	$ 223,633.93	$ -	
November	$ 1,796.25	$ 62,435.74	$ 84,885.49	$ 83,976.37	$ 58,403.16	$ 88,639.21	$ 84,930.60	$ 107,867.28	$ 119,193.83	$ -	
December	$ 1,957.00	$ 112,212.40	$ 111,645.98	$ 105,050.32	$ 60,304.81	$ 79,891.78	$ 94,844.99	$ 156,882.10	$ 163,777.30	$ -	
TOTAL YEAR	**$ 1,238,443.59**	**$ 1,544,555.95**	**$ 2,070,414.67**	**$ 2,049,787.72**	**$ 926,429.14**	**$ 2,076,684.92**	**$ 2,250,266.42**	**$ 2,966,129.26**	**$ 3,106,419.42**		

CITY OF OURAY BOX CAŇON FALLS VISITOR CENTER - VISITOR AND REVENUE TRENDS

VISITORS

	2018		2019		2020		2021		2022		2023		2024		2025		Incr./Decr. Visitors	25 vs. 24 %
MAY	6048		4065				8454		7619		6044		8269		9408		1,139	13.77%
JUNE	11793		13729		9252		20138		17165		18154		21202		21475		273	1.29%
JULY	17819		20914		21473		23929		20702		25595		27765		28270		505	1.82%
AUGUST	11737		13872		17086		15821		14428		16211		17802					
SEPTEMBER	8914		9903		14033		12245		13207		14331		14698					
OCTOBER	3963		5721		10540		8022		9416		9727		11019					
TOTAL VISITORS	**60,274**		**68,204**		**72,494**		**88,696**		**82,827**		**90,062**		**100,755**				**1,917**	

REVENUES

	2018		2019		2020		2021		2022		2023		2024		2025		Incr./Decr.	25 vs. 24
	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	Adm.	Conc.	$	%
MAY	$ 25,699.50	$ 2,682.41	$ 21,118.11	$ 2,427.75			$ 37,554.63	$ 4,489.23	$ 33,477.00	$ 4,754.40	$ 37,736.00	$ 3,803.27	$ 51,247.50	$ 5,375.13	$ 58,268.50	$ 9,271.25	$ 10,917.12	19.28%
JUNE	$ 50,013.95	$ 5,058.44	$ 62,137.51	$ 6,338.97	$ 41,263.44	$ 2,884.13	$ 86,023.51	$ 11,273.73	$ 72,989.00	$ 8,865.86	$ 111,214.00	$ 13,288.56	$ 130,034.00	$ 12,849.07	$ 130,777.50	$ 18,230.59	$ 6,125.02	4.29%
JULY	$ 75,561.60	$ 7,576.29	$ 89,005.01	$ 8,540.88	$ 92,936.75	$ 5,933.87	$ 102,023.52	$ 12,507.75	$ 87,714.00	$ 10,907.87	$ 157,280.91	$ 16,153.30	$ 169,685.00	$ 10,291.93	$ 171,495.00	$ 23,085.75	$ 14,603.82	8.11%
AUGUST	$ 50,370.69	$ 5,159.73	$ 59,804.50	$ 5,944.70	$ 75,438.78	$ 5,170.58	$ 68,804.43	$ 8,937.53	$ 61,701.00	$ 8,385.38	$ 100,420.32	$ 11,353.36	$ 110,588.50	$ 7,754.67				
SEPTEMBER	$ 39,016.59	$ 3,853.74	$ 43,140.50	$ 4,469.76	$ 62,818.85	$ 4,760.34	$ 54,165.46	$ 7,832.49	$ 56,163.00	$ 7,721.29	$ 89,131.98	$ 9,911.90	$ 91,123.00	$ 9,619.60				
OCTOBER	$ 17,605.00	$ 2,358.41	$ 24,735.00	$ 2,398.45	$ 46,641.76	$ 3,253.98	$ 35,177.89	$ 4,531.50	$ 41,064.00	$ 5,773.08	$ 60,297.50	$ 5,516.12	$ 67,778.00	$ 8,870.30				
TOTAL $	**$ 258,267.33**	**$ 26,689.02**	**$ 299,940.63**	**$ 30,120.51**	**$ 319,099.58**	**$ 22,002.90**	**$ 384,124.45**	**$ 49,614.46**	**$ 354,402.00**	**$ 46,439.77**	**$ 556,080.71**	**$ 60,026.51**	**$ 620,456.00**	**$ 54,760.70**	**$ 360,541.00**	**$ 50,587.59**	**$ 31,645.96**	

Admission rate increased by $1.00 in 2018

opened May 12, 2023
Admission rate increased by $2.00 in 2023

CITY OF OURAY VISITOR CENTER - REVENUE TRENDS

REVENUES

	2022		2023			2024			2025			Incr./Decr.	25 vs. 24
	Concessions	**Non-Profit**	**Concessions**	**Non-Profit**	**OHV**	**Concessions**	**Non-Profit**	**OHV**	**Concessions**	**Non-Profit**	**OHV**		
January			$ 228.95	$ 53.00		$ 284.11	$ 25.00	$ -	$ 149.25	$ 95.00	$ -	$ (64.86)	-21%
February			$ 150.89	$ 85.95		$ 438.62	$ 36.00	$ -	$ 519.70	$ 140.00	$ -	$ 185.08	39%
March			$ 395.38	$ 4.00		$ 773.27	$ 111.00	$ -	$ 764.72	$ 95.00	$ -	$ (24.55)	-3%
April			$ 403.25	$ 2.00	$ 50.50	$ 713.73	$ 25.00	$ -	$ -	$ -	$ -	$ (738.73)	-100%
May			$ 1,098.28	$ 611.60	$ 126.25	$ 2,281.10	$ 88.00	$ 126.25	$ 1,362.42	$ 150.00	$ 75.75	$ (907.18)	-36%
June			$ 1,627.77	$ 690.75	$ 202.00	$ 3,035.75	$ 498.00	$ 325.25	$ 3,100.22	$ 120.00	$ 505.00	$ (133.78)	-3%
July	$ 910.80	$ 215.00	$ 2,517.75	$ 664.60	$ 782.75	$ 3,369.09	$ 277.00	$ 252.50	$ 5,390.44	$ 175.00	$ 1,338.25	$ 3,005.10	77%
August	$ 1,281.05	$ 684.85	$ 2,669.69	$ 648.85	$ 378.75	$ 2,360.70	$ 387.00	$ 378.75					
September	$ 1,814.71	$ 676.95	$ 2,834.91	$ 698.00	$ 75.75	$ 3,482.57	$ 360.00	$ 277.75					
October	$ 1,383.05	$ 275.00	$ 1,096.11	$ 253.00	$ 227.25	$ 1,636.08	$ 225.00	$ 50.50					
November	$ 380.36	$ 121.00	$ 354.94	$ 40.00	$ -	$ 160.37	$ 60.00	$ -					
December	$ 516.45	$ 79.00	$ 233.25	$ -	$ -	$ 477.79	$ -	$ -					
TOTAL $	**$ 6,286.42**	**$2,051.80**	**$ 13,611.17**	**$ 3,751.75**	**$ 1,843.25**	**$ 19,013.18**	**$2,092.00**	**$ 1,411.00**	**$ 11,286.75**	**$ 775.00**	**$ 1,919.00**	**$ 1,321.08**	
		$ 8,338.22			$ 19,206.17			$ 22,516.18			$ 13,980.75		
percent of sales earning profit		75%			71%			84%			81%		

320 6th Avenue
PO Box 468
Ouray, Colorado 81427

CITY OF OURAY COLORADO

970.325.7211
Fax 970.325.7212
info@cityofouray.com

Community Development Department
City Council Update
August 18, 2025

Members of the City Council,

The Community Development Department is showing strong progress across all fronts, with a healthy pace of activity during this peak building season. Our workload reflects steady growth in community projects, and general operations continue to move forward smoothly. Our team is focused on keeping momentum strong as we work to support the City's goals and meet the needs of our residents.

Noteworthy updates are outlined below:

- Community Development Director drafted the "Community Development Department Permit Application Submittal Standard Operating Procedures."
    - Intended to provide clear procedural policy to Department staff to ensure efficient processing of land use applications.
- Community Development Director submitted an extension application to the Department of Local Affairs (DOLA) in request for an additional one year for the EIAF Grant that was awarded to the Home Trust for the Riverwalk Affordable Rentals project.
    - General update from the Home Trust is hopeful to break ground in the spring for construction of the development.
- Community Development Director has begun meeting with City Council members either in pairs or individually.
- Community Development Director hosted "Land Use Planning 101" with the City of Ouray's Planning Commission on August 6, 2025.
    - Thanks to all who attended!
- Established a new email account to be used as a central repository for application submittals and general community development inquiries. planning@cityofouray.com
    - The account is not live as of yet; a formal notice will be posted on the website and in other areas prior to activation.
- The City internally worked through the first review and submittal of the recently adopted Deed Restriction template for an application submitted by Home Trust.
- The City has been contacted by the consultants for a pre-application meeting regarding the re-development of the Ouray Hot Springs bathhouse.

We look forward to a strong push as we close out the summer, keeping projects and priorities moving forward. This fall, we will hold a work session on bed and breakfasts, lighting, continue refining several code amendments, and working with the City's Police Department to formalize code enforcement efforts.

Thank you for your commitment to the City of Ouray and its constituents.

Sincerely,



Daniel J. Murphy
Community Development Director

July - August 2025 IT Highlights

- Working with a web developer to improve code on VisitOuray site for accessibility. P1/P2 findings are now **81%** compliant from 45% prior. Still working to be compliant above 90%. The main City website is 100% P1/P2 accessibility compliant.
- Provided Adobe Pro for PD Admin and City Manager..
- Assisted Hot Springs to make sure Meta account posts went to Hot Springs Instagram appropriately
- Staff Onboarding / Offboarding IT work
- Debugged Spare Credit card readers to make sure they are on the Rev B, fastest version
- IT Budget numbers for 2025, 2026 and capital completed.
- Cleaned up a few buttons, links, and added email contact information on the Hot Springs membership site to make it more useful.
- Working on an iPad with wall mount for Hot Springs membership usage
- Provided apps to devices for Parks Manager for workflow tracking.
- Mountain Air assistance with Wifi in Fellin Park
- Server, Network and Finance software updates were completed

A DECLARATION OF CITY OF OURAY, COLORADO STAGE 2 FIRE RESTRICTIONS (DECLARATION NO. 2, 2025)

WHEREAS, the Mayor of the City of Ouray, Colorado (Mayor) pursuant to the City of Ouray Charter Section 2.3 (A) and City of Ouray Code Section 2-8 has the authority to declare a local disaster emergency to exist when, in the Mayor's opinion, there is an occurrence or imminent threat of widespread or severe damage, injury, loss of life or property, resulting from any cause of human origin, including but not limited to fire,

WHEREAS, the Mayor believes the need to declare Stage 2 Fire Restrictions; and

WHEREAS, these restrictions will remain in place until further notice and unless otherwise revised or rescinded by City Council; and

NOW, THEREFORE, BE IT DECLARED BY THE MAYOR OF THE CITY OF OURAY, COLORADO, that:

THE FOLLOWING ACTIVITIES ARE BANNED UNDER STAGE 2 FIRE RESTRICTIONS:

1. Building, maintaining, attending an Open Flame, 36 CFR 261.52(a), including camp fire, stove fire, charcoal grills and barbeques, coal and wood burning stoves and devices (stoves, grills, or lanterns) using liquid fuel such as white gas or kerosene. Except: devices (stoves, grills or lanterns) using pressurized gas canisters (isobutene or propane) that include shut-off valves or within a closed vehicle or building.
2. Smoking, 36 CFR 261.52(c). Except: Within an enclosed vehicle or building, a developed recreation site, or while stopped in an area at least three feet in diameter that is barren or cleared of all flammable material.
3. Welding or operating acetylene or other torch with open flame. 36 CFR 261.52(i)
4. Using an explosive. 36 CFR 261.52(b). This includes but is not limited to fuses or blasting caps, fireworks, rockets, exploding targets, and tracers or incendiary ammunition. This declaration includes July 4th Fireworks by the Fire Department.
5. Operating or using any internal combustion engine, or spark creating tools (e.g. grinders, chainsaw, generator, ATV) without a spark arresting device properly installed, maintained and in effective working order meeting USDA Forest Service or SAE approval.
6. Operating a chainsaw without an approved spark arresting device as described above, a chemical pressurized fire extinguisher (8oz capacity by weight or larger and kept with the operator) and a round point shovel with an overall length of at least 35 inches readily available for use, or outside of the restricted hours of 5am-1pm. 36 CFR 261.52(h)
7. Discharging a firearm, air rifle, or gas gun. 36 CFR 261.52(h).

THE FOLLOWING ACTIVITIES ARE PERMITTED UNDER STAGE 2 FIRE RESTRICTIONS:

1. Authorized activities of any Federal, State or local officer, or member of an organized rescue or firefighting effort in the performance of an official duty.

Now, therefore, I, Ethan Funk, Mayor of the City of Ouray hereby declares: STAGE 2 FIRE RESTRICTIONS effective August 12, 2025 at 12:01am.

CITY OF OURAY, COLORADO

By _____
Ethan Funk, Mayor

ATTEST:

Melissa M. Drake
Melissa M. Drake, City Clerk

X:\Clerk\Council\Declarations\2025\Declaration 2 2025 Stage 2 Fire Restrictions.docx

CITY OF OURAY

ORDINANCE NO. 03 (Series 2025)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF OURAY, COLORADO ADDING A PENALTIES AND FINES SECTION TO CHAPTER 7-7-K OF THE OURAY MUNICIPAL CODE.

WHEREAS, on March 3, 2025, City Council adopted Ordinance 01 (Series 2025) adopting regulation incentivizing affordable housing under OMC 7-7-K ;

WHEREAS, adoption of remedies and penalties for violations along language concerning the fine schedule are necessary because the City is issuing its first deed restriction under the new affordable housing regulations and no penalty and fine mechanism was established; and

WHEREAS, this Ordinance is adopted for the health, safety, and welfare of the public.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF OURAY, COLORADO, as follows:

SECTION 1: ADDITION

A new Section 3 of Section 7-7-K of Chapter 7 is added as follows:

3. Penalties and Fines for Violations

i. It shall be unlawful to violate any covenant contained in a deed restriction executed in connection with these affordable, attainable or workforce housing regulations and such violation is declared a nuisance and may be abated by the City in accordance with its nuisance regulations, in addition to any other remedies that may be available to the City.

ii. Penalties for violations may be assessed and shall be governed by a fine schedule adopted by City Council from time to time.

iii. Any remedies provided herein shall be cumulative and not exclusive and shall be in addition to any other remedies provided by law or equity.

iv. Each day of a violation constitutes a separate violation.

SECTION 2: EFFECTIVE DATE

The provisions of this Ordinance shall become effective thirty (30) days following publication.

SECTION 3: SEVERABILITY

If any clause, sentence, paragraph, or part of this ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

INTRODUCED, READ, APPROVED AS INTRODUCED, AND ORDERED PUBLISHED on first reading by _____vote of the Ouray City Council this 18th day of August 2025.

CITY OF OURAY, COLORADO

_____
Ethan Funk, Mayor

ATTEST:

_____
Melissa M. Drake, City Clerk

INTRODUCED, READ, AND ADOPTED on second reading by _____vote of the Ouray City Council this _____ day of September 2025.

CITY OF OURAY, COLORADO

_____
Ethan Funk, Mayor

ATTEST:

_____
Melissa M. Drake, City Clerk

CERTIFICATE OF ATTESTATION

I, Melissa M. Drake, Ouray City Clerk, hereby certify that Ordinance No. 03 (Series No. 2025), was introduced, read, and passed by the Ouray City Council on first reading on August 18, 2025. The Ordinance was published, in summary, in the *Ouray County Plaindealer* on _____, 2025 and thereafter introduced, read, and adopted by the Ouray City Council on _____, 2025, and thereafter published in the *Ouray County Plaindealer*, as required by law.

_____
Melissa M. Drake, City Clerk

CITY OF OURAY

ORDINANCE NO. 01 (Series 2025)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF OURAY, COLORADO ADDING CHAPTER 7-7-K OF THE OURAY MUNICIPAL CODE TO REGULATE AFFORDABLE, ATTAINABLE, OR WORKFORCE HOUSING; AND ADOPTION OF AN OFFICIAL DEED RESTRICTION AND COVENANT AGREEMENT TEMPLATE BY REFERENCE TO BE EXECUTED AS A REQUIREMENT OF THESE REGULATIONS.

WHEREAS, Staff and the City Council have spent the previous two years studying affordable housing incentives by local governments and attending various classes and educational opportunities to learn what incentives are offered at the state and federal level for building affordable housing stock within the local community;

WHEREAS, City Council held a properly noticed work session on November 18, 2024 and February 3, 2025 to discuss deed restrictions and building incentives as a permitted use in the R-2 zone and within the Mixed-Use Overlay District and City Council further discussed these deed restriction regulations at the regular City Council meeting held on January 21, 2025;

WHEREAS, this Ordinance is adopted for the health, safety, and welfare of the public.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF OURAY, COLORADO, as follows:

SECTION 1: ADDITION

Section 7-7-K of Chapter 7 is added as follows:

K. *Affordable, Attainable, or Workforce Housing*

1. Applicability

i. The incentives apply to any application for Development Review under OMC 7-5 submitted to the City for the development or re-development of a parcel of land where five (5) dwelling units or less will be located.

ii. These incentives shall be a use by right within the Residential – High Density (R-2) zone district or the Mixed-Use Overlay District.

iii. These regulations require a deed restriction and covenant to be executed by the real property owner which will run with the land and be binding on all successors or assigns. A copy of the Official Deed Restriction and Covenant Agreement, as amended from time to time, shall be maintained in the City Clerk's office available for public inspection.

iv. The terms contained in the Official Deed Restriction and Covenant agreement are incorporated herein by reference and are required to be met by Applicant.

2. Incentives

i. Increased Density. The maximum density for each Dwelling Unit shall be 1,500 sq. ft.

ii. Reduced Off-Street Parking. The off-street parking requirements shall be reduced by one (1) parking space for every five (5) required off-street parking spaces under Table 7-8-E. To the extent these parking requirements cause a hardship in accordance with Section 7-5-D-4, a variance may be requested.

iii. Reduced Permit Fees. Applicants that add three (3) or more dwelling units that are restricted by deed under these regulations shall receive a fifty percent (50%) reduction in the Building Permit fees assessed by the City.

iv. EQR Off-Set Program. To the extent that the City of Ouray maintains an EQR off-set program where dwelling unit occupants are afforded credits toward the City water and sewer utility invoices, any qualified

occupants residing in dwelling units permitted herein shall automatically be enrolled in such a program.

v. Permit Process Priority. To the extent City staff has adequate time, any application submitted under these regulations shall receive priority in the City land use review process.

SECTION 2: EFFECTIVE DATE

The provisions of this Ordinance shall become effective thirty (30) days following publication.

SECTION 3: SEVERABILITY

If any clause, sentence, paragraph, or part of this ordinance or the application thereof to any person or circumstances shall for any reason be adjudged by a court of competent jurisdiction invalid, such judgment shall not affect application to other persons or circumstances.

INTRODUCED, READ, APPROVED AS INTRODUCED, AND ORDERED PUBLISHED on first reading by 5 TO 0 vote of the Ouray City Council this 18th day of February 2025.

CITY OF OURAY, COLORADO

Ethan Funk, Mayor

ATTEST:

Melissa M. Drake

Melissa M. Drake, City Clerk

INTRODUCED, READ, AND ADOPTED on second reading by 5 TO 0 vote of the Ouray City Council this ~~the day of February~~ 3RD DAY OF MARCH 2025.

CITY OF OURAY, COLORADO

Ethan Fink, Mayor

ATTEST:

Melissa M. Drake

Melissa M. Drake, City Clerk

CERTIFICATE OF ATTESTATION

I, Melissa M. Drake, Ouray City Clerk, hereby certify that Ordinance No. 01 (Series No. 2025), was introduced, read, and passed by the Ouray City Council on first reading on February 18, 2025. The Ordinance was published, in summary, in the *Ouray County Plaindealer* on FEB. 20, 2025, 2025 and thereafter introduced, read, and adopted by the Ouray City Council on MAR. 6, _____, 2025, and thereafter published in the *Ouray County Plaindealer*, as required by law.

Melissa M. Drake

Melissa M. Drake, City Clerk

RESOLUTION NO. 16 (SERIES 2025)

A RESOLUTION OF CITY COUNCIL OF THE CITY OF OURAY, COLORADO APPROVING THE DEED RESTRICTION FOR A 835 2ND STREET AFFORDABLE HOUSING PROJECT.

WHEREAS, the Home Trust of Colorado, doing business as Hank's Place, LLC, applied to the City to convert a three-dwelling unit building on the real property located at 835 2nd Street, Ouray, Colorado to a five-unit building consisting of affordable dwelling units under Ouray Municipal Code (OMC) 7-7-K, taking advantage of density bonuses in exchange for a deed restricting the property; and

WHEREAS, on March 3, 2025, 2025, City Council approved entering a Letter of Intent with the Home Trust of Ouray County promising a $100,000.00 donation to the project by the City of Ouray in return for a deed restriction in the form adopted by City Council; and

WHEREAS, closing on the purchase of the real property is scheduled for September 2, 2025, and Council desires to approve the deed restriction, authorize the Mayor to sign any necessary closing documents at closing, and to direct the City finance department to wire the donation funds from City affordable housing dollars to the title company, in connection with the closing; and

WHEREAS the City Council finds that the deed restriction and donation advances in exchange for density bonuses, advances the health, safety and welfare of the general public.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF OURAY, COLORADO as follows:

1. Council approves the deed restriction attached hereto as Exhibit A.

2. Council hereby authorizes the mayor to execute any necessary closing documents and to effectuate the execution of the deed restriction in favor of the City.

3. Council directs staff to wire $100,000.00 from the short-term rental excise tax funds allocated for affordable housing to the title company for the clsoing.

ADOPTED this 18th day of August 2025 by the Ouray City Council.

CITY OF OURAY, COLORADO

_____
Ethan Funk, Mayor

ATTEST:

_____
Melissa M. Drake, City Clerk

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

- The IRS allows Housing Tax Credit projects that placed in service as of 12.31.2008 to use higher HERA Special limits.
- All Housing Tax Credit and CHFA Loan projects are "held harmless" from limit decreases. To be "held harmless," a project must be in service before 05.16.2024.
- Housing Tax Credit and CHFA Multifamily Loan projects whose counties experienced a decrease in 2024 limits and that place in service before 05.16.2024 may continue to apply the same limits they used in 2023.

County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Otero		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Otero		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Otero		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Otero		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Otero		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Otero		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Otero		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Otero		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Otero		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Otero		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Otero		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Otero		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Otero		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Ouray		160%	2,868	3,072	3,684	4,260	4,752	114,720	131,040	147,360	163,840	176,960	190,080	203,200	216,160
Ouray		150%	2,688	2,880	3,453	3,993	4,455	107,550	122,850	138,150	153,600	165,900	178,200	190,500	202,650
Ouray		140%	2,509	2,688	3,223	3,727	4,158	100,380	114,660	128,940	143,360	154,840	166,320	177,800	189,140
Ouray		130%	2,330	2,496	2,993	3,461	3,861	93,210	106,470	119,730	133,120	143,780	154,440	165,100	175,630
Ouray		120%	2,151	2,304	2,763	3,195	3,564	86,040	98,280	110,520	122,880	132,720	142,560	152,400	162,120
Ouray		110%	1,971	2,112	2,532	2,928	3,267	78,870	90,090	101,310	112,640	121,660	130,680	139,700	148,610
Ouray		100%	1,792	1,920	2,302	2,662	2,970	71,700	81,900	92,100	102,400	110,600	118,800	127,000	135,100
Ouray		90%	1,613	1,728	2,072	2,396	2,673	64,530	73,710	82,890	92,160	99,540	106,920	114,300	121,590
Ouray		80%	1,434	1,536	1,842	2,130	2,376	57,360	65,520	73,680	81,920	88,480	95,040	101,600	108,080
Ouray		70%	1,254	1,344	1,611	1,863	2,079	50,190	57,330	64,470	71,680	77,420	83,160	88,900	94,570
Ouray		60%	1,075	1,152	1,381	1,597	1,782	43,020	49,140	55,260	61,440	66,360	71,280	76,200	81,060
Ouray		55%	985	1,056	1,266	1,464	1,633	39,435	45,045	50,655	56,320	60,830	65,340	69,850	74,305
Ouray		50%	896	960	1,151	1,331	1,485	35,850	40,950	46,050	51,200	55,300	59,400	63,500	67,550
Ouray		45%	806	864	1,036	1,198	1,336	32,265	36,855	41,445	46,080	49,770	53,460	57,150	60,795
Ouray		40%	717	768	921	1,065	1,188	28,680	32,760	36,840	40,960	44,240	47,520	50,800	54,040
Ouray		30%	537	576	690	798	891	21,510	24,570	27,630	30,720	33,180	35,640	38,100	40,530
Ouray		20%	358	384	460	532	594	14,340	16,380	18,420	20,480	22,120	23,760	25,400	27,020

Implementation Cutoff Date: May 16, 2024

chfa.

2025 Income Limit and Maximum Rent Tables
for All Colorado Counties

HUD Effective Date: April 1, 2025

20% to 120% of Area Median Income (AMI) [20% to 160% AMI for rural resort counties]

- The IRS allows Housing Tax Credit projects that placed in service as of 12.31.2008 to use higher HERA Special limits.
- All Housing Tax Credit and CHFA Loan projects are "held harmless" from limit decreases. To be "held harmless," a project must be in service before 05.16.2025.
- Housing Tax Credit and CHFA Multifamily Loan projects whose counties experienced a decrease in 2025 limits and that place in service before 05.16.2025 may continue to apply the same limits used in 2024.

County	HERA	AMI	2025 Maximum Rents					2025 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Ouray		160%	2,928	3,136	3,764	4,348	4,852	117,120	133,760	150,560	167,200	180,640	194,080	207,360	220,800
Ouray		150%	2,745	2,940	3,528	4,076	4,548	109,800	125,400	141,150	156,750	169,350	181,950	194,400	207,000
Ouray		140%	2,562	2,744	3,293	3,804	4,245	102,480	117,040	131,740	146,300	158,060	169,820	181,440	193,200
Ouray		130%	2,379	2,548	3,058	3,532	3,942	95,160	108,680	122,330	135,850	146,770	157,690	168,480	179,400
Ouray		120%	2,196	2,352	2,823	3,261	3,639	87,840	100,320	112,920	125,400	135,480	145,560	155,520	165,600
Ouray		110%	2,013	2,156	2,587	2,989	3,335	80,520	91,960	103,510	114,950	124,190	133,430	142,560	151,800
Ouray		100%	1,830	1,960	2,352	2,717	3,032	73,200	83,600	94,100	104,500	112,900	121,300	129,600	138,000
Ouray		90%	1,647	1,764	2,117	2,445	2,729	65,880	75,240	84,690	94,050	101,610	109,170	116,640	124,200
Ouray		80%	1,464	1,568	1,882	2,174	2,426	58,560	66,880	75,280	83,600	90,320	97,040	103,680	110,400
Ouray		70%	1,281	1,372	1,646	1,902	2,122	51,240	58,520	65,870	73,150	79,030	84,910	90,720	96,600
Ouray		60%	1,098	1,176	1,411	1,630	1,819	43,920	50,160	56,460	62,700	67,740	72,780	77,760	82,800
Ouray		55%	1,006	1,078	1,293	1,494	1,667	40,260	45,980	51,755	57,475	62,095	66,715	71,280	75,900
Ouray		50%	915	980	1,176	1,358	1,516	36,600	41,800	47,050	52,250	56,450	60,650	64,800	69,000
Ouray		45%	823	882	1,058	1,222	1,364	32,940	37,620	42,345	47,025	50,805	54,585	58,320	62,100
Ouray		40%	732	784	941	1,087	1,213	29,280	33,440	37,640	41,800	45,160	48,520	51,840	55,200
Ouray		30%	549	588	705	815	909	21,960	25,080	28,230	31,350	33,870	36,390	38,880	41,400
Ouray		20%	366	392	470	543	606	14,640	16,720	18,820	20,900	22,580	24,260	25,920	27,600
Park		120%	2,943	3,153	3,783	4,372	4,878	117,720	134,520	151,320	168,120	181,680	195,120	208,560	222,000
Park		110%	2,697	2,890	3,467	4,008	4,471	107,910	123,310	138,710	154,110	166,540	178,860	191,180	203,500
Park		100%	2,452	2,627	3,152	3,643	4,065	98,100	112,100	126,100	140,100	151,400	162,600	173,800	185,000
Park		90%	2,207	2,364	2,837	3,279	3,658	88,290	100,890	113,490	126,090	136,260	146,340	156,420	166,500
Park		80%	1,962	2,102	2,522	2,915	3,252	78,480	89,680	100,880	112,080	121,120	130,080	139,040	148,000
Park		70%	1,716	1,839	2,206	2,550	2,845	68,670	78,470	88,270	98,070	105,980	113,820	121,660	129,500
Park		60%	1,471	1,576	1,891	2,186	2,439	58,860	67,260	75,660	84,060	90,840	97,560	104,280	111,000
Park		55%	1,348	1,445	1,733	2,004	2,235	53,955	61,655	69,355	77,055	83,270	89,430	95,590	101,750
Park		50%	1,226	1,313	1,576	1,821	2,032	49,050	56,050	63,050	70,050	75,700	81,300	86,900	92,500
Park		45%	1,103	1,182	1,418	1,639	1,829	44,145	50,445	56,745	63,045	68,130	73,170	78,210	83,250
Park		40%	981	1,051	1,261	1,457	1,626	39,240	44,840	50,440	56,040	60,560	65,040	69,520	74,000
Park		30%	735	788	945	1,093	1,219	29,430	33,630	37,830	42,030	45,420	48,780	52,140	55,500
Park		20%	490	525	630	728	813	19,620	22,420	25,220	28,020	30,280	32,520	34,760	37,000

Implementation Cutoff Date: May 16, 2025

RESOLUTION NO. 03 (SERIES 2025)

A RESOLUTION OF CITY COUNCIL OF THE CITY OF OURAY, COLORADO ADOPTING THE 2024 COLORADO MAXIMUM RENT CALCULATION FOR AFFORDABLE, ATTAINABLE OR WORKFORCE HOUSING REGULATIONS SET FORTH IN OURAY MUNICIPAL CODE SECTION 7-7-K.

WHEREAS City Council is authorized to set maximum rent charged for occupants of units developed for affordable, attainable or workforce housing under the Ouray Municipal Code, Section 7-7-K;

WHEREAS, the maximum rent calculation is determined by using Area Median Income (AMI) figures published by US Department of Housing and Urban Development ("HUD") and adopted by Colorado Housing and Finance Authority ("CHFA") to determine housing tax credit projects maximum rent charges for Ouray County, Colorado. They are published at: www.chfainfo.com;

WHEREAS the monthly AMI Rent Calculation is derived by taking thirty percent (30%) of the adjusted one-hundred and twenty percent (120%) AMI for a household size of two and dividing it by 12, which for 2024 is $2,457.0; and

WHEREAS City Council finds that the methods used to review and revise the AMI Rent Calculation for land use applications under OMC Section 7-7-K is appropriate and is hereby adopted for the health, safety, and welfare of the public.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF OURAY, COLORADO as follows:

1. The AMI Rent Calculation (Maximum rent allowed to be charged) for affordable, attainable or workforce housing development applications submitted under Ouray Municipal Code, Section 7-7-K is $2,457.00 regardless of the number of occupants.

ADOPTED this 18th day of February 2025 by the Ouray City Council.

CITY OF OURAY, COLORADO

Ethan Funk, Mayor

ATTEST:

Melissa M. Drake, City Clerk

chfa

denver
1981 Blake Street
Denver, CO 80202
303.297.chfa (2432)
800.877.chfa (2432)

PO Box 60
Denver, CO 80201
800.659.2656 tdd
www.chfainfo.com

western slope
348 Main Street
Grand Junction, CO 81501
970.241.2341
800.877.8450

memorandum

to: Multifamily Housing Owners and Managers

from: Chris J. Linton, Manager, Multifamily Program Compliance

date: April 8, 2024

subject: 2024 Colorado Income Limits and Maximum Rents for Developments with Housing Tax Credits and CHFA Multifamily Loans

Attached are the 2024 Colorado income limit and maximum rent tables. The tables are also available online at: www.chfainfo.com/rental-housing/asset-management/rent-income-limits.

On 04.01.2024, HUD released the FY2024 Multifamily Tax Subsidy Program income limits, effective 04.01.2024. IRS Revenue Ruling 94-57 allows taxpayers (i.e., Housing Tax Credit project owners) to rely on the previous year's income limits until 45 days after HUD has released new income limits, or until the effective date, whichever is later. CHFA applies the same timeframe to developments financed with CHFA multifamily loans. Therefore, the **2024 income and rent limits must be implemented no later than May 16, 2024.**

Exceptions: The IRS allows two types of protection from rent decreases: HERA Special limits and the hold harmless rule. While only some Housing Tax Credit projects may use HERA Special limits, all Housing Tax Credit projects are "held harmless" from decreases in limits. To identify the correct limits for your project, you must know its placed-in-service (PIS) date.

- In 2024, HERA Special limits are in place in ten Colorado counties. To apply HERA Special limits, a Housing Tax Credit project must have PIS as of 12.31.2008. HERA Special limits **do not apply** to properties that were not financed with Housing Tax Credits. Therefore, projects with CHFA multifamily loans and no tax credits may not use HERA limits.
- Remember, once your Housing Tax Credit project is placed in service, it is **not** subject to any decrease in limits. To be "held harmless," a Housing Tax Credit project must have PIS prior to the implementation date of the new limits. This year, Housing Tax Credit projects whose counties experienced a decrease in limits **and** PIS before 05.16.2024, may continue to apply the same limits they used in 2023.

  CHFA also extends this hold harmless protection to developments financed with CHFA multifamily loans, regardless of whether they were also financed with Housing Tax Credits.

- New projects that place in service on or after 05.16.2024, must use the 2024 income and rent limits.

Rent Increases: CHFA asks owners to be mindful of the impact on residents when considering any rent increases. CHFA does not require any owner to raise tenant rents, regardless of any increase in maximum rents, and owners may not attribute the cause of any tenant rent increase they implement to CHFA.

Any rent increases associated with higher maximum rents or utility allowance decreases may be implemented at lease renewal only and in accordance with Colorado state and local law. For the Housing Tax Credit and CHFA Loan programs, CHFA does not permit mid-lease term rent increases, unless required by the Section 8, USDA Rural Development, or similar rental assistance programs.

Utility Allowance Reminder: As a reminder, updated utility allowances must be implemented no sooner and no later than the first day immediately following the 90-day period that begins with the new utility allowance schedule's effective date. To remain compliant when allowances increase and tenant rent must be decreased not to exceed the maximum rent, ensure that rents are lowered immediately following the 90-day period. Do not wait until a household is due for annual recertification to lower rents. For detailed guidance and exceptions, see CHFA's Utility Allowance Policy for Housing Tax Credit and Multifamily Loan Developments at www.chfainfo.com/rental-housing/asset-management/lihtc-program-compliance.

Rural Resort Community Limits: In November 2022, Colorado voters passed Proposition 123, a ballot measure authorizing the state to retain money from existing state tax revenue to support affordable housing investment. On behalf of the Office of Economic Development and International Trade (OEDIT), CHFA administers the Colorado Affordable Housing Financing Fund to support land banking, equity, and debt investment. For new programs under Proposition 123, rent and income limits at 130, 140, 150, and 160 percent AMI have been added for Colorado's twelve rural resort communities. These include the following counties: Archuleta, Chaffee, Eagle, Grand, Gunnison, La Plata, Ouray, Pitkin, Routt, San Juan, San Miguel, and Summit.

CHFA Multifamily Program Compliance Manual: More information is also available in CHFA's manual at www.chfainfo.com/rental-housing/asset-management/lihtc-program-compliance.

- Section 4.1 Income Limits and Maximum Rents
- Section 4.2 Rent Restrictions

Questions: Please contact your CHFA Program Compliance Officer with any questions. To find your Program Compliance Officer, search on CHFA's website by city and/or property name at www.chfainfo.com/rental-housing/asset-management/welcome-chfa-asset-management#FindOfficer.

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

- The IRS allows Housing Tax Credit projects that placed in service as of 12.31.2008 to use higher HERA Special limits.
- All Housing Tax Credit and CHFA Loan projects are "held harmless" from limit decreases. To be "held harmless," a project must be in service before 05.16.2024.
- Housing Tax Credit and CHFA Multifamily Loan projects whose counties experienced a decrease in 2024 limits and that place in service before 05.16.2024 may continue to apply the same limits they used in 2023.

County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Adams		120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Adams		110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Adams		100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Adams		90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Adams		80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Adams		70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Adams		60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Adams		55%	1,255	1,345	1,614	1,865	1,937	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Adams		50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Adams		45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Adams		40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Adams		30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Adams		20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440
Alamosa		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Alamosa		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Alamosa		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Alamosa		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Alamosa		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Alamosa		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Alamosa		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Alamosa		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Alamosa		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Alamosa		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Alamosa		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Alamosa		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Alamosa		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

- The IRS allows Housing Tax Credit projects that placed in service as of 12.31.2008 to use higher HERA Special limits.
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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Arapahoe	120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Arapahoe	110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Arapahoe	100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Arapahoe	90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Arapahoe	80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Arapahoe	70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Arapahoe	60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Arapahoe	55%	1,255	1,345	1,614	1,865	1,937	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Arapahoe	50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Arapahoe	45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Arapahoe	40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Arapahoe	30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Arapahoe	20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440
Archuleta	160%	2,640	2,828	3,392	3,920	4,372	105,600	120,640	135,680	150,720	162,880	174,880	187,040	199,040
Archuleta	150%	2,475	2,651	3,180	3,675	4,098	99,000	113,100	127,200	141,300	152,700	163,950	175,350	186,600
Archuleta	140%	2,310	2,474	2,968	3,430	3,825	92,400	105,560	118,720	131,880	142,520	153,020	163,660	174,160
Archuleta	130%	2,145	2,297	2,756	3,185	3,552	85,800	98,020	110,240	122,460	132,340	142,090	151,970	161,720
Archuleta	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Archuleta	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Archuleta	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Archuleta	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Archuleta	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Archuleta	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Archuleta	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Archuleta	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Archuleta	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Archuleta	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Archuleta	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Archuleta	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Archuleta	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

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2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Baca		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Baca		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Baca		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Baca		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Baca		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Baca		70%	1,155	1,319	1,484	1,648	1,781	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Baca		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Baca		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Baca		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Baca		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Baca		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Baca		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Baca		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Bent		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Bent		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Bent		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Bent		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Bent		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Bent		70%	1,155	1,319	1,484	1,648	1,781	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Bent		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Bent		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Bent		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Bent		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Bent		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Bent		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Bent		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Boulder	*Y*	*60%*	*1,596*	*1,710*	*2,052*	*2,370*	*2,644*	*63,840*	*72,960*	*82,080*	*91,140*	*98,460*	*105,780*	*113,040*	*120,360*
Boulder	*Y*	*55%*	*1,463*	*1,567*	*1,881*	*2,172*	*2,424*	*58,520*	*66,880*	*75,240*	*83,545*	*90,255*	*96,965*	*103,620*	*110,330*
Boulder	*Y*	*50%*	*1,330*	*1,425*	*1,710*	*1,975*	*2,203*	*53,200*	*60,800*	*68,400*	*75,950*	*82,050*	*88,150*	*94,200*	*100,300*
Boulder	*Y*	*45%*	*1,197*	*1,282*	*1,539*	*1,777*	*1,983*	*47,880*	*54,720*	*61,560*	*68,355*	*73,845*	*79,335*	*84,780*	*90,270*
Boulder	*Y*	*40%*	*1,064*	*1,140*	*1,368*	*1,580*	*1,763*	*42,560*	*48,640*	*54,720*	*60,760*	*65,640*	*70,520*	*75,360*	*80,240*
Boulder	*Y*	*30%*	*798*	*855*	*1,026*	*1,185*	*1,322*	*31,920*	*36,480*	*41,040*	*45,570*	*49,230*	*52,890*	*56,520*	*60,180*
Boulder		120%	3,066	3,285	3,942	4,555	5,082	122,640	140,160	157,680	175,200	189,240	203,280	217,320	231,360
Boulder		110%	2,810	3,011	3,613	4,175	4,658	112,420	128,480	144,540	160,600	173,470	186,340	199,210	212,080
Boulder		100%	2,555	2,737	3,285	3,796	4,235	102,200	116,800	131,400	146,000	157,700	169,400	181,100	192,800
Boulder		90%	2,299	2,463	2,956	3,416	3,811	91,980	105,120	118,260	131,400	141,930	152,460	162,990	173,520
Boulder		80%	2,044	2,190	2,628	3,037	3,388	81,760	93,440	105,120	116,800	126,160	135,520	144,880	154,240
Boulder		70%	1,788	1,916	2,299	2,657	2,964	71,540	81,760	91,980	102,200	110,390	118,580	126,770	134,960
Boulder		60%	1,533	1,642	1,971	2,277	2,541	61,320	70,080	78,840	87,600	94,620	101,640	108,660	115,680
Boulder		55%	1,405	1,505	1,806	2,087	2,329	56,210	64,240	72,270	80,300	86,735	93,170	99,605	106,040
Boulder		50%	1,277	1,368	1,642	1,898	2,117	51,100	58,400	65,700	73,000	78,850	84,700	90,550	96,400
Boulder		45%	1,149	1,231	1,478	1,708	1,905	45,990	52,560	59,130	65,700	70,965	76,230	81,495	86,760
Boulder		40%	1,022	1,095	1,314	1,518	1,694	40,880	46,720	52,560	58,400	63,080	67,760	72,440	77,120
Boulder		30%	766	821	985	1,138	1,270	30,660	35,040	39,420	43,800	47,310	50,820	54,330	57,840
Boulder		20%	511	547	657	759	847	20,440	23,360	26,280	29,200	31,540	33,880	36,220	38,560
Broomfield		120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Broomfield		110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Broomfield		100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Broomfield		90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Broomfield		80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Broomfield		70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Broomfield		60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Broomfield		55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Broomfield		50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Broomfield		45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Broomfield		40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Broomfield		30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Broomfield		20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Chaffee		160%	2,640	2,828	3,392	3,920	4,372	105,600	120,640	135,680	150,720	162,880	174,880	187,040	199,040
Chaffee		150%	2,475	2,651	3,180	3,675	4,098	99,000	113,100	127,200	141,300	152,700	163,950	175,350	186,600
Chaffee		140%	2,310	2,474	2,968	3,430	3,825	92,400	105,560	118,720	131,880	142,520	153,020	163,660	174,160
Chaffee		130%	2,145	2,297	2,756	3,185	3,552	85,800	98,020	110,240	122,460	132,340	142,090	151,970	161,720
Chaffee		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Chaffee		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Chaffee		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Chaffee		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Chaffee		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Chaffee		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Chaffee		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Chaffee		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Chaffee		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Chaffee		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Chaffee		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Chaffee		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Chaffee		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Cheyenne	*Y*	*60%*	*1,008*	*1,080*	*1,296*	*1,497*	*1,671*	*40,320*	*46,080*	*51,840*	*57,600*	*62,220*	*66,840*	*85,752*	*91,296*
Cheyenne	*Y*	*55%*	*924*	*990*	*1,188*	*1,372*	*1,531*	*36,960*	*42,240*	*47,520*	*52,800*	*57,035*	*61,270*	*78,606*	*83,688*
Cheyenne	*Y*	*50%*	*840*	*900*	*1,080*	*1,248*	*1,392*	*33,600*	*38,400*	*43,200*	*48,000*	*51,850*	*55,700*	*71,460*	*76,080*
Cheyenne	*Y*	*45%*	*756*	*810*	*972*	*1,123*	*1,253*	*30,240*	*34,560*	*38,880*	*43,200*	*46,665*	*50,130*	*64,314*	*68,472*
Cheyenne	*Y*	*40%*	*672*	*720*	*864*	*998*	*1,114*	*26,880*	*30,720*	*34,560*	*38,400*	*41,480*	*44,560*	*57,168*	*60,864*
Cheyenne	*Y*	*30%*	*504*	*540*	*648*	*748*	*835*	*20,160*	*23,040*	*25,920*	*28,800*	*31,110*	*33,420*	*42,876*	*45,648*
Cheyenne		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Cheyenne		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Cheyenne		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Cheyenne		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Cheyenne		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Cheyenne		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Cheyenne		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Cheyenne		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Cheyenne		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Cheyenne		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Cheyenne		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Cheyenne		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Cheyenne		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Clear Creek		120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Clear Creek		110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Clear Creek		100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Clear Creek		90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Clear Creek		80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Clear Creek		70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Clear Creek		60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Clear Creek		55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Clear Creek		50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Clear Creek		45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Clear Creek		40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Clear Creek		30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Clear Creek		20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Conejos	Y	60%	1,062	1,137	1,365	1,577	1,759	42,480	48,540	54,600	60,660	65,520	70,380	75,240	80,100
Conejos	Y	55%	973	1,042	1,251	1,445	1,612	38,940	44,495	50,050	55,605	60,060	64,515	68,970	73,425
Conejos	Y	50%	885	948	1,137	1,314	1,466	35,400	40,450	45,500	50,550	54,600	58,650	62,700	66,750
Conejos	Y	45%	796	853	1,023	1,182	1,319	31,860	36,405	40,950	45,495	49,140	52,785	56,430	60,075
Conejos	Y	40%	708	758	910	1,051	1,173	28,320	32,360	36,400	40,440	43,680	46,920	50,160	53,400
Conejos	Y	30%	531	568	682	788	879	21,240	24,270	27,300	30,330	32,760	35,190	37,620	40,050
Conejos		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Conejos		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Conejos		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Conejos		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Conejos		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Conejos		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Conejos		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Conejos		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Conejos		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Conejos		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Conejos		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Conejos		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Conejos		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Costilla		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Costilla		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Costilla		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Costilla		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Costilla		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Costilla		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Costilla		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Costilla		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Costilla		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Costilla		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Costilla		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Costilla		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Costilla		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

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2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Crowley		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Crowley		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Crowley		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Crowley		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Crowley		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Crowley		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Crowley		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Crowley		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Crowley		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Crowley		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Crowley		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Crowley		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Crowley		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Custer		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Custer		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Custer		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Custer		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Custer		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Custer		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Custer		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Custer		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Custer		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Custer		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Custer		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Custer		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Custer		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Delta	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Delta	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Delta	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Delta	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Delta	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Delta	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Delta	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Delta	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Delta	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Delta	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Delta	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Delta	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Delta	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Denver	120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Denver	110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Denver	100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Denver	90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Denver	80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Denver	70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Denver	60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Denver	55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Denver	50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Denver	45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Denver	40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Denver	30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Denver	20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Dolores	Y	60%	1,213	1,299	1,560	1,802	2,010	48,540	55,440	62,400	69,300	74,880	80,400	85,980	91,500
Dolores	Y	55%	1,112	1,191	1,430	1,652	1,842	44,495	50,820	57,200	63,525	68,640	73,700	78,815	83,875
Dolores	Y	50%	1,011	1,083	1,300	1,501	1,675	40,450	46,200	52,000	57,750	62,400	67,000	71,650	76,250
Dolores	Y	45%	910	974	1,170	1,351	1,507	36,405	41,580	46,800	51,975	56,160	60,300	64,485	68,625
Dolores	Y	40%	809	866	1,040	1,201	1,340	32,360	36,960	41,600	46,200	49,920	53,600	57,320	61,000
Dolores	Y	30%	606	649	780	901	1,005	24,270	27,720	31,200	34,650	37,440	40,200	42,990	45,750
Dolores		120%	2,007	2,151	2,583	2,986	3,333	80,280	91,800	103,320	114,840	124,080	133,320	142,320	151,560
Dolores		110%	1,839	1,971	2,367	2,737	3,055	73,590	84,150	94,710	105,270	113,740	122,210	130,460	138,930
Dolores		100%	1,672	1,792	2,152	2,488	2,777	66,900	76,500	86,100	95,700	103,400	111,100	118,600	126,300
Dolores		90%	1,505	1,613	1,937	2,239	2,499	60,210	68,850	77,490	86,130	93,060	99,990	106,740	113,670
Dolores		80%	1,338	1,434	1,722	1,991	2,222	53,520	61,200	68,880	76,560	82,720	88,880	94,880	101,040
Dolores		70%	1,170	1,254	1,506	1,742	1,944	46,830	53,550	60,270	66,990	72,380	77,770	83,020	88,410
Dolores		60%	1,003	1,075	1,291	1,493	1,666	40,140	45,900	51,660	57,420	62,040	66,660	71,160	75,780
Dolores		55%	919	985	1,183	1,368	1,527	36,795	42,075	47,355	52,635	56,870	61,105	65,230	69,465
Dolores		50%	836	896	1,076	1,244	1,388	33,450	38,250	43,050	47,850	51,700	55,550	59,300	63,150
Dolores		45%	752	806	968	1,119	1,249	30,105	34,425	38,745	43,065	46,530	49,995	53,370	56,835
Dolores		40%	669	717	861	995	1,111	26,760	30,600	34,440	38,280	41,360	44,440	47,440	50,520
Dolores		30%	501	537	645	746	833	20,070	22,950	25,830	28,710	31,020	33,330	35,580	37,890
Dolores		20%	334	358	430	497	555	13,380	15,300	17,220	19,140	20,680	22,220	23,720	25,260
Douglas		120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Douglas		110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Douglas		100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Douglas		90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Douglas		80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Douglas		70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Douglas		60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Douglas		55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Douglas		50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Douglas		45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Douglas		40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Douglas		30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Douglas		20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Eagle		160%	3,644	3,904	4,684	5,412	6,040	145,760	166,560	187,360	208,160	224,800	241,600	258,080	274,880
Eagle		150%	3,416	3,660	4,391	5,073	5,662	136,650	156,150	175,650	195,150	210,750	226,500	241,950	257,700
Eagle		140%	3,188	3,416	4,098	4,735	5,285	127,540	145,740	163,940	182,140	196,700	211,400	225,820	240,520
Eagle		130%	2,960	3,172	3,805	4,397	4,907	118,430	135,330	152,230	169,130	182,650	196,300	209,690	223,340
Eagle		120%	2,733	2,928	3,513	4,059	4,530	109,320	124,920	140,520	156,120	168,600	181,200	193,560	206,160
Eagle		110%	2,505	2,684	3,220	3,720	4,152	100,210	114,510	128,810	143,110	154,550	166,100	177,430	188,980
Eagle		100%	2,277	2,440	2,927	3,382	3,775	91,100	104,100	117,100	130,100	140,500	151,000	161,300	171,800
Eagle		90%	2,049	2,196	2,634	3,044	3,397	81,990	93,690	105,390	117,090	126,450	135,900	145,170	154,620
Eagle		80%	1,822	1,952	2,342	2,706	3,020	72,880	83,280	93,680	104,080	112,400	120,800	129,040	137,440
Eagle		70%	1,594	1,708	2,049	2,367	2,642	63,770	72,870	81,970	91,070	98,350	105,700	112,910	120,260
Eagle		60%	1,366	1,464	1,756	2,029	2,265	54,660	62,460	70,260	78,060	84,300	90,600	96,780	103,080
Eagle		55%	1,252	1,342	1,610	1,860	2,076	50,105	57,255	64,405	71,555	77,275	83,050	88,715	94,490
Eagle		50%	1,138	1,220	1,463	1,691	1,887	45,550	52,050	58,550	65,050	70,250	75,500	80,650	85,900
Eagle		45%	1,024	1,098	1,317	1,522	1,698	40,995	46,845	52,695	58,545	63,225	67,950	72,585	77,310
Eagle		40%	911	976	1,171	1,353	1,510	36,440	41,640	46,840	52,040	56,200	60,400	64,520	68,720
Eagle		30%	683	732	878	1,014	1,132	27,330	31,230	35,130	39,030	42,150	45,300	48,390	51,540
Eagle		20%	455	488	585	676	755	18,220	20,820	23,420	26,020	28,100	30,200	32,260	34,360
El Paso		120%	2,184	2,340	2,808	3,246	3,621	87,360	99,840	112,320	124,800	134,880	144,840	154,800	164,760
El Paso		110%	2,002	2,145	2,574	2,975	3,319	80,080	91,520	102,960	114,400	123,640	132,770	141,900	151,030
El Paso		100%	1,820	1,950	2,340	2,705	3,017	72,800	83,200	93,600	104,000	112,400	120,700	129,000	137,300
El Paso		90%	1,638	1,755	2,106	2,434	2,715	65,520	74,880	84,240	93,600	101,160	108,630	116,100	123,570
El Paso		80%	1,456	1,560	1,872	2,164	2,414	58,240	66,560	74,880	83,200	89,920	96,560	103,200	109,840
El Paso		70%	1,274	1,365	1,638	1,893	2,112	50,960	58,240	65,520	72,800	78,680	84,490	90,300	96,110
El Paso		60%	1,092	1,170	1,404	1,623	1,810	43,680	49,920	56,160	62,400	67,440	72,420	77,400	82,380
El Paso		55%	1,001	1,072	1,287	1,487	1,659	40,040	45,760	51,480	57,200	61,820	66,385	70,950	75,515
El Paso		50%	910	975	1,170	1,352	1,508	36,400	41,600	46,800	52,000	56,200	60,350	64,500	68,650
El Paso		45%	819	877	1,053	1,217	1,357	32,760	37,440	42,120	46,800	50,580	54,315	58,050	61,785
El Paso		40%	728	780	936	1,082	1,207	29,120	33,280	37,440	41,600	44,960	48,280	51,600	54,920
El Paso		30%	546	585	702	811	905	21,840	24,960	28,080	31,200	33,720	36,210	38,700	41,190
El Paso		20%	364	390	468	541	603	14,560	16,640	18,720	20,800	22,480	24,140	25,800	27,460

Implementation Cutoff Date: May 16, 2024

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2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Elbert	120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Elbert	110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Elbert	100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Elbert	90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Elbert	80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Elbert	70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Elbert	60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Elbert	55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Elbert	50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Elbert	45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Elbert	40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Elbert	30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Elbert	20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440
Fremont	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Fremont	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Fremont	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Fremont	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Fremont	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Fremont	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Fremont	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Fremont	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Fremont	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Fremont	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Fremont	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Fremont	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Fremont	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Garfield		120%	2,151	2,305	2,766	3,195	3,564	86,040	98,400	110,640	122,880	132,720	142,560	152,400	162,240
Garfield		110%	1,971	2,113	2,535	2,928	3,267	78,870	90,200	101,420	112,640	121,660	130,680	139,700	148,720
Garfield		100%	1,792	1,921	2,305	2,662	2,970	71,700	82,000	92,200	102,400	110,600	118,800	127,000	135,200
Garfield		90%	1,613	1,729	2,074	2,396	2,673	64,530	73,800	82,980	92,160	99,540	106,920	114,300	121,680
Garfield		80%	1,434	1,537	1,844	2,130	2,376	57,360	65,600	73,760	81,920	88,480	95,040	101,600	108,160
Garfield		70%	1,254	1,344	1,613	1,863	2,079	50,190	57,400	64,540	71,680	77,420	83,160	88,900	94,640
Garfield		60%	1,075	1,152	1,383	1,597	1,782	43,020	49,200	55,320	61,440	66,360	71,280	76,200	81,120
Garfield		55%	985	1,056	1,267	1,464	1,633	39,435	45,100	50,710	56,320	60,830	65,340	69,850	74,360
Garfield		50%	896	960	1,152	1,331	1,485	35,850	41,000	46,100	51,200	55,300	59,400	63,500	67,600
Garfield		45%	806	864	1,037	1,198	1,336	32,265	36,900	41,490	46,080	49,770	53,460	57,150	60,840
Garfield		40%	717	768	922	1,065	1,188	28,680	32,800	36,880	40,960	44,240	47,520	50,800	54,080
Garfield		30%	537	576	691	798	891	21,510	24,600	27,660	30,720	33,180	35,640	38,100	40,560
Garfield		20%	358	384	461	532	594	14,340	16,400	18,440	20,480	22,120	23,760	25,400	27,040
Gilpin		120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Gilpin		110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Gilpin		100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Gilpin		90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Gilpin		80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Gilpin		70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Gilpin		60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Gilpin		55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Gilpin		50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Gilpin		45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Gilpin		40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Gilpin		30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Gilpin		20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440

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2024 Income Limit and Maximum Rent Tables
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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Grand	160%	2,876	3,080	3,696	4,268	4,764	115,040	131,360	147,840	164,160	177,280	190,560	203,520	216,800
Grand	150%	2,696	2,887	3,465	4,001	4,466	107,850	123,150	138,600	153,900	166,200	178,650	190,800	203,250
Grand	140%	2,516	2,695	3,234	3,734	4,168	100,660	114,940	129,360	143,640	155,120	166,740	178,080	189,700
Grand	130%	2,336	2,502	3,003	3,467	3,870	93,470	106,730	120,120	133,380	144,040	154,830	165,360	176,150
Grand	120%	2,157	2,310	2,772	3,201	3,573	86,280	98,520	110,880	123,120	132,960	142,920	152,640	162,600
Grand	110%	1,977	2,117	2,541	2,934	3,275	79,090	90,310	101,640	112,860	121,880	131,010	139,920	149,050
Grand	100%	1,797	1,925	2,310	2,667	2,977	71,900	82,100	92,400	102,600	110,800	119,100	127,200	135,500
Grand	90%	1,617	1,732	2,079	2,400	2,679	64,710	73,890	83,160	92,340	99,720	107,190	114,480	121,950
Grand	80%	1,438	1,540	1,848	2,134	2,382	57,520	65,680	73,920	82,080	88,640	95,280	101,760	108,400
Grand	70%	1,258	1,347	1,617	1,867	2,084	50,330	57,470	64,680	71,820	77,560	83,370	89,040	94,850
Grand	60%	1,078	1,155	1,386	1,600	1,786	43,140	49,260	55,440	61,560	66,480	71,460	76,320	81,300
Grand	55%	988	1,058	1,270	1,467	1,637	39,545	45,155	50,820	56,430	60,940	65,505	69,960	74,525
Grand	50%	898	962	1,155	1,333	1,488	35,950	41,050	46,200	51,300	55,400	59,550	63,600	67,750
Grand	45%	808	866	1,039	1,200	1,339	32,355	36,945	41,580	46,170	49,860	53,595	57,240	60,975
Grand	40%	719	770	924	1,067	1,191	28,760	32,840	36,960	41,040	44,320	47,640	50,880	54,200
Grand	30%	539	577	693	800	893	21,570	24,630	27,720	30,780	33,240	35,730	38,160	40,650
Grand	20%	359	385	462	533	595	14,380	16,420	18,480	20,520	22,160	23,820	25,440	27,100
Gunnison	160%	2,884	3,090	3,708	4,286	4,780	115,360	131,840	148,320	164,800	178,080	191,200	204,480	217,600
Gunnison	150%	2,703	2,896	3,476	4,018	4,481	108,150	123,600	139,050	154,500	166,950	179,250	191,700	204,000
Gunnison	140%	2,523	2,703	3,244	3,750	4,182	100,940	115,360	129,780	144,200	155,820	167,300	178,920	190,400
Gunnison	130%	2,343	2,510	3,012	3,482	3,883	93,730	107,120	120,510	133,900	144,690	155,350	166,140	176,800
Gunnison	120%	2,163	2,317	2,781	3,214	3,585	86,520	98,880	111,240	123,600	133,560	143,400	153,360	163,200
Gunnison	110%	1,982	2,124	2,549	2,946	3,286	79,310	90,640	101,970	113,300	122,430	131,450	140,580	149,600
Gunnison	100%	1,802	1,931	2,317	2,678	2,987	72,100	82,400	92,700	103,000	111,300	119,500	127,800	136,000
Gunnison	90%	1,622	1,738	2,085	2,410	2,688	64,890	74,160	83,430	92,700	100,170	107,550	115,020	122,400
Gunnison	80%	1,442	1,545	1,854	2,143	2,390	57,680	65,920	74,160	82,400	89,040	95,600	102,240	108,800
Gunnison	70%	1,261	1,351	1,622	1,875	2,091	50,470	57,680	64,890	72,100	77,910	83,650	89,460	95,200
Gunnison	60%	1,081	1,158	1,390	1,607	1,792	43,260	49,440	55,620	61,800	66,780	71,700	76,680	81,600
Gunnison	55%	991	1,062	1,274	1,473	1,643	39,655	45,320	50,985	56,650	61,215	65,725	70,290	74,800
Gunnison	50%	901	965	1,158	1,339	1,493	36,050	41,200	46,350	51,500	55,650	59,750	63,900	68,000
Gunnison	45%	811	869	1,042	1,205	1,344	32,445	37,080	41,715	46,350	50,085	53,775	57,510	61,200
Gunnison	40%	721	772	927	1,071	1,195	28,840	32,960	37,080	41,200	44,520	47,800	51,120	54,400
Gunnison	30%	540	579	695	803	896	21,630	24,720	27,810	30,900	33,390	35,850	38,340	40,800
Gunnison	20%	360	386	463	535	597	14,420	16,480	18,540	20,600	22,260	23,900	25,560	27,200

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Hinsdale		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Hinsdale		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Hinsdale		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Hinsdale		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Hinsdale		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Hinsdale		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Hinsdale		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Hinsdale		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Hinsdale		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Hinsdale		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Hinsdale		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Hinsdale		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Hinsdale		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Huerfano		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Huerfano		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Huerfano		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Huerfano		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Huerfano		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Huerfano		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Huerfano		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Huerfano		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Huerfano		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Huerfano		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Huerfano		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Huerfano		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Huerfano		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Jackson	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Jackson	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Jackson	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Jackson	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Jackson	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Jackson	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Jackson	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Jackson	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Jackson	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Jackson	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Jackson	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Jackson	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Jackson	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Jefferson	120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Jefferson	110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Jefferson	100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Jefferson	90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Jefferson	80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Jefferson	70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Jefferson	60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Jefferson	55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Jefferson	50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Jefferson	45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Jefferson	40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Jefferson	30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Jefferson	20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440

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2024 Income Limit and Maximum Rent Tables
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20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Kiowa	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Kiowa	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Kiowa	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Kiowa	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Kiowa	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Kiowa	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Kiowa	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Kiowa	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Kiowa	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Kiowa	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Kiowa	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Kiowa	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Kiowa	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Kit Carson	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Kit Carson	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Kit Carson	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Kit Carson	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Kit Carson	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Kit Carson	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Kit Carson	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Kit Carson	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Kit Carson	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Kit Carson	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Kit Carson	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Kit Carson	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Kit Carson	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
La Plata		160%	3,096	3,316	3,980	4,598	5,128	123,840	141,440	159,200	176,800	191,040	205,120	219,360	233,440
La Plata		150%	2,902	3,108	3,731	4,310	4,807	116,100	132,600	149,250	165,750	179,100	192,300	205,650	218,850
La Plata		140%	2,709	2,901	3,482	4,023	4,487	108,360	123,760	139,300	154,700	167,160	179,480	191,940	204,260
La Plata		130%	2,515	2,694	3,233	3,735	4,166	100,620	114,920	129,350	143,650	155,220	166,660	178,230	189,670
La Plata		120%	2,322	2,487	2,985	3,448	3,846	92,880	106,080	119,400	132,600	143,280	153,840	164,520	175,080
La Plata		110%	2,128	2,279	2,736	3,161	3,525	85,140	97,240	109,450	121,550	131,340	141,020	150,810	160,490
La Plata		100%	1,935	2,072	2,487	2,873	3,205	77,400	88,400	99,500	110,500	119,400	128,200	137,100	145,900
La Plata		90%	1,741	1,865	2,238	2,586	2,884	69,660	79,560	89,550	99,450	107,460	115,380	123,390	131,310
La Plata		80%	1,548	1,658	1,990	2,299	2,564	61,920	70,720	79,600	88,400	95,520	102,560	109,680	116,720
La Plata		70%	1,354	1,450	1,741	2,011	2,243	54,180	61,880	69,650	77,350	83,580	89,740	95,970	102,130
La Plata		60%	1,161	1,243	1,492	1,724	1,923	46,440	53,040	59,700	66,300	71,640	76,920	82,260	87,540
La Plata		55%	1,064	1,139	1,368	1,580	1,762	42,570	48,620	54,725	60,775	65,670	70,510	75,405	80,245
La Plata		50%	967	1,036	1,243	1,436	1,602	38,700	44,200	49,750	55,250	59,700	64,100	68,550	72,950
La Plata		45%	870	932	1,119	1,293	1,442	34,830	39,780	44,775	49,725	53,730	57,690	61,695	65,655
La Plata		40%	774	829	995	1,149	1,282	30,960	35,360	39,800	44,200	47,760	51,280	54,840	58,360
La Plata		30%	580	621	746	862	961	23,220	26,520	29,850	33,150	35,820	38,460	41,130	43,770
La Plata		20%	387	414	497	574	641	15,480	17,680	19,900	22,100	23,880	25,640	27,420	29,180
Lake		120%	2,007	2,151	2,583	2,986	3,333	80,280	91,800	103,320	114,840	124,080	133,320	142,320	151,560
Lake		110%	1,839	1,971	2,367	2,737	3,055	73,590	84,150	94,710	105,270	113,740	122,210	130,460	138,930
Lake		100%	1,672	1,792	2,152	2,488	2,777	66,900	76,500	86,100	95,700	103,400	111,100	118,600	126,300
Lake		90%	1,505	1,613	1,937	2,239	2,499	60,210	68,850	77,490	86,130	93,060	99,990	106,740	113,670
Lake		80%	1,338	1,434	1,722	1,991	2,222	53,520	61,200	68,880	76,560	82,720	88,880	94,880	101,040
Lake		70%	1,170	1,254	1,506	1,742	1,944	46,830	53,550	60,270	66,990	72,380	77,770	83,020	88,410
Lake		60%	1,003	1,075	1,291	1,493	1,666	40,140	45,900	51,660	57,420	62,040	66,660	71,160	75,780
Lake		55%	919	985	1,183	1,368	1,527	36,795	42,075	47,355	52,635	56,870	61,105	65,230	69,465
Lake		50%	836	896	1,076	1,244	1,388	33,450	38,250	43,050	47,850	51,700	55,550	59,300	63,150
Lake		45%	752	806	968	1,119	1,249	30,105	34,425	38,745	43,065	46,530	49,995	53,370	56,835
Lake		40%	669	717	861	995	1,111	26,760	30,600	34,440	38,280	41,360	44,440	47,440	50,520
Lake		30%	501	537	645	746	833	20,070	22,950	25,830	28,710	31,020	33,330	35,580	37,890
Lake		20%	334	358	430	497	555	13,380	15,300	17,220	19,140	20,680	22,220	23,720	25,260

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Larimer	120%	2,496	2,674	3,210	3,708	4,137	99,840	114,120	128,400	142,560	154,080	165,480	176,880	188,280
Larimer	110%	2,288	2,451	2,942	3,399	3,792	91,520	104,610	117,700	130,680	141,240	151,690	162,140	172,590
Larimer	100%	2,080	2,228	2,675	3,090	3,447	83,200	95,100	107,000	118,800	128,400	137,900	147,400	156,900
Larimer	90%	1,872	2,005	2,407	2,781	3,102	74,880	85,590	96,300	106,920	115,560	124,110	132,660	141,210
Larimer	80%	1,664	1,783	2,140	2,472	2,758	66,560	76,080	85,600	95,040	102,720	110,320	117,920	125,520
Larimer	70%	1,456	1,560	1,872	2,163	2,413	58,240	66,570	74,900	83,160	89,880	96,530	103,180	109,830
Larimer	60%	1,248	1,337	1,605	1,854	2,068	49,920	57,060	64,200	71,280	77,040	82,740	88,440	94,140
Larimer	55%	1,144	1,225	1,471	1,699	1,896	45,760	52,305	58,850	65,340	70,620	75,845	81,070	86,295
Larimer	50%	1,040	1,114	1,337	1,545	1,723	41,600	47,550	53,500	59,400	64,200	68,950	73,700	78,450
Larimer	45%	936	1,002	1,203	1,390	1,551	37,440	42,795	48,150	53,460	57,780	62,055	66,330	70,605
Larimer	40%	832	891	1,070	1,236	1,379	33,280	38,040	42,800	47,520	51,360	55,160	58,960	62,760
Larimer	30%	624	668	802	927	1,034	24,960	28,530	32,100	35,640	38,520	41,370	44,220	47,070
Larimer	20%	416	445	535	618	689	16,640	19,020	21,400	23,760	25,680	27,580	29,480	31,380
Las Animas	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Las Animas	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Las Animas	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Las Animas	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Las Animas	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Las Animas	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Las Animas	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Las Animas	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Las Animas	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Las Animas	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Las Animas	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Las Animas	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Las Animas	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Lincoln	*Y*	*60%*	*1,120*	*1,200*	*1,441*	*1,665*	*1,857*	*44,820*	*51,240*	*57,660*	*64,020*	*69,180*	*74,280*	*79,440*	*84,540*
Lincoln	*Y*	*55%*	*1,027*	*1,100*	*1,321*	*1,526*	*1,702*	*41,085*	*46,970*	*52,855*	*58,685*	*63,415*	*68,090*	*72,820*	*77,495*
Lincoln	*Y*	*50%*	*933*	*1,000*	*1,201*	*1,387*	*1,547*	*37,350*	*42,700*	*48,050*	*53,350*	*57,650*	*61,900*	*66,200*	*70,450*
Lincoln	*Y*	*45%*	*840*	*900*	*1,081*	*1,248*	*1,392*	*33,615*	*38,430*	*43,245*	*48,015*	*51,885*	*55,710*	*59,580*	*63,405*
Lincoln	*Y*	*40%*	*747*	*800*	*961*	*1,110*	*1,238*	*29,880*	*34,160*	*38,440*	*42,680*	*46,120*	*49,520*	*52,960*	*56,360*
Lincoln	*Y*	*30%*	*560*	*600*	*720*	*832*	*928*	*22,410*	*25,620*	*28,830*	*32,010*	*34,590*	*37,140*	*39,720*	*42,270*
Lincoln		120%	1,995	2,137	2,565	2,964	3,306	79,800	91,200	102,600	114,000	123,120	132,240	141,360	150,480
Lincoln		110%	1,828	1,959	2,351	2,717	3,030	73,150	83,600	94,050	104,500	112,860	121,220	129,580	137,940
Lincoln		100%	1,662	1,781	2,137	2,470	2,755	66,500	76,000	85,500	95,000	102,600	110,200	117,800	125,400
Lincoln		90%	1,496	1,603	1,923	2,223	2,479	59,850	68,400	76,950	85,500	92,340	99,180	106,020	112,860
Lincoln		80%	1,330	1,425	1,710	1,976	2,204	53,200	60,800	68,400	76,000	82,080	88,160	94,240	100,320
Lincoln		70%	1,163	1,246	1,496	1,729	1,928	46,550	53,200	59,850	66,500	71,820	77,140	82,460	87,780
Lincoln		60%	997	1,068	1,282	1,482	1,653	39,900	45,600	51,300	57,000	61,560	66,120	70,680	75,240
Lincoln		55%	914	979	1,175	1,358	1,515	36,575	41,800	47,025	52,250	56,430	60,610	64,790	68,970
Lincoln		50%	831	890	1,068	1,235	1,377	33,250	38,000	42,750	47,500	51,300	55,100	58,900	62,700
Lincoln		45%	748	801	961	1,111	1,239	29,925	34,200	38,475	42,750	46,170	49,590	53,010	56,430
Lincoln		40%	665	712	855	988	1,102	26,600	30,400	34,200	38,000	41,040	44,080	47,120	50,160
Lincoln		30%	498	534	641	741	826	19,950	22,800	25,650	28,500	30,780	33,060	35,340	37,620
Lincoln		20%	332	356	427	494	551	13,300	15,200	17,100	19,000	20,520	22,040	23,560	25,080
Logan		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Logan		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Logan		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Logan		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Logan		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Logan		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Logan		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Logan		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Logan		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Logan		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Logan		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Logan		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Logan		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Mesa	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Mesa	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Mesa	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Mesa	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Mesa	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Mesa	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Mesa	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Mesa	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Mesa	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Mesa	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Mesa	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Mesa	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Mesa	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Mineral	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Mineral	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Mineral	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Mineral	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Mineral	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Mineral	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Mineral	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Mineral	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Mineral	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Mineral	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Mineral	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Mineral	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Mineral	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Moffat	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Moffat	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Moffat	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Moffat	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Moffat	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Moffat	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Moffat	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Moffat	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Moffat	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Moffat	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Moffat	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Moffat	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Moffat	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Montezuma	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Montezuma	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Montezuma	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Montezuma	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Montezuma	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Montezuma	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Montezuma	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Montezuma	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Montezuma	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Montezuma	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Montezuma	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Montezuma	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Montezuma	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Montrose		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Montrose		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Montrose		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Montrose		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Montrose		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Montrose		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Montrose		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Montrose		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Montrose		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Montrose		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Montrose		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Montrose		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Montrose		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Morgan	*Y*	*60%*	*1,029*	*1,102*	*1,323*	*1,527*	*1,704*	*41,160*	*47,040*	*52,920*	*58,740*	*63,480*	*68,160*	*72,840*	*77,580*
Morgan	*Y*	*55%*	*943*	*1,010*	*1,212*	*1,400*	*1,562*	*37,730*	*43,120*	*48,510*	*53,845*	*58,190*	*62,480*	*66,770*	*71,115*
Morgan	*Y*	*50%*	*857*	*918*	*1,102*	*1,273*	*1,420*	*34,300*	*39,200*	*44,100*	*48,950*	*52,900*	*56,800*	*60,700*	*64,650*
Morgan	*Y*	*45%*	*771*	*826*	*992*	*1,145*	*1,278*	*30,870*	*35,280*	*39,690*	*44,055*	*47,610*	*51,120*	*54,630*	*58,185*
Morgan	*Y*	*40%*	*686*	*735*	*882*	*1,018*	*1,136*	*27,440*	*31,360*	*35,280*	*39,160*	*42,320*	*45,440*	*48,560*	*51,720*
Morgan	*Y*	*30%*	*514*	*551*	*661*	*763*	*852*	*20,580*	*23,520*	*26,460*	*29,370*	*31,740*	*34,080*	*36,420*	*38,790*
Morgan		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Morgan		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Morgan		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Morgan		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Morgan		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Morgan		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Morgan		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Morgan		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Morgan		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Morgan		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Morgan		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Morgan		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Morgan		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

- The IRS allows Housing Tax Credit projects that placed in service as of 12.31.2008 to use higher HERA Special limits.
- All Housing Tax Credit and CHFA Loan projects are "held harmless" from limit decreases. To be "held harmless," a project must be in service before 05.16.2024.
- Housing Tax Credit and CHFA Multifamily Loan projects whose counties experienced a decrease in 2024 limits and that place in service before 05.16.2024 may continue to apply the same limits they used in 2023.

County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Otero		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Otero		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Otero		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Otero		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Otero		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Otero		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Otero		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Otero		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Otero		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Otero		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Otero		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Otero		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Otero		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Ouray		160%	2,868	3,072	3,684	4,260	4,752	114,720	131,040	147,360	163,840	176,960	190,080	203,200	216,160
Ouray		150%	2,688	2,880	3,453	3,993	4,455	107,550	122,850	138,150	153,600	165,900	178,200	190,500	202,650
Ouray		140%	2,509	2,688	3,223	3,727	4,158	100,380	114,660	128,940	143,360	154,840	166,320	177,800	189,140
Ouray		130%	2,330	2,496	2,993	3,461	3,861	93,210	106,470	119,730	133,120	143,780	154,440	165,100	175,630
Ouray		120%	2,151	2,304	2,763	3,195	3,564	86,040	98,280	110,520	122,880	132,720	142,560	152,400	162,120
Ouray		110%	1,971	2,112	2,532	2,928	3,267	78,870	90,090	101,310	112,640	121,660	130,680	139,700	148,610
Ouray		100%	1,792	1,920	2,302	2,662	2,970	71,700	81,900	92,100	102,400	110,600	118,800	127,000	135,100
Ouray		90%	1,613	1,728	2,072	2,396	2,673	64,530	73,710	82,890	92,160	99,540	106,920	114,300	121,590
Ouray		80%	1,434	1,536	1,842	2,130	2,376	57,360	65,520	73,680	81,920	88,480	95,040	101,600	108,080
Ouray		70%	1,254	1,344	1,611	1,863	2,079	50,190	57,330	64,470	71,680	77,420	83,160	88,900	94,570
Ouray		60%	1,075	1,152	1,381	1,597	1,782	43,020	49,140	55,260	61,440	66,360	71,280	76,200	81,060
Ouray		55%	985	1,056	1,266	1,464	1,633	39,435	45,045	50,655	56,320	60,830	65,340	69,850	74,305
Ouray		50%	896	960	1,151	1,331	1,485	35,850	40,950	46,050	51,200	55,300	59,400	63,500	67,550
Ouray		45%	806	864	1,036	1,198	1,336	32,265	36,855	41,445	46,080	49,770	53,460	57,150	60,795
Ouray		40%	717	768	921	1,065	1,188	28,680	32,760	36,840	40,960	44,240	47,520	50,800	54,040
Ouray		30%	537	576	690	798	891	21,510	24,570	27,630	30,720	33,180	35,640	38,100	40,530
Ouray		20%	358	384	460	532	594	14,340	16,380	18,420	20,480	22,120	23,760	25,400	27,020

Implementation Cutoff Date: May 16, 2024

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Park	120%	2,739	2,935	3,522	4,069	4,539	109,560	125,280	140,880	156,480	169,080	181,560	194,040	206,640
Park	110%	2,510	2,690	3,228	3,730	4,160	100,430	114,840	129,140	143,440	154,990	166,430	177,870	189,420
Park	100%	2,282	2,446	2,935	3,391	3,782	91,300	104,400	117,400	130,400	140,900	151,300	161,700	172,200
Park	90%	2,054	2,201	2,641	3,052	3,404	82,170	93,960	105,660	117,360	126,810	136,170	145,530	154,980
Park	80%	1,826	1,957	2,348	2,713	3,026	73,040	83,520	93,920	104,320	112,720	121,040	129,360	137,760
Park	70%	1,597	1,712	2,054	2,373	2,647	63,910	73,080	82,180	91,280	98,630	105,910	113,190	120,540
Park	60%	1,369	1,467	1,761	2,034	2,269	54,780	62,640	70,440	78,240	84,540	90,780	97,020	103,320
Park	55%	1,255	1,345	1,614	1,865	2,080	50,215	57,420	64,570	71,720	77,495	83,215	88,935	94,710
Park	50%	1,141	1,223	1,467	1,695	1,891	45,650	52,200	58,700	65,200	70,450	75,650	80,850	86,100
Park	45%	1,027	1,100	1,320	1,526	1,702	41,085	46,980	52,830	58,680	63,405	68,085	72,765	77,490
Park	40%	913	978	1,174	1,356	1,513	36,520	41,760	46,960	52,160	56,360	60,520	64,680	68,880
Park	30%	684	733	880	1,017	1,134	27,390	31,320	35,220	39,120	42,270	45,390	48,510	51,660
Park	20%	456	489	587	678	756	18,260	20,880	23,480	26,080	28,180	30,260	32,340	34,440
Phillips	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Phillips	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Phillips	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Phillips	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Phillips	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Phillips	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Phillips	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Phillips	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Phillips	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Phillips	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Phillips	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Phillips	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Phillips	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Pitkin	*Y*	*60%*	*1,519*	*1,627*	*1,953*	*2,256*	*2,517*	*60,780*	*69,420*	*78,120*	*86,760*	*93,720*	*100,680*	*107,640*	*114,540*
Pitkin	*Y*	*55%*	*1,392*	*1,491*	*1,790*	*2,068*	*2,307*	*55,715*	*63,635*	*71,610*	*79,530*	*85,910*	*92,290*	*98,670*	*104,995*
Pitkin	*Y*	*50%*	*1,266*	*1,356*	*1,627*	*1,880*	*2,097*	*50,650*	*57,850*	*65,100*	*72,300*	*78,100*	*83,900*	*89,700*	*95,450*
Pitkin	*Y*	*45%*	*1,139*	*1,220*	*1,464*	*1,692*	*1,887*	*45,585*	*52,065*	*58,590*	*65,070*	*70,290*	*75,510*	*80,730*	*85,905*
Pitkin	*Y*	*40%*	*1,013*	*1,085*	*1,302*	*1,504*	*1,678*	*40,520*	*46,280*	*52,080*	*57,840*	*62,480*	*67,120*	*71,760*	*76,360*
Pitkin	*Y*	*30%*	*759*	*813*	*976*	*1,128*	*1,258*	*30,390*	*34,710*	*39,060*	*43,380*	*46,860*	*50,340*	*53,820*	*57,270*
Pitkin		160%	3,520	3,772	4,524	5,230	5,832	140,800	160,960	180,960	201,120	217,280	233,280	249,440	265,440
Pitkin		150%	3,300	3,536	4,241	4,903	5,467	132,000	150,900	169,650	188,550	203,700	218,700	233,850	248,850
Pitkin		140%	3,080	3,300	3,958	4,576	5,103	123,200	140,840	158,340	175,980	190,120	204,120	218,260	232,260
Pitkin		130%	2,860	3,064	3,675	4,249	4,738	114,400	130,780	147,030	163,410	176,540	189,540	202,670	215,670
Pitkin		120%	2,640	2,829	3,393	3,922	4,374	105,600	120,720	135,720	150,840	162,960	174,960	187,080	199,080
Pitkin		110%	2,420	2,593	3,110	3,595	4,009	96,800	110,660	124,410	138,270	149,380	160,380	171,490	182,490
Pitkin		100%	2,200	2,357	2,827	3,268	3,645	88,000	100,600	113,100	125,700	135,800	145,800	155,900	165,900
Pitkin		90%	1,980	2,121	2,544	2,941	3,280	79,200	90,540	101,790	113,130	122,220	131,220	140,310	149,310
Pitkin		80%	1,760	1,886	2,262	2,615	2,916	70,400	80,480	90,480	100,560	108,640	116,640	124,720	132,720
Pitkin		70%	1,540	1,650	1,979	2,288	2,551	61,600	70,420	79,170	87,990	95,060	102,060	109,130	116,130
Pitkin		60%	1,320	1,414	1,696	1,961	2,187	52,800	60,360	67,860	75,420	81,480	87,480	93,540	99,540
Pitkin		55%	1,210	1,296	1,555	1,797	2,004	48,400	55,330	62,205	69,135	74,690	80,190	85,745	91,245
Pitkin		50%	1,100	1,178	1,413	1,634	1,822	44,000	50,300	56,550	62,850	67,900	72,900	77,950	82,950
Pitkin		45%	990	1,060	1,272	1,470	1,640	39,600	45,270	50,895	56,565	61,110	65,610	70,155	74,655
Pitkin		40%	880	943	1,131	1,307	1,458	35,200	40,240	45,240	50,280	54,320	58,320	62,360	66,360
Pitkin		30%	660	707	848	980	1,093	26,400	30,180	33,930	37,710	40,740	43,740	46,770	49,770
Pitkin		20%	440	471	565	653	729	17,600	20,120	22,620	25,140	27,160	29,160	31,180	33,180

Implementation Cutoff Date: May 16, 2024

chfa.

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20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Prowers	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Prowers	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Prowers	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Prowers	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Prowers	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Prowers	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Prowers	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Prowers	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Prowers	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Prowers	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Prowers	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Prowers	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Prowers	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Pueblo	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Pueblo	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Pueblo	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Pueblo	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Pueblo	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Pueblo	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Pueblo	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Pueblo	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Pueblo	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Pueblo	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Pueblo	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Pueblo	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Pueblo	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Rio Blanco		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Rio Blanco		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Rio Blanco		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Rio Blanco		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Rio Blanco		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Rio Blanco		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Rio Blanco		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Rio Blanco		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Rio Blanco		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Rio Blanco		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Rio Blanco		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Rio Blanco		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Rio Blanco		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Rio Grande	*Y*	*60%*	*1,110*	*1,188*	*1,426*	*1,647*	*1,837*	*44,400*	*50,700*	*57,060*	*63,360*	*68,460*	*73,500*	*78,600*	*83,640*
Rio Grande	*Y*	*55%*	*1,017*	*1,089*	*1,307*	*1,510*	*1,684*	*40,700*	*46,475*	*52,305*	*58,080*	*62,755*	*67,375*	*72,050*	*76,670*
Rio Grande	*Y*	*50%*	*925*	*990*	*1,188*	*1,373*	*1,531*	*37,000*	*42,250*	*47,550*	*52,800*	*57,050*	*61,250*	*65,500*	*69,700*
Rio Grande	*Y*	*45%*	*832*	*891*	*1,069*	*1,235*	*1,378*	*33,300*	*38,025*	*42,795*	*47,520*	*51,345*	*55,125*	*58,950*	*62,730*
Rio Grande	*Y*	*40%*	*740*	*792*	*951*	*1,098*	*1,225*	*29,600*	*33,800*	*38,040*	*42,240*	*45,640*	*49,000*	*52,400*	*55,760*
Rio Grande	*Y*	*30%*	*555*	*594*	*713*	*823*	*918*	*22,200*	*25,350*	*28,530*	*31,680*	*34,230*	*36,750*	*39,300*	*41,820*
Rio Grande		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Rio Grande		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Rio Grande		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Rio Grande		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Rio Grande		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Rio Grande		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Rio Grande		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Rio Grande		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Rio Grande		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Rio Grande		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Rio Grande		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Rio Grande		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Rio Grande		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

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2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Routt	160%	3,336	3,574	4,288	4,956	5,528	133,440	152,480	171,520	190,560	205,920	221,120	236,320	251,680
Routt	150%	3,127	3,350	4,020	4,646	5,182	125,100	142,950	160,800	178,650	193,050	207,300	221,550	235,950
Routt	140%	2,919	3,127	3,752	4,336	4,837	116,760	133,420	150,080	166,740	180,180	193,480	206,780	220,220
Routt	130%	2,710	2,903	3,484	4,026	4,491	108,420	123,890	139,360	154,830	167,310	179,660	192,010	204,490
Routt	120%	2,502	2,680	3,216	3,717	4,146	100,080	114,360	128,640	142,920	154,440	165,840	177,240	188,760
Routt	110%	2,293	2,457	2,948	3,407	3,800	91,740	104,830	117,920	131,010	141,570	152,020	162,470	173,030
Routt	100%	2,085	2,233	2,680	3,097	3,455	83,400	95,300	107,200	119,100	128,700	138,200	147,700	157,300
Routt	90%	1,876	2,010	2,412	2,787	3,109	75,060	85,770	96,480	107,190	115,830	124,380	132,930	141,570
Routt	80%	1,668	1,787	2,144	2,478	2,764	66,720	76,240	85,760	95,280	102,960	110,560	118,160	125,840
Routt	70%	1,459	1,563	1,876	2,168	2,418	58,380	66,710	75,040	83,370	90,090	96,740	103,390	110,110
Routt	60%	1,251	1,340	1,608	1,858	2,073	50,040	57,180	64,320	71,460	77,220	82,920	88,620	94,380
Routt	55%	1,146	1,228	1,474	1,703	1,900	45,870	52,415	58,960	65,505	70,785	76,010	81,235	86,515
Routt	50%	1,042	1,116	1,340	1,548	1,727	41,700	47,650	53,600	59,550	64,350	69,100	73,850	78,650
Routt	45%	938	1,005	1,206	1,393	1,554	37,530	42,885	48,240	53,595	57,915	62,190	66,465	70,785
Routt	40%	834	893	1,072	1,239	1,382	33,360	38,120	42,880	47,640	51,480	55,280	59,080	62,920
Routt	30%	625	670	804	929	1,036	25,020	28,590	32,160	35,730	38,610	41,460	44,310	47,190
Routt	20%	417	446	536	619	691	16,680	19,060	21,440	23,820	25,740	27,640	29,540	31,460

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Saguache	*Y*	*60%*	*1,023*	*1,096*	*1,315*	*1,519*	*1,695*	*40,920*	*46,800*	*52,620*	*58,440*	*63,120*	*67,800*	*72,480*	*77,160*
Saguache	*Y*	*55%*	*937*	*1,005*	*1,205*	*1,392*	*1,553*	*37,510*	*42,900*	*48,235*	*53,570*	*57,860*	*62,150*	*66,440*	*70,730*
Saguache	*Y*	*50%*	*852*	*913*	*1,096*	*1,266*	*1,412*	*34,100*	*39,000*	*43,850*	*48,700*	*52,600*	*56,500*	*60,400*	*64,300*
Saguache	*Y*	*45%*	*767*	*822*	*986*	*1,139*	*1,271*	*30,690*	*35,100*	*39,465*	*43,830*	*47,340*	*50,850*	*54,360*	*57,870*
Saguache	*Y*	*40%*	*682*	*731*	*877*	*1,013*	*1,130*	*27,280*	*31,200*	*35,080*	*38,960*	*42,080*	*45,200*	*48,320*	*51,440*
Saguache	*Y*	*30%*	*511*	*548*	*657*	*759*	*847*	*20,460*	*23,400*	*26,310*	*29,220*	*31,560*	*33,900*	*36,240*	*38,580*
Saguache		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Saguache		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Saguache		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Saguache		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Saguache		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Saguache		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Saguache		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Saguache		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Saguache		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Saguache		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Saguache		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Saguache		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Saguache		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

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2024 Income Limit and Maximum Rent Tables
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20% to 120% of Area Median Income (AMI)

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
San Juan		160%	2,640	2,828	3,392	3,920	4,372	105,600	120,640	135,680	150,720	162,880	174,880	187,040	199,040
San Juan		150%	2,475	2,651	3,180	3,675	4,098	99,000	113,100	127,200	141,300	152,700	163,950	175,350	186,600
San Juan		140%	2,310	2,474	2,968	3,430	3,825	92,400	105,560	118,720	131,880	142,520	153,020	163,660	174,160
San Juan		130%	2,145	2,297	2,756	3,185	3,552	85,800	98,020	110,240	122,460	132,340	142,090	151,970	161,720
San Juan		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
San Juan		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
San Juan		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
San Juan		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
San Juan		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
San Juan		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
San Juan		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
San Juan		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
San Juan		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
San Juan		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
San Juan		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
San Juan		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
San Juan		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
San Miguel		160%	3,068	3,288	3,948	4,560	5,088	122,720	140,320	157,920	175,360	189,440	203,520	217,600	231,520
San Miguel		150%	2,876	3,082	3,701	4,275	4,770	115,050	131,550	148,050	164,400	177,600	190,800	204,000	217,050
San Miguel		140%	2,684	2,877	3,454	3,990	4,452	107,380	122,780	138,180	153,440	165,760	178,080	190,400	202,580
San Miguel		130%	2,492	2,671	3,207	3,705	4,134	99,710	114,010	128,310	142,480	153,920	165,360	176,800	188,110
San Miguel		120%	2,301	2,466	2,961	3,420	3,816	92,040	105,240	118,440	131,520	142,080	152,640	163,200	173,640
San Miguel		110%	2,109	2,260	2,714	3,135	3,498	84,370	96,470	108,570	120,560	130,240	139,920	149,600	159,170
San Miguel		100%	1,917	2,055	2,467	2,850	3,180	76,700	87,700	98,700	109,600	118,400	127,200	136,000	144,700
San Miguel		90%	1,725	1,849	2,220	2,565	2,862	69,030	78,930	88,830	98,640	106,560	114,480	122,400	130,230
San Miguel		80%	1,534	1,644	1,974	2,280	2,544	61,360	70,160	78,960	87,680	94,720	101,760	108,800	115,760
San Miguel		70%	1,342	1,438	1,727	1,995	2,226	53,690	61,390	69,090	76,720	82,880	89,040	95,200	101,290
San Miguel		60%	1,150	1,233	1,480	1,710	1,908	46,020	52,620	59,220	65,760	71,040	76,320	81,600	86,820
San Miguel		55%	1,054	1,130	1,357	1,567	1,749	42,185	48,235	54,285	60,280	65,120	69,960	74,800	79,585
San Miguel		50%	958	1,027	1,233	1,425	1,590	38,350	43,850	49,350	54,800	59,200	63,600	68,000	72,350
San Miguel		45%	862	924	1,110	1,282	1,431	34,515	39,465	44,415	49,320	53,280	57,240	61,200	65,115
San Miguel		40%	767	822	987	1,140	1,272	30,680	35,080	39,480	43,840	47,360	50,880	54,400	57,880
San Miguel		30%	575	616	740	855	954	23,010	26,310	29,610	32,880	35,520	38,160	40,800	43,410
San Miguel		20%	383	411	493	570	636	15,340	17,540	19,740	21,920	23,680	25,440	27,200	28,940

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Sedgwick	*Y*	*60%*	*1,051*	*1,126*	*1,351*	*1,562*	*1,743*	*42,060*	*48,060*	*54,060*	*60,060*	*64,920*	*69,720*	*74,520*	*79,320*
Sedgwick	*Y*	*55%*	*963*	*1,032*	*1,238*	*1,432*	*1,597*	*38,555*	*44,055*	*49,555*	*55,055*	*59,510*	*63,910*	*68,310*	*72,710*
Sedgwick	*Y*	*50%*	*876*	*938*	*1,126*	*1,301*	*1,452*	*35,050*	*40,050*	*45,050*	*50,050*	*54,100*	*58,100*	*62,100*	*66,100*
Sedgwick	*Y*	*45%*	*788*	*844*	*1,013*	*1,171*	*1,307*	*31,545*	*36,045*	*40,545*	*45,045*	*48,690*	*52,290*	*55,890*	*59,490*
Sedgwick	*Y*	*40%*	*701*	*751*	*901*	*1,041*	*1,162*	*28,040*	*32,040*	*36,040*	*40,040*	*43,280*	*46,480*	*49,680*	*52,880*
Sedgwick	*Y*	*30%*	*525*	*563*	*675*	*781*	*871*	*21,030*	*24,030*	*27,030*	*30,030*	*32,460*	*34,860*	*37,260*	*39,660*
Sedgwick		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Sedgwick		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Sedgwick		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Sedgwick		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Sedgwick		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Sedgwick		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Sedgwick		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Sedgwick		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Sedgwick		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Sedgwick		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Sedgwick		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Sedgwick		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Sedgwick		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

- The IRS allows Housing Tax Credit projects that placed in service as of 12.31.2008 to use higher HERA Special limits.
- All Housing Tax Credit and CHFA Loan projects are "held harmless" from limit decreases. To be "held harmless," a project must be in service before 05.16.2024.
- Housing Tax Credit and CHFA Multifamily Loan projects whose counties experienced a decrease in 2024 limits and that place in service before 05.16.2024 may continue to apply the same limits they used in 2023.

County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Summit	160%	3,412	3,656	4,388	5,068	5,652	136,480	156,000	175,520	194,880	210,560	226,080	241,760	257,280
Summit	150%	3,198	3,427	4,113	4,751	5,298	127,950	146,250	164,550	182,700	197,400	211,950	226,650	241,200
Summit	140%	2,985	3,199	3,839	4,434	4,945	119,420	136,500	153,580	170,520	184,240	197,820	211,540	225,120
Summit	130%	2,772	2,970	3,565	4,117	4,592	110,890	126,750	142,610	158,340	171,080	183,690	196,430	209,040
Summit	120%	2,559	2,742	3,291	3,801	4,239	102,360	117,000	131,640	146,160	157,920	169,560	181,320	192,960
Summit	110%	2,345	2,513	3,016	3,484	3,885	93,830	107,250	120,670	133,980	144,760	155,430	166,210	176,880
Summit	100%	2,132	2,285	2,742	3,167	3,532	85,300	97,500	109,700	121,800	131,600	141,300	151,100	160,800
Summit	90%	1,919	2,056	2,468	2,850	3,179	76,770	87,750	98,730	109,620	118,440	127,170	135,990	144,720
Summit	80%	1,706	1,828	2,194	2,534	2,826	68,240	78,000	87,760	97,440	105,280	113,040	120,880	128,640
Summit	70%	1,492	1,599	1,919	2,217	2,472	59,710	68,250	76,790	85,260	92,120	98,910	105,770	112,560
Summit	60%	1,279	1,371	1,645	1,900	2,119	51,180	58,500	65,820	73,080	78,960	84,780	90,660	96,480
Summit	55%	1,172	1,256	1,508	1,742	1,942	46,915	53,625	60,335	66,990	72,380	77,715	83,105	88,440
Summit	50%	1,066	1,142	1,371	1,583	1,766	42,650	48,750	54,850	60,900	65,800	70,650	75,550	80,400
Summit	45%	959	1,028	1,234	1,425	1,589	38,385	43,875	49,365	54,810	59,220	63,585	67,995	72,360
Summit	40%	853	914	1,097	1,267	1,413	34,120	39,000	43,880	48,720	52,640	56,520	60,440	64,320
Summit	30%	639	685	822	950	1,059	25,590	29,250	32,910	36,540	39,480	42,390	45,330	48,240
Summit	20%	426	457	548	633	706	17,060	19,500	21,940	24,360	26,320	28,260	30,220	32,160
Teller	120%	1,983	2,124	2,547	2,943	3,282	79,320	90,600	101,880	113,160	122,280	131,280	140,400	149,400
Teller	110%	1,817	1,947	2,334	2,697	3,008	72,710	83,050	93,390	103,730	112,090	120,340	128,700	136,950
Teller	100%	1,652	1,770	2,122	2,452	2,735	66,100	75,500	84,900	94,300	101,900	109,400	117,000	124,500
Teller	90%	1,487	1,593	1,910	2,207	2,461	59,490	67,950	76,410	84,870	91,710	98,460	105,300	112,050
Teller	80%	1,322	1,416	1,698	1,962	2,188	52,880	60,400	67,920	75,440	81,520	87,520	93,600	99,600
Teller	70%	1,156	1,239	1,485	1,716	1,914	46,270	52,850	59,430	66,010	71,330	76,580	81,900	87,150
Teller	60%	991	1,062	1,273	1,471	1,641	39,660	45,300	50,940	56,580	61,140	65,640	70,200	74,700
Teller	55%	908	973	1,167	1,348	1,504	36,355	41,525	46,695	51,865	56,045	60,170	64,350	68,475
Teller	50%	826	885	1,061	1,226	1,367	33,050	37,750	42,450	47,150	50,950	54,700	58,500	62,250
Teller	45%	743	796	955	1,103	1,230	29,745	33,975	38,205	42,435	45,855	49,230	52,650	56,025
Teller	40%	661	708	849	981	1,094	26,440	30,200	33,960	37,720	40,760	43,760	46,800	49,800
Teller	30%	495	531	636	735	820	19,830	22,650	25,470	28,290	30,570	32,820	35,100	37,350
Teller	20%	330	354	424	490	547	13,220	15,100	16,980	18,860	20,380	21,880	23,400	24,900

Implementation Cutoff Date: May 16, 2024

chfa.

2024 Income Limit and Maximum Rent Tables
for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County HERA	AMI	2024 Maximum Rents					2024 Income Limits							
		0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Washington	120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Washington	110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Washington	100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Washington	90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Washington	80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Washington	70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Washington	60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Washington	55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Washington	50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Washington	45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Washington	40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Washington	30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Washington	20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880
Weld	120%	2,406	2,577	3,093	3,573	3,987	96,240	109,920	123,720	137,400	148,440	159,480	170,400	181,440
Weld	110%	2,205	2,362	2,835	3,275	3,654	88,220	100,760	113,410	125,950	136,070	146,190	156,200	166,320
Weld	100%	2,005	2,147	2,577	2,977	3,322	80,200	91,600	103,100	114,500	123,700	132,900	142,000	151,200
Weld	90%	1,804	1,932	2,319	2,679	2,990	72,180	82,440	92,790	103,050	111,330	119,610	127,800	136,080
Weld	80%	1,604	1,718	2,062	2,382	2,658	64,160	73,280	82,480	91,600	98,960	106,320	113,600	120,960
Weld	70%	1,403	1,503	1,804	2,084	2,325	56,140	64,120	72,170	80,150	86,590	93,030	99,400	105,840
Weld	60%	1,203	1,288	1,546	1,786	1,993	48,120	54,960	61,860	68,700	74,220	79,740	85,200	90,720
Weld	55%	1,102	1,181	1,417	1,637	1,827	44,110	50,380	56,705	62,975	68,035	73,095	78,100	83,160
Weld	50%	1,002	1,073	1,288	1,488	1,661	40,100	45,800	51,550	57,250	61,850	66,450	71,000	75,600
Weld	45%	902	966	1,159	1,339	1,495	36,090	41,220	46,395	51,525	55,665	59,805	63,900	68,040
Weld	40%	802	859	1,031	1,191	1,329	32,080	36,640	41,240	45,800	49,480	53,160	56,800	60,480
Weld	30%	601	644	773	893	996	24,060	27,480	30,930	34,350	37,110	39,870	42,600	45,360
Weld	20%	401	429	515	595	664	16,040	18,320	20,620	22,900	24,740	26,580	28,400	30,240

Implementation Cutoff Date: May 16, 2024

chfa.

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for All Colorado Counties
20% to 120% of Area Median Income (AMI)

HUD Effective Date: April 1, 2024

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County	HERA	AMI	2024 Maximum Rents					2024 Income Limits							
			0 Bdrm	1 Bdrm	2 Bdrm	3 Bdrm	4 Bdrm	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Yuma		120%	1,980	2,121	2,544	2,940	3,279	79,200	90,480	101,760	113,040	122,160	131,160	140,280	149,280
Yuma		110%	1,815	1,944	2,332	2,695	3,005	72,600	82,940	93,280	103,620	111,980	120,230	128,590	136,840
Yuma		100%	1,650	1,767	2,120	2,450	2,732	66,000	75,400	84,800	94,200	101,800	109,300	116,900	124,400
Yuma		90%	1,485	1,590	1,908	2,205	2,459	59,400	67,860	76,320	84,780	91,620	98,370	105,210	111,960
Yuma		80%	1,320	1,414	1,696	1,960	2,186	52,800	60,320	67,840	75,360	81,440	87,440	93,520	99,520
Yuma		70%	1,155	1,237	1,484	1,715	1,912	46,200	52,780	59,360	65,940	71,260	76,510	81,830	87,080
Yuma		60%	990	1,060	1,272	1,470	1,639	39,600	45,240	50,880	56,520	61,080	65,580	70,140	74,640
Yuma		55%	907	972	1,166	1,347	1,502	36,300	41,470	46,640	51,810	55,990	60,115	64,295	68,420
Yuma		50%	825	883	1,060	1,225	1,366	33,000	37,700	42,400	47,100	50,900	54,650	58,450	62,200
Yuma		45%	742	795	954	1,102	1,229	29,700	33,930	38,160	42,390	45,810	49,185	52,605	55,980
Yuma		40%	660	707	848	980	1,093	26,400	30,160	33,920	37,680	40,720	43,720	46,760	49,760
Yuma		30%	495	530	636	735	819	19,800	22,620	25,440	28,260	30,540	32,790	35,070	37,320
Yuma		20%	330	353	424	490	546	13,200	15,080	16,960	18,840	20,360	21,860	23,380	24,880

Implementation Cutoff Date: May 16, 2024

RESOLUTION NO. 17 (SERIES 2025)

A RESOLUTION OF CITY COUNCIL OF THE CITY OF OURAY, COLORADO APPROVING THE DEED RESTRICTION FOR A SWISS VILLAGE COOPERATIVE AFFORDABLE HOUSING LOAN OF TWO-HUNDRED THOUSAND DOLLARS ALONG A WITH PROMISSORY NOTE, DEED OF TRUST, AND SUBORDINATION AGREEMENT WHICH RELFECTS A LOAN TO THE COOPERATIVE FORGIVEABLE OVER NINETY-NINE (99) YEARS; AND INSTRUCTIONS TO STAFF CONCERNING THE CITY'S PARTICIATION IN THE CLOSING OF THE PURCHASE OF THE SWISS VILLAGE MOBILE HOME PARK BY THE COOPERATIVE.

WHEREAS, the City of Ouray agrees to contribute two-hundred thousand dollars ($200,000.00) towards the purchase of the purchaser of the Swiss Village Mobile Home Park (Association) in return for a deed restriction on the property as set forth on Exhibit A attached hereto; and

WHEREAS, the Association requests the money from the City be in the form of a forgivable loan and a promissory note and deed of trust are attached as Exhibit B calling for forgiveness of the loan over the term of the deed restriction; and

WHEREAS, the Association has received favorable loan terms for the purchase of the property through grants such that the City's loan must be subordinated to the grantor loan in the form attached as Exhibit C; and

WHEREAS, the City Council finds that the deed restriction and the loan evidenced by a promissory note, deed of trust, and subordination agreement advances the health, safety and welfare of the general public.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF OURAY, COLORADO as follows:

1. Council approves the deed restriction, promissory note, deed of trust, and form subordination agreement.

2. Council authorizes the mayor to execute any necessary closing documents and to effectuate the execution of the deed restriction in favor of the City at a closing to be scheduled

3. Council directs staff to wire $200,000.00 from the short-term rental excise tax fund for affordable housing to the title company in connection with a closing to be scheduled by Swiss Village Cooperative.

4. Staff is directed to retain the original promissory note in the City Vault.

ADOPTED this 18th day of August 2025 by the Ouray City Council.

CITY OF OURAY, COLORADO

_____
Ethan Funk, Mayor

ATTEST:

_____
Melissa M. Drake, City Clerk

DEED RESTRICTION AND USE COVENANT AGREEMENT
FOR [INSERT STREET ADDRESS]
City of Ouray
Affordable Housing Ownership and Occupancy

THIS DEED RESTRICTION AND USE COVENANT AGREEMENT is entered into this _____ day of _____, 2025 ("Effective Date") between **SWISS VILLAGE COOPERATIVE, INC.,** a Colorado cooperative, P.O. Box 193, Ouray, Colorado 81427, ("Grantor" or "Owner"), and the **CITY OF OURAY**, a Colorado home rule municipal corporation with its principal place of business being 320 6th Ave, Ouray, Colorado 81427, ("Grantee" or "City").

Property Subject to Deed Restriction. The following real property (the "Restricted Property") is hereby subject to these Covenants:

(INSERT LEGAL HERE)
County of Ouray
State of Colorado.

Commonly known as **1500 OAK STREET, UNITS 1A, 1B, 2, 3, 4, 5,6, 7, 8, 9,10, 11, 12A, 12B, 14, 15, 16, 17,18, 19, and 2**0**, OURAY, COLORADO, 81427.**

This Restricted Property has maximum lot rent charges of $2,457.00 per month based upon the AMI Lot Rent Calculation.

RECITALS

WHEREAS Grantor is the Owner of the Restricted Property consisting of twenty (20) mobile home lots;

WHEREAS, in connection with Owner's purchase of Restricted Property, City provides Two Hundred Thousand Dollars ($200,000.00) towards the purchase of the Restricted Property in return for the execution of this deed restriction;

WHEREAS the mobile home units located on Restricted Property are owned individually by Patrons who all have voting rights in Grantor, except unit 20, and these units are numbered 1A, 1B, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12A, 12B, 14, 15, 16, 17, 18, 19, and 20;

WHEREAS the mobile home located on Lot 20 is being purchased by Owner in connection with the purchase of the Restricted Property and will be sold to a Qualified Patron as soon as possible after the purchase;

WHEREAS, Lot/Unit Nos #3, 8, 9, 11, and 12A are initially exempt from subsection 3.2.2 below concerning the qualification that the Patron must use a mobile home located on a lot on Restricted Property as their primary residence and such exemption shall terminate upon any Transfer and subsection 3.2.4 concerning the qualification that a Patron must receive a yearly household income as specified therein

WHEREAS, Grantor, and any heirs, executors, administrators, representatives, successors, and assigns, and Patron and Nonpatron members of Grantor desires and agrees to comply with this DEED RESTRICTION AND COVENANT AGREEMENT ("Covenant"), recorded at the reception number above in the Ouray County Clerk and Recorder's office, and agrees to the restriction in the use of the Restricted Property;

WHEREAS, Grantor shall provide written evidence consisting of each Patron and Nonpatron specifically agreeing in writing to be bound by this Deed Restriction and Use Covenant and such writing shall be attached and incorporated into this agreement as Exhibit A.

WHEREAS, under this Covenant Grantor and Grantee intend, declare, and agree that the regulatory and restrictive covenants set forth herein govern the use of the Restricted Property and shall be and are covenants running with the land and shall be binding upon Grantor and Grantee; and

WHEREAS this Covenant is intended to restrict the rent charged on any mobile home lots located on Restricted Property to no more than thirty percent (30%) of the adjusted one hundred twenty percent (120%) AMI divided by 12 months for a household of two, regardless of true household size, adjusted from time to time by Ouray City Council, to all Patrons of the Restricted Property.

DEFINITIONS

1. **AREA MEDIAN INCOME (AMI)** is determined by using the figures published yearly by US Department of Housing and Urban Development ("HUD") and adopted by Colorado Housing and Finance Authority ("CHFA") to determine housing tax credit projects maximum rent charges for counties in Colorado. They are published at: www.chfainfo.com.

2. **AMI LOT RENT CALCULATION** means the Colorado maximum monthly rent charged by an Owner per unit based on a household size of two, regardless of true household size, that may be collected from all occupants of a Restricted Property, being no more than thirty percent (30%) of the adjusted one hundred twenty percent (120%) AMI divided by 12, amended by resolution.[1]

3. **LEASE** means a written agreement between the Owner and Qualified Patron establishing the terms and conditions of the lot rent, including reasonable rules and regulations promulgated by the Owner.

4. **QUALIFIED PATRON** means any person(s) who owns a mobile home unit located within the Restricted Property, is a voting member of Grantor, occupies and uses the Restricted Property as their primary residence, and meets all other qualifications set forth in Paragraph 3 below.

5. **LOT RENT** is the maximum total amount of remuneration charged to a Qualified Patron for use of the Restricted Property in accordance with the AMI Rent Calculation in effect in the Deed Restriction and Use Covenant Agreement including any costs for Owner's insurance, taxes, debt service, legal and administrative expenses, and City of Ouray water/sewer/trash charges, per lot, per month, but not including individual unit electricity, gas, internet, or any other hidden costs, fees, or payments of any kind for services rendered that are less than fair market value.

6. **TRANSFER** means an act of an Owner or a Qualified Patron by which the Restricted Property or a mobile home unit located within the Restricted Property is wholly or partially transferred to another; including but not limited to the sale, assignment voluntary or involuntary transfer, or transfer by operation of law (whether by contract of sale, gift, devise, bequest, trustee's sale, foreclosure, or otherwise) of any interest in the Qualified Patron's mobile home unit located within the Restricted Property, including but not limited to a fee simple interest, a joint tenancy interest, a tenancy in common, a life estate, a leasehold interest or any interest evidenced by a contract by which possession of Qualified Patron's mobile home is transferred.

COVENANT

[1] Based on 120% of the 2024 area median income for Ouray County, as adopted by CHFA on May 6, 2024, for a household size of two or $98,280.00

NOW, THEREFORE, in consideration of the foregoing material Recitals, the mutual covenants, restrictions, and equitable servitudes stated herein and other good and valuable considerations, including the purchase money by the City and the written agreement of Grantor, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby represent and agree as follows:

1. **Covenant Runs with the Land**. These Covenants shall run with the land and title to the Restricted Property, for benefit of and enforceability by Grantee and their successors and assigns, and this Covenant shall bind the Grantor and all subsequent Owners of the Restricted Property. Owner shall be personally obligated hereunder for the full and complete performance and observance of all covenants, conditions, and restrictions contained herein during the period of ownership. Every lease of the Restricted Property, for any purposes, shall be deemed to include and incorporate by reference, the covenants contained in this Covenant.

1.1 Term. The **"Term"** of this Covenant shall commence on the Effective Date and shall continue for a term of ninety-nine (99) years ("**Expiration Date**"). Said term shall reset upon every Owner Transfer or update to Covenants.

1.2 Administration and Enforcement. This Covenant shall be administered and enforced by the City through its duly authorized designee, by any appropriate legal or equitable action, including but not limited to specific performance, injunction, abatement or eviction of non-complying Restricted Property Owner(s) or Patrons such other remedies and penalties as may be specified in this Covenant, and in addition to any fines and penalties adopted by City Council in the future, or any other remedy available at law.

1.3 Update to Covenants. This Deed Restriction and Use Covenant may be amended by mutual agreement of the Owner, City, and Qualified Patrons.

1.4 Replacement of Prior Agreement. If applicable, this Covenant shall supersede and replace in its entirety that certain Deed Restriction and Covenant recorded in the official records of the _____ County Clerk and Recorder on [RECORDING DATE] at Reception No. [RECORDING #].

2. **Definitions**. The Parties acknowledge and agree that the definitions contained herein shall apply to this Covenant and further agree that each definition: (a) forms a portion of the basis of this Covenant; and (b) is incorporated in this Covenant.

3. **Ownership, Use, Occupancy, and Qualification.**

3.1 **Use and Occupancy.** The use of the Restricted Property is hereby, and shall henceforth be, limited exclusively to Qualified Patrons. If the Restricted Property is owned or used without compliance with this Covenant, Grantee shall have the right to enforcement and the remedies set forth herein, including but not limited to the rights under Section 8.

3.2 **Qualification.** Qualified Patrons shall:

3.2.1 be subject to the AMI Lot Rent Calculation in effect at the time the Qualified Patron takes possession of a mobile home located within the Restricted Property.

3.2.2 occupy the Restricted Property as their sole and exclusive primary residence and use the Restricted Property no less than seventy percent (70%) of the year, which is 255 nonconsecutive days.

3.2.3 be provided with a fully executed written mobile home park lot lease from Owner for Lot Rent and a copy of the most current rules and regulations which include this deed restriction and use covenants.

3.2.4 receive yearly household income, as defined by HUD, not to exceed 120% of the most recently adopted area median income for Ouray County by City Council for a household size of two, regardless of true household size.

3.3 **Continued Qualification Compliance.** Owner is responsible for ensuring that all occupants who use the Restricted Property are Qualified Patrons and must maintain compliance with all applicable requirements on an on-going basis, except that once a Patron is income qualified under Paragraph 3.2.1 above at the time of a Transfer, no further income qualification is necessary until the next Transfer. Failure of Grantor to do so shall constitute a violation. Owner is required to comply with any deed restriction, including providing proof of maximum rent compliance, maximum median income compliance, or responding to any request to ensure compliance with these Covenants.

4. **Transfer of Personal Property:** Any Transfers of mobile homes owned by Patrons located within the Restricted Property shall not occur until each encumbrance, debt, or liability owed by Owner to City under these covenants for that unit or any monies owed for City utilities for that unit is fully satisfied, including any fees and violation fines.

5. **No Alteration of Restricted Property.** The Restricted Property shall not be altered, demolished, partially demolished, released from these covenants, without the approval of the City of Ouray.

6. **Default/Breach**

6.1 **Right to Request Lease.** In the event Grantee has reasonable cause to believe an Owner or Patron is violating the provisions of this Covenant, that person or entity, through its authorized representative, shall provide the required written lease or other occupancy agreement, proof of income, and any other relevant documentation to the City within seventy-two (72) hours after a written request to Owner was sent by U.S.P.S.

6.2 **Notice of Violation**. Grantee shall send a Notice of Violation ("NOV") to the Owner and Patron detailing the nature of the violation and allowing the Owner and Patron fourteen (14) days to determine the merits of the allegations, or to correct the violation. The NOV shall advise the alleged violator of the fines associated with each alleged violation, and any additional opportunity to cure before the fines or consequences escalate. In the event the Owner or Patron disagrees with any allegation of violation or determination of non-compliance by the City of the Covenant, the Owner or Patron may request, in writing, a hearing before Grantee, who shall have absolute discretion to determine the appropriate action to be taken to either remedy the violation or to require Owner and Patron to sell the Restricted Property. If the Owner or Patron does not request a hearing and the violation is not cured within the fourteen-day period, the Owner and/or Patron shall be considered in violation of this Covenant, and fines shall continue to accrue until the violation is cured or the maximum fine has been reached. Failure to request a hearing shall constitute the failure to exhaust administrative remedies for the purpose of judicial review.

6.3 **Hearing Before the Grantee**. Whenever this Covenant provides for a hearing before Grantee, such a hearing shall be scheduled by Grantee within twenty-one (21) days of the date of receipt of a written request for a hearing. At any such hearing, the Owner or other aggrieved party may be represented by counsel and may present evidence on the issues to be determined at the hearing. An electronic record of the hearing shall be made, and the decision of Grantee shall be a final decision, subject to judicial review.

6.4 **Reservation of Remedies**. There is hereby reserved to the parties hereto all remedies provided by law for breach of this Covenant or any of its terms. In the event the Parties resort to litigation with respect to any or all provisions of this Covenant, the prevailing party shall be awarded its damages, expenses, and costs, including reasonable attorney's fees.

6.5 **Sale Without Compliance**. Prior to the sale and/or conveyance of the Restricted Property or any mobile home unit owned by a Patron, the Owner shall submit a notice to the City of such sale or conveyance requesting confirmation of compliance or a request for an exemption from this Covenant (the "Notice of Sale") and allowing the City fourteen (14) days to confirm or deny compliance or grant an exception. In the event Owner does not receive a timely response or disagrees with the determination of the City, Owner may request a hearing in accordance with 7.2 above. In the event the Restricted Property or any mobile home unit owned by a Patron, is sold and/or conveyed without compliance with the terms of this Covenant, such sale and/or conveyance shall be wholly null and void and shall confer no title whatsoever upon the purported buyer. Each conveyance of the Restricted Property, for all purposes, shall be deemed to include and incorporate by this reference the covenants herein contained, even without reference therein to this Covenant.

6.6 **Failure to Cure**. In the event an Owner fails to cure any breach of this Covenant, Grantee may resort to any and all available legal or equitable actions, including but not limited to specific performance of this Covenant, declaring the breach a nuisance and abating the same and assessing costs under Ouray Municipal Code (OMC) Section 10-4-E, seeking a mandatory injunction requiring the sale of the Restricted Property by Owner, and/or for an injunction against future sale(s) in violation of this Covenant.

7. General Provisions

7.1 **Enforcement of Covenant**. This Covenant shall constitute covenants running with the land and Restricted Property as a burden thereon, for the benefit of the Grantee and/or its respective successors and assigns, as applicable, and who may enforce the covenants and compel compliance therewith. Enforcement by any appropriate legal action may include, but is not limited to specific performance injunction, reversion, damages, or eviction of noncomplying Qualified Patron.

7.2 **Equal Housing Opportunity.** Pursuant to the Fair Housing Act and public policy, Grantor shall not discriminate based on race, creed, color, sex, national origin, familial status, disability, sexual orientation, or gender identity in the sale, use or occupancy of the Restricted Property.

7.3 **Waiver of Exemptions.** Every Qualified Patron, by taking a membership interest in the cooperative who owns the Restricted Property, shall be deemed to have subordinated to this Covenant all right of homestead and any other exemption in, or with respect to, such Restricted Property under state or federal law presently existing or hereafter enacted.

7.4 **Notices.** Any notice, consent, approval, or request which is required to be given by any party hereunder shall be given by personal delivery, by mailing the same, certified mail, return receipt requested, properly addressed and with postage fully prepaid, to the address provided herein or to the address of Grantee and Grantor at:

Grantee: City Administrator
City of Ouray
320 6th Avenue
PO Box 468
Ouray, CO 81427
Telephone: 970-325-7078

Grantor: SWISS VILLAGE COOPERATIVE, INC.
Attn Paula Damke
PO BOX 193
Ouray, CO 81427

7.5 **Severability.** Whenever possible, each provision of this Covenant and any other related document shall be interpreted in such manner as to be valid under applicable law; but if any provision of this Covenant shall be invalid or prohibited under said applicable law, such provisions shall be ineffective to the extent of such invalidity or prohibition, without invalidating the remaining provisions of this Covenant.

7.6 **Choice of Law and Venue.** This Covenant and each related document are governed and construed in accordance with the laws of the State of Colorado and action shall commence in Ouray County, Colorado and any removal to federal court is hereby waived and such removal shall be remanded back to Ouray County District Court.

7.7 **Attorney Fees and Costs**. In any proceeding for the resolution of any controversy or claim arising out of or relating to, this Deed Restriction and Use Covenant, or its breach, the finder of fact shall determine and award to the prevailing party, their reasonable attorney fees and costs.

7.8 **Successors.** Except as otherwise provided herein, the provisions and covenants contained herein shall inure to and be binding upon the heirs, successors, and assigns of the parties.

7.9 **Further Actions.** Owners and subsequent owners agree that they shall be personally liable for their participation in any of the transactions contemplated herein and that they will execute such further documents and take such further actions as may be reasonably required to carry out the provisions and intent of this Covenant or any agreement or document relating hereto or entered in connection herewith.

7.10 **Modifications.** Any modifications of this Covenant shall be effective only when made by a duly executed instrument by Grantee and Owner, with the written consent of each, and recorded with the Clerk and Recorder of Ouray County, Colorado.

8.11 **Authority to Sign**. Each person signing this document on behalf of a party, represents and warrants that they have the full power and authority to enter into and perform this Agreement.

EXECUTED this _____ day of _____ 2025.

CITY OF OURAY

_____
Ethan Funk, Mayor

Attest:

_____
Melissa M. Drake, Clerk

OWNER

By: [NAME], Member

State of Colorado)
) ss.
County of Ouray)

The foregoing Deed Restriction and Covenant for SWISS VILLAGE COOPERATIVE, INC., has been acknowledged before me this _____ day of _____, 2025, by _____ _____ on behalf of Swiss Village Cooperative, Inc.

Witness my hand and official seal.
My commission expires:

_____
Notary Public

DRAFT

PROMISSORY NOTE

$200,000.00 **Date: _____** **Ouray, CO**

FOR VALUE RECEIVED, the undersigned (Borrower) promises to pay **CITY OF OURAY** (Note Holder) the principal sum of Two Hundred Thousand Dollars ($200,000.00) with interest on the unpaid principal balance from the date set forth above (Effective Date) until paid at the current prime rate as of the Effective Date of _____percent (__ %) per annum.

1. Terms of Payment/Forgiveness

This loan shall function as a grant. The term of the loan is ninety-nine (99) years from the Effective Date. The loan shall be forgiven at the expiration of the term, subject to Borrower remaining in compliance during the term with the Deed Restriction and Use Covenant dated _____ and recorded on _____ at Reception No. _____ in the office of the Ouray County, Colorado, Clerk and Recorder's Office (Deed Restriction).

OR The principal balance of this Note and all accrued interest will be forgiven as follows: 1/99th of the original principal amount and accrued interest shall be forgiven on each anniversary of the Effective Date. Should Borrower default before the end of the 99-year period, any remaining principal and interest shall become immediately due and payable.

2. Default

In the event of any default of the Deed Restriction then the remaining unforgiven principal balance shall bear interest at twelve percent (12%) from the date of default until such balance has been paid in full, and the unpaid principal balance, plus accrued interest and all other obligations of Borrower to the Noteholder, direct or indirect, shall, at the option of the City, become immediately due and payable without notice or demand, and the City shall have and may exercise any and all rights and remedies provided herein or in the Deed of Trust or Deed Restriction.

In the event of any such default, Borrower agrees to pay on demand all of the State's reasonable costs and expenses incurred for the recovery of all or any part of or for the protection of the indebtedness, or to enforce the State's rights under the Loan Agreement or Security Documents, including, without limitation, reasonable attorneys' fees.

3. Security

The indebtedness evidenced by this Note is secured by a Deed of Trust dated _____, and until released said Deed of Trust contains additional rights of Note Holder. Such rights may cause Acceleration of the indebtedness evidenced by this Note. Reference is made to

said

Deed of Trust for such additional terms and the legal description of the property covered by the Deed of Trust.

4. Nonrecourse

This Note is nonrecourse to Borrower's partners, members, managers, directors, employees and agents as appropriate, and the payment of principal, interest and any other amounts due and owing under this Note shall not be enforced by any action or proceeding whereby any damages or personal money judgment shall be sought against any of Borrower's partners, members, managers, directors, employees and agents as appropriate.

5. Miscellaneous

a. If any of the provisions of this Note are held to be invalid or unenforceable, the determination of invalidity or unenforceability of an such provision shall not affect the validity or enforceability of any other provision(s) of this Note.

b. This Note shall be binding upon Borrower and its successors and assigns and shall inure to the benefit of and be enforceable by the City of Ouray, its successors and assigns.

c. The obligations of Borrower are contingent upon receipt of funds from the City of Ouray.

d. Borrowers and all other makers, sureties, guarantors, and endorsers hereby waive presentment, notice of dishonor and protest, and they hereby agree to any extensions of time of payment and partial payments before, at, or after maturity. This Note shall be the joint and several obligation of Borrower and all other makers, sureties, guarantors and endorsers, and their successors and assigns.

BORROWER:
SWISS VILLAGE COOPERATIVE, INC.

By_____
Name and Title

(CAUTION: SIGN ORIGINAL NOTE ONLY/RETAIN COPY)

DRAFT

DEED OF TRUST
(Short Form - NOT Due on Sale)

THIS DEED OF TRUST, Made this _____ day of _____, 2025, between SWISS VILLAGE COOPERATIVE, INC., a Colorado cooperative, whose address is P.O. Box 193, Ouray, Colorado 81427 (Grantor), and the Public Trustee of Ouray County, Colorado (Public Trustee).

WHEREAS, Grantor has executed a Promissory Note (Note) bearing even date herewith, for the principal sum of Two Hundred Thousand Dollars ($200,000.00), payable to the order of **CITY OF OURAY**, the Beneficiary of this Deed of Trust, whose address is 320 6th Avenue, Ouray, Colorado 81427, after the date hereof, with interest thereon from the date thereof at the rate of ____ percent per annum, payable as follows: (INSERT TERMS FROM PROMISSORY NOTE); and

WHEREAS, Grantor is desirous of securing payment of the principal and interest of said promissory note in whose hands soever the Note may be.

NOW, THEREFORE, Grantor, in consideration of the premises and for the purpose aforesaid, does hereby grant, bargain, sell and convey, in trust forever, unto the Public Trustee of Ouray County, in which county the following described property is situate; to wit,

See Legal Description on the attached Exhibit A

Also known by street and number as 1500 Oak Street, Ouray, CO 81427

TO HAVE AND TO HOLD the same, together with all and singular the privileges and appurtenances thereunto belonging; **In Trust nevertheless**, that in case of default in the payment of said note, or any part thereof or interest thereon, or in the performance of any covenants hereinafter set forth, then upon the beneficiary (Note Holder) filing notice of election and demand for sale, said Public Trustee, after advertising notice of said sale as provided by law, in a newspaper of general circulation in said county, shall sell said property in the manner provided by law in effect at the time of filing said notice and demand, at public auction for cash, at any proper place designated in the notice of sale. Out of the proceeds of said sale said Trustee shall retain or pay first all fees, charges and costs and all moneys advanced for taxes, insurance and assessments, or on any prior encumbrance, with interest thereon, and pay the principal and interest due on said note, rendering the overplus (if any) unto the Grantor; and after the expiration of the time of redemption, said Trustee shall execute and deliver to the purchaser a deed to the property sold. The Beneficiary may purchase said property or any part thereof at such sale.

Grantor covenants that at the time of delivery of these presents, it is seized of said property in fee simple, and that said property is free of encumbrances, except ******* and that it will keep all buildings insured for fire and extended coverage in amount equal to the unpaid balance of said note with loss payable to the Beneficiary, and will pay all taxes and assessments against said property and amounts due on prior encumbrances, and if he shall fail to pay insurance premiums, taxes or amounts due on prior encumbrance, the beneficiary may pay the same and all amounts so paid shall become additional indebtedness due hereunder; and in case of foreclosure he will pay reasonable attorney's fees.

Should the Beneficiary hereunder be made a party to any action affecting this deed of trust or the title to said property, Grantor agrees that all court costs and a

reasonable attorney's fee paid by the beneficiary shall become additional indebtedness due hereunder; and Grantor does hereby release and waive all claims in said property as a homestead exemption or other exemption now or hereafter provided by law.

It is agreed that in case of default in payment of said principal or interest or a breach of any of the covenants herein, then said principal sum hereby secured and interest thereon may at the option of the beneficiary become due and payable at once, anything in said note to the contrary notwithstanding and possession of said property will thereupon be delivered to the Beneficiary, and on failure to deliver such possession the beneficiary shall be entitled to a receiver for said property, who may be appointed by any court of competent jurisdiction.

Whenever used herein the singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders. All of the covenants herein shall be binding upon the respective heirs, personal representatives, successors and assigns of the parties hereto.

Should any provision of this Deed of Trust be found to violate the statutes or court decisions of the State of Colorado, or of the United States, such provision shall be deemed to be amended to comply with and conform to such statutes and decisions.

Executed this _____ day of June, 2025.

SWISS VILLAGE COOPERATIVE, INC., a Colorado cooperative

By_____

STATE OF COLORADO)
) ss.
County of)

The foregoing instrument was acknowledged before me this _____ day of _____, 2025, by _____ as President of Swiss Village Cooperative, Inc, Grantor.

Witness my hand and official seal.

My Commission expires:

_____
Notary Public

EXHIBIT A
Legal Description

Parcel 1: (Insert Legal)

Parcel 2: (Insert Legal)

Parcel Numbers above are not part of the legal descriptions.

After recording return to:
Impact Development Fund
200 E. 7th Street, Suite 412
Loveland, CO 80537

SUBORDINATION AGREEMENT

THIS SUBORDINATION AGREEMENT (the "Agreement"), is made and entered into as of the ____ day of ____ 2025, by and among _____, a _____ ("Borrower"), _____, a _____ ("Example – Junior Lender"), and Impact Development Fund, a Colorado non-profit corporation (the "Senior Lender").

RECITALS:

A. Borrower is the owner of the real property located in the County of _____, Colorado, which is legally described on **Exhibit A**, attached hereto and incorporated herein by reference ("Property") subject to the Subordinate Deed of Trust (described below).

B. Borrower received from Example – Junior Lender funds in the amount of $_____.00 pursuant to a Promissory Note ("Subordinate Note" and the obligations under the Subordinate Note and all related documents and instruments are hereafter referred to as the "Subordinate Note Documents"). The Subordination Note Documents together with any other loans from the Example – Junior Lender to Borrower relating to the Property, as each such may be modified, amended, supplemented, substituted, or replaced, are collectively referred to herein as the "Subordinate Debts."

C. The Subordinate Debts are secured by a Deed of Trust granted by the Borrower for the benefit of Example – Junior Lender dated _____ ____, 2021 and recorded on _____ at Reception No. _____ (as the foregoing has or may be modified, amended, supplemented, substituted or replaced, "Subordinate Deed of Trust"). The Subordinate Note Documents and the Subordinate Deed of Trust together with all other documents or instruments executed and relating thereto and each as modified, amended, supplemented, substituted or replaced from time to time, are hereafter the "Subordinate Loan Documents."

D. On or about even date herewith, Senior Lender is loaning to Borrower an amount not to exceed $_____.00 related to the Property ("Senior Loan").

E. The Senior Loan is evidenced by a Promissory Note granted by Borrower for the benefit of the Senior Lender (as modified, amended, supplemented, substituted or replaced, "Senior Note") and is secured by among other things a first lien Deed of Trust encumbering the Property (the "Senior Deed of Trust"), among other collateral (collectively, all collateral documents securing the Senior Note and all other obligations referenced in any such instrument as each such instrument is modified, amended, supplemented, substituted or replaced, are collectively referred to herein as the "Senior Security Instruments," and the Senior Security Instruments together with all documents evidencing or relating to the Senior Loan, each as may be modified, amended, supplemented, substituted or replaced are collectively referred to herein as the "Senior Loan Documents").

F. The Senior Lender has agreed to make the Senior Loan only upon the execution of this Agreement by Example – Junior Lender and Borrower.

NOW, THEREFORE, in consideration of the Recitals, which are hereby made a part hereof, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed as follows:

1. Subordination to the Senior Deed of Trust. The Borrower and the Example – Junior Lender, each as applicable, hereby subordinates the Subordinate Loan Documents, along with any and all other of each of their right, title and interest in and to the Property and any rents and proceeds thereof to the Senior Loan Documents and any amendments, modifications or extensions thereto.

2. Subordination of Right, Title, and Interest of Example – Junior Lender in the Property. All right, title and interest of the Example – Junior Lender in and to the Property, and rents and proceeds thereof, pursuant to the Subordinate Loan Documents shall in all respects be junior, subordinate and subject to the prior right, title and interest of the Senior Lender in and to the Property, and rents and proceeds thereof, pursuant to the Senior Loan Documents.

3. Limitations on Payment. The Example – Junior Lender shall not receive, or take action to collect or enforce, payment from Borrower, and Borrower will not make payment to the Example – Junior Lender, of any amounts outstanding under the Subordinate Debts. Upon the occurrence of an Event of Default as defined in the Senior Loan Documents, Senior Lender shall give notice to Example – Junior Lender, and the Example – Junior Lender shall not, without the prior written consent of the Senior Lender, receive or take any action to collect or enforce, payment of the Subordinate Debts or any part thereof from any trustee in bankruptcy, receiver, or other liquidator of any part of Borrower's property, or from any other person. Until payment in full of the Senior Note any payment received by the Example – Junior Lender in violation of the immediately preceding sentence shall promptly be delivered to the Senior Lender for application to the Senior Note. The Example – Junior Lender and Senior Lender agree to notify each other, within a reasonable time period, of their knowledge of an event of default under their respective instruments.

4. Release of Subordinate Covenant and Subordinate Loan Documents. Upon an Event of Default and Senior Lender's election to foreclose the Senior Deed of Trust or take a deed in lieu thereof, the Example – Junior Lender shall promptly execute and deliver to Senior Lender or any third-party successful bidder at foreclosure sale such instruments as may reasonably be necessary to terminate or release any covenants or grant agreements, relating to the Subordinate Loan Documents with respect to the Property foreclosed or transferred by deed-in-lieu thereof. Example – Junior Lender agrees that if it fails to execute any releases required under this Section within ten (10) days of satisfaction of the above requirements, such releases will be automatic with no further action necessary on the part of Senior Lender.

5. Default. Upon the occurrence of an Event of Default, and prior to the commencement of foreclosure by Senior Lender under the any of the Senior Loan Documents, Senior Lender agrees it shall provide notice of such default to the Example – Junior Lender and provide to the Example – Junior Lender the same number of days to cure such default that are

provided to Borrower in the Senior Loan Documents to cure such defaults; on the condition that (i) Senior Lender shall only be required to provide notice of default to the Example – Junior Lender if Senior Lender is required to provide notice of such default to Borrower in the Senior Loan Documents; (ii) the Example – Junior Lender shall be entitled to a cure period for default only to the extent that Borrower is entitled to a cure period for such default in the Senior Loan Documents; and (iii) the Example – Junior Lender's cure period shall be co-terminus with (and not in addition to) the cure period provided to Borrower.

Upon the occurrence of a default under the Subordinate Debts, the Example – Junior Lender agrees to provide to Senior Lender a copy of any notice of default provided to Borrower.

6. Senior Lender Priority. In the event of the bankruptcy of, or the appointment of a trustee, receiver or other representative or liquidator for any of the property of Borrower, or in the event Borrower shall become the subject of any proceeding of any character under any federal or state bankruptcy or insolvency act or law, all moneys and other property allocated or allocable to the Subordinate Debts shall be paid and delivered directly to the Senior Lender for application by the Senior Lender to the Senior Note, in such order as the Senior Lender shall elect, until full payment of the Senior Note with the excess, if any, to be paid to Example – Junior Lender.

7. Loan Priority. The parties acknowledge and agree that, notwithstanding any other provisions of this Agreement or any loan document to the contrary, the Senior Loan Documents shall be first and prior to any of the Subordinate Loan Documents.

8. Condemnation Awards and Insurance Proceeds. Until repayment in full of the Senior Loans, the Example – Junior Lender agrees that any and all rights of either of the Example – Junior Lender, including without limitation any and all rights to condemnation awards or insurance proceeds, shall be, and are hereby expressly made, subject and subordinate to the lien of the Senior Deed of Trust and to the rights, interests and remedies of the Senior Lender and its successors and assigns (including the purchaser at any foreclosure sale or the transferee of any transfer in lieu of foreclosure) under the Senior Deed of Trust. If following any such application or disposition of the insurance proceeds or condemnation awards and other compensation in accordance with the terms of the Senior Loan Documents any balance remains, then such excess shall be made payable to the Example – Junior Lender.

9. Pay Over of Monies. In the event that the Example – Junior Lender receives any payment or property on or under the Subordinate Debts whether condemnation, insurance proceeds or in violation of the terms of this Agreement, such payments shall be held in trust by the Example – Junior Lender, and it will forthwith pay over or deliver the same to the Senior Lender to be held by Senior Lender as cash collateral securing the Senior Note or applied to the Senior Note.

10. Undertakings Unaffected. The Example – Junior Lender's undertakings herein shall not be affected or impaired by (a) any neglect or omission on the part of the Senior Lender to preserve any collateral at any time securing payment of the Senior Note, or (b) any act on the part of the Senior Lender in releasing, canceling, or surrendering all or part of such collateral, or in extending the time for payment with respect to all or any part of the Senior Note or such collateral, or in enforcing or realizing upon such collateral. No notice whatsoever need be given to the Example – Junior Lender at any time of any payments made under the Senior Note or with

respect to any collateral securing the Senior Note. Notwithstanding anything to the contrary contained herein, Senior Lender agrees that it will not (a) extend the maturity of the Senior Note, or (b) increase the amount of the Senior Loan without the prior written consent of the Example – Junior Lender.

11. Limitation on Transfer. The Example – Junior Lender will not assign, pledge or otherwise transfer, or permit or suffer to be assigned, pledged or otherwise transferred, or execute any power of attorney with respect to, the Subordinate Debts, or any part thereof, except upon prior written notice to the Senior Lender and unless such assignee, pledgee, or transferee agrees in writing to be bound by the terms and conditions of this Agreement.

12. Acceleration. In the event of any breach of this Agreement, the Senior Lender shall have the right, at its option, and in addition to any other rights the Senior Lender may have, to declare the Senior Note immediately due and payable without notice or demand.

13. Continuing Nature of Subordination. This Agreement shall be irrevocable and shall continue effective until the Senior Loan has been paid in full and all financing arrangements between Borrower and the Senior Lender relating to the Senior Loan have been terminated. The agreement of the Example – Junior Lender to subordinate to the Senior Loans shall be limited to the principal amount of the Senior Loans, together with interest, default interest, fees and charges that may be incurred in connection with the Senior Loans, all as described in the Senior Deed of Trust including, but not limited to, real estate tax and insurance payments and any and all modifications of the Senior Loan.

14. Successors and Assigns. This Agreement is binding not only upon the Example – Junior Lender and Borrower, but also upon the successors and assigns of each of them and is enforceable not only by the Senior Lender but also by its successors and any assignee of or participant in the Senior Note.

15. Governing Law. This Agreement shall be interpreted, and the rights and liabilities of the parties hereto determined, in accordance with the internal laws of the State of Colorado.

16. Section Titles; Gender. The section titles contained in this Agreement are and shall be without substantive meaning or content of any kind whatsoever and are not a part of the agreement between the parties hereto. The singular form of any word used in this Agreement shall include the masculine and feminine forms, and vice versa.

17. Notices. Except as otherwise expressly provided herein, any notice required or desired to be served, given or delivered hereunder shall be in writing and shall be deemed to have been validly served, given or delivered upon receipt when personally delivered or sent by facsimile transmission or overnight courier, or when duly deposited in the United States mails, certified or registered with proper postage prepaid, addressed to the party to be notified as follows:

If to Borrower: _____
Attn: _____
(Address:)_____
(City, State, Zip:)_____

If to Senior Lender: Impact Development Fund
200 E. 7th Street, Suite 412
Loveland, CO 80537

If to Example – Junior Lender: _____
Attn: _____
(Address:)_____
(City, State, Zip:))_____

18. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original with the same effect as if the signatures thereto and hereto were upon the same document.

[*The remainder of this page has intentionally been left blank*.]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

BORROWER:

_____

a _____

By: _____

(Signers Name)

Its: (Title)

STATE OF COLORADO)

) ss.

COUNTY OF _____)

The foregoing Deed of Trust was acknowledged before me this ____ day of _____, 2021 by _____ as _____ of _____, a _____.

Witness my hand and official seal.

My commission expires: _____

_____

Notary Public

Example – Junior Lender:

_____,
a _____

By: _____
(Signers Name)
Its: (Title)

STATE OF COLORADO)
) ss.
COUNTY OF _____)

The foregoing Deed of Trust was acknowledged before me this ____ day of _____, 2021 by _____ as _____ of _____, a _____.

Witness my hand and official seal.

My commission expires: _____

_____
Notary Public

SENIOR LENDER:
IMPACT DEVELOPMENT FUND,
a Colorado nonprofit corporation

_____

By: Megan Ferguson
Its: Chief Executive Officer

STATE OF COLORADO)
) ss.
COUNTY OF LARIMER)

The foregoing instrument was acknowledged before me this _____ day of _____, «Closing Year», by Sean Doherty as Executive Director of Impact Development Fund, a Colorado nonprofit corporation.

Witness my hand and official seal.

My commission expires:_____

_____

Notary Public

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

RESOLUTION NO. 19 (SERIES 2025)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OURAY, COLORADO APPROVING THE OURAY COUNTY MULTI-JUISDICTIONAL HAZARD MITIGATION PLAN

WHEREAS, the Federal Disaster Mitigation Act of 2000 was signed in to law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring jurisdictions to adopt a hazard mitigation action plan to be eligible for pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, a Multi-Jurisdictional Hazard Mitigation Plan was prepared by Ouray County, CO, with assistance from JEO Consulting Group, Inc.; and

WHEREAS, the purpose of the mitigation plan was to lessen the effects of disasters by increasing the disaster resistance of the county and participating jurisdictions located within the planning area by identifying the hazards that affect the City of Ouray and prioritize mitigation actions and strategies to reduce potential loss of life and property damage from those hazards, and

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of the City of Ouray in the form of a resolution and further requesting approval of the plan at the Federal Level; and

NOW, THEREFORE, the City Council of the City of Ouray does herewith adopt the most recent and FEMA approved version of the Ouray County Hazard Mitigation Plan 2025 in its entirety; and

PASSED AND APPROVED this 18th day of August, 2025 by the Ouray City Council.

CITY OF OURAY, COLORADO

ATTEST: _____

Ethan Funk, Mayor

_____

Melissa M. Drake, City Clerk

2025
Ouray County
Hazard Mitigation Plan



Prepared By: JEO CONSULTING GROUP

Ouray County Planning Team

Name	Title	Jurisdiction
Glenn Boyd	Emergency Manager	Ouray County
*Phil Luebbert	Project Manager	JEO Consulting Group Inc.
*Karl Dietrich	Planner	JEO Consulting Group Inc.
*Sam Otte	Project Coordinator	JEO Consulting Group Inc.
*Matthew West	Mitigation Planning Supervisor	Colorado Division of Homeland Security and Emergency Management
*David Krick	Mitigation Planning Specialist	Colorado Division of Homeland Security and Emergency Management

**Served in an advisory or consultant role.*

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Section One: Introduction

Hazard Mitigation Planning

Hazard mitigation planning is a process in which hazards are identified and profiled; people and facilities at risk are identified and assessed for threats and potential vulnerabilities; and strategies and mitigation measures are identified. Hazard mitigation planning increases the ability of communities and other governmental entities to function effectively in the face of natural disasters. The process aims to reduce risk and vulnerability to lessen impacts on life, the economy, and infrastructure.

FEMA definition of
Hazard Mitigation

"Any sustained action taken to reduce or eliminate the long-term risk to human life and property from [natural] hazards."

Severe weather and hazardous events occur more frequently in our daily lives. Pursuing mitigation strategies reduces risk and is socially and economically responsible for preventing long-term risks from natural and human-caused hazards.

Hazards, such as severe winter weather, avalanches, intentional attacks, landslides, floods, lightning, drought, and wildfires, are part of the world around us. These hazard events can occur as a part of regular operation or because of human error. All jurisdictions participating in this planning process are vulnerable to a wide range of hazards that threaten the safety of residents and have the potential to damage or destroy both public and private property, cause environmental degradation, or disrupt the local economy and overall quality of life.

This plan updated the Ouray County Hazard Mitigation Plan, which was approved in 2020. The plan update was developed in compliance with the requirements of the Disaster Mitigation Act of 2000 (DMA 2000). By preparing this plan, Ouray County has demonstrated a commitment to reducing risks from hazards and to helping decision-makers establish mitigation activities and resources.

Hazard Mitigation Assistance

On June 1, 2009, FEMA initiated the integration of the Hazard Mitigation Assistance program, which aligned specific policies and timelines of the various mitigation programs. These Hazard Mitigation Assistance programs present a critical opportunity to minimize the risk to individuals and property from hazards while simultaneously reducing the reliance on federal disaster funds.

Mitigation is the cornerstone of emergency management. Mitigation focuses on breaking the cycle of disaster damage, reconstruction, and repeated damage. Mitigation lessens the impact disasters have on people's lives and property through damage prevention, appropriate development standards, and affordable flood insurance. Through measures such as avoiding building in damage-prone areas, stringent building codes, and floodplain management regulations, the impact on lives and communities is lessened.

- FEMA Mitigation Directorate

Separate legislative actions authorized each Hazard Mitigation Assistance program; each program differs slightly in scope and intent.

- **Hazard Mitigation Grant Program:** To qualify for post-disaster mitigation funds, local jurisdictions must adopt a mitigation plan that FEMA approves. The Hazard Mitigation Grant Program funds states, territories, Indian tribal governments, local governments, and eligible private non-profits following a presidential disaster declaration. The DMA 2000 authorizes up to seven percent of Hazard Mitigation Grant Program funds available to a state after a disaster to develop or update state, tribal, and local mitigation plans.

- **Flood Mitigation Assistance:** This program provides grant funds to implement projects such as acquiring or elevating flood-prone homes. Jurisdictions must be participating communities in the National Flood Insurance Program to qualify for this grant. Flood Mitigation Assistance aims to reduce or eliminate claims under the National Flood Insurance Program.

- **Pre-Disaster Mitigation:** The Pre-Disaster Mitigation grant program makes federal funds available to state, local, tribal, and territorial governments to implement measures to reduce the risk to individuals and property from future natural hazards. The Consolidated Appropriations Act of 2023 authorizes funding for 100 projects with total funds of $233,043,782 in 2023.

- **Fire Mitigation Assistance Grants:** Section 404 of the Stafford Act allows FEMA to provide Hazard Mitigation Grant Program grants to any area that received a Fire Management Assistance Grant declaration, even if no presidential declaration was made. Fire Mitigation Assistance Grants aid communities in implementing long-term mitigation measures after a wildfire event.

See *Appendix E: Hazard Mitigation Project Funding Guidebook* for more information about these grant programs and other funding opportunities to help implement identified mitigation actions.

Summary of Changes

The hazard mitigation planning process changes during each update to best accommodate the planning area and specific conditions. Changes from the 2020 Hazard Mitigation Plan and planning process in this update included an updated plan layout, greater effort to include all taxing authorities as participants, an in-depth funding guidebook, and changes to meet updated FEMA hazard mitigation plan policies. The plan was also updated to reflect changing priorities for each participating jurisdiction. Each local planning team identified prioritized hazards of concern, and mitigation actions were reviewed. Each local planning team reviewed the mitigation actions from 2020 and updated the timeline, priority (high, medium, low), and status. Local planning teams were also able to add new mitigation actions to better fit any changing priorities and concerns. The 2020 Ouray County Hazard Mitigation Plan Review Tool was reviewed for possible changes to incorporate into this plan update and were addressed where applicable. These changes are described in the table below.

Table 1: 2020 Plan Comments and Revisions

Comment/Revision from 2020 Review Tool	Location of Revision	Summary of Changes
Although neighboring jurisdictions were invited to participate, they did not do so. Several of Ouray County's hazards either come from neighbors or extend into them. Regularly working with them on cross-boundary hazards may get them to participate in the next plan update.	Section 4 & Appendix B	All neighboring jurisdictions were once again invited to participate. However, no one chose to do so. Ouray County and local participants regularly work on cross-boundary projects.
The listed plans, studies, reports, and technical information listed in the Review and Incorporation of Existing Planning Mechanisms section shows the Planning Team clearly considered several other mechanisms. However, a few important documents are missing that will need to be reviewed and incorporated in the next plan update, such as County and municipal land use and zoning codes. More importantly, for the next update, please add more detailed narrative about how and where each of the listed planning mechanisms was explicitly used in the HMP. For example, describe how you used the Town of Ridgeway Master Plan and where in the HMP that information may be found. It is understood the City of Ouray is updating their Master Plan. However, the HMP did not review and incorporate information from the old plan, nor does it specify that it incorporated new draft information. The plan should have reviewed and incorporated information from the old plan since it is still in place as the community's long-range plan, or, it should have reviewed new draft plan sections (if available).	Individual Participant Profiles	Within each participant profile, there is a Plans and Studies section. There, you will find a list of planning documents that discuss or relate to hazard mitigation. Each document describes how it is integrated with the hazard mitigation plan or contains hazard mitigation principles.
It is unclear how each member of the Planning Team participated in the process. The plan does a great job describing the meetings and provides a thorough list of Planning team	Individual Participant Profiles	Each participant profile has a section for the local planning team. There, you will find a list of the local planning team members, along with

Comment/Revision from 2020 Review Tool	Location of Revision	Summary of Changes
members, however it is not clear if everyone went to each meeting or what parts of the plan they provided input on without flipping back and forth to the appendix. For the next update, consider making this information more explicit within the body of the plan itself.		which meetings they attended and if they helped to develop materials, which is included in the profile.
In the next plan update, consider providing minutes or brief summaries of key take-aways from planning discussions as part of the packets for each Steering Committee meeting. Minutes detail useful information and pair well with agendas.	Section 4 & Appendix B	Meeting overview summaries are included in Section 4 of the Upfront. Examples of meeting worksheets are included in Appendix B.
Section 4.4, Critical Facilities, states that the critical facilities analysis for both counties are in a confidential appendix. For the next plan update, if the critical facilities analysis is kept confidential again, consider adding more narrative describing what that analysis includes. If a community member were to read this plan, they should at least be able to understand what types of analysis were conducted by each hazard. For example, did you look at what critical facilities were in flood plains? How would being in a flood plain impact the critical facility? While it is acceptable to have the full analysis separate, consider adding more detail to the narrative that is included in the plan.	Individual Participant Profiles & Appendix A	For this plan update, community lifelines are listed in the individual participant profiles and are no longer kept confidential. Appendix A includes an analysis of the community lifelines by hazard, and the profiles include a map of the locations along with the floodplain.
The Capabilities Assessment (Section 5.2.1) clearly demonstrates that the Steering Committee and Planning Team evaluated a range of different types of capabilities for each community. Requirement C1 requires that the plan describes existing authorities, policies, programs, and resources. For the next plan, consider adding more narrative around each, or the major capabilities, instead of only listing them in a table. Doing so will provide greater context and clarity about what is going on in each community. As an example, the City of Ouray and the Town of Ridgeway do not have staff with the specific title of "Resiliency Planner". However, both jurisdictions have staff that may be managing or administering resiliency-related planning activities. Further clarity will be helpful to understand who is doing resiliency planning and what activities are advancing community resilience. Lastly, in the next update, make sure to spell out the acronyms (e.g., BCEGS Rating) for each capability.	Individual Participant Profiles	Within each participant profile, there is a capability assessment table. This table has been expanded to include additional items from the last plan. Narratives for each capability were not included as the planning team felt this was a much cleaner and easier way to understand capabilities.

Goals and Objectives

The potential for disaster losses and the probability of natural and human-caused hazards present a significant concern for the jurisdictions participating in this plan. The driving motivation behind this hazard mitigation plan is to reduce vulnerability and the likelihood of impacts on the health, safety, and welfare of all residents and visitors in the county. The Ouray County Planning Team reviewed and approved goals, which helped guide the process of identifying broad-based and jurisdictional-specific mitigation strategies and projects that will reduce their vulnerability and help build stronger, more resilient communities if implemented.

Goals from the 2020 hazard mitigation plan were reviewed, and the Ouray County Planning Team agreed that they are still relevant and applicable for this plan update with minor wording updates. The goals and objectives for this plan update are as follows.

Goal 1: Minimize Loss of Life and Injury from Anticipated Hazard Events

Objectives

1. Educate residents and visitors about natural hazard events and ways to protect themselves.
2. Complete local-level community wildfire protection plans to include evacuation routes and procedures as well as re-entry procedures.
3. Improve flash flood and debris flow warning and evacuation capabilities.
4. Implement debris flow mitigation.
5. Make travel safer on Highways 550 and 62, County Roads, and major corridors through the county.
6. Provide training and equipment to responders and government officials.
7. Update and expand all-hazard emergency response plans.
8. Update building codes.

Goal 2: Reduce the Potential impact of Natural, Human-caused, and Technological Disasters on Public and Private Property, the Economy, Natural Environment, and Historic Resources

Objectives

1. Reduce flood impacts to the residents and visitors of the City of Ouray, Town of Ridgway, and the county.
2. Reduce debris flow impacts to public, private, and historic structures in the City of Ouray.
3. Reduce wildfire impacts to structures, ecosystems, and response resources.
4. Continue to reduce impacts of wildfire to future and existing development through land use planning, subdivision reviews, permitting, and building codes.
5. Update mapping of hazard areas, including flood, debris flow, wildfire, rockfall, and avalanche.
6. Use updated risk maps to improve the risk assessment in future updates to this plan and to provide public information.
7. Reduce drought impacts.
8. Provide training and equipment to responders and government officials.
9. Update building codes.

Goal 3: Reduce the Potential Impact of Natural, Human-caused, and Technological Disasters on Community Lifelines, Infrastructure, and Critical Support Services.

Objectives

1. Protect community lifelines and assets at risk to flood, debris flows, or landslide.
2. Protect community lifelines and assets at risk to wildfire.
3. Protect necessary communication infrastructure from multiple hazards (wildfire, lightning, windstorm, flood, extreme temperatures).
4. Provide continuity of operations and continuity of government.
5. Provide necessary support infrastructure.
6. Review government capabilities for responding effectively to anticipated hazard events and upgrade where possible.
7. Reduce the impact and risk of potential terroristic attacks on community lifelines, infrastructure, and services.

Participating Jurisdictions

Jurisdictions that participated in the Ouray County Hazard Mitigation Plan are listed in the table below. These jurisdictions met all the requirements for participation by attending required meetings, assisting in data collection, identifying mitigation actions, reviewing plan drafts, and either adopting the plan by resolution or planning to adopt the plan by resolution.

Table 2: Participating Jurisdictions

Participating Jurisdictions
Ouray County
City of Ouray
Town of Ridgway
Dallas Park Cemetery District*

**Dallas Park Cemetery District participated throughout the planning process and has separate district profile. However, the State of Colorado and FEMA have determined that the district is not considered a full participant and will have to work with Ouray County when applying for FEMA hazard mitigation assistance grants.*

Section Two: How to Use This Hazard Mitigation Plan

Introduction

This hazard mitigation plan was developed for anyone who lives, works, owns a business, owns land, or visits Ouray County. Different sections of the plan will be helpful to different people. This section is designed to help guide readers to the most relevant information.

How to Use This Document

Jurisdiction that Participated in the Plan

I am a governing official from a participating jurisdiction and want to learn more about the hazards that could impact my jurisdiction, identify strategies to reduce vulnerability to those hazards, how to secure funding for those strategies, and how to keep the plan up to date. I would review:

- **Section Three Planning Area Overview and Appendix C Planning Area Profile:** To learn about demographics, at-risk populations, housing, employment, economics, social vulnerability, rural capacity index, state and federal areas, and historical sites.
- **Section Five Risk Assessment Summary and Appendix A Full Risk Assessment:** To learn about the hazards that could impact Ouray County, where those hazards are likely to occur, how often they are likely to happen, the possible extent of the hazards, how climate change will impact the hazards, and countywide vulnerabilities.
- **Section Six Plan Implementation and Maintenance and Appendix F Guide to Review and Update the Hazard Mitigation Plan:** To learn about plan maintenance and how to update your participant section.
- **Participant Profiles Appendix:** To learn jurisdictional-specific information about Ouray County, local communities, and other local jurisdictions. Each participant section contains information about prioritized hazards, infrastructure critical to community lifelines, and mitigation strategies.
- **Appendix E Hazard Mitigation Project Funding Guidebook:** To learn about various federal, state, and other funding sources to help pay for identified mitigation strategies.

Resident, Landowner, Visitor, or Business

I am a resident, landowner, visitor, or business and want to learn about Ouray County/my community, protecting my family, home, and property from natural and human-caused hazards. I would review:

- **Section Three Planning Area Overview and Appendix C Planning Area Profile:** To learn about demographics, at-risk populations, housing, employment, economics, social vulnerability, rural capacity index, state and federal areas, and historical sites.

- **Section Five Risk Assessment Summary and Appendix A Full Risk Assessment:** To learn about the hazards that could impact Ouray County, where those hazards are likely to occur, how often they are likely to happen, the possible extent of the hazards, how climate change will impact the hazards, and countywide vulnerabilities.

- **Participant Profile Appendix:** To learn jurisdictional-specific information about Ouray County, local communities, and other local jurisdictions. Each participant section contains information about prioritized hazards, infrastructure critical to community lifelines, and mitigation strategies.

State or Federal Agency

I am with a state or federal agency and want to learn more about the planning process, hazard risks, and mitigation strategies across all jurisdictions in Ouray County. I would review:

- **Section One Introduction:** To learn about the goals and objectives of the Ouray County Hazard Mitigation Plan.

- **Section Three Planning Area Overview and Appendix C Planning Area Profile:** To learn about demographics, at-risk populations, housing, employment, economics, social vulnerability, rural capacity index, state and federal areas, and historical sites.

- **Section Four Planning Process Summary and Appendix B Planning Process Documentation:** To learn about the planning process, who attended meetings, and who was invited to participate.

- **Section Five Risk Assessment Summary and Appendix A Full Risk Assessment:** To learn about the hazards that could impact Ouray County, where those hazards are likely to occur, how often they are likely to happen, the possible extent of the hazards, how climate change will impact the hazards, and countywide vulnerabilities.

- **Appendix D Mitigation Strategy and Participant Profiles Appendix:** To learn about the mitigation strategies identified by each participating jurisdiction.

Section Three: Planning Area Overview

Introduction

To identify jurisdictional vulnerabilities, it is vital to understand the people and built environment of the planning area. The following section provides a summary of Ouray County's characteristics. A more detailed profile broken down by community is covered in *Appendix C: Planning Area Profile*, including demographics, at-risk populations, employment, economics, and housing.

Location and Geography

Located in the mountains of southwest Colorado, Ouray County is known as the "Switzerland of America". The county's terrain ranges from the San Juan Mountains in the south through the fertile Uncompahgre River Valley to rolling foothills and mesa lands in the north. It is a land of steep gorges, towering peaks, tumbling waterfalls, high mesas, and green pastures. Elevation ranges from 6,257 feet to 14,150 feet above sea level. Montrose County borders it to the north and northwest, San Miguel County to the west, San Juan County to the south, Hinsdale County to the southeast, and Gunnison County to the northeast.

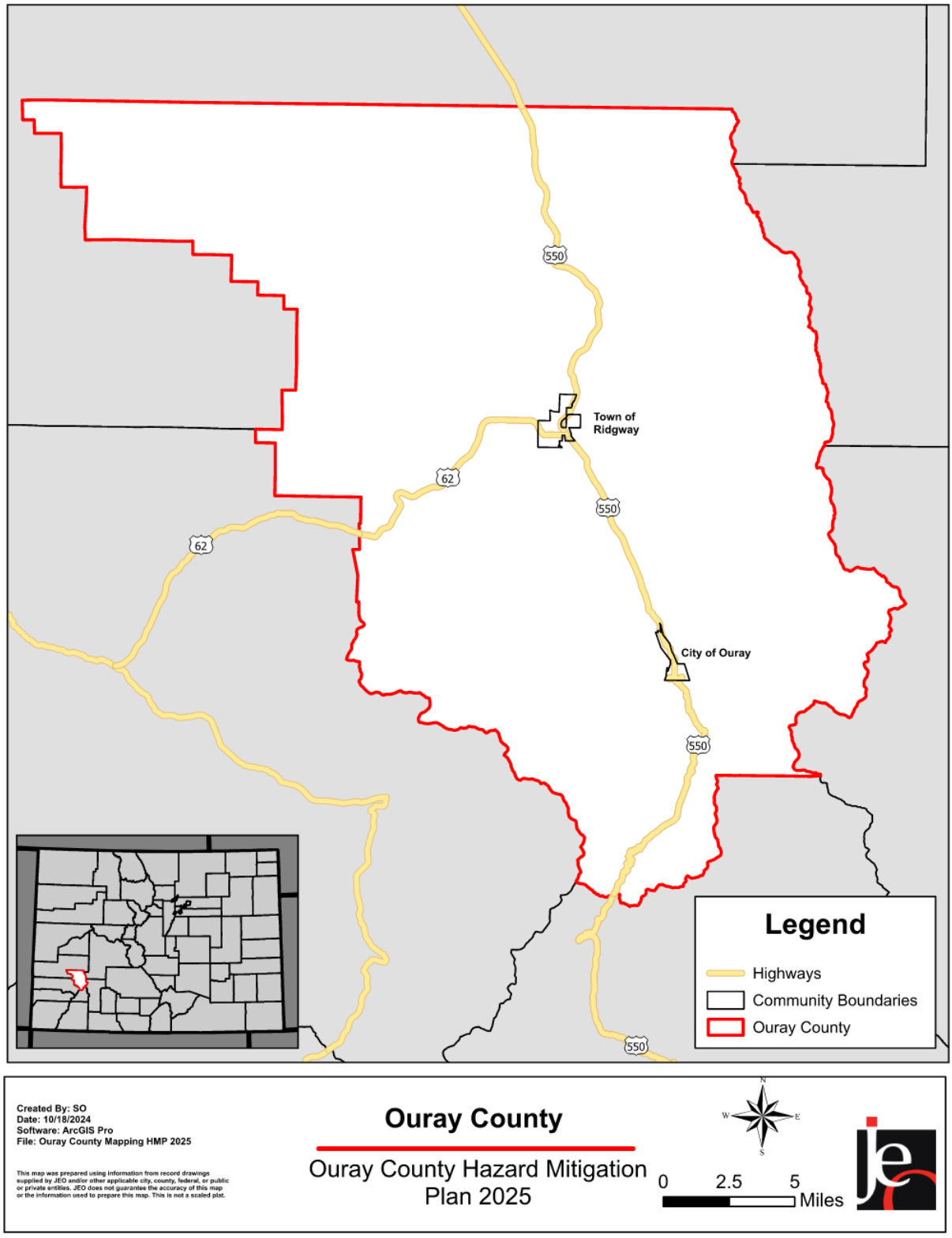
Ouray County encompasses 542 square miles (0.6 square miles are water) and includes two incorporated municipalities:

- The City of Ouray is located at an elevation of 7,687 feet and has a total area of 0.9 square miles, all of it land.
- The Town of Ridgway is located at an elevation of 6,962 feet and has a total area of 1.9 square miles, all of which is land.

The Uncompahgre River flows northwesterly through the county. Other major waterways include Red Mountain Creek, Ralston Creek, Bear Creek, Canyon Creek, Oak Creek, Portland Creek, Cascade Creek, Skyrocket Creek, Bridalveil Creek, Corbett Creek, Dexter Creek, Cutler Creek, Coal Creek, Cottonwood Creek, Dallas Creek, Cow Creek, Billy Creek, Crystal Lake, Lake Lenore, Black Lake, and Ridgway Reservoir. The climate in the river basin is semiarid, but rainfall and temperatures vary widely depending on elevation. Average annual precipitation ranges from 13 inches in the Colona-Ridgway area to 40 inches in the mountains. Approximately 30 to 40% of the precipitation is snowfall. Vegetation in the area consists of piñon, juniper, sagebrush, oak brush, and ponderosa pine, with dense spruce/fir forests in the Alpine Zone. Major transportation routes include U.S. Highway 550 and State Highway 62. Figure 1 shows Ouray County, incorporated communities, major transportation routes, major waterways, and locations within the state.

Additionally, Ouray County has a substantial amount of federally owned public land. Notably, the Uncompahgre National Forest covers large swaths of the southern portions of the county, surrounding the City of Ouray, and portions of the northwest and northeast sections of the County. The Mt. Sneffels Wilderness Area is located in the county's southwest corner and is contained in the Uncompahgre National Forest. Bureau of Land Management (BLM) lands can also be found throughout the central and northern portions of the county.

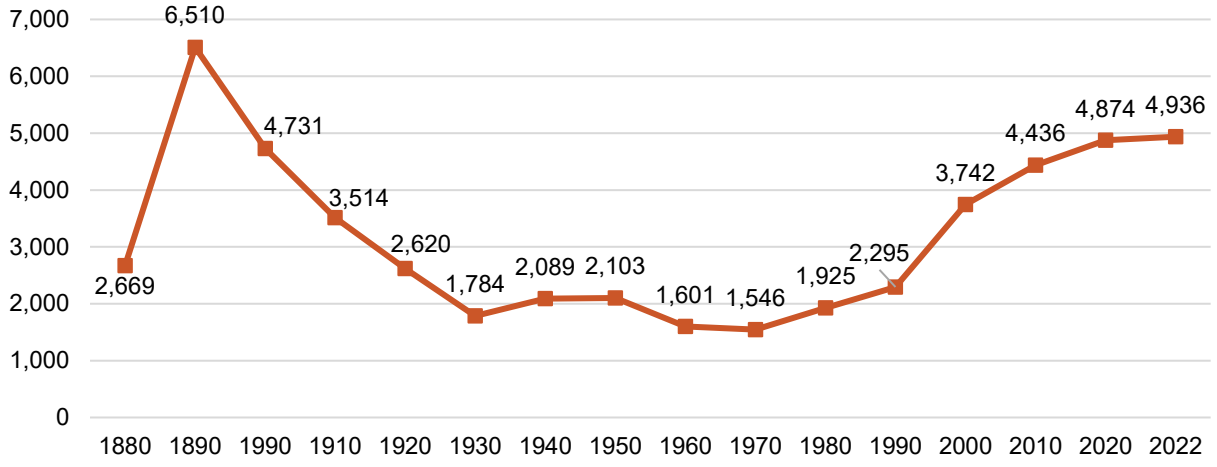
Figure 1: Ouray County Planning Area



Demographics

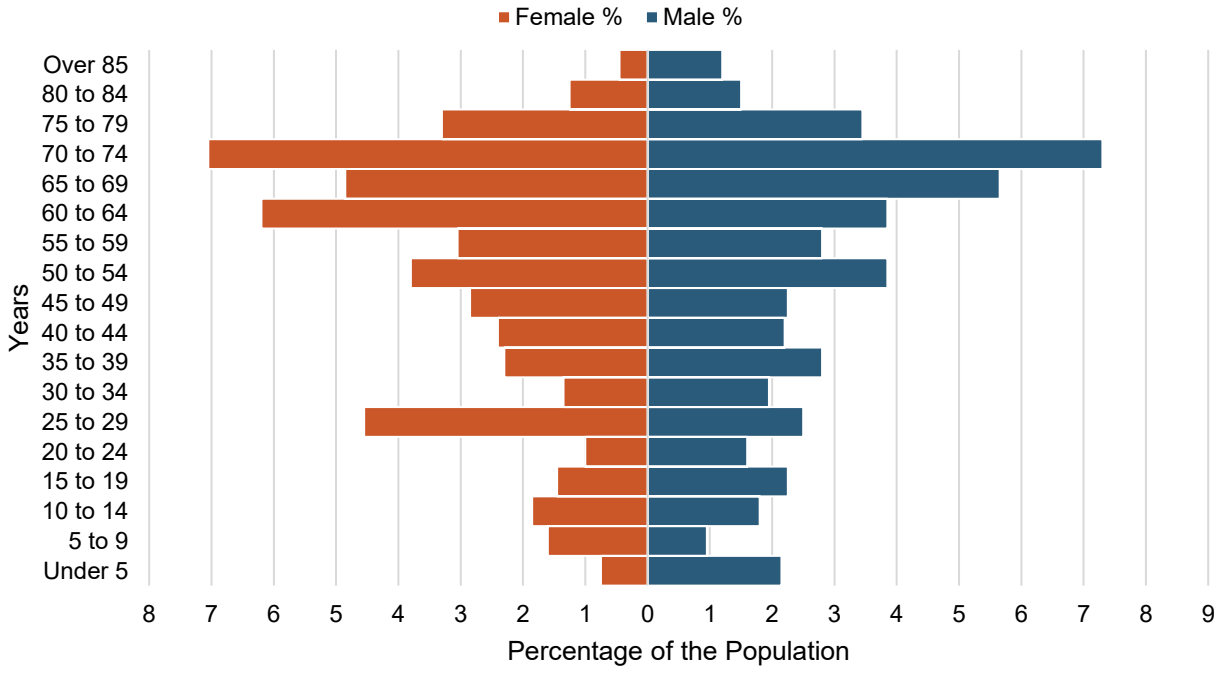
The U.S. Census Bureau collects specific demographic information for Ouray County. The estimated population of the planning area is 4,936.[1]

Figure 2: Ouray County Population, 1880-2022



Source: U.S. Census Bureau[2,3]

Figure 3: Population by Age Cohort and Sex (2022)



Source: U.S. Census Bureau[4]

1 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.
2 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.
3 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.
4 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.

Community and regional vulnerability are impacted by growing or declining populations. Areas growing quickly may lack resources to provide services for all residents in a reasonable timeframe, including snow removal, emergency storm shelters, repairs to damaged infrastructure, or even tracking the location of vulnerable populations. Ouray County has grown considerably since 1990, more than doubling the population. Additional population information broken down by community can be found in *Appendix C: Planning Area Profile*.

In general, specific populations may have increased vulnerability due to difficulty with medical issues, extremes in age, and communication issues due to language barriers. Several at-risk populations have been identified in Ouray County. These include:

- Schools
- Populations That Speak English as a Second Language
- Racial Minorities

Medical and care facilities would typically be identified as vulnerable population groups. However, Ouray County does not have any medical or care facilities.[5] This adds additional vulnerabilities to the general population. For any medical care, residents and visitors must travel outside the county, which increases the difficulty of getting treatment and the amount of time without treatment.

The tables below and on the next page list the at-risk populations in Ouray County. See *Appendix C: Planning Area Profile* for additional information about at-risk populations.

Table 3: School Inventory

School District	Total Enrollment (2023-2024)	Teachers (2023-2024)
Ouray School District	169	21
Ridgway School District	333	34

Source: Colorado Department of Education[6,7]

Table 4: County & State ESL and Poverty At-Risk Populations

Jurisdiction	Percent That Speaks English as a Second Language
Ouray County	5.8%
State of Colorado	16.2%

Source: U.S. Census Bureau[8]

5 Colorado Department of Public Health and Environment. 2023. "Regulated Health Facilities". https://cdphe.colorado.gov/find-and-compare-facilities.
6 Colorado Department of Education. 2023. "PK-12 Membership Trend by District." https://www.cde.state.co.us/cdereval/pupilcurrent.
7 Colorado Department of Education. 2023. "Count of Teachers by District, Ethnicity and Gender." https://www.cde.state.co.us/cdereval/staffcurrent.
8 United States Census Bureau. "2022 Census Bureau American Community Survey: S1601: Language Spoken at Home." https://data.census.gov/.

Table 5: County Racial Composition Trends

Race	2010 Number	2010 % of Total	2022 Number	2022 % of Total	% Change
White, Not Hispanic	4,277	96.4%	4,522	91.6%	-4.8%
Black	7	0.2%	105	2.1%	1.9%
American Indian and Alaskan Native	17	0.4%	9	0.2%	-0.2%
Asian	25	0.6%	15	0.3%	-0.3%
Native Hawaiian and Other Pacific Islander	5	0.1%	0	0%	-0.1%
Other Races	45	1.0%	40	0.8%	-0.2%
Two or More Races	60	1.4%	245	5.0%	3.6%
Total Population	**4,436**	-	**4,936**	-	-

Source: U.S. Census Bureau[9,10]

Housing

The U.S. Census Bureau provides information related to housing units and potential areas of vulnerability. Potentially vulnerable housing characteristics include vacant housing, rental properties, mobile homes, older housing, those with no internet, and homes with no vehicles available. The tables below show the characteristics of vulnerable housing in Ouray County. Additional housing information by community can be found in *Appendix C: Planning Area Profile*.

Table 6: Vulnerable County & State Housing Characteristics

Housing Characteristics	Ouray County	State of Colorado
Occupied Housing Units	2,435 (70.6%)	2,278,044 (91.1%)
Lacking Complete Plumbing Facilities	0%	0.3%
Lacking Complete Kitchen Facilities	0%	0.7%
No Telephone Service Available	1.4%	0.9%
Broadband Internet Subscription	87.7%	91.8%
No Vehicles Available	1.8%	5.0%
Mobile Homes	7.0%	3.7%

Source: U.S. Census Bureau[11,12]

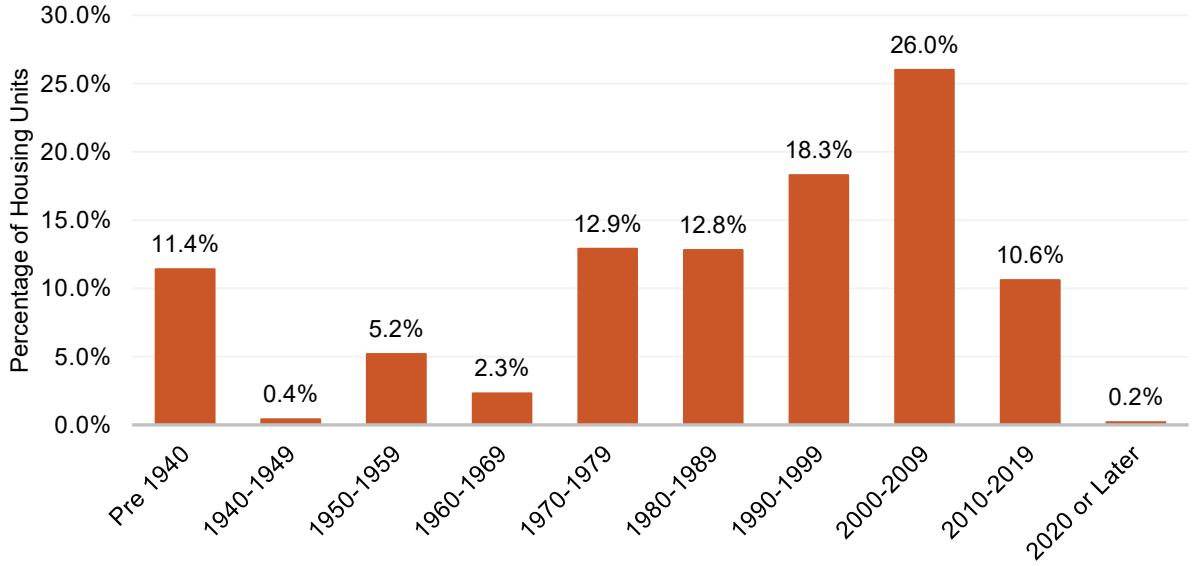
9 United States Census Bureau. "2010 Census Redistricting Data (Public Law 94-171): P1: Race." https://data.census.gov.
10 United States Census Bureau. "2022 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates." https://data.census.gov/.
11 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.
12 United States Census Bureau. "2022 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States." https://data.census.gov/.

Table 7: County Housing Characteristics

Occupied Housing Units	Vacant Housing Units	Owner Occupied Housing Units	Renter Occupied Housing Units
2,435 (70.6%)	1,013 (29.4%)	1,864 (76.6%)	571 (23.4%)

Source: U.S. Census Bureau[13]

Figure 4: Housing Age in Ouray County



Source: U.S. Census Bureau[14]

Housing Crisis

Ouray County is a highly desirable area to visit and live in, with scenic views and abundant recreation opportunities. Additionally, building new housing is extremely difficult due to the dramatic elevation changes. This has caused a housing shortage and the county's housing cost to increase dramatically. The lack of available and affordable workforce housing has left local workers with few options, leading to employee shortages at local businesses. Those working in Ouray County often have to commute into the county from other communities. Like many mountain communities, Ouray County is also experiencing a very high vacancy rate of nearly 30%. This is likely due to the increasing number of second homes and short-term vacation rentals, which adds to the housing shortage.[15]

Employment and Economics

The U.S. Census Bureau provides information related to employment and economic indicators. Low-income and unemployed populations may be more vulnerable to specific hazards like flooding and severe winter weather. Additional employment and economic information broken down by community can be found in *Appendix C: Planning Area Profile*.

13 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.
14 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics". https://data.census.gov/.
15 Teitz, Liz. Ouray County Plaindealer. November 17, 2021. "Census shows more than 40% of Ouray homes vacant". https://www.rmpbs.org/blogs/news/census-shows-more-than-40-of-ouray-homes-vacant.

Table 8: Vulnerable Employment & Economic Characteristics

Employment and Economic Characteristics	Ouray County	State of Colorado
Percent of People Living Below the Poverty Line	4.8%	9.6%
Median Household Income	$78,750	$87,598
Unemployment Rate	4.2%	4.5%

Source: U.S. Census Bureau[16]

16 United States Census Bureau. "2022 Census Bureau American Community Survey: DP03: Selected Economic Characteristics." https://data.census.gov/.

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Section Four: Planning Process Summary

Introduction

The process utilized to develop a hazard mitigation plan is often as important as the final planning document. For this planning process, Ouray County adapted the four-step hazard mitigation planning process outlined by FEMA to fit the needs of the participating jurisdictions. The following pages summarize the planning process during the plan update.

FEMA Planning Process Requirements

Requirement §201.6(b): Planning process. An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

Requirement §201.6(c)(1): The plan shall document the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Plan Update Process

Once Ouray County was awarded a FEMA grant for their hazard mitigation plan update, JEO Consulting Group, Inc. was contracted to assist, guide, and facilitate the planning process and plan assembly. To start the project, a meeting was held between Ouray County staff and JEO Consulting Group, Inc. to discuss the planning process and a general schedule for the plan update (Figure 5).

Figure 5: Project Timeline



To participate in developing this plan update, jurisdictions were required to have at least one representative present at the Round 1 or Round 2 meetings, view meeting recordings, or attend a follow-up meeting with either JEO Consulting Group, Inc. or Ouray County.

Round 1 Meetings: Hazard Identification & Plan Integration

The Round 1 Meeting intended to familiarize jurisdictional representatives (i.e., the local planning teams), stakeholders, and the public with the plan update process, expected actions for the coming months, the responsibilities of being a participant, and to collect preliminary information to update the plan. After the meeting, the attendees conducted risk and vulnerability assessments based on local capabilities, previous occurrences of hazards, and potential exposure. In addition, local planning team members evaluated the potential integration of the hazard mitigation plan alongside other local planning mechanisms.

The Round 1 Meeting was a hybrid meeting where participants, stakeholders, and the public could join in person or online via Zoom. The meeting was held on Monday, August 19, 2024, at the Ouray County Event Center from 10:30 am to noon. Virtual and in-person sign-in sheets can be found in *Appendix B: Planning Process Documentation*.

Round 2 Meetings: Mitigation Strategies, National Flood Insurance Program, & Plan Maintenance

Round 2 Meetings are designed to identify and prioritize new mitigation measures, update previous mitigation actions from the 2020 hazard mitigation plan, update National Flood Insurance Program information, and determine when the plan would be reviewed and by whom. Attendees were also asked to review the information collected from the Round 1 meeting and add additional vulnerability and impact analysis.

The Round 2 Meeting was a hybrid meeting where participants, stakeholders, and the public could join in person or online via Zoom. The meeting was held on Monday, December 16, 2024, at the Ouray County Event Center from 10:30 am to noon. Virtual and in-person sign-in sheets can be found in *Appendix B: Planning Process Documentation*.

Public Review

Once the draft of the hazard mitigation plan was completed, a public review period was opened to allow local planning teams and stakeholders to review the plan, provide comments, and request changes. The public review period was open from March 3, 2025, through March 28, 2025. Participating jurisdictions were emailed a notification of this public review period. Jurisdictions and stakeholders could provide comments via phone call or email to the Ouray County Planning Team. A review of the comments and who they were from can be found in *Appendix B: Planning Process Documentation*. All changes and comments were reviewed and incorporated into the plan as applicable.

Plan Adoption

Based on FEMA requirements, each participant must formally adopt this multi-jurisdictional hazard mitigation plan through approval of a resolution. This approval will create individual ownership of the plan by each participant. Formal adoption provides evidence of a participant's full commitment to implement the plan's goals, objectives, and action items. A copy of the resolution draft provided to participating jurisdictions is located in *Appendix B: Planning Process Documentation,* along with any copies of adoption resolutions that have already been received.

FEMA Plan Adoption Requirement

Requirement §201.6(c)(5): For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

Stakeholder and Public Involvement

To notify and engage the public in the planning process, a wide range of stakeholder groups, State of Colorado agencies, neighboring jurisdictions, and the general public were contacted and encouraged to participate in the plan update. Lists of the notified stakeholders, agencies, and neighboring jurisdictions can be found in *Appendix B: Planning Process Documentation*.

Stakeholder Groups

Fifty-seven stakeholder groups were identified, and invitations were emailed/mailed to participate in the planning process by attending meetings. The Full Moon Dam owner, West Region Health Care Coalition, American Red Cross, San Miguel Power Association, Bureau of Land Management, U.S. Forest Service, West Region Wildfire Council, Tri-State Generation and Transmission, and Coal Creek Hydro attended meetings. None of the stakeholders returned information about their prioritized hazards of concern or mitigation actions.

Vulnerable Populations

The Ouray County Planning Team was asked to identify any underserved communities or vulnerable populations in the county that the stakeholder groups had not already identified so they could have the opportunity to be involved in the planning process. The planning team indicated very few underserved communities or vulnerable populations in the county. Due to the climate, there are very few homeless. Some homes speak Spanish, but those that do typically speak English as well. There are no nursing homes or hospitals located in the county. The identified stakeholder groups represented all other vulnerable populations.

State of Colorado Agencies

Various state agencies were contacted and emailed invitations to participate in the planning process by attending meetings or reviewing the draft plan. Representatives from the Colorado Department of Public Safety and the Colorado Division of Homeland Security and Emergency Management attended a public meeting.

Neighboring Jurisdictions

Neighboring jurisdictions were notified and invited to participate in the planning process by attending meetings. No neighboring jurisdictions attended a meeting. No comments or revisions were received from any neighboring jurisdictions.

Public Survey

The general public was encouraged to participate in the planning process through a public survey available online and in hard copy. This survey was done with the ongoing Ouray County Community Wildfire Protection Plan update. The survey was shared with the public using the county's website, newsletter, and social media posts. A postcard with a QR code about the survey was also sent to all homes and businesses in the county. Copies of the survey and outreach documentation can be found in *Appendix B: Planning Process Documentation*. The purpose of the survey was to collect specific concerns related to hazards and projects the public has a vested interest in. It was available from October 10, 2024, to November 30, 2024. In total, there were

266 responses to the survey from members of the public, with a majority (64/266) coming from the Log Hill area (64/266), the Town of Ridgway (53/266), and the City of Ouray (48/266).

Results of the public survey were shared with participating jurisdictions during the Round 2 meeting. These results helped influence hazard prioritization and mitigation actions selected by local planning teams. Participating jurisdictions could also use the public survey to determine needed capabilities and future outreach preferences.

The most commonly experienced hazard events for residents included drought, severe winter storms, and windstorms. Drought, lightning, wildfire, and windstorms were the hazards of most concern. The most popular mitigation projects of importance for the public were increasing fire response capabilities and reducing hazardous fuels. The full results of the public survey can be found in *Appendix B: Planning Process Documentation*.

Section Five: Risk Assessment Summary

Introduction

The ultimate purpose of this hazard mitigation plan is to minimize the loss of life and property across Ouray County due to natural and human-caused hazards. The basis for the planning process is the county and local risk assessment. This section summarizes potential hazards, county vulnerabilities and exposures, probability of future occurrences, and potential impacts and losses. By conducting a county and local risk assessment, participating jurisdictions can develop specific strategies to address areas of concern identified through this process. This section is meant to summarize the risk assessment for Ouray County. The entire risk assessment can be found in *Appendix A: Full Risk Assessment*.

Hazard Identification

Identifying relevant hazards for Ouray County began with a review of the Colorado Enhanced State Hazard Mitigation Plan 2023-2028. The Ouray County Planning Team reviewed, discussed, and determined the list of hazards to be profiled in this hazard mitigation plan update. It was decided that the hazards addressed in the 2020 Hazard Mitigation Plan were still applicable and would be used for this plan update. The hazards for which a risk assessment was completed are listed below.

Table 9: Hazards Addressed in the Plan

Hazards Addressed in the Plan		
Avalanche	Flooding	Public Health Emergencies
Dam Failure	Hazardous Materials Incident	Severe Winter Storm
Debris Flow	Imminent Threat	Wildfire
Drought	Landslide/Rockfall	Windstorm
Earthquakes	Lightning	
Extreme Temperatures	Mass Casualty Events	

Hazards identified in the Colorado Enhanced State Hazard Mitigation Plan 2023 - 2028 that were not identified in the Ouray County Hazard Mitigation Plan update include the following list.[17]

- Animal Disease Outbreak
- Levee Incident
- Erosion / Deposition
- Expansive Soils
- Ground Subsidence
- Hail
- Pest Infestation
- Tornado
- Wildlife-Vehicle Collision

These hazards were reviewed by Ouray County and the participating jurisdictions and were chosen not to be included in this plan for various reasons. Specific reasons for omission are discussed in the hazard section below.

17 Colorado Division of Homeland Security & Emergency Management. 2023. "Colorado Enhanced State Hazard Mitigation Plan 2023-2028". https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

Animal Disease Outbreak

Animal agriculture is not a large portion of Ouray County's local economy. In the 2022 Census of Agriculture, the county ranks 50 out of 63 Colorado counties in livestock products sold.[18] Ouray County and the local planning teams felt that this hazard was of very low concern and did not need to be profiled in the hazard mitigation plan.

Levee Incident

There are no known levees located in or upstream of the county.

Erosion / Deposition

Erosion and deposition can come from several sources, including water, wind, waves, or moving ice. The most common ways this occurs in Colorado are by water and wind. As outlined in the Colorado Enhanced State Hazard Mitigation Plan 2023-2028, wind deposits for Ouray County are absent.[19] Erosion and deposition from water are addressed in this plan's flooding risk assessment.

Expansive Soils

In the Colorado Enhanced State Hazard Mitigation Plan 2023-2028, the amount of Ouray County land covered by expansive soils is between 37.72%-61.58% with one reported event.[20] Even with the elevated percentage of expansive soils, the low number of reported events caused the planning team to be minimally concerned with the hazard. Additionally, the Ouray County Planning Team could not identify any specific mitigation actions they would undertake, so this hazard will not be profiled in the plan.

Ground Subsidence

According to the Colorado Enhanced State Hazard Mitigation Plan 2023-2028, the percentage of ground subsidence areas in the county is between 3.8% and 9.9%.[21] There are no known instances of ground subsidence in Ouray County.

Hail

Hail has rarely occurred in Ouray County in the past. Since 1996, the National Centers for Environmental Information (NCEI) data reported three hail events in the county. None of the events had any reported damage.[22] Due to the lack of historical events and damages, this hazard has not been profiled in this plan.

Pest Infestation

Ouray County's primary concern regarding pest infestation is tree kill, which increases wildfire risk. The Western Balsam Bark Beetle, Fir Engraver, and the Western Spruce Budworm are active in the county and can kill fir and spruce trees.[23] Pests impacting wildfire risk are discussed in the wildfire risk assessment. Because of this, pest infestation will not be individually profiled in this plan.

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18 U.S. Department of Agriculture. 2022. "Census of Agriculture County Profile". https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Colorado/cp08091.pdf.

19 Colorado Division of Homeland Security & Emergency Management. 2023. "Colorado Enhanced State Hazard Mitigation Plan 2023-2028". https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

20 Colorado Division of Homeland Security & Emergency Management. 2023. "Colorado Enhanced State Hazard Mitigation Plan 2023-2028". https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

21 Colorado Division of Homeland Security & Emergency Management. 2023. "Colorado Enhanced State Hazard Mitigation Plan 2023-2028". https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

22 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

23 Colorado State Forest Service. 2023. "Current Insect & Disease Activity in Colorado." https://csfs.colostate.edu/forest-management/common-forest-insects-diseases/.

Tornado
Since 1996, NCEI data reported no tornado events in Ouray County.[24] Due to the lack of historical events and the unlikely likelihood of one occurring in the future, this hazard has not been profiled in this plan.

Wildlife-Vehicle Collision
While vehicle wildlife collisions have occurred, the number was less than vehicle-only collisions, and damage numbers per event were similar. The Mass Casualty Events hazard will cover any significant incidents with a high number of fatalities.

Hazard Assessment Summary Tables

The following tables provide an overview of the data contained in the hazard profiles. These tables are intended to be a quick reference for people using the plan. Detailed descriptions of each hazard can be found in *Appendix A: Full Risk Assessment*. There are five main pieces of data used within these tables.

- **Number of Events:** This shows how often a hazard event occurs. The frequency of a hazard event will affect how a community responds. Severe winter weather may not cause much damage each time, but multiple storms can have an incremental effect on housing and utilities. In contrast, a public health emergency may not occur often, but a single event can have massive impacts on the county.

- **Property and Crop Damage in Dollars:** This is the total dollar amount of all property and crop damage recorded in federal, state, and local data sources. The limitation of these data sources is that dollar figures are usually estimates and often do not include all damages from every event but only officially recorded damages from reported events.

- **Total Years of Record:** This is the span of years in which data is available for recorded events.

- **Historical Probability:** This can be calculated based on the total years of record and the years in which an event occurred. An example of the historical probability estimate is found below:

$$\textbf{\textit{Annual Probability}}\ (\%) = \frac{Total\ Years\ with\ an\ Event\ Occuring\ (\#)}{Total\ Years\ of\ Record\ (\#)}\ x\ 100$$

- **Future Likelihood:** This is the probability that a hazard will occur in the future. Future likelihood considers historical probability, climate change, and future development. It is broken down into the four categories listed below.

  Very Unlikely = Hazard is expected to occur once every 50+ years.
  Unlikely = Hazard is expected to occur once every 10+ to 50 years.
  Likely = Hazard is expected to occur once every 5+ to 10 years.
  Very Likely = Hazard is expected to occur once every 1 to 5 years.

24 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

Table 10: Loss Estimation for Ouray County

Hazard Type		Number of Events	Property Damage[1]	Crop Damage[2]
Avalanche[1,7]		63	$201,750	N/A
Dam Failure[3]		0	N/A	$0
Debris Flow[1]		26	$551,000	$0
Drought[5]		360 out of 1,188 Months	$0	$943,396
Earthquakes[13]		8	$0	$0
Extreme Temperatures[12]	Extreme Cold	Avg. 0.2 Days a Year	N/A	N/A
	Extreme Heat	Avg. 0.3 Days a Year	N/A	N/A
Flooding[1]	Flash Flood	19	$1,607,000	$172,414
	Flood	3	$1,000	
Hazardous Materials Incident	Fixed Site[11]	4	$0	N/A
	Transportation[10]	1	$78,700	N/A
Imminent Threat[4,7]		2	N/A	N/A
Landslide/Rockfall[1,7]	Landslide	1	$0	$0
	Rockfall	11	$145,000	$0
Lightning[2]		4	$1,161	$0
Mass Casualty Events	Auto[7]	0	N/A	N/A
	Aviation[8]	0	N/A	N/A
Public Health Emergencies	Pandemic[9]	5	N/A	N/A
	Naturally Occurring Health Emergencies[7,9]	0	N/A	N/A
Severe Winter Storm[1]	Blizzard	11	$963,074	$3,302,281
	Heavy Snow	144		
	Ice Storm	0		
	Winter Storm	326		
	Winter Weather	545		
Wildfire[1,6]		202	$1,525,000	$20,000
Windstorm[1]	**High Wind**	16	$40,000	$9,143
	Strong Wind	8	$20,500	
	Thunderstorm Wind	1	$60,000	
Total		**1,400**	**$5,194,185**	**$4,447,234**

1 – NCEI, 1996 – March 2024[25]
2 – SHELDUS, 1960 – 2021[26]
3 – Standford University, 1890 – September 2023[27]

25 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
26 Arizona State University. 2021. "SHELDUS". https://cemhs.asu.edu/sheldus.
27 Stanford University. September 2023. "National Performance of Dams Program". http://npdp.stanford.edu/.

4 – University of Maryland, 1970-2020.[28]
5 – NCEI, 1895 – October 2024[29]
6 – U.S. Forest Service, 1992 – 2020[30]
7 – County Personnel
8 – National Transportation Safety Board, 1962 – October 2024[31]
9 – CDPHE & CDC, 1993 – 2024[32,33,34,35,36,37]
10 – Pipeline and Hazardous Materials Safety Administration, 1971 – 2023[38]
11 – U.S. Coast Guard National Response Center, 1990 – July 2024[39]
12 – NOAA, 1947 – 2024[40]
13 – U.S. Geological Survey, 1889 – July 2024[41]

Table 11: County Risk Assessment

Hazard	Number of Events / Years of Record	Historical Probability	Future Likelihood
Avalanche[1,7]	63/29	62%	Very Likely
Dam Failure[3]	0/134	Less than 1%	Very Unlikely
Debris Flow[1]	26/28	42%	Very Likely
Drought[5]	360/1,188 months	23%	Very Likely
Earthquakes[13]	8/135	4%	Unlikely
Extreme Temperatures[12]	Extreme Heat: 13/78 Extreme Cold: 12/78	Extreme Heat: 17% Extreme Cold: 15%	Extreme Heat: Very Likely Extreme Cold: Likely
Flooding[1]	22/28	46%	Very Likely
Hazardous Materials Incident[10,11]	Fixed Site: 4/35 Transportation: 1/53	Fixed Site: 9% Transportation: 2%	Fixed Site: Likely Transportation: Unlikely
Imminent Threat[4,7]	2/105	2%	Unlikely
Landslide/Rockfall[1,7]	12/29	37%	Very Likely
Lightning[2]	4/62	100%	Very Likely
Mass Casualty Events[7,8]	0/63	Less than 1%	Unlikely

28 University of Maryland and National Consortium for the Study of Terrorism and Response to Terrorism. 1970-2020. “Global Terrorism Database”. https://www.start.umd.edu/gtd/.
29 National Centers for Environmental Information. 1895-October 2024. “County Time Series”. https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CO-037/pdsi/all/9/1895-2023?base_prd=true&begbaseyear=1901&endbaseyear=2000.
30 U.S. Forest Service. 2022. “Spatial Wildfire Occurrence Data for the United States, 1992-2020”. https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.
31 National Transportation Safety Board. 1962-October 2024. “Aviation Accident Database”. https://www.ntsb.gov/Pages/AviationQueryV2.aspx.
32 Centers for Disease Control and Prevention. October 2024. “Trends in United States COVID-19 Deaths, Emergency Department Visits, and Test Positivity by Geographic Area”. https://covid.cdc.gov/covid-data-tracker/#trends_totaldeaths_select_00.
33 Colorado Department of Public Health & Environment. 2024. “West Nile Virus Data”. 2003-2024. https://cdphe.colorado.gov/animal-related-diseases/west-nile-virus/west-nile-virus-data.
34 Colorado Department of Public Health & Environment. May 2024. “Hantavirus in Colorado since 1993”. 1993-2023. https://docs.google.com/document/d/1BBBKElU9sUHKKXVh93anVcOnouyISJ2AgNExlkb3MmE/pub.
35 Colorado Department of Public Health & Environment. 2024. “Colorado plague data”. 2005-2021. https://cdphe.colorado.gov/colorado-plague-data.
36 Colorado Department of Public Health & Environment. 2024. “Human Tularemia in Colorado, 2012-2020”. 2012-2020. https://docs.google.com/document/d/1GzBJSCU3Qtf0dukBekDqJbzc72NgEj8e0NxEeQTo0uU/pub.
37 Centers for Disease Control and Prevention. 2023. “Data and Maps for Colorado Tick Fever. 2003-2022. https://www.cdc.gov/colorado-tick-fever/data-maps/index.html.
38 U.S. Department of Transportation - Pipeline and Hazardous Materials Safety Administration. 1971-2023. "Incident Statistics". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.
39 U.S. Coast Guard National Response Center. July 2024. "Chemical Pollution and Railroad Incidents, 1990-2024." [datafile]. https://nrc.uscg.mil/.
40 National Oceanic and Atmospheric Administration ACIS. November 2024. "SC ACIS". 1947-2024. https://scacis.rcc-acis.org/.
41 U.S. Geological Survey. July 2024. “Search Earthquake Catalog”. https://earthquake.usgs.gov/earthquakes/search/.

Hazard	Number of Events / Years of Record	Historical Probability	Future Likelihood
Public Health Emergencies[7,9]	Pandemic: 5/107 Naturally Occurring: 0/32	Pandemic: 4% Naturally Occurring: Less than 1%	Pandemic: Unknown Naturally Occurring: Very Unlikely
Severe Winter Weather[1]	996/28	100%	Very Likely
Wildfire[1,6]	202/29	97%	Very Likely
Windstorm[1]	25/28	61%	Very Likely

1 – NCEI, 1996 – March 2024[42]
2 – SHELDUS, 1960 – 2021[43]
3 – Standford University, 1890 – September 2023[44]
4 – University of Maryland, 1970-2020.[45]
5 – NCEI, 1895 – October 2024[46]
6 – U.S. Forest Service, 1992 – 2020[47]
7 – County Personnel
8 – National Transportation Safety Board, 1962 – October 2024[48]
9 – CDPHE & CDC, 1993 – 2024[49,50,51,52,53,54]
10 – Pipeline and Hazardous Materials Safety Administration, 1971 – 2023[55]
11 – U.S. Coast Guard National Response Center, 1990 – July 2024[56]
12 – NOAA, 1947 – 2024[57]
13 – U.S. Geological Survey, 1889 – July 2024[58]

42 National Centers for Environmental Information. March 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
43 Arizona State University. 2021. “SHELDUS”. https://cemhs.asu.edu/sheldus.
44 Stanford University. September 2023. “National Performance of Dams Program”. http://npdp.stanford.edu/.
45 University of Maryland and National Consortium for the Study of Terrorism and Response to Terrorism. 1970-2020. “Global Terrorism Database”. https://www.start.umd.edu/gtd/.
46 National Centers for Environmental Information. 1895-October 2024. “County Time Series”. https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CO-037/pdsi/all/9/1895-2023?base_prd=true&begbaseyear=1901&endbaseyear=2000.
47 U.S. Forest Service. 2022. “Spatial Wildfire Occurrence Data for the United States, 1992-2020”. https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.
48 National Transportation Safety Board. 1962-October 2024. “Aviation Accident Database”. https://www.ntsb.gov/Pages/AviationQueryV2.aspx.
49 Centers for Disease Control and Prevention. October 2024. “Trends in United States COVID-19 Deaths, Emergency Department Visits, and Test Positivity by Geographic Area”. https://covid.cdc.gov/covid-data-tracker/#trends_totaldeaths_select_00.
50 Colorado Department of Public Health & Environment. 2024. “West Nile Virus Data”. 2003-2024. https://cdphe.colorado.gov/animal-related-diseases/west-nile-virus/west-nile-virus-data.
51 Colorado Department of Public Health & Environment. May 2024. “Hantavirus in Colorado since 1993”. 1993-2023. https://docs.google.com/document/d/1BBBKElU9sUHKKXVh93anVcOnouyISJ2AgNExlkb3MmE/pub.
52 Colorado Department of Public Health & Environment. 2024. “Colorado plague data”. 2005-2021. https://cdphe.colorado.gov/colorado-plague-data.
53 Colorado Department of Public Health & Environment. 2024. “Human Tularemia in Colorado, 2012-2020”. 2012-2020. https://docs.google.com/document/d/1GzBJSCU3Qtf0dukBekDqJbzc72NgEj8e0NxEeQTo0uU/pub.
54 Centers for Disease Control and Prevention. 2023. “Data and Maps for Colorado Tick Fever. 2003-2022. https://www.cdc.gov/colorado-tick-fever/data-maps/index.html.
55 U.S. Department of Transportation - Pipeline and Hazardous Materials Safety Administration. 1971-2023. "Incident Statistics". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.
56 U.S. Coast Guard National Response Center. July 2024. "Chemical Pollution and Railroad Incidents, 1990-2024." [datafile]. https://nrc.uscg.mil/.
57 National Oceanic and Atmospheric Administration ACIS. November 2024. "SC ACIS". 1947-2024. https://scacis.rcc-acis.org/.
58 U.S. Geological Survey. July 2024. “Search Earthquake Catalog”. https://earthquake.usgs.gov/earthquakes/search/.

FEMA National Risk Index

FEMA's National Risk Index is an online tool that analyzes natural hazards and community risk factors to develop a risk measurement for each county in the United States. Eighteen natural hazards are given a score from very high to very low. The table below provides the National Risk Index ratings for Ouray County. Risk Index scores are calculated using an equation that combines expected annual loss, social vulnerability, and community resilience scores. All values fall between 0 (lowest possible value) and 100 (highest possible value).

Table 12: National Risk Index

Hazard	Ouray County
Avalanche	Relatively Low (70.2)
Coastal Flooding	Not Applicable
Cold Wave	Very Low (27.6)
Drought	Very Low (18.8)
Earthquake	Very Low (22.4)
Hail	Very Low (4.5)
Heat Wave	No Rating (0.0)
Hurricane	Not Applicable
Ice Storm	Very Low (11.3)
Landslide	Very Low (18.0)
Lightning	Very Low (18.0)
Riverine Flooding	Very Low (33.2)
Strong Wind	Very Low (1.9)
Tornado	Very Low (2.8)
Tsunami	Not Applicable
Volcanic Activity	Not Applicable
Wildfire	Relatively Low (70.4)
Winter Weather	Very Low (10.2)
Overall Score	**Very Low (4.77)**

Source: FEMA[59]

Historical Disaster Declarations

Presidential Disaster Declarations

Presidential disaster declarations by county are available via FEMA from 1953 to October 2024. The following table describes the presidential disaster declarations within the county for the period of record. Ouray County has received eight presidential disaster declarations.

Table 13: Presidential Disaster Declarations

Disaster Declaration Number	Declaration Date	Title	Incident Type
293	9/22/1970	Heavy Rains & Flooding	Flood
396	6/7/1973	Flooding & Landslides	Flood
3025	1/29/1977	Drought	Drought
719	7/27/1984	Severe Storms, Mudslides, Landslides & Flooding	Flood

59 FEMA. “The National Risk Index”. Accessed September 2023. https://hazards.fema.gov/nri/map.

Disaster Declaration Number	Declaration Date	Title	Incident Type
1421	6/19/2020	Wildfires	Fire
3224	5/9/2005	Hurricane Katrina Evacuation	Coastal Storm
3436	3/13/2020	COVID-19	Biological
4498	3/28/2020	COVID-19 Pandemic	Biological

Source: Federal Emergency Management Agency, 1953-October 2024[60]

USDA Secretarial Disasters

Several U.S. Department of Agriculture Secretarial Disasters for Ouray County have occurred since 2012. Table 14 lists these disaster events.

Table 14: USDA Secretarial Disasters (2012-2024)

Year	Type	Declaration Number
2012	Drought, High Winds, Heat	S3260
2012	Freezing	S3307
2013	Drought, High Winds, Fire, Heat, Insets	S3539
2014	Freezing	S3760
2017	Rainstorm, High Winds	S4251
2018	Drought	S4309
2019	Drought	S4481
2020	Drought	S4648
2022	Drought	S5147
2024	Drought	S5669

Source: U.S. Department of Agriculture, 2003-2024[61]

State Emergency Declarations

From 1980 to 2024, there have been 20 emergency declarations from Colorado governors for events that impacted Ouray County. The table below shows all the declarations, the year they occurred, the hazard, and the locations affected.

Table 15: State Emergency Declarations

Year	Type	Location Affected
1982	Flooding	Ouray County
1984	Flooding	Delta, Dolores, Hinsdale, Saguache, Mesa, Montrose, Moffat, Rio Blanco, Pitkin, San Miguel, Ouray, Eagle, Gunnison Counties, Town of Silt
1994	Wildfires	Statewide
2002	Wildfires	Statewide
2002	Drought	Statewide
2003	Snow Emergency	Statewide
2009	Severe Blizzard	Statewide
2009	Severe Spring Snowstorm	Statewide
2013	Winter Storm	Statewide
2014	Extreme Weather	Statewide
2017	Wildfire	Statewide

60 Federal Emergency Management Agency. October 2024. “Disaster Declarations”. https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2.

61 U.S Department of Agriculture. 2024. “Disaster Designation Information” https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/disaster-designation-information/index.

Year	Type	Location Affected
2018	Wildfire	Statewide
2018	Rock Landslide	U.S. Highway 550 near Ouray
2020	COVID-19	Statewide
2020	Wildfire	Statewide
2021	Severe Winter Weather	Statewide
2022	Avian Influenza	Statewide
2022	Highly Pathogenic Avian Influenza	Statewide
2023	Extreme Cold	Statewide
2024	Flooding, Debris Flow, Rock Landslide	Ouray County

Source: State of Colorado, 1980-2023[62], Local Planning Team

Hazard Profiles

Information from participating jurisdictions was collected and reviewed alongside hazard occurrence, magnitude, and event narratives as provided by local, state, and federal databases. Profiles for each identified hazard in the plan were created to examine their risk and potential impact in Ouray County. These complete profiles can be found in *Appendix A: Full Risk Assessment*. Hazards of local concern or events that have deviated from the norm are discussed in greater detail in each respective participant profile (see *Participant Profiles Appendix* of this plan).

Local planning teams prioritized hazards of concern from the county hazard list based on historical hazard occurrences, potential impacts, and local capabilities. The table below lists the participants along with their prioritized hazards of concern. It is important to note that while a jurisdiction may not have selected a specific hazard as prioritized, hazard events can impact any jurisdiction at any time, and their selection is not a complete indication of risk.

Table 16: Prioritized Hazards of Concern by Jurisdiction

Hazard	Ouray County	City of Ouray	Town of Ridgway	Dallas Park Cemetery District
Avalanche	X			
Dam Failure				
Debris Flow	X	X	X	
Drought			X	
Earthquakes				
Extreme Temperatures				
Flooding	X		X	X
Hazardous Materials Incident				
Imminent Threat				
Landslide/Rockfall	X	X		
Lightning				
Mass Casualty Events	X			
Public Health Emergencies	X			
Severe Winter Storm	X			X
Wildfire	X	X	X	X
Windstorm				X

62 Colorado Division of Homeland Security & Emergency Management. 2023. "Colorado Enhanced State Hazard Mitigation Plan 2023-2028". https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

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Section Six: Mitigation Strategy

Introduction

The primary focus of the mitigation strategy is to identify action items to reduce the effects of hazards on existing infrastructure and property based on the established goals and objectives of the hazard mitigation plan. These actions should consider the most cost-effective and technically feasible options to address risk.

FEMA Mitigation Strategy Requirements

Requirement §201.6(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

Requirement §201.6(c)(3)(ii): [The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

Requirement: §201.6(c)(3)(ii): [The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program, and continued compliance with NFIP requirements, as appropriate.

Requirement: §201.6(c)(3)(iii): [The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Requirement §201.6(c)(3)(iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Summary of Changes

The development of the mitigation strategy for this plan update includes adding new mitigation actions, updating the status or removal of past mitigation actions, and revising descriptions for consistency across Ouray County.

Selected Mitigation and Strategic Actions

After establishing the goals, the local planning teams evaluated mitigation and strategic actions. These actions included the mitigation and strategic actions identified by each participating jurisdiction in the previous plan and additional actions discussed during the update planning process. The Ouray County Planning Team provided each participant a link to the FEMA Mitigation Ideas document to be used as a starting point to review a wide range of potential mitigation actions. Participants were also encouraged to think of actions that may need FEMA grant assistance and to review their hazard prioritization section for potential mitigation and strategic actions. Ouray County Planning Team members were also available to help local jurisdictions identify additional action alternatives. These suggestions helped participants

determine which actions would best assist their respective jurisdiction in alleviating damage in the event of a disaster.

During the update of previously identified actions and the identification of new actions, local planning teams prioritized each identified mitigation and strategic action as high, medium, or low. The listed priority rating does not indicate which actions will be implemented first. Generally, high-priority actions either address a significant concern for the jurisdiction, have few to no challenges in implementation, and/or garner ample support from the public and administration. Low-priority actions either address a minor concern for the jurisdiction, have many challenges in implementation, and/or may not have support from the public or administration at this time. Medium-priority actions may only have one or two of the items listed above. A mitigation and strategic action's priority may change quickly as circumstances change.

The mitigation and strategic actions are the core of a hazard mitigation plan. The local planning teams were instructed that each hazard identified in the plan must have an action that addresses it. Mitigation and strategic actions were evaluated based on referencing the community's risk and capability assessments. Jurisdictions were encouraged to choose actions that were realistic and relevant to the concerns identified.

Not all the mitigation and strategic actions identified by a jurisdiction may ultimately be implemented due to limited capabilities, prohibitive costs, low benefit-cost ratio, or other concerns. These factors may not be identified during this planning process. Additionally, some jurisdictions may identify and pursue additional mitigation actions not identified in this hazard mitigation plan.

Participant Mitigation and Strategic Actions

Mitigation and strategic actions identified by participants of the HMP are found in the Mitigation and Strategic Actions Matrix in *Appendix D: Mitigation Strategy*. Additional information about selected actions can be found in the participant profiles in the *Participant Profiles Appendix.* Each action includes the following details in the respective community profile.

- **Action:** General title of the action item.
- **Description:** Summary of what the action item(s) will accomplish.
- **Hazard(s) Addressed:** The hazards the mitigation action aims to address.
- **Estimated Cost:** General cost estimate for implementing the mitigation action for the appropriate jurisdiction.
- **Local Funding:** A list of potential local funding mechanisms to fund the action.
- **Timeline:** General timeline as established by planning participants.
- **Priority:** General description of the importance and workability in which an action may be implemented (high/medium/low).
- **Lead agency:** Listing of agencies or departments which may lead or oversee the implementation of the action item.
- **Status:** A description of what has been done, if anything, to implement the action item.

Implementation of the actions will vary between individual plan participants based on the availability of existing information, funding opportunities and limitations, and the administrative capabilities of communities. Establishing a cost-benefit analysis is beyond the scope of this plan. It could be completed before the submittal of a project grant application or as part of a five-year update. Completed, removed, kept, and new mitigation actions for each participating jurisdiction can be found in the *Participant Profiles Appendix*.

Section Seven: Plan Implementation and Maintenance

Monitoring, Evaluating, and Updating the Plan

Each participating jurisdiction in the Ouray County Hazard Mitigation Plan will monitor, evaluate, and update the plan during its five-year lifespan. Each participant's governing body will prioritize hazard mitigation projects with support and suggestions from the public and local business owners. Each local planning team will be responsible for plan maintenance, the frequency of review, and how the public will be involved. This information can be found in each participant's profile under the Local Planning Team section. During the review, the local planning team can report on the effectiveness of the hazard mitigation plan and the status of projects. It can also include which implementation processes worked well, any difficulties encountered, how coordination efforts proceed, and which strategies could be revised.

FEMA Plan Maintenance and Update Requirements

Requirement §201.6(c)(4)(i): [The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

Requirement §201.6(c)(4)(ii): [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

Requirement §201.6(c)(4)(iii): [The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.

In addition, each local planning team will be responsible for ensuring that the plan's goals are incorporated into applicable revisions of their jurisdiction's relevant planning documents. The hazard mitigation plan will also consider any changes in planning documents and include the information accordingly in its next update. *Appendix F: Guide to Review and Update the Hazard Mitigation Plan* may also be used to assist with plan updates.

The FEMA required update of this plan will occur at least every five years, to reduce the risk of the plan expiring. Updates may be incorporated more frequently, especially in the event of a significant hazard. Ouray County will start meetings to discuss mitigation plan updates at least nine months before the deadline for completing the plan update. The Ouray County Emergency Management Department will review the goals and objectives of the previous plan and evaluate them to determine whether they are still pertinent and current. Among other criteria, they may want to consider the following.

- Do the goals and objectives address current and expected conditions?
- If any of the recommended projects have been completed, did they have the desired impact on the goal for which they were identified? If not, why was it unsuccessful (lack of

funds/resources, lack of political/popular support, underestimation of the time needed, etc.)?
- Have the nature, magnitude, and/or type of risks changed?
- Are there implementation problems?
- Are current resources appropriate for implementing the plan?
- Were the outcomes as expected?
- Did the plan partners participate as initially planned?
- Are there other agencies that should be included in the revision process?

A private consulting firm or individual will be hired to help facilitate the plan update process if necessary.

Continued Public Involvement

To ensure continued plan support and input from the public and stakeholders, public involvement should remain a top priority for each participating jurisdiction. Every participant identified ways the public will be involved in the update process. These ways can be found in the individual participant profiles in the *Participant Profiles Appendix*. The list below shows how participants will include the public in the updated process.

- Social Media
- Websites
- Board/Council Meetings
- Newsletter
- Direct Mailings
- Press Releases

Unforeseen Opportunities

If new, innovative mitigation options arise that could impact Ouray County or elements of this plan that are determined to be of importance, a plan amendment may be proposed and considered separate from the annual review and other proposed plan amendments. Ouray County, as the plan sponsor, allows jurisdictions to compile proposed amendments and send them to the Colorado Division of Homeland Security and Emergency Management, and subsequently to FEMA, for a plan amendment. Such amendments should include all applicable information for each proposal, including a description of changes, identified funding, responsible agencies, etc.

Incorporation into Existing Planning Mechanisms

The Ouray County Planning Team utilized various plan integration tools to help communities determine how their existing planning mechanisms were related to the Hazard Mitigation Plan. Utilizing FEMA's *Integrating the Local Natural Hazard Mitigation Plan into a Community's Comprehensive Plan*[63] guidance and FEMA's *2015 Plan Integration*[64] guide, each jurisdiction engaged in a plan integration discussion. This discussion was facilitated by a Plan Integration Worksheet or questions created by the Ouray County Planning Team. This offered an easy way

63 Federal Emergency Management Agency. November 2013. "FEMA Region X Integrating the Local Natural Hazard Mitigation Plan into a Community's Comprehensive Plan". https://www.fema.gov/sites/default/files/2020-07/integrating-hazard-mitigation-local-plan.pdf.

64 Federal Emergency Management Agency. July 2015. "Plan Integration: Linking Local Planning Efforts." https://www.fema.gov/sites/default/files/2020-06/fema-plan-integration_7-1-2015.pdf.

for participants to notify the Ouray County Planning Team of existing planning mechanisms and if they are integrated with the hazard mitigation plan.

Each jurisdiction referenced all relevant existing planning mechanisms and provided information on how these did or did not address hazards and vulnerability. Summaries of plan integration are found in each individual participant profile. For jurisdictions that lack existing planning mechanisms, especially smaller communities, the plan may be used as a guide for future activity and development in the jurisdiction.

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Section Eight: Participant Profiles

Purpose of Participant Profiles

Participant profiles contain information specific to jurisdictions participating in the Ouray County Hazard Mitigation Plan planning effort. Participant profiles were developed to highlight each jurisdiction's unique characteristics that affect its vulnerability to hazards. These profiles may serve as a short reference for identified vulnerabilities and mitigation actions for a jurisdiction as it implements the mitigation plan. Information from individual jurisdictions was collected at public and one-on-one meetings and used to establish their section of the plan. Participant profiles may include the following elements:

- Community Fact Sheet
- Local Planning Team
- Capability Assessment
- Plans and Studies
- Future Development Trends
- Community Lifelines
- Hazard Prioritization and Mitigation Strategy

Individual participant profiles can be found in the *Participant Profile Appendix*. The location of the profiles is given below.

Participant Profile Appendix
- Ouray County
- City of Ouray
- Town of Ridgway
- Dallas Park Cemetery Board

Participant Profile Appendix

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City of Ouray 27
Town of Ridgway 51
Dallas Park Cemetery District 72

County Profile

Ouray County

Ouray County
Hazard Mitigation Plan 2025

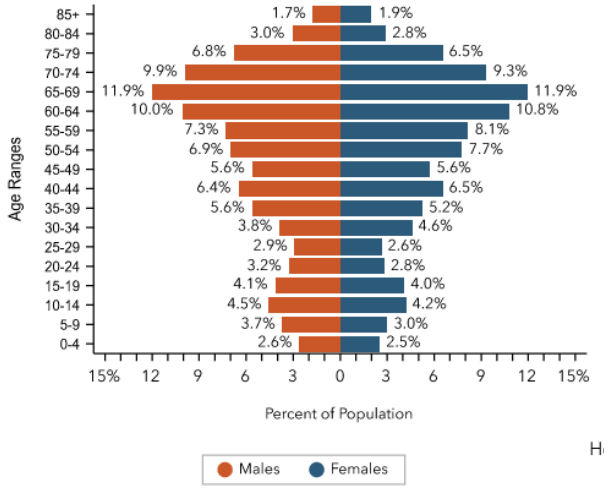
County Fact Sheet

Community Summary Fact Sheet

Ouray County, CO
Ouray County Hazard Mitigation Plan 2025

5,246	55.7	2,500	2.10	$721,747	$77,844
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID

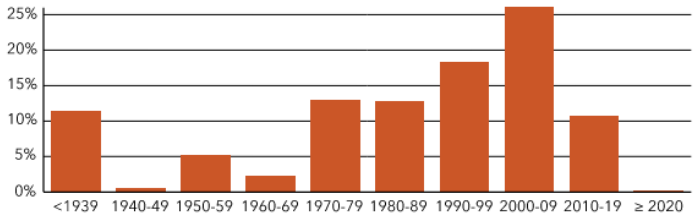


TOTAL POPULATION	
2024 Total Population (Estimate)	5,246
2020 Total Population (U.S. Census)	4,874
2010 Total Population (U.S. Census)	4,436
2000 Total Population (U.S. Census)	3,742

AT RISK POPULATIONS

659	1,728	43	7%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

364	1.3%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- American Indian Population
- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- White Population

7% **of the Total Population is Hispanic**

HOUSING

1,013	7%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Ouray County Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Glenn Boyd	Emergency Manager	Ouray County	Attended, Materials Development	Attended, Materials Development
Jake Niece	County Commissioner	Ouray County	Attended, Materials Development	Attended
Lynn Padgett	County Commissioner	Ouray County	Attended, Materials Development	Attended
Michelle Nauer	County Commissioner	Ouray County	Attended, Materials Development	Attended
Jennifer Peterson	Public Information Officer	Ouray County	Attended	Attended
Dolgio Nergui	IT Tech	Ouray County	Attended	
Erin Stadelman	Fairgrounds Manager	Ouray County	Attended	Attended
Kristin Kelley	Director of Public Health	Ouray County	Attended, Materials Development	-
Susie Mayfield	County Assessor	Ouray County	Attended	-
Connie Hunt	County Administrator	Ouray County	-	Attended
Kara Rhoades	Deputy County Manager	Ouray County	Attended	-
Justin Perry	Sheriff	Ouray County	-	Attended
Christy Williams	Admin Assistant	Ouray County	-	Attended

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or before other funding opportunity cycles start.

The County Emergency Manager, County Deputy Emergency Manager, and County Sheriff will be responsible for reviewing and updating this participant profile outside of the five-year update. Ouray County will review the plan annually, and the public will be notified using social media, the county website, the county newsletter, direct mailings, and public Board of County Commissioners meetings.

Capability Assessment

The planning team assessed Ouray County's hazard mitigation capabilities by reviewing planning, regulatory, administrative, technical, fiscal, education, and outreach capabilities. The county does not foresee the ability to increase these capabilities in the near future.

Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Stormwater Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	Water System Emergency Response Plan	No
	Source Water Protection Plan	No
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Growth Management Ordinance	No
	Hazard Specific Ordinances	Yes
	Erosion/Sediment Control Plan	No
	Flood Insurance Study	No
	Elevation Certificates	Yes
	BCEGS Rating	No
	Other (if any)	Climate Action Report, Upper Uncompahgre Basin Water Supply Protection and Enhancement Report, Wildfire Operating Plan
Administrative & Technical Capability	Planning Commission	Yes
	Planner/Engineer (Land Development)	Yes
	Planner/Engineer/Scientist (Natural Hazards)	Yes
	Resilience Planner	No
	Transportation Planner	No
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Engineering (Construction)	Yes
	Emergency Manager	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	Yes
	Site Plan Review Requirements	Yes
	Other (if any)	-

Capability/Planning Mechanism		Yes/No
Fiscal Capability	1- & 6-Year Plan	No
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes, such as Mitigation Projects	No
	Gas/Electric/Water/Sewer Service Fees	No
	Stormwater Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Withheld Spending in Hazard-Prone Areas	No
	Other (if any)	-
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	No
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	-
Warning Systems / Services	General	Yes
	Flood	Yes
	Wildfire	Yes
	Tornado	No
	Geological Hazards	Yes
	Other (if any)	-

Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Limited
Public Support to Implement Projects	Limited
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

Ouray County is a member of the NFIP, having joined on 7/3/1985, and the county's Floodplain Administrator oversees the commitments and requirements of the NFIP and Colorado Rules and Regulations for Regulatory Floodplain (2 CCR 408-1). The Floodplain Administrator uses the FEMA Map Service Center, National Flood Hazard Layer, and flood insurance rate maps to determine if a development is in the floodplain. Any new development or substantial improvement within the Special Flood Hazard Area must receive a Development Permit. Ouray County's Land Use Code outlines floodplain and Development Permit regulations. Applications are reviewed to ensure all criteria are met before approval. Substantially improved or damaged structures in the floodplain are identified through onsite inspections by a building inspector. The Chief Building Inspector enforces the floodplain regulations. The floodplain regulations do not exceed State of Colorado requirements. The county maintains letters of Map Change with the corresponding Development Permit.

The local planning team has stated that Ouray County will remain in good standing and be involved with the NFIP. Ouray County has no barriers to running the NFIP program, and no known areas have limited NFIP coverage. NFIP education consists of buying/building documents on the county's website. Additional NFIP information is given in the table below.

Ouray County NFIP Information

NFIP Overview	
Date of NFIP Participation:	07/03/1985
Floodplain Administrator:	Yes
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	No
Number of NFIP Policies In-Force:	19
Total NFIP Premium ($):	$20,595
Total NFIP Coverage ($):	$5,768,000
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	$0
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the County Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Buildings and Valuation in the Floodplain

The planning team acquired GIS parcel data from the County Assessor and Microsoft building footprint data to analyze the location, number, and value of buildings in the 100-year and 500-year floodplains. A summary of the results of this analysis is provided in the following tables.

Ouray County Buildings and Value in the 100-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
4,257	$4,248,272,280	85	$69,055,200	2%

Source: County Assessor, 2024; Microsoft, 2024

Ouray County Buildings and Value in the 500-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
4,257	$4,248,272,280	11	$13,113,370	0.3%

Source: County Assessor, 2024; Microsoft, 2024

Plans and Studies

Ouray County has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below, along with a description of how it is integrated with the hazard mitigation plan or contains hazard mitigation principles. When the county updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update. Unless otherwise specified below, the hazard mitigation plan has not been integrated into these or other planning mechanisms.

Building Code (2021)

The building code sets standards for constructed buildings and structures. The county has adopted the 2018 International Building Code with various edits and amendments. Enforcement is handled through building permits, plan checks, inspections, and code enforcement. The hazard mitigation plan has not been integrated with the building code.

Community Wildfire Protection Plan (2025)

The Ouray County Community Wildfire Protection Plan is a strategic plan that identifies specific wildland fire risks facing communities and fire authorities in the county and provides prioritized mitigation projects and activities designed to reduce those risks. Also included in the community wildfire protection plan is a plan to address watershed risk from wildfires. The plan identifies values to protect, their risk of wildfire, and areas where vegetation treatments are likely to occur. The hazard mitigation plan includes projects identified in the community wildfire protection plan.

Emergency Evacuation Plan (2024)

The emergency evacuation plan establishes the procedures to direct the evacuation and road closures across the county during emergencies. While fire is the most likely event that would cause an evacuation, the plan was developed with an all-hazards approach to be adaptable and flexible no matter the reason for evacuation. It covers emergency evacuation procedures, expected actions that will be taken, public information and notifications, evacuation routes, and evacuation center and shelter information. The hazard mitigation plan has not been integrated into the emergency evacuation plan.

Emergency Operations Plan (2021)

The Ouray County Emergency Operation Plan outlines general guidelines on how the county manages operations related to the five phases of emergency management. It outlines the day-to-day management of incidents along with major emergencies and disasters. The plan covers emergency management operations, assignment of roles and responsibilities, emergency support functions, direction, control, and coordination, information collection and dissemination, communications, administration, finance, and logistics. Because this is a response plan, the hazard mitigation plan has not been integrated.

Master Plan (2025)

The master plan is designed to guide the future actions and growth of the county. Drought, flooding, landslides/rockfalls, wildfires, and severe winter weather are directly discussed in the plan. The hazard mitigation plan has been integrated with the master plan by reference, and a summary of the overall threat assessment of hazards is included in the appendix. Also discussed in the plan are natural environment, land use, emergency management, and infrastructure strategies. Strategies related to emergency management include supporting hazard mitigation and evacuation plans, integrating mitigation strategies into the Land Use Code, limiting development in areas where emergency services cannot be provided, and enhancing emergency services in Ouray County.

San Miguel and Ouray County Regional Climate Action Plan (2021)

In 2021, the county partnered with San Miguel County to create the San Miguel and Ouray County Regional Climate Action Plan. This climate action plan is a regional roadmap for reducing greenhouse gas emissions and creating a sustainable, thriving future. The plan establishes a timeline for high-priority, ongoing, mid-and long-term actions. This plan covers energy supply, building energy use, transportation and aviation, water and material use, food, water, and land. The hazard mitigation plan is referenced in this document.

Upper Uncompahgre Basin Water Supply Protection and Enhancement Report (2016)

This report assesses the existing and future water needs of agricultural, domestic, municipal, industrial, recreational, and environmental uses and options for stabilizing and augmenting existing and future water uses within the Upper Uncompahgre River Basin in Ouray County. It includes a basin description, water rights and administration, water demands and shortages, and potential augmentation supplies and combinations. The hazard mitigation plan has not been integrated with this report.

Zoning Ordinance (2023), Subdivision Regulations (2012), Floodplain Regulations (2023), Wildfire Regulations (2022)

Ouray County's floodplain regulations, zoning ordinance, subdivision regulations, and wildfire regulations are all included in the county's Land Use Regulations. These documents outline where and how development should occur in the future. These documents discourage development in the floodplain by restricting and prohibiting uses, controlling the alternation of floodplains, controlling development that may increase flood damage, and regulating the construction of flood barriers that unnaturally divert flood waters. The wildfire regulations apply to all newly constructed or improved dwelling units in the county. Dwelling units must meet standards for roofing, siding, a five-foot hardened zone, exterior doors, gutters, and emergency vehicle access.

Wildfire Operating Plan (2024)

The Ouray County Wildfire Operating Plan establishes standard operating procedures and responsibilities to implement cooperative wildfire protection on all lands within the county. It contains information about interagency cooperation, preparedness, operations, state of emergency fire fund, and interagency fire resource use and reimbursement. This plan has not been integrated with the hazard mitigation plan.

Future Development Trends

Over the past five years, housing has increased throughout the county. Many of these structures were built in the wildland-urban interface, rockfall, and avalanche areas. In addition to the new housing, the number of visitors to the county has increased dramatically. In the next five years, it is unknown if any large new housing or business development will occur.

The new housing that has been built increases the county's risk and vulnerability to drought, earthquakes, extreme temperatures, severe winter storms, and windstorms because more buildings could be impacted. With many homes built in the wildland-urban interface, avalanche areas, and rockfall areas, risk and vulnerability to those hazards increase. However, the county's wildfire regulations help minimize the wildfire risks. The increase in visitors increases the risk and vulnerability to mass casualty events and public health emergencies.

Since 2000, Ouray County has gained approximately 1,500, a 28.6% increase in population. Increasing populations are associated with more robust hazard mitigation and emergency planning requirements for development. Growing populations can also increase tax revenues, allowing communities to pursue additional mitigation projects. Nearly 33% of the population is age 65 or older. This likely increases risk and vulnerability to all hazards as older adults are more vulnerable to hazards than other groups. The minority population in the county is around 11%. Minorities may face increased vulnerability as they tend to have access to fewer financial and systemic resources that would enable them to implement hazard mitigation projects and to respond and recover from hazard events. A small portion of the county speaks English as a second language. Those populations live primarily in the City of Ouray and the Town of Ridgway.

Community Lifelines

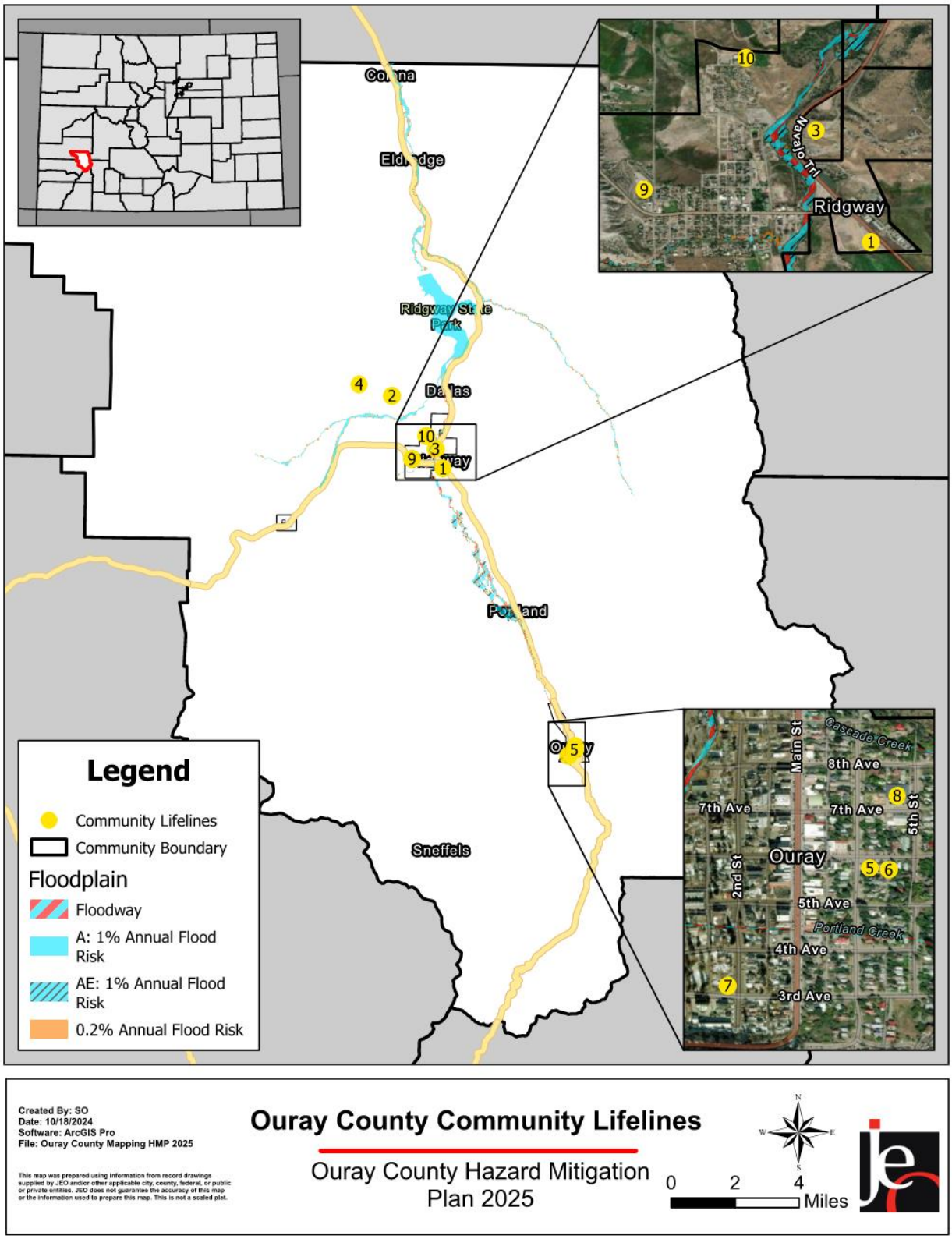
As listed in the following table, each participating jurisdiction identified community lifelines vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communications; Transportation; Hazardous Materials; and Water Systems.



Ouray County Community Lifelines

CL Number	Name	Community Lifeline Type	Generator	Floodplain
1	4-H Event Center	Other	No	No
2	Communications Tower	Communications	Yes	No
3	Emergency Operations Center / Land Use / Road and Bridge	Safety and Security	Yes	No
4	Log Hill Fire Station	Safety and Security	Yes	No
5	Ouray County Courthouse	Safety and Security	Yes	No
6	Ouray County Courthouse Annex / Sheriff's Office / Emergency Management	Safety and Security	Yes	No
7	Ouray County Public Health	Health and Medical	No	No
8	Ouray Schools	Other	Yes	No
9	Ridgway Elementary School	Other	Yes	No
10	Ridgway Secondary School	Other	Yes	No

Ouray County Community Lifelines Map



Hazard Historical Occurrences

Hazard Historical Occurrences for Ouray County

Hazard Type		Number of Events	Property Damage[1]	Crop Damage[2]
Avalanche[1,7]		63	$201,750	N/A
Dam Failure[3]		0	N/A	$0
Debris Flow[1]		26	$551,000	$0
Drought[5]		360 out of 1,188 Months	$0	$943,396
Earthquakes[13]		8	$0	$0
Extreme Temperatures[12]	Extreme Cold	Avg. 0.2 Days a Year	N/A	N/A
	Extreme Heat	Avg. 0.3 Days a Year	N/A	N/A
Flooding[1]	Flash Flood	19	$1,607,000	$172,414
	Flood	3	$1,000	
Hazardous Materials Incident	Fixed Site[11]	4	$0	N/A
	Transportation[10]	1	$78,700	N/A
Imminent Threat[4,7]		2	N/A	N/A
Landslide/Rockfall[1,7]	Landslide	1	$0	$0
	Rockfall	11	$145,000	$0
Lightning[2]		4	$1,161	$0
Mass Casualty Events	Auto[7]	0	N/A	N/A
	Aviation[8]	0	N/A	N/A
Public Health Emergencies	Pandemic[9]	5	N/A	N/A
	Naturally Occurring Health Emergencies[7,9]	0	N/A	N/A
Severe Winter Storm[1]	Blizzard	11	$963,074	$3,302,281
	Heavy Snow	144		
	Ice Storm	0		
	Winter Storm	326		
	Winter Weather	545		
Wildfire[1,6]		202	$1,525,000	$20,000
Windstorm[1]	**High Wind**	16	$40,000	$9,143
	Strong Wind	8	$20,500	
	Thunderstorm Wind	1	$60,000	
Total		**1,400**	**$5,194,185**	**$4,447,234**

1 – NCEI, 1996 – March 2024[1]
2 – SHELDUS, 1960 – 2021[2]

1 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
2 Arizona State University. 2021. "SHELDUS". https://cemhs.asu.edu/sheldus.

3 – Standford University, 1890 – September 2023[3]
4 – University of Maryland, 1970-2020.[4]
5 – NCEI, 1895 – October 2024[5]
6 – U.S. Forest Service, 1992 – 2020[6]
7 – County Personnel
8 – National Transportation Safety Board, 1962 – October 2024[7]
9 – CDPHE & CDC, 1993 – 2024[8,9,10,11,12,13]
10 – Pipeline and Hazardous Materials Safety Administration, 1971 – 2023[14]
11 – U.S. Coast Guard National Response Center, 1990 – July 2024[15]
12 – NOAA, 1947 – 2024[16]
13 – U.S. Geological Survey, 1889 – July 2024[17]

Hazard Prioritization and Mitigation Strategy

The Ouray County Hazard Mitigation Plan evaluates a range of natural and human-caused hazards that pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Ouray County, requiring a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by Ouray County. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. Please see *Section Five* and *Appendix A* for a review and analysis of other regional hazards.

Avalanche

The county's southern portion, mainly Highway 550, is most at risk for avalanches. The East Riverside Slide on Red Mountain Pass is notoriously dangerous because it impacts Highway 550. Much of the southern and eastern portions of the county are located in the Northern San Juan Mountains, regarded as one of the most avalanche-prone regions in Colorado. Exact monetary losses from avalanches are unavailable; however, the impacts of road closures on businesses can have significant economic consequences. With the continued interest in backcountry recreation in the county, the exposure to this hazard has been increasing. In March 2019, historic snow totals triggered avalanches along Highway 550 south of the City of Ouray. These slides

3 Stanford University. September 2023. “National Performance of Dams Program”. http://npdp.stanford.edu/.
4 University of Maryland and National Consortium for the Study of Terrorism and Response to Terrorism. 1970-2020. “Global Terrorism Database”. https://www.start.umd.edu/gtd/.
5 National Centers for Environmental Information. 1895-October 2024. “County Time Series”. https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CO-037/pdsi/all/9/1895-2023?base_prd=true&begbaseyear=1901&endbaseyear=2000.
6 U.S. Forest Service. 2022. “Spatial Wildfire Occurrence Data for the United States, 1992-2020”. https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.
7 National Transportation Safety Board. 1962-October 2024. “Aviation Accident Database”. https://www.ntsb.gov/Pages/AviationQueryV2.aspx.
8 Centers for Disease Control and Prevention. October 2024. “Trends in United States COVID-19 Deaths, Emergency Department Visits, and Test Positivity by Geographic Area”. https://covid.cdc.gov/covid-data-tracker/#trends_totaldeaths_select_00.
9 Colorado Department of Public Health & Environment. 2024. “West Nile Virus Data”. 2003-2024. https://cdphe.colorado.gov/animal-related-diseases/west-nile-virus/west-nile-virus-data.
10 Colorado Department of Public Health & Environment. May 2024. “Hantavirus in Colorado since 1993”. 1993-2023. https://docs.google.com/document/d/1BBBKElU9sUHKKXVh93anVcOnouyISJ2AgNExlkb3MmE/pub.
11 Colorado Department of Public Health & Environment. 2024. “Colorado plague data”. 2005-2021. https://cdphe.colorado.gov/colorado-plague-data.
12 Colorado Department of Public Health & Environment. 2024. “Human Tularemia in Colorado, 2012-2020”. 2012-2020. https://docs.google.com/document/d/1GzBJSCU3Qtf0dukBekDgJbzc72NgEj8e0NxEeQTo0uU/pub.
13 Centers for Disease Control and Prevention. 2023. “Data and Maps for Colorado Tick Fever. 2003-2022. https://www.cdc.gov/colorado-tick-fever/data-maps/index.html.
14 U.S. Department of Transportation - Pipeline and Hazardous Materials Safety Administration. 1971-2023. "Incident Statistics". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.
15 U.S. Coast Guard National Response Center. July 2024. "Chemical Pollution and Railroad Incidents, 1990-2024." [datafile]. https://nrc.uscg.mil/.
16 National Oceanic and Atmospheric Administration ACIS. November 2024. "SC ACIS". 1947-2024. https://scacis.rcc-acis.org/.
17 U.S. Geological Survey. July 2024. “Search Earthquake Catalog”. https://earthquake.usgs.gov/earthquakes/search/.

caused Highway 550 to close for 23 miles. Primary concerns for the county related to avalanches include building damage, road closures, and loss of life. In 2023, CDOT installed avalanche mitigation equipment above Highway 550 on Red Mountain Pass. CDOT routinely performs avalanche mitigation on Highway 550 near Red Mountain Pass. The Ouray Silver Mines conducts avalanche mitigation on County Road 361 as part of their winter maintenance agreement with the county.

New and Kept Mitigation and Strategic Actions

Action	Avalanche Risk Reduction
Description & Location	Reduce avalanche risks to miners and first responders along County Road 361.
Hazard(s) Addressed	Avalanche
Estimated Cost	Unknown, Staff Time
Local Funding	Winter Maintenance Agreement with the Ouray Silver Mine, Staff Time, General Fund
Timeline	Ongoing
Priority	High
Lead Agency	Road and Bridge Department, Ouray Silver Mine (Lead)
Status	Ongoing. The Ouray Silver Mine conducts avalanche mitigation in its Winter Maintenance Agreement with Ouray County.

Action	Improve GIS Capabilities
Description & Location	Improve countywide GIS capabilities to support land use planning and emergency management. Update and modernize the avalanche hazard atlas by developing a GIS avalanche database.
Hazard(s) Addressed	Avalanche, Dam Failure, Debris Flow, Earthquake, Flooding, Hazardous Materials Incident, Landslides/Rockfall, Public Health Emergencies, Severe Winter Storm, Wildfire
Estimated Cost	$10,000+
Local Funding	GIS Department Budget
Timeline	Ongoing
Priority	High
Lead Agency	GIS Department
Status	Ongoing. Significant progress has been made, but there will always be a need for GIS updates.

Debris Flow

Debris flow events are most likely to occur during and after a flood or heavy rain event in the county's southern portion. Debris flows can damage roads, bridges, homes, and water systems. Problem areas include the City of Ouray and surrounding areas, County Roads 5 and 7 southwest of Ridgway, County Road 17 near Corbett Creek, and State Highways 62 and 145. The closure of roads due to debris flows is a significant concern for access in and out of the county. Ouray County experienced debris flows during the most recent flood event in August 2025. County Roads 23 and 361 were closed because of debris flows across the roads. Debris filled the Ridgway Ditch, causing Ridgway to be unable to divert water from Beaver Creek, the community's primary water source. Debris flows also overrun and close Highways 62 and 145 several times yearly. The City of Ouray has a long history of trying to mitigate this hazard by constructing flumes to route debris and water from Portland and Cascade Creeks in 1909. Top concerns related to debris flows are injuries, fatalities, damage to structures, water quality, health risks during debris clean-up, and road closures hindering movement and emergency response. Ouray County is working on a project to build a bridge over the culverted area at Corbett Creek on County Road

14. This project is valued at over one million dollars and is expected to begin construction in early 2025.

New and Kept Mitigation and Strategic Actions

Action	Ridgway Reservoir Debris
Description & Location	Work with Parks & Wildlife and Tri-County to keep debris low in Ridgway Reservoir to prevent flooding, debris flow, and dam overflow.
Hazard(s) Addressed	Dam Failure, Debris Flow, Flooding
Estimated Cost	$10,000+
Local Funding	General Fund
Timeline	Ongoing
Priority	High
Lead Agency	Land Use and Planning Department, Colorado Parks and Wildlife, Tri-County
Status	Ongoing. Debris prevention is ongoing.

Flooding

Primary concerns related to flooding include damage to roads, bridges, culverts, homes, and drinking water systems; health concerns, including lack of access to services, water quality, and mold; and the risk of injury or death. The most recent flood event occurred in August 2024 and caused $4,000,000+ in damage. During the event, County Road 17 was washed out, and debris flow closed County Road 23. Agricultural fields, homes, and buildings were flooded. The City of Ouray experienced damage at Bridal Veil Bridge, Federal Court, Skyrocket, and Oak Creeks. The Town of Ridgway experienced damage to the headgates that feed the reservoir. A disaster declaration was issued because of this event.

Flash flooding from thunderstorm events and snowmelt-driven flooding are of particular concern to the county. Sources of riverine flooding in the county include the Uncompahgre River, Dallas Creek, Cedar Creek, Cuddigan Gulch, Coal Creek, and Unnamed Creek. Due to the county's topography, many rivers and creeks flow through extremely narrow areas south of the City of Ouray and then flatten into a broad floodplain between Ouray and Ridgway.

Over the years, Ouray County has improved bridge and drainage in areas prone to flash flooding and debris flow. Recently, the county received a $100,000,000 FEMA grant to develop a bridge over Corbette Creek.

New and Kept Mitigation and Strategic Actions

Action	Drainage Improvements
Description & Location	Build a culvert or drainage system to prevent County Road 17 near Corbett Creek from flooding and washing out during heavy rainstorms.
Hazard(s) Addressed	Dam Failure, Debris Flow, Flooding
Estimated Cost	$1,377,236
Local Funding	Road and Bridge Department Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Road and Bridge Department
Status	In Progress. The county received a grant from FEMA for the project to begin in 2025.

Action	Early Warning Systems
Description & Location	Improve and expand early warning systems to detect hazardous precipitation events and potential flooding.
Hazard(s) Addressed	Dam Failure, Flooding
Estimated Cost	$10,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Emergency Manager
Status	Not Started.

Action	Flood Workshops
Description & Location	Invite the Colorado Water Conservation Board and FEMA to host flood insurance workshops every two years before the flood season.
Hazard(s) Addressed	Flooding
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	Ongoing
Priority	High
Lead Agency	Floodplain Administrator
Status	Ongoing. This occurs every two years.

Removed Mitigation and Strategic Actions

Action	NFIP Continuation
Description & Location	Continue implementing sound floodplain management practices as communities participate in the National Flood Insurance Program.
Hazard(s) Addressed	Flooding
Status	Removed as this is not an actual mitigation action. The county and communities will continue to participate in the NFIP.

Landslide/Rockfall

Landslides/Rockfalls in the county are very likely to occur and can be very destructive. Locations of particular concern include the City of Ouray and nearby areas in the county, including the Camp Bird Road Area, Highway 550 near Colona, and the 11000 block of County Road 1. The impact on transportation routes, such as the closure of Highway 550 or County Road 17, are significant concerns for the county since those are the only two ways in and out. The impact of landslide/rockfall on critical infrastructure, such as gas or powerlines, is a concern. On March 8, 2019, a massive rockslide caused significant damage to County Road 17, approximately three miles north of the City of Ouray. This event closed County Road 17 for nearly two months. In August 2024, County Road 17 was closed for a month because of a rockfall event. To help reduce rockfall risk, a mitigation project along Highway 550 at Ruby Walls was completed in November 2018. However, many other areas need rockfall mitigation.

New and Kept Mitigation and Strategic Actions

Action	Rockfall Scaling
Description & Location	Perform rockfall scaling on County Road 17 and other county roads.
Hazard(s) Addressed	Landslides/Rockfall
Estimated Cost	$50,000+
Local Funding	Road and Bridge Department Budget
Timeline	5+ Years
Priority	High
Lead Agency	Road and Bridge Department
Status	Not Started.

Mass Casualty Event

The Ouray County Public Health Department prioritized this hazard. Whenever there are many deaths in a small region, the impacts can be severe and long-lasting. Many resources would be needed to help the region overcome grief and regain a sense of safety and trust. Primary concerns for the health department include fatalities and mental health impacts. Improving the mental health landscape in Ouray County is ongoing through the WCPHP Improvement Plan. Updating and integrating emergency plans and scenario training events would be helpful in the future.

New and Kept Mitigation and Strategic Actions

Action	Roadway Safety Improvements
Description & Location	Collaborate with CDOT on Federal Land Access Grant for safety improvements on Highway 550 and County Road 361. Including improved parking for recreation and hard surfacing for a portion of 361.
Hazard(s) Addressed	Avalanche, Debris Flow, Landslide/Rockfall, Mass Casualty Events, Severe Winter Storm
Estimated Cost	Staff Time
Local Funding	Staff Time, Road and Bridge Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Road and Bridge Department
Status	Not Started.

Public Health Emergencies

The Ouray County Public Health Department prioritized this hazard. The recent COVID-19 pandemic highlighted how a public health emergency can quickly overwhelm local public health offices' limited funding and staffing. Ouray County has very few healthcare providers, so getting people the help they need was difficult without traveling outside the county. COVID-19 highlighted the need to plan and integrate public health into all emergency planning efforts and draw on other agencies and statewide resources. Concerns related to public health emergencies are fatalities, economic impacts on vulnerable populations, and mental health impacts. Since the COVID-19 pandemic, the health department has been working on forming partnerships and agreements with other public health agencies as well as community-based organizations that serve vulnerable populations. The health department would like to update and integrate all emergency plans soon.

New and Kept Mitigation and Strategic Actions

Action	Improve Public Health Capabilities
Description & Location	Improve public health capabilities by adding an environmental health program to Ouray County Public Health. The environmental health program would cover water quality concerns, radon, mosquito/insect control, indoor and outdoor air quality, and hazardous chemicals. Currently, environmental health is handled by the State of Colorado. Ouray County Public Health would like to add this program to gain a more local perspective and an immediate response and approach. Hire a dedicated environmental health person to run the program.
Hazard(s) Addressed	Public Health Emergencies
Estimated Cost	$100,000+
Local Funding	General Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Ouray County Public Health Director
Status	New Action. Not started due to limited staffing and funding.

Severe Winter Storms

The county experiences severe winter weather annually; however, the southern portion of the county and the City of Ouray typically experience more winter weather events. Heavy snow loads can cause roofs to collapse and disrupt supply chains, especially if Highway 550 or County Road 17 are closed. Travelers on highways in remote areas can become stranded, requiring search and rescue assistance and shelter provisions. Limited phone and cell service in parts of the county means emergency reporting may be impossible during severe winter storm events. The 2018-2019 winter brought high snow totals in the county, causing extreme avalanche danger on Red Mountain Pass on Highway 550. This caused the highway to be closed from March 3 to March 22, cutting off access from the south.

New and Kept Mitigation and Strategic Actions

Action	Data Backup
Description & Location	Develop capability for off-site backup of critical data.
Hazard(s) Addressed	Debris Flow, Earthquake, Flooding, Imminent Threat, Landslides/Rockfall, Severe Winter Storm, Wildfire, Windstorm
Estimated Cost	Unknown
Local Funding	Information and Technology Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Information and Technology Department
Status	Not Started.

Action	Upgrade Wireless Communications
Description & Location	Upgrade County Wireless Communications to include access to the State 800 Mhz system.
Hazard(s) Addressed	Imminent Threat, Severe Winter Storm, Wildfire, Windstorm
Estimated Cost	$2,000,000+
Local Funding	Unknown
Timeline	5+ Years
Priority	High
Lead Agency	Emergency Manager (Lead), Ouray County Public Telecommunications
Status	Not started due to a lack of funding.

Removed Mitigation and Strategic Actions

Action	Weather Radios
Description & Location	Improve the coverage of the NOAA all-hazards radio in Ouray County for all potential warning situations (present coverage is limited to the Ridgway area).
Hazard(s) Addressed	Drought, Extreme Temperatures, Flooding, Severe Winter Storm, Wildfire, Windstorm
Status	Removed. This action is no longer needed due to alternative solutions.

Wildfire

Nearly the entire county is vulnerable to wildfires. The highest risk areas are generally in the northern/central parts of the county, including the areas surrounding the Town of Ridgway. The City of Ouray and the Town of Ridgway contain the highest density of structures in the WUI. Top concerns include communication, injuries, health impacts from smoke, fatalities, blocked transportation routes, vulnerable populations being unable to evacuate, mass panic, water quality impacts, and damage to property and infrastructure. Recent wildfires include the Cow Creek Fire in 2018 and the Simms Mesa Fire in 2022. The Cow Creek Fire burned 859 acres in the Uncompahgre wilderness, nine miles south of Ridgway. The Simms Mesa Fire burned 313 acres near the northern county border. It destroyed one primary residence and two other structures.

Past completed projects include the Baldy Mountain Project (with plans for more prescribed fires), beetle-killed-tree mitigation, and West Region Wildfire Council wildfire mitigation projects across private lands. Additional wildfire risk information on past and future projects can be found in the Ouray County Community Wildfire Protection Plan 2025.

Completed Mitigation and Strategic Actions

Action	Evacuation Plan
Description & Location	Develop a flood evacuation plan for the critical portions of the City of Ouray.
Hazard(s) Addressed	Dam Failure, Flooding, Hazardous Materials Incident, Imminent Threat, Wildfire
Status	Completed. A countywide evacuation plan was completed in 2024.

Action	Develop CWPP
Description & Location	Develop CWPP for other remaining designated WUI areas for extreme and very high communities.
Hazard(s) Addressed	Wildfire
Status	The Ouray County CWPP was completed in 2025.

New and Kept Mitigation and Strategic Actions

Action	Defensible Space
Description & Location	Encourage residents to construct defensible spaces around homes by promoting Firewise techniques.
Hazard(s) Addressed	Drought, Lightning, Wildfire, Windstorm
Estimated Cost	Staff Time, $5,000+
Local Funding	General Fund, Staff Time
Timeline	Ongoing
Priority	High
Lead Agency	Emergency Manager, West Region Wildfire Council (Lead)
Status	Ongoing. Residents throughout the county actively participate in the WRWC mitigation programs to create more defensible space. Log Hill Volunteer Fire Department Station 1 completed a defensible space project in 2019. Ouray County is working with Ouray Forest Collaborative for mitigation around the City of Ouray.

Action	Hazardous Fuels Reduction
Description & Location	Provide hazardous fuel reduction treatments around the five radio/cell sites in Ouray County.
Hazard(s) Addressed	Drought, Lightning, Wildfire, Windstorm
Estimated Cost	$20,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Emergency Manager (Lead), Log Hill Mesa Fire Protection District, Ouray Fire District, Ridgway Fire District
Status	Not Started.

Action	Implement Projects Identified in Ouray County CWPP
Description & Location	Implement fuel treatment and other projects in areas identified in the Ouray County CWPP.
Hazard(s) Addressed	Debris Flow, Drought, Lightning, Wildfire, Windstorm
Estimated Cost	$1,000,000+
Local Funding	General Fund
Timeline	Ongoing
Priority	High
Lead Agency	Emergency Manager (Lead), Log Hill Mesa Fire Protection District, Ouray Fire District, Ridgway Fire District
Status	Ongoing. Projects are implemented as identified, and funding is available.

Action	Improve Wildfire Regulations
Description & Location	Review the county wildfire mitigation standards code against the state Wildland Urban Interface Code being developed by the Colorado Wildfire Resiliency Code Board and modify the Ouray County code if appropriate.
Hazard(s) Addressed	Debris Flow, Drought, Lightning, Wildfire, Windstorm
Estimated Cost	Staff Time
Local Funding	Staff Time, Land Use Budget
Timeline	1 Year
Priority	High
Lead Agency	Land Use Department
Status	Not Started.

Action	Insurance Industry Partnership
Description & Location	Review county wildfire regulations with the insurance industry. Partner with the insurance industry.
Hazard(s) Addressed	Debris Flow, Drought, Lightning, Wildfire, Windstorm
Estimated Cost	Staff Time
Local Funding	Staff Time, Land Use Department Budge
Timeline	1 Year
Priority	High
Lead Agency	Land Use Department
Status	Not Started.

Action	Subdivision Wildfire Requirements
Description & Location	Explore adding the development of a community wildfire protection plan and defensible space as requirements for subdivision-planned unit development approvals.
Hazard(s) Addressed	Wildfire
Estimated Cost	Staff Time
Local Funding	Staff Time, Land Use and Planning Department Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Land Use and Planning Department
Status	Not Started.

Removed Mitigation and Strategic Actions

Action	Improve Fire District Capabilities
Description & Location	Improve FPD wildland capabilities. Install "quick dumps" on all county and city water trucks and equip them to carry "porta-ponds."
Hazard(s) Addressed	Wildfire
Status	Removed. The local fire districts would better handle this action.

Action	ISO Ratings
Description & Location	Research and implement a strategy to reduce ISO ratings countywide.
Hazard(s) Addressed	Debris Flow, Drought, Lightning, Wildfire, Windstorm
Status	Removed. The local fire districts would better handle this action.

Other Mitigation and Strategic Actions

Action	Continuity of Operations Plans
Description & Location	Develop continuity of operations and continuity of government plans.
Hazard(s) Addressed	All Hazards
Estimated Cost	$30,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	County Emergency Manager (Lead), All County Department Heads, City of Ouray, Town of Ridgway
Status	Not Started. Additional funding or staffing is needed to complete this action.

Action	Facility Hardening
Description & Location	Hardening the Ouray County Courthouse and other county facilities from imminent threat.
Hazard(s) Addressed	Imminent Threat
Estimated Cost	$100,000+
Local Funding	Maintenance Department Budget
Timeline	Ongoing
Priority	High
Lead Agency	Emergency Manager (Lead), Maintenance Department
Status	Ongoing. Ouray County has made significant steps to harden the security of the courthouse. Ouray County developed and adopted a Courthouse "Emergency Procedures Plan." There is now a single point of entry to the courthouse. Other county facilities still need to be hardened.

Action	Fiber Improvements
Description & Location	Improve fiber broadband availability better to serve responders, the community, and the region.
Hazard(s) Addressed	All Hazards
Estimated Cost	$100,000+
Local Funding	Information and Technology Department Budget
Timeline	Ongoing
Priority	High
Lead Agency	Information and Technology Department
Status	Ongoing. Improvements are made as funding is available.

Action	Hazardous Materials Partnership
Description & Location	Encourage the State of Colorado to continue to monitor and enforce hazardous materials transport regulations. Work with State Patrol hazmat officers to monitor hazmat on county and CDOT roads.
Hazard(s) Addressed	Hazardous Materials Incident
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	Ongoing
Priority	Medium
Lead Agency	Emergency Manager
Status	Ongoing. Ouray County continues to work with the State of Colorado and the State Patrol to monitor and enforce regulations.

Action	Hazard Shelter Site Improvements
Description & Location	Identify potential multi-hazard shelter sites and ensure adequate supplies and backup power capabilities.
Hazard(s) Addressed	Avalanche, Dam Failure, Debris Flow, Earthquake, Extreme Temperatures, Flooding, Hazardous Materials Incident, Imminent Threat, Landslides/Rockfall, Mass Casualty Events, Severe Winter Storms, Wildfire, Windstorm
Estimated Cost	$150,000
Local Funding	General Fund
Timeline	Ongoing
Priority	High
Lead Agency	Emergency Manager
Status	Ongoing. Six shelter sites have been identified and approved by the Red Cross. Four sites are in the City of Ouray (Ouray Community Center, Ouray Schools, St. Daniels Church, and the Elks Club). The sites still need funding to finalize backup power.

Action	Hazmat Training
Description & Location	Hazmat awareness training for first responders.
Hazard(s) Addressed	Hazardous Materials Incident
Estimated Cost	$10,000+
Local Funding	EMS Budget
Timeline	Ongoing
Priority	Medium
Lead Agency	Ouray County EMS
Status	Ongoing. Training for 1st responders is done regularly.

Action	NIMS Training
Description & Location	Ensure all first responders are trained in NIMS according to FEMA regulations.
Hazard(s) Addressed	All Hazards
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	Ongoing
Priority	High
Lead Agency	Emergency Manager
Status	Ongoing. This is a continual effort made by Ouray County Emergency Management. Emergency management is working on developing in-person classes for courses that are online.

Action	Public Education
Description & Location	Educate staff, residents, and visitors on their risks to all hazards that could impact the county, how to get information and emergency notifications, mitigation actions that can be taken, and preparedness actions to keep themselves safe. Keeping residents, staff, and visitors informed about hazards that could impact the community and opportunities for mitigating risks can help protect public health, safety, and welfare. Outreach and education may include but are not limited to booths at local events, social media posts, flyers, mailings, and in-person updates for the local governing body. These activities will occur at a minimum on an annual basis.
Hazard(s) Addressed	All Hazards
Estimated Cost	Staff Time
Local Funding	Staff Time, General Budget
Timeline	Ongoing
Priority	Low
Lead Agency	Emergency Manager (Lead), City of Ouray, Town of Ridgway, Local Fire Protection Districts, Partner Agencies and Organizations
Status	Ongoing. Hazard education is continually being done, but more can always be done.

Action	Radio/Cell Site Mitigation
Description & Location	Evaluate the multi-hazard risk to five radio/cell and repeater sites and develop appropriate mitigation recommendations.
Hazard(s) Addressed	Avalanche, Debris Flow, Earthquake, Flooding, Hazardous Materials Incident, Imminent Threat, Landslides/Rockfall, Lightning, Severe Winter Storms, Wildfire, Windstorm
Estimated Cost	Unknown
Local Funding	Unknown
Timeline	5+ Years
Priority	High
Lead Agency	Public Telecommunications (Lead), Emergency Manager
Status	Not Started.

Action	Warning Messages
Description & Location	Create preloaded warning messages for specific events (e.g., flood, fire, evacuation) for the target notification system and NOW.
Hazard(s) Addressed	All Hazards
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	Ongoing
Priority	High
Lead Agency	Emergency Manager (Lead), Public Information Officer
Status	Ongoing. Warning messages are continually being updated.

Action	Water Storage Study
Description & Location	Conduct a water Storage Study for the whole of Ouray County.
Hazard(s) Addressed	Drought
Estimated Cost	$25,000+
Local Funding	Land Use and Planning Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Land Use and Planning Department
Status	Not Started.

Removed Mitigation and Strategic Actions

Action	Resource Lists
Description & Location	Create emergency management resource lists.
Hazard(s) Addressed	All Hazards
Status	Removed. This action is no longer a priority for the county.

Community Profile

City of Ouray

Ouray County
Hazard Mitigation Plan 2025

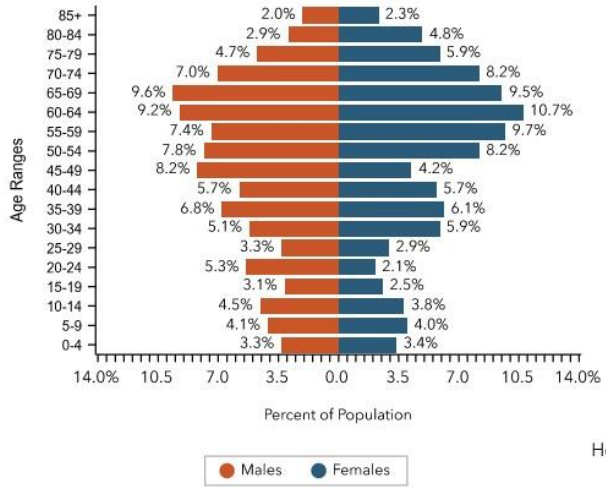
Community Fact Sheet

Community Summary Fact Sheet

City of Ouray, CO
Ouray County Hazard Mitigation Plan 2025

963	53.1	444	2.17	$631,378	$77,500
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID

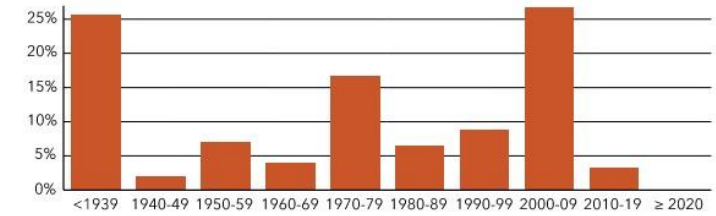


TOTAL POPULATION	
2024 Total Population (Estimate)	963
2020 Total Population (U.S. Census)	898
2010 Total Population (U.S. Census)	1,000
2000 Total Population (U.S. Census)	820

AT RISK POPULATIONS

92	274	32	9%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

138	1.4%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- American Indian Population
- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- White Population

8% **of the Total Population is Hispanic**

HOUSING

342	8%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Ouray Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Gary Ray	Interim Police Chief	City of Ouray	Materials Development	-
Joe Coleman	Interim City Administrator	City of Ouray	Materials Development	-
Autumn Bailey	Public Information Officer	City of Ouray	Attended, Materials Development	-
Tamara Gulde	City Council Member	City of Ouray	Attended	Attended, Materials Development

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or before other funding opportunity cycles start.

The City Administrator and Public Information Officer will be responsible for reviewing and updating this participant profile outside of the five-year update. The City of Ouray will review the plan bi-annually, and the public will be notified using public notices at city council meetings.

Capability Assessment

The planning team assessed the City of Ouray's hazard mitigation capabilities by reviewing planning and regulatory, administrative, technical, fiscal, and education and outreach capabilities. The city cannot increase the capabilities listed below due to recent turnover in key staff positions.

Ouray Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Stormwater Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	Water System Emergency Response Plan	No
	Source Water Protection Plan	No
	National Flood Insurance Program	Yes
	Community Rating System	No

Capability/Planning Mechanism		Yes/No
	Community Wildfire Protection Plan	Yes
	Growth Management Ordinance	No
	Hazard Specific Ordinances	Yes
	Erosion/Sediment Control Plan	No
	Flood Insurance Study	Yes
	Elevation Certificates	Yes
	BCEGS Rating	Yes
	Other (if any)	Regional Climate Action Plan, Upper Uncompahgre Basin Water Supply Protection and Enhancement Report
Administrative & Technical Capability	Planning Commission	Yes
	Planner/Engineer (Land Development)	Yes
	Planner/Engineer/Scientist (Natural Hazards)	Yes
	Resilience Planner	No
	Transportation Planner	No
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Engineering (Construction)	Yes
	Emergency Manager	Yes
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Site Plan Review Requirements	Yes
	Other (if any)	-
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	Yes
	Awarded a Grant in the Past	Yes
	Authority to Levy Taxes for Specific Purposes, such as Mitigation Projects	Yes
	Gas/Electric/Water/Sewer Service Fees	Yes
	Stormwater Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Withheld Spending in Hazard-Prone Areas	No
	Other (if any)	-
	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes

Capability/Planning Mechanism		Yes/No
Education & Outreach Capability	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	-
Warning Systems / Services	General	Yes
	Flood	Yes
	Wildfire	Yes
	Tornado	Yes
	Geological Hazards	No
	Other (if any)	Protective Communications

Ouray Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Moderate
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	High
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

National Flood Insurance Program (NFIP)

The City of Ouray is a member of the NFIP, having joined on 7/03/1985, and the city's Floodplain Administrator oversees the commitments and requirements of the NFIP and Colorado Rules and Regulations for Regulatory Floodplain (2 CCR 408-1). The Floodplain Administrator uses the Flood Insurance Study for Ouray County to determine if a development is located in the floodplain. Any new development, addition, or substantial improvement must go through a Site Development Review. This review requires complete documentation of all hazards associated with the parcel. A Floodplain Development Permit must be received if it is in a Special Flood Hazard Area. The permit declares the flood zone, flood elevation, and other pertinent information that must be certified by a Colorado Licensed Profession upon completion. Ouray's Floodplain Management Regulations outlines floodplain and Floodplain Development Permit regulations. Substantially improved or damaged structures in the floodplain are identified through the building permit review process. The floodplain regulations do not exceed State of Colorado requirements. Letters of Map Revisions are kept on the city's website.

The local planning team has stated that Ouray will remain in good standing and be involved with the NFIP. There are no barriers for the city when running the NFIP program effectively. A recent Debris Flow report identified Cascade Creek and Portland Creek as hazards for debris flows. These areas could see flooding and have limited NFIP coverage. Currently, the city has minimal educational material regarding flood insurance. Additional NFIP information is given in the table below.

Ouray NFIP Information

NFIP Overview	
Date of NFIP Participation:	07/03/1985
Floodplain Administrator:	Yes
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	18
Total NFIP Premium ($):	$17,731
Total NFIP Coverage ($):	$5,106,000
Number of Claims Paid Out:	5
Total Amount of Claims Paid Out ($:)	$33,045
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Buildings and Valuation in the Floodplain

The planning team acquired GIS parcel data from the County Assessor and Microsoft building footprint data to analyze buildings' location, number, and value in the 100-year and 500-year floodplains. A summary of the results of this analysis is provided in the following tables.

Ouray Buildings and Value in the 100-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
581	$429,449,320	3	$1,129,830	0.5%

Source: County Assessor, 2024; Microsoft, 2024

Ouray Buildings and Value in the 500-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
581	$429,449,320	0	0	0%

Source: County Assessor, 2024; Microsoft, 2024

Plans and Studies

The City of Ouray has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below, along with a description of how it is integrated with the hazard mitigation plan or contains hazard mitigation principles. When the city updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update. Unless otherwise specified below, the hazard mitigation plan has not been integrated into these or other planning mechanisms.

Building Regulations (2023), Floodplain Management Regulations (2023)

The building regulations set standards for constructed buildings and structures. The city has adopted the 2018 International Building Code. The Community Development Department handles enforcement. The floodplain management regulations outline uses and construction standards within the 100-year floodplain and help to restrict development in the floodplain. The hazard mitigation plan has not been integrated with the building regulations.

Community Wildfire Protection Plan (2025)

The City of Ouray is part of the Ouray County Community Wildfire Protection Plan (CWPP). The CWPP is a strategic plan that identifies specific wildland fire risks facing communities and fire authorities in the county and provides prioritized mitigation projects and activities designed to reduce those risks. Also included in the CWPP is a plan to address watershed risk from wildfires. The plan identifies values to protect, their risk of wildfire, and areas where vegetation treatments are likely to occur. Applicable projects identified in the CWPP are included in the hazard mitigation plan.

Community Plan (2021)

The community plan is designed to guide the future actions and growth of the city. Community resilience is discussed throughout the plan and is embodied in the overall vision, goals, and actions. The community plan has several goals and actions that address debris flow, drought, flooding, landslides/rockfall, and wildfire. Applicable actions from this goal have been added to the hazard mitigation plan. The next update for the community plan is in 2031.

Restriction of Water Use Code (2023)

The city's restriction of water use code outlines the city council's ability to limit the use of city water to specific times, days, and uses. The code has six stages, with triggering conditions for each stage and applicable restrictions. This code has not been integrated with the hazard mitigation plan.

Emergency Operations Plan (2021)

The City of Ouray is part of the Ouray County Emergency Operations Plan. The plan outlines general guidelines on how the county manages operations related to the five phases of emergency management. It outlines the day-to-day management of incidents along with major emergencies and disasters. The plan covers emergency management operations; assignment of roles and responsibilities; emergency support functions; direction, control, and coordination; information collection and dissemination; communications; administration; finance; and logistics. Because this is a response plan, the hazard mitigation plan has not been integrated.

San Miguel and Ouray County Regional Climate Action Plan (2021)

The City of Ouray is part of the San Miguel and Ouray County Regional Climate Action Plan. This climate action plan is a regional roadmap for reducing greenhouse gas emissions and creating a sustainable, thriving future. The plan establishes a timeline for high-priority, ongoing, mid-and long-term actions. This plan covers energy supply, building energy use, transportation and aviation, water and material use, food, water, and land. The hazard mitigation plan is referenced in this document.

Upper Uncompahgre Basin Water Supply Protection and Enhancement Report (2016)

This report assesses the existing and future water needs of agricultural, domestic, municipal, industrial, recreational, and environmental uses and options for stabilizing and augmenting existing and future water uses within the Upper Uncompahgre River Basin in Ouray County. It includes a basin description, water rights and administration, water demands and shortages, and potential augmentation supplies and combinations. The hazard mitigation plan has not been integrated with this report.

Zoning Ordinance (2023), Subdivision Regulations (2023)

The city's Land Use Development Code includes the City of Ouray's zoning ordinance and subdivision regulations. These documents outline where and how development should occur in the future. They reference the city's floodplain management regulations and help to restrict development in the floodplain. The hazard mitigation plan has not been integrated into either of these documents.

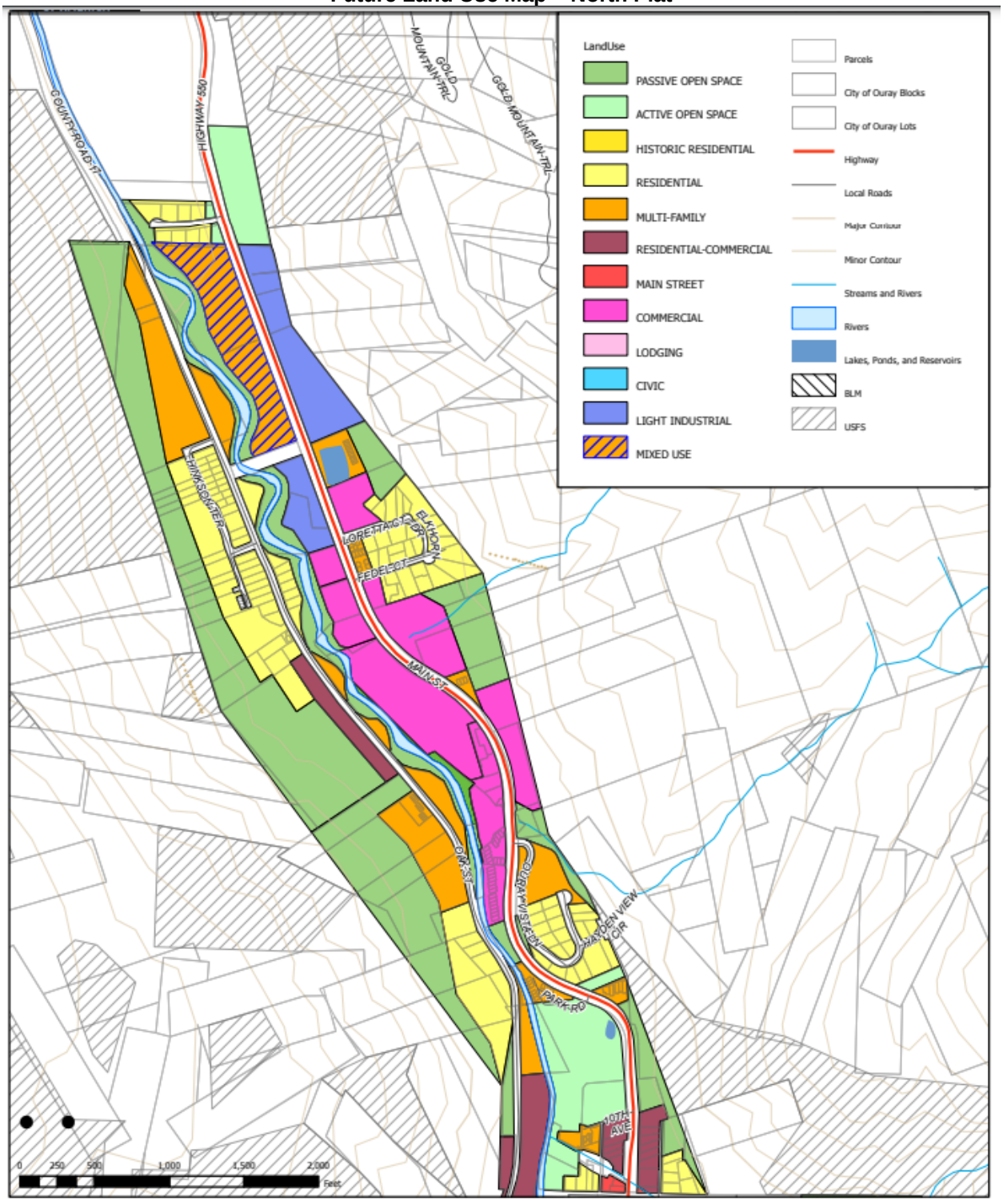
Future Development Trends

Over the past five years, new housing has been developed in rockfall areas on the northern end of the community. These homes had geo-housing mitigation as required in the city's code. In the next five years, additional housing is planned in the community but specific areas have not yet been identified. Future land use maps for the city can be found on the following pages.

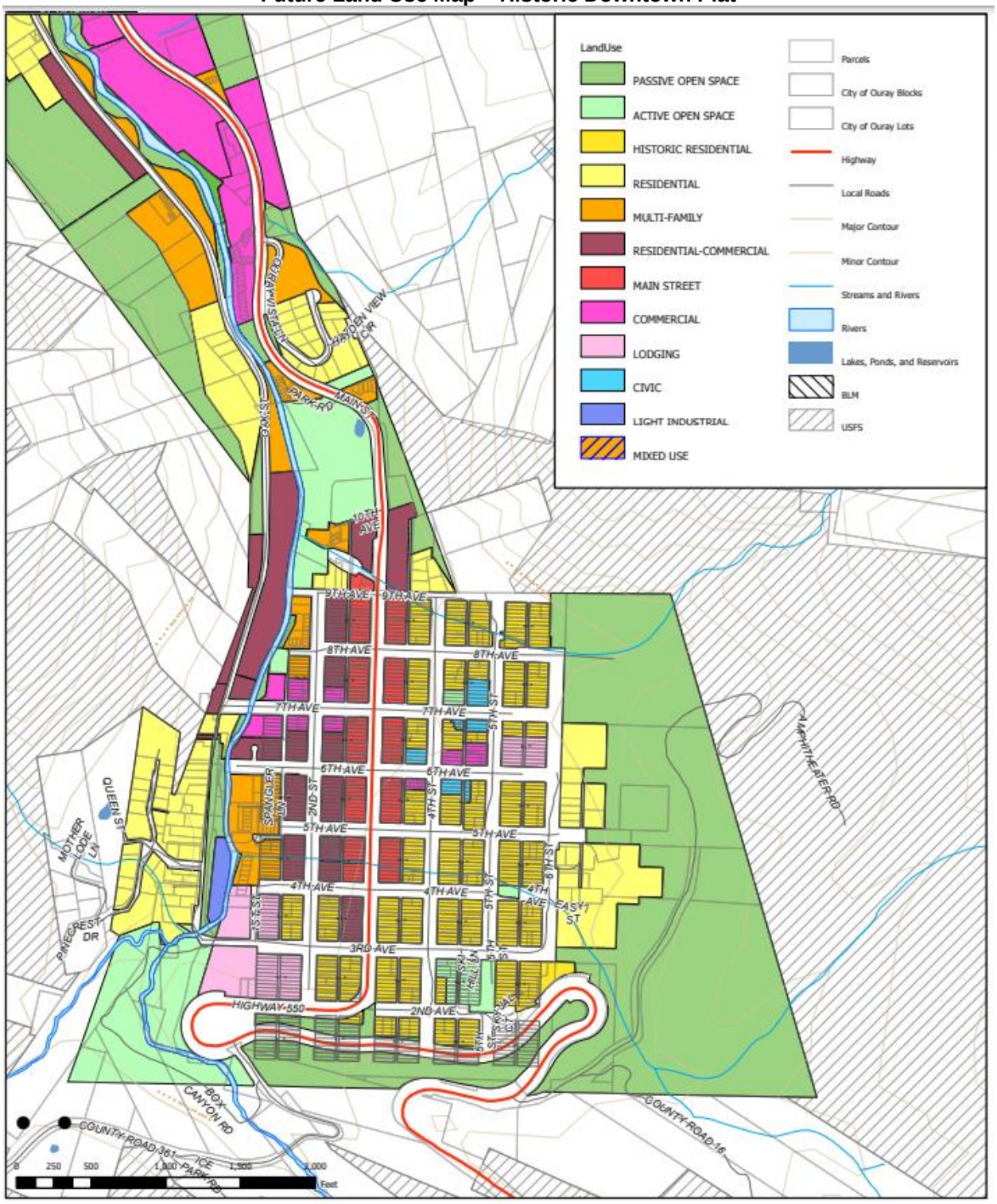
The new housing that has been built increases the county's risk and vulnerability to drought, earthquakes, extreme temperatures, severe winter storms, and windstorms because more buildings could be impacted. With new housing also located in rockfall areas, risk and vulnerability to rockfall increases. However, the risk and vulnerability are minimized as those homes have been mitigated for rockfall.

Since 2000, the City of Ouray has gained approximately 140 people, a 14.5% increase in population. Increasing populations are associated with more robust hazard mitigation and emergency planning requirements for development. Growing populations can also increase tax revenues, allowing communities to pursue additional mitigation projects. Approximately 28% of the population is age 65 or older. This likely increases risk and vulnerability to all hazards as older adults are more vulnerable to hazards than other groups. Additionally, some of the elderly population is located in known rockfall zones. The minority population in the city is around 11%. Minorities may face increased vulnerability as they tend to have access to fewer financial and systemic resources that would enable them to implement hazard mitigation projects and to respond and recover from hazard events.

Future Land Use Map – North Plat



Future Land Use Map – Historic Downtown Plat



Community Lifelines

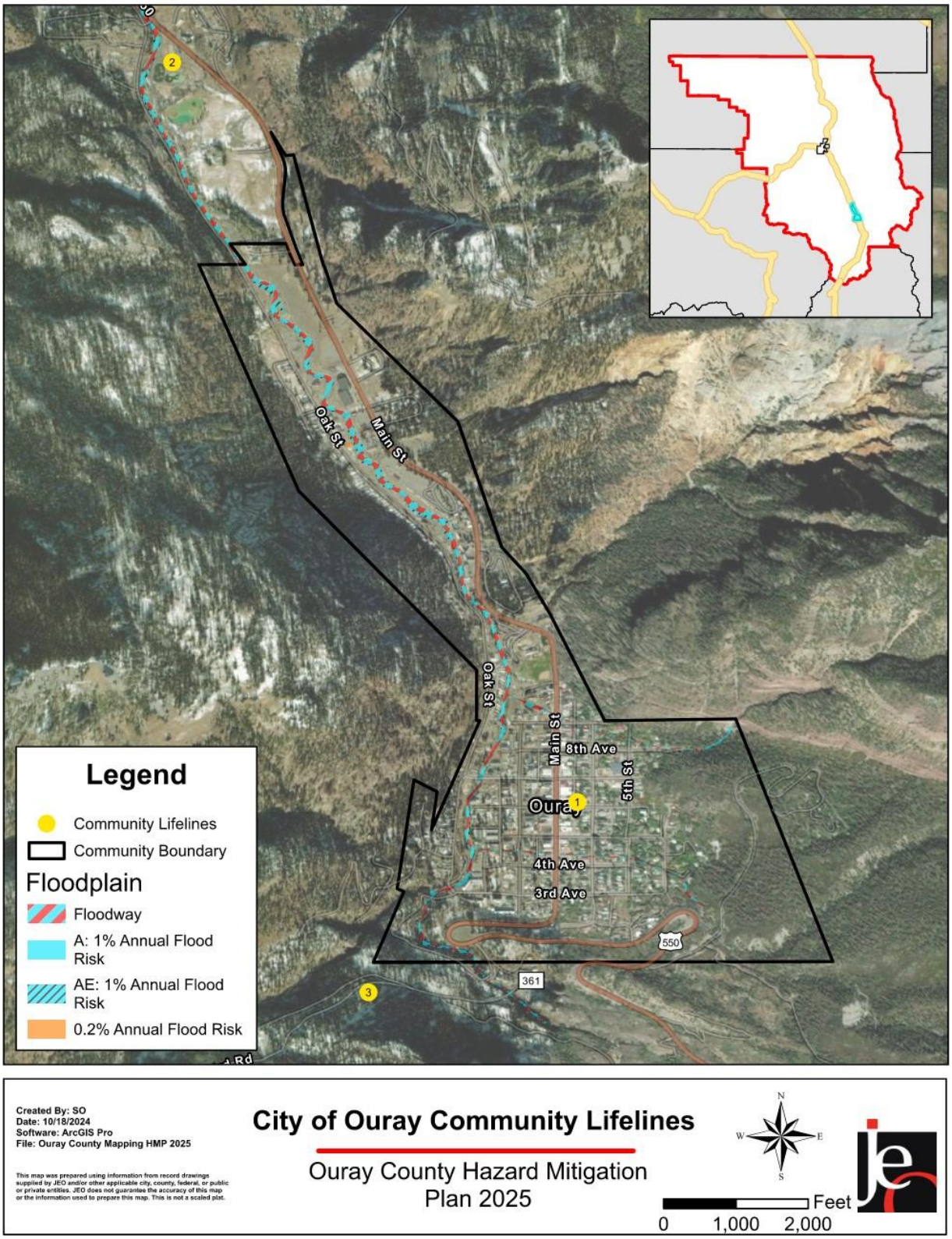
As listed in the following table, each participating jurisdiction identified community lifelines vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communications; Transportation; Hazardous Materials; and Water Systems.



Ouray Community Lifelines

CL Number	Name	Community Lifeline Type	Generator	Floodplain
1	City Hall	Safety and Security	Yes	No
2	Sewer Plant	Water Systems	Yes	No
3	Water Plant	Water Systems	Yes	No

Ouray Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Ouray County Hazard Mitigation Plan evaluates a range of natural and human-caused hazards that pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Ouray, which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards the City of Ouray identified. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. Please see *Section Five* and *Appendix A* for a review and analysis of other regional hazards.

Debris Flow

The City of Ouray and surrounding areas have been developed near debris fans (Portland, Cascade, Oak Creek), and there are eight creeks and several smaller basins that directly flow into the community. Because of this, the city has frequent issues with debris flows damaging bridges and private property. In August 2024, a flooding/debris flow event damaged the Bridal Veil Bridge. Debris flows can also damage and close Highway 550, the only way into and out of the community. Skyrocket Creek threatens the hot springs pool, which has been filled with debris in the past. The pool is a significant economic engine for the city and can have 300-400 visitors at a time in the busy summer months. A worst-case scenario would be if a debris flow struck the crowded pool. Residential development on the Corbett Creek and Dexter Creek debris fans could also be at risk. There are currently no warning systems on any of the problem drainages. In a 2002 report by the Colorado Geological Survey, the City of Ouray is listed as a Tier One debris flow area. Excerpts from that report are listed below.

> "The main town site of Ouray is located on the coalescing debris fans of Portland and Cascade Creeks. A small portion of the town lying on the west side of the Uncompahgre River is on the debris fan of Oak Creek. Recently, the fan of Skyrocket Creek at the north edge of town was subdivided into several residential sites. One or more of these fans has had debris flow and flash flood events on 22 occasions between 1874 and 1982. Efforts were made to control the debris by construction of a timber-lined channel ("flume") with a concrete bottom that was completed in 1909. These provided some protection, but damage continued when the flumes became clogged or overflowed. Major events occurred in 1981 and 1983, and the decrepit flumes were overwhelmed, resulting in damage to many homes, businesses, and town facilities. Following these destructive events, the city received grants for the design and replacement of the flumes with reinforced concrete structures. These new structures have yet to be tested by a major debris flood. They are more durable structures that will probably handle moderate-sized events, but it remains to be seen if they can tolerate the massive debris flow plugs of major events without malfunctioning. Debris plug fronts 25 to 30 ft. high have been reported, and deposits at the highway of 40 ft. depth have occurred (Jochim, 1986).
>
> Some engineering studies and mitigation designs were made by private consultants to the developer before the Skyrocket fan was subdivided in 1996. A key part of the mitigation is the redesign and replacement of an old diversion structure above the fan. A wooden diversion structure at this location was built in the spring of 1929, and it failed during massive debris flows in July of that same year. When the diversion failed, a drift of debris 40 ft. high was deposited on the highway below the fan. The new diversion is intended to intercept most of the debris flow volume and divert it to the north side of the Skyrocket fan. If this functions, it could minimize debris flow and flash flooding on the main fan that now

> contains several new homes. If it doesn't perform as intended, these homes and older City and residential areas west of US Hwy 550 will continue to be in very high-hazard areas."

In order to help reduce this risk, flumes were created throughout the community to route debris and water from Portland and Cascade creeks. These flumes are maintained and regularly cleaned of debris. However, there is still potential for a significant event to overwhelm these flumes or to be plugged with debris, resulting in debris spilling onto local streets. This debris would hinder emergency services and can impact transportation. More recent developments on the debris fans of Skyrocket and Bridalveil creeks incorporate geotechnical investigations and recommendations to reduce potential impacts. Homes on the debris fans are protected by dredged channels with berms that divert flows. In the future, the city would like to secure vital infrastructure better so that it is less likely to be damaged by flooding and debris flows.

New and Kept Mitigation and Strategic Actions

Action	**Cascade Rock/Debris Removal**
Description & Location	Bi-annual removal of rock and debris in the Cascade catchment basin to prevent flooding.
Hazard(s) Addressed	Debris Flow, Flooding, Landslide/Rockfall
Estimated Cost	$5,000 per Year
Local Funding	Utilities Budget
Timeline	Ongoing
Priority	Medium
Lead Agency	Public Works Director
Status	Ongoing. Rock and debris are removed throughout the year when they build up.

Action	**Flume Improvements**
Description & Location	Inventory flumes, identify problem areas, and initiate repairs; conduct an engineering evaluation of problem areas as needed; and renew and provide required funding for flume repair, maintenance, and replacement.
Hazard(s) Addressed	Debris Flow, Flooding
Estimated Cost	Varies Depending on the Project
Local Funding	Utilities Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works Director
Status	New Action. Planning Stage. Engineering to start in 2025.

Action	**Geothermal Line Upgrades**
Description & Location	Complete phase 3 of the Geothermal Line that supplies the Ouray Hot Springs Pool and Hydroelectric for the Public Works Shop.
Hazard(s) Addressed	Debris Flow, Drought, Earthquake, Landslides/Rockfall
Estimated Cost	$2,000,000
Local Funding	Utilities Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Public Works Director
Status	The project is currently in the design phase.

Action	Skyrocket Rock/Debris Removal
Description & Location	Annual removal of rock and debris in the Skyrocket catchment basin to prevent flooding.
Hazard(s) Addressed	Debris Flow, Flooding, Landslides/Rockfall
Estimated Cost	$5,000 per Year
Local Funding	Utilities Budget
Timeline	Ongoing
Priority	Medium
Lead Agency	Public Works Director
Status	Ongoing. Rock and debris are removed throughout the year when they build up.

Removed Mitigation and Strategic Actions

Action	Rock Removal
Description & Location	Annual removal of rock and debris in the Portland catchment basin to prevent flooding.
Hazard(s) Addressed	Debris Flow, Flooding, Landslide/Rockfall
Status	Removed. This action is no longer a priority for the city.

Landslide/Rockfall

Steep slopes around the City of Ouray cause rockfalls to occur regularly. Most of the city is in landslide/rockfall hazard areas, and Highway 550, which provides north and south access to the city, is also at an increased risk. Rockfall is a significant concern near the east and west Box Canyon walls. In March 2016, a rockfall totaled a house, and in November 2018, a rockfall impacted a home and caused flooding in a drainage ditch. In August 2019, a rockfall landed on the geothermal line that supplies the Ouray Hot Springs pool, and in 2021, a rockfall event caused damage to the city's water infrastructure and caused $100,000 of damage to the Ouray Ice Park. Past events have also damaged the Weehawken Spring water transmission line that delivers water to the city's storage tanks and water plant.

Concerns related to landslides/rockfalls include damage to property and infrastructure, injuries and fatalities, and road closures. During a recent closure of Highway 550, it was reported that local businesses experienced a 60% loss of revenue. In order to help reduce the frequency of rockfalls, a retaining wall was installed in the box canyon to solidify infrastructure.

New and Kept Mitigation and Strategic Actions

Action	Landslide/Rockfall Code Improvements
Description & Location	Ensure the Land Use Code is amended to appropriately address development in other natural hazard areas, such as steep slope areas that are 30% or greater. Amend the Ouray Land Use Code to create rockfall hazard regulations for rockfall hazard areas.
Hazard(s) Addressed	Landslide/Rockfall
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Community Development Director
Status	New Action. Not Started. On pause due to a lack of staffing and funding.

Rockfall Impacting the Ouray Hot Springs - 2019



Action	Weehawken Spring Transmission Line Repair/Replacement
Description & Location	Replace or repair the Weehawken Spring transmission line should an event take the line out of service. Develop a plan for public notification, conservation methods, and fire protection alternatives if service is interrupted.
Hazard(s) Addressed	Dam Failure, Debris Flow, Drought, Earthquake, Flooding, Imminent Threat, Landslides/Rockfall
Estimated Cost	$100,000+
Local Funding	Utilities Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Public Works Director
Status	Not Started. Currently waiting on funding.

Removed Mitigation and Strategic Actions

Action	Rockfall Study
Description & Location	A rockfall hazard study is to be conducted in 2022.
Hazard(s) Addressed	Landslides/Rockfall
Status	Removed. This study was not conducted and is no longer being considered.

Action	Water Main Landslide Mitigation
Description & Location	Protect the City of Ouray water main from landslide impacts.
Hazard(s) Addressed	Landslides/Rockfall
Status	Removed. This project is no longer a priority for the city.

Wildfire

Wildfires have not directly impacted the city in the past, but recent fires nearby have caused poor air quality and concern that they could spread to the city. Of any hazard, wildfire has the potential to do the most damage. While the city and surrounding area have a lower burn probability due to the higher elevations, there is a high density of structures in the WUI. Wildfires can cause evacuations, injuries, loss of life, and damage to buildings and infrastructure. A significant wildfire can also impact visitors to the city in the summer months when tourism is at its peak. Life safety and human health are serious concerns due to the limited evacuation routes and high influx of visitors to the city during summer festivals. The local fire authorities in the area are in the process of tree mitigation. Additional tree mitigation is needed in the future on both public and private property.

Completed Mitigation and Strategic Actions

Action	Community Wildfire Protection Plan
Description & Location	Complete CWPP for the City of Ouray Volunteer Fire Department.
Hazard(s) Addressed	Debris Flow, Drought, Flooding, Wildfire
Status	The fire department is part of the Ouray County CWPP, which was completed in 2025.

Action	Evacuation Plan
Description & Location	Develop a flood evacuation plan for the critical portions of the City of Ouray.
Hazard(s) Addressed	Dam Failure, Flooding, Hazardous Materials Incident, Imminent Threat, Wildfire
Status	Completed. A county-wide evacuation plan was completed in 2024.

New and Kept Mitigation and Strategic Actions

Action	Forest Management Program
Description & Location	Create an active forest management and improvement program for all city-owned properties to ensure good stewardship, wildlife habitat, wildfire mitigation, and overall forest health.
Hazard(s) Addressed	Debris Flow, Drought, Extreme Temperatures, Flooding, Imminent Threat, Lightning, Wildfire, Windstorm
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	5+ Years
Priority	High
Lead Agency	Parks and Facilities Manager (Lead), U.S. Forest Service
Status	New Action. Not Started.

Action	Implement Projects Identified in Ouray County CWPP
Description & Location	Implement fuel treatment and other projects in areas identified in the Ouray County CWPP.
Hazard(s) Addressed	Debris Flow, Drought, Extreme Temperatures, Flooding, Imminent Threat, Lightning, Wildfire, Windstorm
Estimated Cost	$10,000,000
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	City Administrator
Status	Locations have been identified. Some funding is secured, and other funding is needed to implement the projects.

Removed Mitigation and Strategic Actions

Action	Wildfire Regulations
Description & Location	Develop wildfire protection regulations.
Hazard(s) Addressed	Wildfire
Status	Removed. The Colorado Wildfire Resiliency Code Board is developing a state Wildland Urban Interface code. Local jurisdictions must adopt the code by October 1, 2025, and enforce the code by January 1, 2026.

Other Mitigation and Strategic Actions

Action	Avalanche Risk Reduction
Description & Location	Analyze and implement a proactive avalanche control program for critical infrastructure (roads, camping locations, structures, highways, and key access routes). This analysis would involve both manual and mechanical avalanche mitigation.
Hazard(s) Addressed	Avalanche
Estimated Cost	Unknown
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Ouray Police Department, Ouray County Sheriff
Status	New Action. Not Started

Action	Building & Infrastructure Hardening
Description & Location	Strengthen the infrastructure in Ouray to reduce the potential for damage during windstorms. This strengthening includes reinforcing buildings, improving transportation networks, securing utility lines, and ensuring essential services can continue during a windstorm.
Hazard(s) Addressed	Windstorm
Estimated Cost	Varies by Project
Local Funding	General Fund
Timeline	2-5 Years
Priority	Low
Lead Agency	Public Works Department
Status	New Action. Not Started.

Action	Community Analysis – Mass Casualty Events
Description & Location	Conduct a comprehensive risk assessment to identify potential causes of mass casualty events in Ouray. The analysis should consider the city's infrastructure, population density, local emergency response capabilities, and vulnerability of community lifelines.
Hazard(s) Addressed	Mass Casualty Events
Estimated Cost	$10,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Ouray Police Department
Status	New Action. Not Started.

Action	Comprehensive Public Health Emergency Response Plan
Description & Location	Work with Ouray County Public Health to develop a comprehensive public health emergency response plan that outlines the roles, responsibilities, and resources needed to respond to a public health crisis. This plan should include procedures for disease containment, mass vaccination, quarantine, public health communication, and current resource availability and gaps. Utilize planning and zoning to create/upgrade medical facilities in Ouray and plan contingencies for patient surges.
Hazard(s) Addressed	Public Health Emergencies
Estimated Cost	Staff Time
Local Funding	Staff Time
Timeline	2-5 Years
Priority	High
Lead Agency	City Administrator
Status	New Action. Not Started.

Action	Cross Training for Snowplow Drivers
Description & Location	Cross-train city staff on how to operate snowplows to expand the pool of plow drivers and help maintain accessibility during severe winter weather.
Hazard(s) Addressed	Severe Winter Storm
Estimated Cost	Staff Time
Local Funding	Staff Time
Timeline	2-5 Years
Priority	High
Lead Agency	Public Works Department
Status	New Action. Not Started.

Action	Early Warning Systems
Description & Location	Improve and expand early warning systems to detect hazardous precipitation events, dam failure, and potential flooding.
Hazard(s) Addressed	Dam Failure, Flooding
Estimated Cost	$10,000+
Local Funding	General Fund
Timeline	Ongoing
Priority	Medium
Lead Agency	Public Information Officer
Status	Ongoing. The City of Ouray uses WENS, CodeRED, Facebook, Twitter, Business Alerts, and the City Website for early notification systems. A significant amount of work still needs to be done for the early detection system.

Action	Extreme Temperature Centers and Education
Description & Location	Protect vulnerable populations from the effects of extreme temperatures by ensuring they have access to resources like shelter, cooling, and heating centers. Additionally, promote community education and awareness about the risks of extreme temperatures and the steps individuals can take to stay safe.
Hazard(s) Addressed	Extreme Temperatures
Estimated Cost	$1,000+, Staff Time
Local Funding	General Fund, Staff Time
Timeline	1 Year
Priority	Medium
Lead Agency	Ouray Police Department
Status	New Action. Not Started

Action	Floodplain Regulation Improvements
Description & Location	Amend the Land Use Code to require development in an identified alluvial fan to be constructed above the base flood elevation as determined by an engineer. Amend the Floodplain Regulations to meet FEMA requirements. Amend the floodplain regulations to ensure flumes and streams are maintained and/or improved during development to avoid potential flooding during high water runoff events due to clogs caused by debris or other alterations and disturbances.
Hazard(s) Addressed	Flooding
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Floodplain Administrator
Status	New Action. Not Started. Currently on pause due to a lack of staff and funding.

Action	Hardening Facilities
Description & Location	Harden the city facilities from imminent threats, including water tanks, source water protection areas (Weehawken Spring source), and the sewage plant.
Hazard(s) Addressed	Imminent Threat
Estimated Cost	$50,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Parks and Facilities Manager
Status	Not Started. The city currently cannot implement this project due to staff restrictions.

Action	Hazardous Materials Incident Capacity Building
Description & Location	Equip emergency responders with the necessary tools, training, and technology to respond effectively to hazardous materials spills. This includes specialized containment, cleanup, protective gear, vehicles, training, and equipment needed to transport hazardous materials safely.
Hazard(s) Addressed	Hazardous Materials Incidents
Estimated Cost	Varies by Project
Local Funding	General Fund
Timeline	1 Year
Priority	High
Lead Agency	City Council (Lead), Ouray Police Department, Ouray Fire Protection District, City Council
Status	New Action. Not Started.

Action	Lightning Education
Description & Location	Increase public awareness about lightning safety, including how to respond during a lightning storm and the importance of staying safe. The campaign will target residents and visitors to Ouray, especially those engaging in outdoor activities like hiking, camping, and fishing, putting people at greater risk for lightning strikes.
Hazard(s) Addressed	Lightning
Estimated Cost	Staff Time
Local Funding	Staff Time
Timeline	1 Year
Priority	Low
Lead Agency	Public Information Officer
Status	New Action. Not Started

Action	Oak Creek Supply Line
Description & Location	Consider reconstructing the Oak Creek supply line, reservoir, and diversion to diversify water sources and have a backup water source to Weehawken Springs.
Hazard(s) Addressed	Drought
Estimated Cost	Unknown
Local Funding	Utilities Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Public Works Director
Status	New Action. Not Started.

Action	Redundant Water Supply
Description & Location	Work with Ouray Ice Park Inc. to build a redundant water line from the Wehawken Springs for the Ouray water supply.
Hazard(s) Addressed	Drought
Estimated Cost	$100,000+
Local Funding	Utilities Budget, Cost Share
Timeline	5+ Years
Priority	Medium
Lead Agency	Public Works Director (Lead), Ouray Ice Park
Status	Not Started. Currently waiting on funding.

Action	Water Conservation Standards
Description & Location	Adopt stricter water conservation standards to protect the environment and maximize the city's water capacity for development as envisioned by the Community Plan.
Hazard(s) Addressed	Drought
Estimated Cost	Staff Time
Local Funding	Staff Time, General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Community Development Director
Status	New Action. Not Started. The city cannot currently implement this project due to staff shortages.

Completed Mitigation and Strategic Actions

Action	Update Community Plan
Description & Location	Complete the City Of Ouray Community Plan Update (last updated 2004).
Hazard(s) Addressed	All Hazards
Status	Completed. The plan was updated in 2021.

Removed Mitigation and Strategic Actions

Action	Building Codes - Flood
Description & Location	Develop flood protection building codes. Revisit building regulations in identified flood hazard areas, including flumes.
Hazard(s) Addressed	Flooding
Status	Removed. This action is no longer a priority for the city.

Action	Continuity of Operations Plans
Description & Location	Develop continuity of operations and continuity of government plans.
Hazard(s) Addressed	All Hazards
Status	Removed. This action is no longer a priority for the city.

Action	Fiber Upgrades
Description & Location	Fiber build of broadband to better serve responders and the community.
Hazard(s) Addressed	All Hazards
Status	Removed. This action is no longer a priority for the city.

Action	NFIP Continuation
Description & Location	Continue implementing sound floodplain management practices as communities participate in the National Flood Insurance Program.
Hazard(s) Addressed	Flooding
Status	Removed as this is not an actual mitigation action. The county and communities will continue to participate in the NFIP.

Action	Public Education
Description & Location	Conduct outreach on debris flow and flood protection methods for property and business owners in the City of Ouray. Encourage residents to construct defensible spaces around homes by promoting the Firewise technique. Educate citizens about flood insurance and clear water vs. sediment/mudflow. Produce multi-hazard education materials. Develop educational materials on water conservation and use.
Hazard(s) Addressed	Debris Flow, Drought, Flooding
Status	Removed. This project is no longer a priority for the city.

Community Profile

Town of Ridgway

Ouray County
Hazard Mitigation Plan 2025

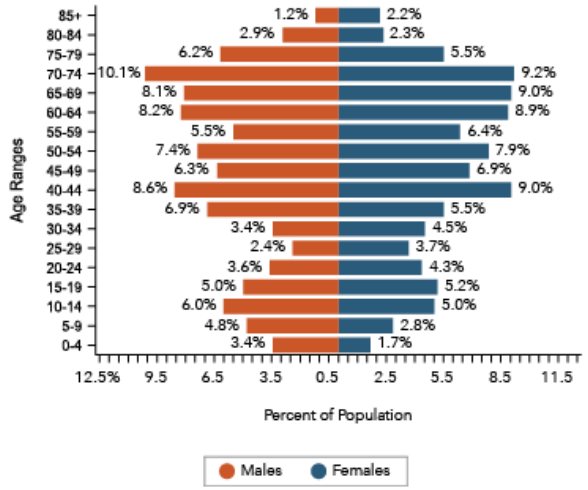
Community Fact Sheet

Community Summary Fact Sheet

Town of Ridgway, CO
Ouray County Hazard Mitigation Plan 2025

1,181	50.3	570	2.07	$924,342	$79,073
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID



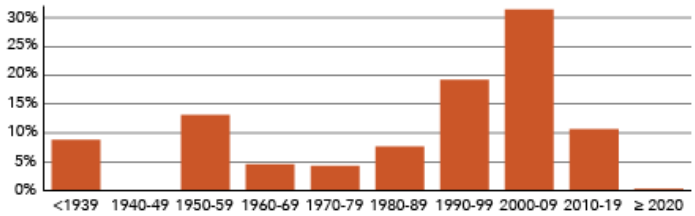
TOTAL POPULATION

2024 Total Population (Estimate)	1,181
2020 Total Population (U.S. Census)	1,183
2010 Total Population (U.S. Census)	887
2000 Total Population (U.S. Census)	712

AT RISK POPULATIONS

149	335	11	15%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

HOUSING: YEAR BUILT



EMPLOYMENT

153	2.5%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- American Indian Population
- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- White Population

7% **of the Total Population is Hispanic**

HOUSING

81	12%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Ridgway Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
John Clark	Mayor	Town of Ridgway	Attended	Attended
Preston Neill	Administrator	Town of Ridgway	Attended, Materials Development	Attended, Materials Development
Shane Schmalz	Town Marshal	Town of Ridgway	Materials Development	Materials Development
Steven Schroeder	Public Works Maintenance Operator II	Town of Ridgway	Materials Development	Materials Development

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or before other funding opportunity cycles start.

The Administrator, Town Marshal, and Public Works Maintenance Operator II will be responsible for reviewing and updating this participant profile outside of the five-year update. The Town of Ridgway will review the plan annually, and the public will be notified using email listserv, the town website, social media, newspaper advertisements, and public town council meetings.

Capability Assessment

The planning team assessed the Town of Ridgway's hazard mitigation capabilities by reviewing planning, regulatory, administrative, technical, fiscal, education, and outreach capabilities. As the town continues to grow and add staff, various capabilities will be able to be increased. This includes the Education & Outreach Capabilities and Administrative & Technical Capabilities.

Ridgway Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Stormwater Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	Water System Emergency Response Plan	No
	Source Water Protection Plan	Yes

Capability/Planning Mechanism		Yes/No
Capability	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Growth Management Ordinance	No
	Hazard Specific Ordinances	Yes
	Erosion/Sediment Control Plan	No
	Flood Insurance Study	Yes
	Elevation Certificates	Yes
	BCEGS Rating	Yes
	Other (if any)	Growing Water Smart Action Plan, Regional Climate Action Plan, Upper Uncompahgre Basin Water Supply Protection and Enhancement Report
Administrative & Technical Capability	Planning Commission	Yes
	Planner/Engineer (Land Development)	Yes
	Planner/Engineer/Scientist (Natural Hazards)	Yes
	Resilience Planner	Yes
	Transportation Planner	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Engineering (Construction)	Yes
	Emergency Manager	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	No
	Site Plan Review Requirements	Yes
	Other (if any)	-
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for Grants in the Past	No
	Awarded a Grant in the Past	No
	Authority to Levy Taxes for Specific Purposes, such as Mitigation Projects	No
	Gas/Electric/Water/Sewer Service Fees	Yes
	Stormwater Service Fees	No
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Withheld Spending in Hazard-Prone Areas	No
	Other (if any)	-
	Local Citizen Groups or Non-Profit Organizations Focused on	Yes

Capability/Planning Mechanism		Yes/No
Education & Outreach Capability	Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	Newsletter, Email, Listserv, Social Media
Warning Systems / Services	General	Yes
	Flood	Yes
	Wildfire	Yes
	Tornado	No
	Geological Hazards	Yes
	Other (if any)	Protective Communications

Ridgway Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

National Flood Insurance Program (NFIP)

Ridgway is a member of the NFIP, having joined on 9/27/1985, and the town's Floodplain Administrator oversees the commitments and requirements of the NFIP and Colorado Rules and Regulations for Regulatory Floodplain (2 CCR 408-1). The Floodplain Administrator uses the FEMA Map Service Center and the National Flood Hazard Layer to determine if a development is located in the floodplain. Any new development or substantial improvement within the Special Flood Hazard Area must receive a Floodplain Development Permit. Ridgway's municipal code outlines floodplain and Floodplain Development Permit regulations. Substantially improved or damaged structures in the floodplain are identified through the building permit review process. Enforcement of the floodplain regulations is conducted through inspections during construction. The floodplain regulations do not exceed State of Colorado requirements. Letters of Map Revisions are tracked internally. Any Letter of Map Revision is noted on the town's master flood map and filed by panel number in an accessible location.

The local planning team has stated that Ridgway will remain in good standing and continue to be involved with the NFIP. The main barrier to running the NFIP program is that the town staff does not have practical experience running it. Ridgway has no policies in force, so the NFIP is rarely discussed. There are no known areas in the community with limited NFIP coverage. Ridgway puts

out annual communications about how flood insurance is available and that homes in high-risk flooding areas with mortgages from government-backed lenders must have flood insurance. Additional NFIP information is given in the table below.

Ridgway NFIP Information

NFIP Overview	
Date of NFIP Participation:	09/27/1985
Floodplain Administrator:	Yes
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	Yes
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	$0
Total NFIP Coverage ($):	$0
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	$0
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Buildings and Valuation in the Floodplain

The planning team acquired GIS parcel data from the County Assessor and Microsoft building footprint data to analyze buildings' location, number, and value in the 100-year and 500-year floodplains. The following tables provide a summary of the results of this analysis.

Ridgway Buildings and Value in the 100-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
542	$402,872,240	3	$1,643,900	0.5%

Source: County Assessor, 2024; Microsoft, 2024

Ridgway Buildings and Value in the 500-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
542	$402,872,240	1	$721,480	0.2%

Source: County Assessor, 2024; Microsoft, 2024

Plans and Studies

The Town of Ridgway has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below, along with a description of how it is integrated with the hazard mitigation plan or contains hazard mitigation principles. When the town updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update. Unless otherwise specified below, the hazard mitigation plan has not been integrated into these or other planning mechanisms.

Building Code (2019) and Floodplain Regulations (2023)

The building regulations set standards for constructed buildings and structures. The town has adopted the 2018 International Building Code. The Building Inspector/Building Official handles enforcement. The floodplain management regulations outline uses and construction standards within the 100-year floodplain and help to restrict development in the floodplain. The hazard mitigation plan has not been integrated with these documents beyond what is typically required by the 2018 International Building Code.

Capital Improvements Plan (2024)

The capital improvements plan outlines projects the city would like to pursue and provides a planning schedule and financing options. Projects include improving stormwater and drainage, upsizing water distribution lines, installing water meters, updating the electrical system, constructing a new water treatment facility, and installing backup generators at community lifelines. The capital improvements plan is updated each budget cycle. Hazard mitigation, resiliency, and anticipated climate change impacts the decision-making process, and related projects are included in the plan each year. This hazard mitigation plan includes applicable projects in the capital improvements plan.

Community Wildfire Protection Plan (2025)

The Town of Ridgway is part of the Ouray County Community Wildfire Protection Plan (CWPP). The CWPP is a strategic plan that identifies specific wildland fire risks facing communities and fire authorities in the county and provides prioritized mitigation projects and activities designed to reduce those risks. Also included in the CWPP is a plan to address watershed risk from wildfires. The plan identifies values to protect, their risk of wildfire, and areas where vegetation treatments are likely to occur. Applicable projects identified by the CWPP are included in the hazard mitigation plan.

Growing Water Smart Action Plan (2024)

The Growing Water Smart Action Plan aims to reduce landscape water usage across the community. Actions include municipal turf replacement, irrigation upgrades, water system upgrades, updating the Town Code, increased public education, and adopting the WaterSmart Ridgway Residential Program. This action plan covers four years of action steps. Applicable actions have been added as mitigation actions in this hazard mitigation plan. The hazard mitigation plan was not integrated with the water smart action plan.

Master Plan (2019)

The master plan is designed to guide the future actions and growth of the town. Hazard mitigation planning is referenced several times throughout the document, and the Ouray County Hazard Mitigation Plan is also referenced. Under Community Value 5, "Well-Managed Growth," Goal 3 calls for proactively mitigating natural and human-made hazards. Policies related to that include preventing development in high-risk areas (floodplains, steep slopes), managing stormwater on-site, participating in the hazard mitigation plan and community wildfire protection plan, promoting awareness on emergency response protocols and mitigation, siting infrastructure to avoid exposure to hazards, and considering hazard mitigation in town planning and decision making. The comprehensive plan is updated every five to seven years to ensure that it continues to meet the community's vision and goals for the future.

Emergency Operations Plan (2021)
The Town of Ridgway is part of the Ouray County Emergency Operations Plan. The plan outlines general guidelines on how the county manages operations related to the five phases of emergency management. It outlines the day-to-day management of incidents along with major emergencies and disasters. The plan covers emergency management operations; assignment of roles and responsibilities; emergency support functions; direction, control, and coordination; information collection and dissemination; communications; administration; finance; and logistics. Because this is a response plan, the hazard mitigation plan has not been integrated.

San Miguel and Ouray County Regional Climate Action Plan (2021)
The Town of Ridgway is part of the San Miguel and Ouray County Regional Climate Action Plan. This climate action plan is a regional roadmap for reducing greenhouse gas emissions and creating a sustainable, thriving future. The plan establishes a timeline for high-priority, ongoing, mid- and long-term actions. This plan covers energy supply, building energy use, transportation and aviation, water and material use, food, water, and land. The hazard mitigation plan is referenced in this document.

Upper Uncompahgre Basin Water Supply Protection and Enhancement Report (2016)
This report assesses the existing and future water needs of agricultural, domestic, municipal, industrial, recreational, and environmental uses and options for stabilizing and augmenting existing and future water uses within the Upper Uncompahgre River Basin in Ouray County. It includes a basin description, water rights and administration, water demands and shortages, and potential augmentation supplies and combinations. The hazard mitigation plan has not been integrated with this report.

Water Conservation and Management Plan (2018)
Ridgway's Water Conservation and Management Plan outlines the stages, triggers, and action items related to drought and water conservation. The town has six stages with triggers related to drought status and water demand exceeding system capacity. Also included in the plan are enforcement provisions. The hazard mitigation plan has not been integrated with the Water Conservation and Management Plan.

Water Supply Assessment (2022)
The water supply assessment looked at the town's existing and future water demands, then evaluated the current system to meet those demands and identify any deficiencies. It includes a review of water system demands, water availability, water supply strategies, and recommendations. The assessment found that the potable 2050 treated water demand could be fully met in all high-growth scenarios. The hazard mitigation plan has not been integrated into this assessment.

Zoning Regulations (2023) and Subdivision Regulations (2023)
The Town of Ridgway's zoning and subdivision regulations are included in the town's Land Use Regulations in the Code of Ordinances. These documents outline where and how development should occur in the future. They restrict development in hazard-prone areas, limit population density in the floodplain, promote drought-tolerant landscaping, limit infrastructure on steep slopes, and limit development in wildfire and geological hazard areas. The hazard mitigation plan has not been integrated into these documents.

Future Development Trends

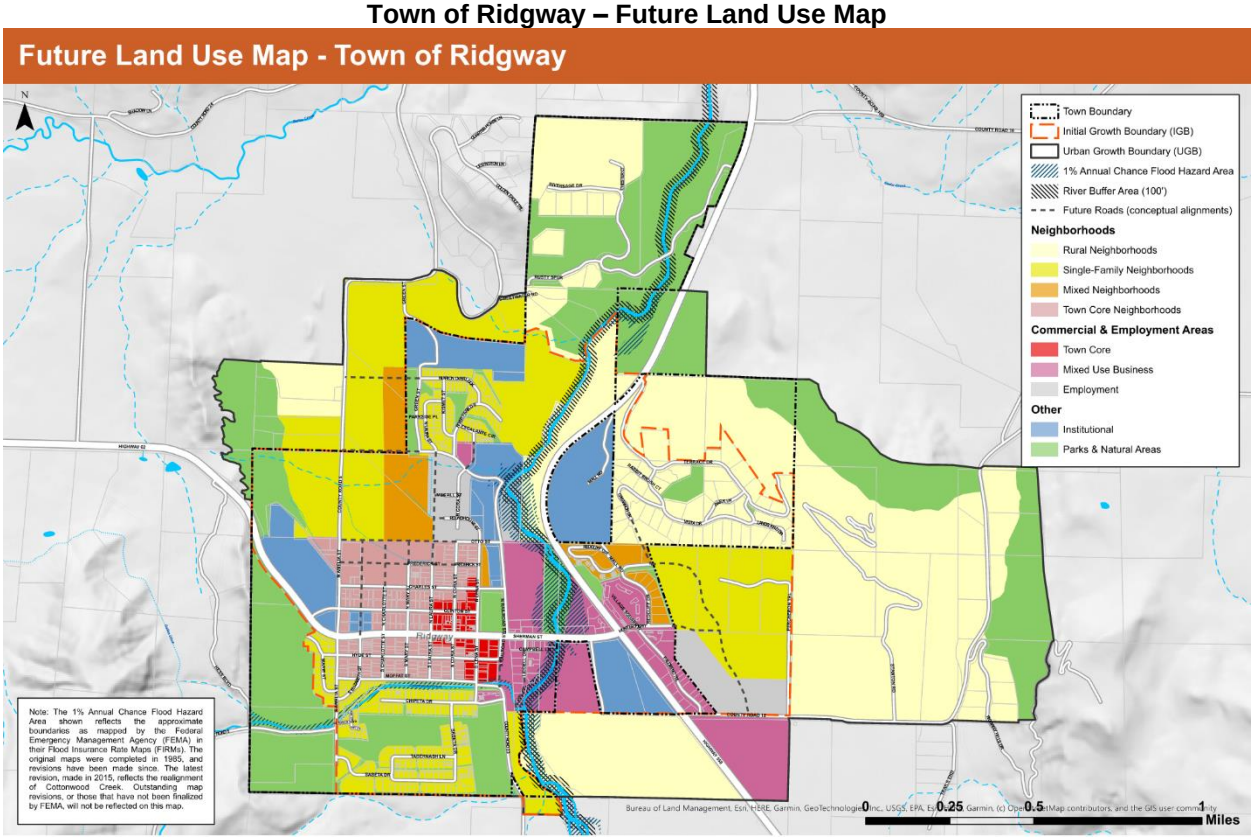
Over the past five years, a significant amount of residential development has occurred in Ridgway. The new housing units have been constructed in the residential and historic residential zoning districts along with the eastern side of the community. Various public infrastructure, including utilities and roads, have been built as part of these developments. One of the developments, the Riverfront Village PUD, is being built directly adjacent to the Uncompahgre River. Thirty-eight residential and four commercial units are being constructed for that project. The Riverfront Village project was reviewed against all town standards and regulations, including the Uncompahgre River Overlay District (UROD) standards. Part of the intent of the UROD is to utilize design and development techniques that avoid, minimize, and mitigate impacts on the natural environment and ensure the aesthetic and ecologic qualities of the river corridor continue to be a community asset.

Soon, several parcels and potential units associated with the Preserve PUD will be developed. This development will be near the Uncompahgre River and will be reviewed to meet the standards of the UROD. The map below shows the future land use map for the Town of Ridgway.

The new housing that has been built increases the county's risk and vulnerability to drought, earthquakes, extreme temperatures, severe winter storms, and windstorms because more buildings could be impacted. As mentioned above, the two PUDs may have an increased risk of flooding but have been mitigated to minimize risk and vulnerability. No other current or planned developments will be in known hazardous areas.

Since 2000, the Town of Ridgway has gained approximately 470 people, a 39.7% increase in population. Increasing populations are associated with more robust hazard mitigation and emergency planning requirements for development. Growing populations can also increase tax revenues, allowing communities to pursue additional mitigation projects. Approximately 28% of the population is age 65 or older. This likely increases risk and vulnerability to all hazards as older adults are more vulnerable to hazards than other groups. These elderly populations are spread throughout the community in many neighborhoods. The minority population in the town is around 13%. Minorities may face increased vulnerability as they tend to have access to fewer financial and systemic resources that would enable them to implement hazard mitigation projects and to respond and recover from hazard events.

Town of Ridgway – Future Land Use Map



Community Lifelines

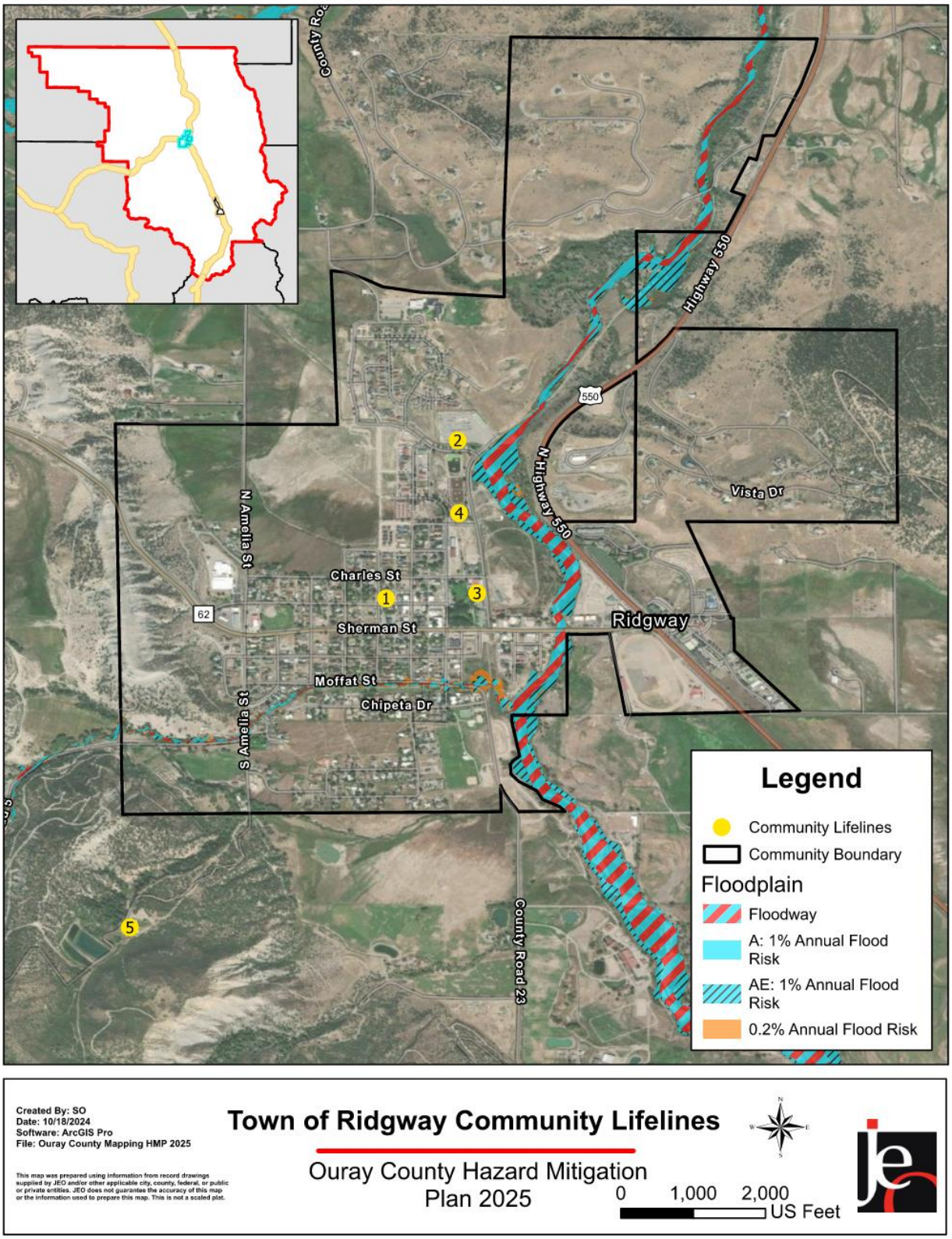
As listed in the following table, each participating jurisdiction identified community lifelines vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communications; Transportation; Hazardous Materials; and Water Systems.



Ridgway Community Lifelines

CL Number	Name	Community Lifeline Type	Generator	Floodplain
1	Decker Community Room	Safety and Security	No	No
2	San Miguel Power Association	Energy	Yes	No
3	Town Hall	Safety and Security	No	No
4	Wastewater Treatment Plant	Water Systems	No	No
5	Water Treatment Plant	Water Systems	Yes	No

Ridgway Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Ouray County Hazard Mitigation Plan evaluates a range of natural and human-caused hazards that pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Ridgway, which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards the Town of Ridgway identified. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be low concern. Please see Section Five and Appendix A for a review and analysis of other regional hazards.

Debris Flow

Summer rain events have become much more intense than in the past. These rain events are typically short but powerful and can carry significant debris. On August 12, 2024, a significant rain event impacted the town's Beaver Creek diversion infrastructure. The event filled the Ridgway Ditch with a mud slurry from bank to bank to the top of the ditch for hundreds of feet. As a result, the town has been unable to divert water from Beaver Creek, the community's primary water source. A similar amount of mud, rocks, and gravel impacted the Grizzly Diversion Trough. Ridgeway is removing the debris, making repairs, and identifying ways to repair further and enhance the infrastructure.

The areas along Cottonwood Creek that run through Ridgway are at increased risk from debris flows. The area around Highway 62 and Amelia Street intersection is also at risk if rainstorms intensify. The volume of water and debris coming off the hill on the west side of town could overwhelm the stormwater system or breach the system if debris plugs up culverts and storm drains.

With climate change likely increasing the frequency and intensity of rainstorms, the amount of debris included in flood events will increase. This increase in debris is likely to impact the floodplain, community infrastructure, and properties in the floodplain. The Town of Ridgway is currently identifying a water diversion alternative that will be more resilient against future flooding and debris flow events. The local planning team would also like to better secure and protect town-owned infrastructure against flooding and debris flows.

New and Kept Mitigation and Strategic Actions

Action	Stream Improvements
Description & Location	Rollans Park - Restoration project, in-stream improvements.
Hazard(s) Addressed	Debris Flow, Flooding
Estimated Cost	$400,000
Local Funding	Parks Department Budget
Timeline	Ongoing
Priority	Medium
Lead Agency	Park Department
Status	Ongoing. Work takes place each winter when flows are low. The scope of work depends on the amount of restoration required and the amount of gravel in the channel.

Action	Water Crossing
Description & Location	Construct a 2nd river crossing for the water system.
Hazard(s) Addressed	Debris Flow, Drought, Earthquake, Flooding, Imminent Threat, Landslides/Rockfall
Estimated Cost	$100,000
Local Funding	Water Department Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Water Department
Status	Not Started. There is a lack of resources and funding to implement this project.

Drought

Hotter temperatures and reduced snowpack, which provides water to the community, are the biggest concerns related to drought. Ridgway is a very water-conscious community because of how high they are in the watershed and its proximity and reliance on the snowpack. Past drought events and the enactment of water restrictions heighten residents' concerns. The town most recently enacted voluntary water restrictions in the summer of 2024 due to the county's category, according to the U.S. Drought Portal, and due to the amount of water being treated at the water treatment plant. Ridgway has a Water Conservation and Management Plan with six stages and triggers related to drought status and water demand exceeding system capacity.

The town has also implemented a Growing Water Smart Action Plan to establish goals and outcomes to improve watershed health and water resiliency. A few projects from the plan have already started to be implemented to help reduce overall water usage. One of those projects was the Harwell Park Turf Replacement Pilot Project. Many more projects are still needed to help establish a more reliable water supply and reduce residential, commercial, and town water usage.

The town has two principal water diversion locations. One is the Beaver Creek Diversion, and the other is the Happy Hollow Diversion. The town diverts water into the Ridgway Ditch at the Beaver Creek diversion. The Ridgway Ditch carries water for approximately five miles, winding across varying terrain from the diversion in upper Beaver Creek to Lake Otonowanda. Then, water is transported via a transmission line from Lake Otonowanda to the pre-sedimentation ponds above the water plant. The Happy Hollow Diversion is located on Cottonwood Creek, about a mile south of town, just off the east side of County Road 5. At the town's split point, water is diverted into a pipeline that flows to the pre-sedimentation ponds above the water treatment plant.

After water is settled in the pre-sedimentation ponds, water for domestic use flows by gravity into the water treatment plant building, which is pressurized and flows to the microfiltration system. After treatment, water flows to storage tanks (two tanks at 300,000 gallons each) to provide chlorine contact time.

Completed Mitigation and Strategic Actions

Action	Backup Compressor
Description & Location	Install a backup compressor for the water plant.
Hazard(s) Addressed	Drought, Earthquake, Imminent Threat, Severe Winter Storm, Wildfire, Windstorm
Status	Completed.

Action	Water Supply Redundancy
Description & Location	Identify and secure a secondary interconnection for any interruption in the town's water supply.
Hazard(s) Addressed	Drought
Status	Completed. The Tri-County Water Interconnect project was completed in 2020.

New and Kept Mitigation and Strategic Actions

Action	Increased Water Storage
Description & Location	Increase water storage east of the Uncompahgre River.
Hazard(s) Addressed	Drought
Estimated Cost	$750,000
Local Funding	Water Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Water Department
Status	Not Started. The town does not currently have the resources or funding to implement this project.

Action	Water Conservation
Description & Location	Research and explore water conservation opportunities in follow up to the 2018 adoption of the Water Management and Conservation Plan and water rate increases. Codify regulations as appropriate.
Hazard(s) Addressed	Drought
Estimated Cost	Staff Time
Local Funding	Water Department Budget, Staff Time
Timeline	Ongoing
Priority	High
Lead Agency	Water Department
Status	Ongoing. Ridgway has attended a Growing Water Smart Workshop by the Sonoran Institute. The program introduced participating communities to the full range of communications, public engagement, planning, and policy implementation tools to realize watershed health and community resiliency goals. The community learned about the best approaches for integrating land use and water planning.

Action	Water Conservation Plan
Description & Location	Water conservation plan/basin protection implementation.
Hazard(s) Addressed	Drought
Estimated Cost	$25,000
Local Funding	Water Department Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Water Department Budget
Status	Not Started. There is a lack of resources and funding to implement this project.

Action	Water Supply Code
Description & Location	Review and update the town code's regulations regarding adequate water supply for new development.
Hazard(s) Addressed	Drought
Estimated Cost	$10,000
Local Funding	Water Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Water Department
Status	Planning Stage. The town is aiming to complete this project within the next two years.

Action	Water Supply Contingency Plan
Description & Location	Maintain a contingency plan in an emergency threatening or disrupting the community water supply.
Hazard(s) Addressed	Drought
Estimated Cost	$5,000+
Local Funding	Water Department Budget
Timeline	Ongoing
Priority	High
Lead Agency	Water Department
Status	Ongoing. The town is currently working to pinpoint a short-term contingency plan as they continue to navigate the Beaver Creek Diversion Restoration Project.

Flooding

In recent years, summer rain events have become much more intense than in the past. These events have been short but powerful and have caused flood damage to several properties on the west side of town. On August 12, 2024, a significant flood impacted the town's Beaver Creek diversion infrastructure. As a result, the town has been unable to divert water from Beaver Creek, the community's primary water source, into the Ridgway Ditch. Most of the mapped floodplain is on the community's east side along the Uncompahgre River. However, much of Ridgway was built on a relatively flat area, making natural drainage insufficient. This causes flooding of homes and buildings on the west side of town not located in a mapped floodplain.

The primary concern related to flooding is rain, causing heavy flows along Cottonwood Creek down the Uncompahgre River. Due to climate change, the local planning team expects these storms to become more frequent and powerful. If that happens, it could impact the floodplain, and several properties may become damaged from floods. The installation of storm drains downtown has alleviated many of the flooding concerns. However, there are still undersized culverts throughout the community. To help better understand the risks of flooding, Ridgway participated in the Flood Insurance Study and Risk Mapping, Assessment, and Planning Project in 2022 and 2023. In the future, the community would like to better secure various town-owned infrastructure and improve stormwater infrastructure around town.

Completed Mitigation and Strategic Actions

Action	Floodplain Map Update
Description & Location	Work with FEMA and Ouray County to maintain up-to-date maps of the 100-year floodplain and floodway along all waterways flowing through Ridgway.
Hazard(s) Addressed	Flooding
Status	Completed in 2023.

Action	Preservation of Open Space and Natural Resources
Description & Location	Prioritize conserving and preserving community-valued natural resources such as environmentally sensitive areas, view and wildlife corridors, riparian areas and wetlands, river corridors, natural filtration, and stormwater drainage areas.
Hazard(s) Addressed	Flooding
Status	Completed. This is achieved through the town's land use regulations, town standards, and guiding documents such as the Master Plan.

Action	Stormwater Management Plan
Description & Location	Develop a stormwater management plan for the Town of Ridgway.
Hazard(s) Addressed	Debris Flow, Flooding
Status	Completed.

New and Kept Mitigation and Strategic Actions

Action	Backup Generators
Description & Location	Purchase a backup generator for the Wastewater Treatment Plant.
Hazard(s) Addressed	Earthquake, Extreme Temperatures, Imminent Threat, Severe Winter Storm, Wildfire, Windstorm
Estimated Cost	$160,000
Local Funding	Engineering Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Engineering Department
Status	Not Started. A backup generator was purchased and installed at the Water Treatment Plant. The town still needs to budget and buy a backup generator for the Wastewater Treatment Plant.

Action	Drainage Improvements
Description & Location	Implement town-wide stormwater drainage improvements.
Hazard(s) Addressed	Debris Flow, Flooding
Estimated Cost	$1,500,000
Local Funding	Streets Department Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Streets Department
Status	Not Started.

Action	Early Warning Systems
Description & Location	Improve and expand early warning systems to detect hazardous precipitation events and potential flooding.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000+
Local Funding	Streets Department Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Streets Department
Status	Not Started. Currently, the town lacks the resources and funding to implement this project.

Removed Mitigation and Strategic Actions

Action	NFIP Continuation
Description & Location	Continue implementing sound floodplain management practices as communities participate in the National Flood Insurance Program.
Hazard(s) Addressed	Flooding
Status	Removed as this is not an actual mitigation action. The county and communities will continue to participate in the NFIP.

Wildfire

The last significant wildfires in the county were the Cow Creek Fire in the fall of 2019 and the Simms Mesa Fire in 2022. Ridgway was not directly impacted by either other than poor air quality. Ridgway is concerned about the town's location in the wildland-urban interface. There is a general feeling that it's not a matter of whether a wildfire will occur but rather when a large wildfire will majorly impact the county and community. In general, the areas around Ridgway have an increased wildfire due to a higher burn probability and a high density of structures in the WUI.

Areas of specific wildfire concern are the Vista Terrace neighborhood, located on the east side of Highway 550, and the town's Water Treatment Plant and other parts of the diversion system located south of the community. A case can be made that all areas of town are concerned about wildfires if there are strong winds in the forecast and limited resources to fight a wildfire.

On town-owned property, wildfire mitigation work takes place each year. Actions are usually on-the-ground treatments and tree pruning to reduce the chance of a wildfire causing damage. Many residents also undertake wildfire mitigation work on their properties each year. Additional tree mitigation work is needed in the future, both on public and private properties. Enhanced education about the benefits of wildfire mitigation would also help increase the private work done. A wildfire outreach committee started meeting in the spring of 2025 to coordinate education efforts among various agencies and organizations.

Completed Mitigation and Strategic Actions

Action	Develop CWPP
Description & Location	Develop CWPP for other remaining designated WUI areas for extreme and very high communities.
Hazard(s) Addressed	Wildfire
Status	The Ouray County CWPP was completed in 2025.

New and Kept Mitigation and Strategic Actions

Action	Defensible Space
Description & Location	Encourage residents to construct defensible spaces around homes by promoting Firewise techniques and participate in the Wildfire Ready Home Program form West Region Wildfire Council.
Hazard(s) Addressed	Wildfire
Estimated Cost	Staff Time
Local Funding	Building Department Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Building Department (Lead), WRWC (Support)
Status	In Progress. The town periodically communicates to the public about the importance of wildfire mitigation, which involves a range of practices to reduce the destruction caused by wildfires. More still needs to be done in the future. West Region Wildfire Council also provides education, site visits, and a vegetation management cost-share program.

Action	Implement Projects Identified in Ouray County CWPP
Description & Location	Implement fuel treatment and other projects in areas identified in the Ouray County CWPP.
Hazard(s) Addressed	Debris Flow, Drought, Flooding, Lightning, Wildfire, Windstorm
Estimated Cost	Varies by Project
Local Funding	General Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Town Manager (Lead), WRWC (Support)
Status	Not Started. West Region Wildfire Council facilitates the Ouray Forest Collaborative to work with partners to plan and implement fuels treatments.

Other Mitigation and Strategic Actions

Action	Code Updates – Landslide/Rockfall
Description & Location	Define "steep slopes" in the development code and develop regulations that detail the conditions and performance standards under which such development may be evaluated.
Hazard(s) Addressed	Landslide/Rockfall
Estimated Cost	$5,000
Local Funding	Building Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Building Department
Status	Not Started.

Action	Infrastructure Redundancies
Description & Location	Evaluate Town infrastructure and community lifelines to determine what values are at risk from hazards. Identify opportunities to introduce redundancies into infrastructure systems.
Hazard(s) Addressed	Avalanche, Dam Failure, Debris Flow, Drought, Earthquake, Extreme Temperatures, Flooding, Imminent Threat, Landslides/Rockfall, Lightning, Severe Winter Storm, Wildfire, Windstorm
Estimated Cost	$20,000
Local Funding	Engineering Department Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Engineering Department
Status	Not Started.

Action	Mental Health Support
Description & Location	Explore opportunities for mental health support and outreach.
Hazard(s) Addressed	Mass Casualty Events, Public Health Emergencies
Estimated Cost	Staff Time
Local Funding	General Budget
Timeline	Ongoing
Priority	Medium
Lead Agency	Town Manager
Status	Ongoing. Ridgway periodically helps communicate pertinent information through its channels. More needs to be done in the future.

Action	Public Education
Description & Location	Educate staff, residents, and visitors on their risks to all hazards that could impact the community, how to get information and emergency notifications, mitigation actions that can be taken, and preparedness actions to keep themselves safe. Keeping residents, staff, and visitors informed about hazards that could impact the community and opportunities for mitigating risks can help protect public health, safety, and welfare. Coordinate outreach and education projects and materials with Ouray County and other project partners. Ridgway will amplify and expand on education and outreach strategies created by Ouray County. Outreach and education may include but are not limited to booths at local events, social media posts, flyers, mailings, and in-person updates for the local governing body. These activities will occur at a minimum on an annual basis.
Hazard(s) Addressed	All Hazards
Estimated Cost	$500+
Local Funding	General Budget
Timeline	Ongoing
Priority	Low
Lead Agency	Town Manager
Status	Ongoing. Some public education is done for various hazards. More needs to be done in the future.

Action	Radon Mitigation
Description & Location	Share radon mitigation information with the building community via training and electronic media.
Hazard(s) Addressed	Public Health Emergencies
Estimated Cost	Staff Time
Local Funding	Building Department Budget, Staff Time
Timeline	Ongoing
Priority	Medium
Lead Agency	Building Department
Status	Ongoing. This is consistently done through the building department.

Action	Source Water Protection
Description & Location	Work with Ouray County to regulate uses or activities allowed within or adjacent to the town's Source Water Protection Area to reduce the risk of pollution or other contaminants entering the town's water supply and ensure the town has access as needed.
Hazard(s) Addressed	Hazardous Materials Incident
Estimated Cost	Staff Time
Local Funding	Water Department Budget
Timeline	Ongoing
Priority	High
Lead Agency	Water Department
Status	Ongoing. The town regularly works with Ouray County on this action.

Action	Surge/Lightning Protection
Description & Location	Water plant surge and lightning protection.
Hazard(s) Addressed	Lightning
Estimated Cost	$7,500
Local Funding	Engineering Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Engineering Department
Status	Planning Stage. Ridgway is aiming to complete this project in the next two years.

Completed Mitigation and Strategic Actions

Action	Continuity of Operations Plan & Emergency Management Plan
Description & Location	Develop and maintain a local emergency response and management plan and a plan to continue government operations during and after an emergency event.
Hazard(s) Addressed	All Hazards
Status	Completed an update to the plan in 2025.

Action	Data Backup
Description & Location	Develop capability for off-site backup of critical data.
Hazard(s) Addressed	Imminent Threat, Severe Winter Storm, Windstorm
Status	Completed

Action	Water Plant Security
Description & Location	Install fencing for the water treatment plant.
Hazard(s) Addressed	Imminent Threat
Status	Completed

District Profile

Dallas Park Cemetery District

Ouray County
Hazard Mitigation Plan 2025

Local Planning Team

Dallas Park Cemetery District Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
Steve Duce	President	Dallas Park Cemetery District	-	Materials Development
John Robinson	Vice-President	Dallas Park Cemetery District	-	Materials Development
Storme Lowery	Secretary	Dallas Park Cemetery District	-	Materials Development
Hannah Hollenbeck	Bookkeeper	Dallas Park Cemetery District	-	Materials Development
Mike Smith	Grounds Keeper	Dallas Park Cemetery District	-	-
Coleen McElroy	Sexton	Dallas Park Cemetery District	Recording, Materials Development	Attended, Materials Development

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or before other funding opportunity cycles start.

The President, Bookkeeper, and Sexton will be responsible for reviewing and updating this participant profile outside of the five-year update. The Dallas Park Cemetery District will review the plan annually, and the public will be notified during public board meetings.

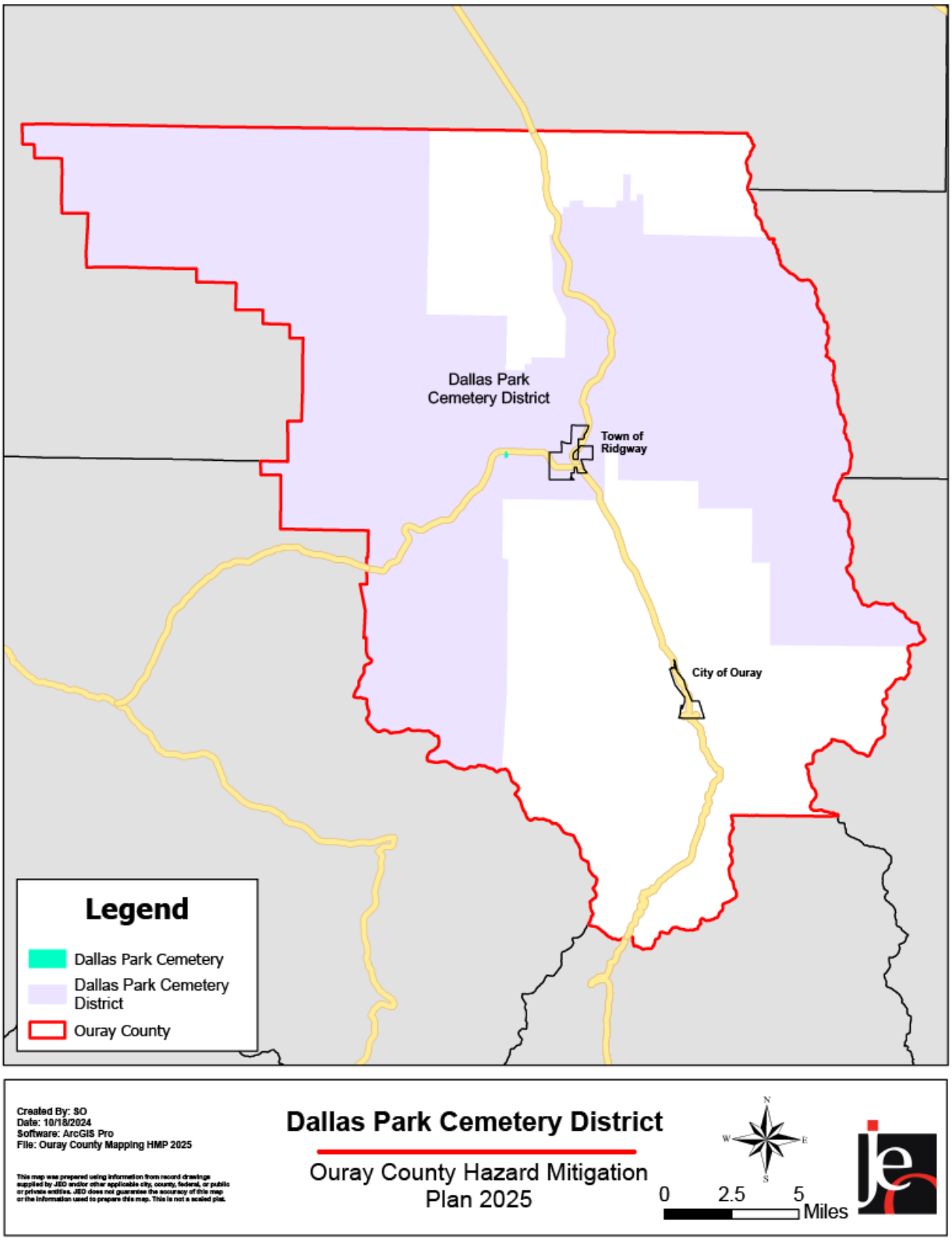
Location

The Dallas Park Cemetery is three miles west of the Town of Ridgway at 7960 Highway 62. The cemetery owns a metal building that houses the maintenance shop and cemetery office, a pump house that houses the pump for irrigation out of the Dallas Ditch, and a historic building used for additional equipment that does not fit in the main metal building. Dallas Park Cemetery is designated as the official Ouray County Mass Casualty Cemetery. The map below shows the cemetery district boundary and the cemetery. The Dallas Park Cemetery District is a taxing authority, and most of its funds come from a general operating levy tax. Other funds come from plot sales, burial fees, and donations.

Capability Assessment

The planning team assessed the Dallas Park Cemetery District's hazard mitigation capabilities by reviewing planning, regulatory, administrative, technical, fiscal, education, and outreach capabilities. The district is capable of increasing revenue capabilities through raising the levy tax, but it would require voter approval. Other capabilities could be improved with board approval and funds available.

Dallas Park Cemetery District Location



Dallas Park Cemetery District Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes (County)
	Capital Improvements Plan	Yes
	Economic Development Plan	No
	Emergency Operations Plan	Yes (County)
	Floodplain Management Plan	Yes (County)
	Stormwater Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	No
	Building Codes	No
	Water System Emergency Response Plan	No
	Source Water Protection Plan	Yes (County)
	National Flood Insurance Program	No
	Community Rating System	No
	Community Wildfire Protection Plan	Yes (County)
	Growth Management Ordinance	No
	Hazard Specific Ordinances	No
	Erosion/Sediment Control Plan	No
	Flood Insurance Study	No
	Elevation Certificates	Yes
	BCEGS Rating	No
	Other (if any)	-
Administrative & Technical Capability	Planning Commission	No
	Planner/Engineer (Land Development)	No
	Planner/Engineer/Scientist (Natural Hazards)	Yes
	Resilience Planner	No
	Transportation Planner	No
	Floodplain Administrator	No
	GIS Capabilities	No
	Chief Building Official	No
	Engineering (Construction)	No
	Emergency Manager	Yes (County)
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Site Plan Review Requirements	No
	Other (if any)	-
	1- & 6-Year Plan	No
	Applied for Grants in the Past	No

Capability/Planning Mechanism		Yes/No
Fiscal Capability	Awarded a Grant in the Past	No
	Authority to Levy Taxes for Specific Purposes, such as Mitigation Projects	No
	Gas/Electric/Water/Sewer Service Fees	No
	Stormwater Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Withheld Spending in Hazard-Prone Areas	No
	Other (if any)	-
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	No
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	-
Warning Systems / Services	General	No
	Flood	No
	Wildfire	No
	Tornado	No
	Geological Hazards	No
	Other (if any)	-

Dallas Park Cemetery District's Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Limited
Time to Devote to Hazard Mitigation	Moderate
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Moderate

Plans and Studies

The Dallas Park Cemetery District does not currently have any planning mechanisms. If the district decides to create planning documents or perform a study, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into those documents.

Future Development Trends

In 2021, the cemetery district purchased a metal building to house the cemetery office and maintenance equipment. While not located in the floodplain, it is nearby to the west. The building is in a wildfire risk area. In the next five years, the board plans to build additional roads throughout the cemetery to help reduce wear on the main road and increase parking away from tree lines and known flood areas.

The new building increases the cemetery's risk of earthquakes, severe winter storms, and windstorms because an additional building could be impacted. However, that risk is offset because the maintenance equipment will be less likely to be damaged. Flood and wildfire risk also increase due to the location of the building. However, the risk is minimized because the building is surrounded by washed rock to help reduce any possible impacts of flooding or fire. The new roads will also help minimize the risk by creating fire breaks and parking in safer locations.

Community Lifelines

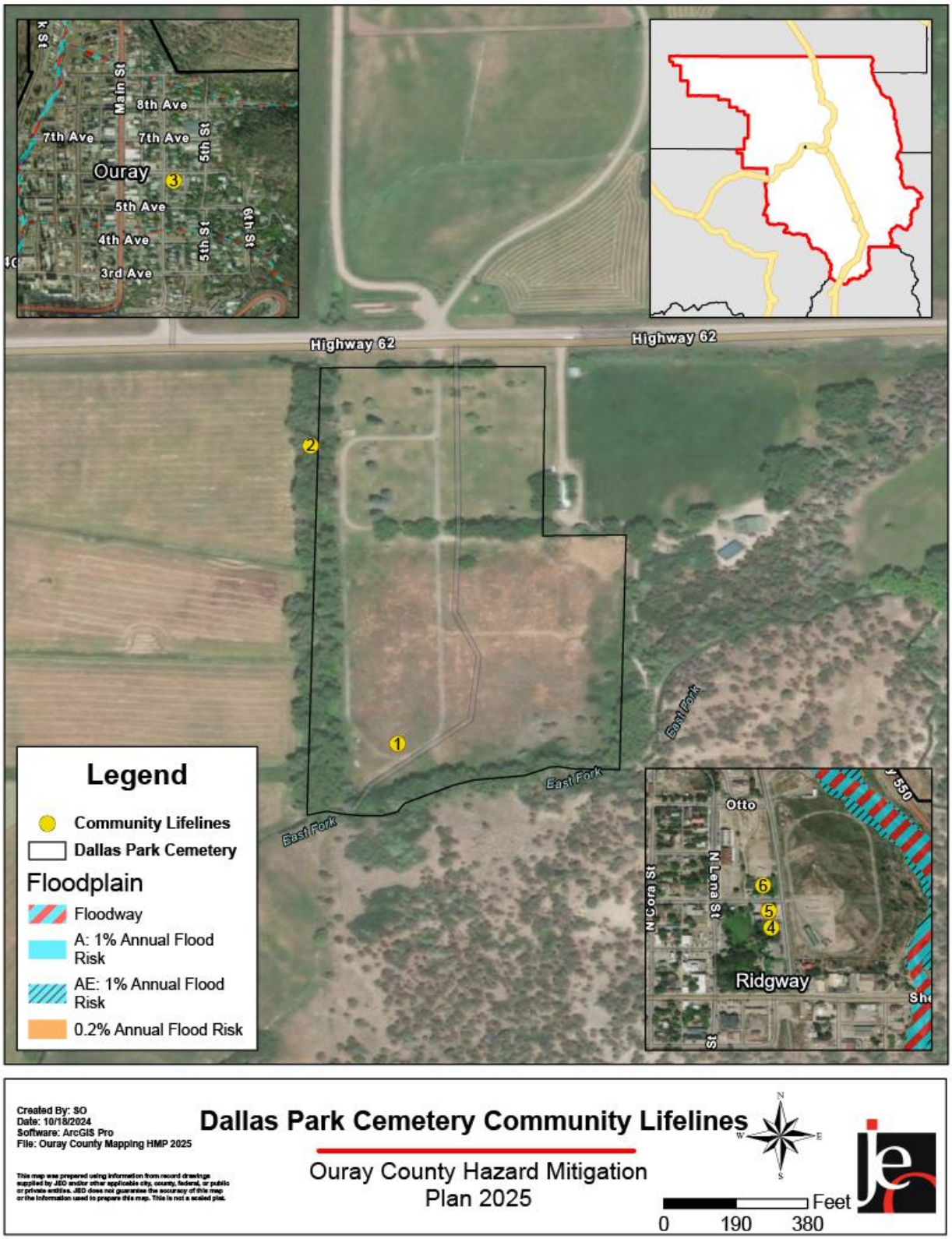
As listed in the following table, each participating jurisdiction identified community lifelines vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communications; Transportation; Hazardous Materials; and Water Systems.



Dallas Park Cemetery District Community Lifelines

CL Number	Name	Community Lifeline Type	Generator	Floodplain
1	Cemetery Office and Maintenance Building	Other	No	No
2	Dallas Ditch	Water Systems	No	No
3	Ouray County Courthouse	Safety and Security	Yes	No
4	Ouray County EMS	Health and Medical	Yes	No
5	Ridgway Fire District	Safety and Security	Yes	No
6	Ridgway Library	Other	No	No

Dallas Park Cemetery Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Ouray County Hazard Mitigation Plan evaluates a range of natural and human-caused hazards that pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for the cemetery, which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards the Dallas Park Cemetery District identified. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. Please see Section Five and Appendix A for a review and analysis of other regional hazards.

Flooding

Several years ago, the Dallas Ditch, which runs along the cemetery's southern border, flooded. It is at a higher elevation than much of the cemetery, so water flowed down the main road, damaging it and depositing mud over a portion of the graves. Since then, the mud has been cleaned up, but the road has never been adequately repaired and continues deteriorating. This road is the only entrance and exit to the cemetery, and there is concern that people will drive over headstones and sprinkler heads to avoid the potholes. There is also an irrigation ditch that runs the entire length of the western border, and if it were to flood, it could wash out graves and headstones and damage the building that houses the cemetery office, records, and maintenance equipment. The cemetery district has second priority ditch rights to the Dallas Ditch for irrigation. Those are cleaned every year, and obstructions are removed.

New and Kept Mitigation and Strategic Actions

Action	Drainage Improvements
Description & Location	Improve roadways within the cemetery to channel waterways from burial sites and out of the cemetery. Keep the French drain operating correctly.
Hazard(s) Addressed	Flooding
Estimated Cost	$30,000
Local Funding	Mill Levy Tax, Plot Sales, Burial Fees, Donations
Timeline	2-5 Years
Priority	Medium
Lead Agency	District Board
Status	New Action. Not Started

Severe Winter Storm

After winter storm events, visitors can lose track of the roads and drive over headstones and sprinkler heads. In January 2024, three headstones were knocked over when someone tried to drive into the cemetery before the roads were cleared. Trees are also more likely to break and drop branches, damaging headstones, buildings, and cars. To help reduce the number of people driving in the cemetery during or immediately after a winter storm, gates have been installed and can be locked. In the future, the district would like to get the roads plowed faster and the gate closed more quickly during heavy storms. Additional public education is also needed to better inform them of the hazards of entering the cemetery when it has not been plowed.

New and Kept Mitigation and Strategic Actions

Action	Tree Trimming and Removal
Description & Location	A high concentration of trees on the cemetery's western and northern borders and center sections need to be trimmed or removed.
Hazard(s) Addressed	Severe Winter Storm, Wildfire, Windstorm
Estimated Cost	$25,000
Local Funding	Mill Levy Tax, Plot Sales, Burial Fees, Donations
Timeline	2-5 Years
Priority	High
Lead Agency	District Board
Status	New Action. In Progress. The cemetery trims and removes trees as funds allow. However, with limited funds, little can be done each year.

Wildfire

Being in a rural area, the cemetery is more vulnerable to wildfire because of the wildland vegetation surrounding it. On the southern and western border, there are many trees and tall grass along with weeds in the south portion of the cemetery. This is a concern for the district because people park in that area, and wildfires could start from dry vegetation and hot vehicles. While parking is identified in other places, preventing people from parking in grassy areas is difficult. The cemetery district cannot properly mow the tall grass and weeds due to a lack of equipment. In the future, the district would like to purchase a brush hog and remove the rocks so that a regular mower can manicure the southern portion of the cemetery. However, this will likely take many years to complete.

New and Kept Mitigation and Strategic Actions

Action	Wildfire Fuels Reduction
Description & Location	Mitigate vegetation on nine acres of land on the upper southern section of the cemetery and along the southern and western borders.
Hazard(s) Addressed	Drought, Extreme Temperatures, Lightning, Wildfire
Estimated Cost	$50,000
Local Funding	Mill Levy Tax, Plot Sales, Burial Fees, Donations
Timeline	5+ Years
Priority	High
Lead Agency	District Board
Status	New Action. In Progress. The cemetery is always working on this as funds permit. Progress is slow and will take at least five years to complete.

Windstorm

There are many trees on the cemetery grounds, primarily located along the two irrigation ditches running on the southern and western borders. Each year, large tree branches fall due to high wind events. So far, only headstones have been damaged, and the cemetery district has had to repair or replace them. Primary concerns include injury from falling branches, damaged buildings, damaged headstones, and damaged cars when people are visiting. Each year, the district has a professional tree service that cuts down and trim as many trees as can be afforded. However, the district does not have a large operating budget, so more tree trimming is needed.

New and Kept Mitigation and Strategic Actions

See the Tree Trimming and Removal action under severe winter storms.

Other Mitigation and Strategic Actions

Action	Cemetery Closure Plan
Description & Location	Create a plan on when to close the cemetery to the public during or after a hazardous event.
Hazard(s) Addressed	Earthquake, Flooding, Hazardous Materials Incident, Severe Winter Storm, Wildfire, Windstorm
Estimated Cost	Staff Time
Local Funding	General Budget, Staff Time
Timeline	2-5 Years
Priority	Low
Lead Agency	District Board
Status	New Action. Not Started

Removed Hazards

The following hazards do not have an identified mitigation action because they would not negatively impact the cemetery district or would not occur at the cemetery.

- Avalanche
- Dam Failure
- Debris Flow
- Imminent Threat
- Landslide/Rockfall
- Mass Casualty
- Public Health Emergency

Appendix A: Full Risk Assessment

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Terms and Definitions

The following table defines terms used throughout the Full Risk Assessment Appendix.

Term Definitions

Term	Definition
Hazard	A potential source of injury, death, or damages.
Asset	People, structures, facilities, and systems that have value to the community.
Risk	The potential for damages, loss, or other impacts created by the interaction of hazards and assets. Risks include the probability that a hazard will occur and the extent of the impact on assets in the community.
Vulnerability	Susceptibility to injury, death, or damages due to a specific hazard.
Impact	The consequence or effect of a hazard on the community or assets.
Historical Occurrence	The number of hazard events reported during a defined period.
Extent	The strength or magnitude relative to a specific hazard.
Historical Probability	Likelihood of a hazard occurring based on historical occurrences.
Future Likelihood	The probability of a hazard occurring based on historical occurrences, climate change, and future development.

Methodology

The risk assessment methodology utilized for this appendix follows the same methods outlined in the FEMA Local Mitigation Planning Handbook.[1] This process consists of four primary steps: 1) Describe the hazard; 2) Identify vulnerable community assets; 3) Analyze risk; and 4) Summarize vulnerability.

When describing the hazard, this appendix will examine the following items: previous occurrences of the hazard within Ouray County; locations where the hazard has occurred in the past or is likely to happen in the future; extent of past events and likely extent for future occurrences; and probability of future occurrences. County and participant risk analysis will examine historic impacts and losses and what is possible should the hazard occur. Risk analysis will include qualitative (i.e., description of historical or potential effects) and quantitative data (i.e., assigning values and measurements for possible loss of assets).

The best and most current appropriate data available have been considered for each hazard profiled. Further discussion relative to each hazard is discussed in the hazard profile portion of this appendix. Unless expressly stated otherwise, each hazard's extent scale(s) apply to all jurisdictions within Ouray County. Mapping vulnerable population locations was impossible during this plan update as spatial location data for these populations was unavailable.

Hazard Identification

Identifying relevant hazards for Ouray County began with a review of the Colorado Enhanced State Hazard Mitigation Plan 2023-2028. The Ouray County Planning Team reviewed, discussed, and determined the list of hazards to be profiled in this hazard mitigation plan update. It was decided that the hazards addressed in the 2020 Ouray County Hazard Mitigation Plan were still applicable and would be used for this plan update. The hazards for which a risk assessment was completed are listed on the page below.

1 Federal Emergency Management Agency. May 2023. "Local Mitigation Planning Handbook". https://www.fema.gov/sites/default/files/documents/fema_local-mitigation-planning-handbook_052023.pdf.

Hazards Addressed in the Plan

Hazards Addressed in the Plan		
Avalanche	Flooding	Public Health Emergencies
Dam Failure	Hazardous Materials Incident	Severe Winter Storm
Debris Flow	Imminent Threat	Wildfire
Drought	Landslides/Rockfall	Windstorm
Earthquakes	Lightning	
Extreme Temperatures	Mass Casualty Events	

FEMA Risk Assessment Requirements

Requirement §201.6(c)(2): Risk assessment. The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

Requirement §201.6(c)(2)(i): The risk assessment shall include a] description of the type … of all natural hazards that can affect the jurisdiction.

Requirement §201.6(c)(2)(i): The risk assessment shall include a] description of the … location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

Requirement §201.6(c)(2)(ii): The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.

Requirement §201.6(c)(2)(ii): The risk assessment] must also address National Flood Insurance Program insured structures that have been repetitively damaged floods.

Requirement §201.6(c)(2)(ii)(A): The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area.

Requirement §201.6(c)(2)(iii): For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

Average Annual Damages, Historical Probability, and Future Likelihood

Average Annual damages

FEMA *Requirement §201.6(c)(2)(ii) (B)* suggests that when the appropriate data is available, hazard mitigation plans should also provide an estimate of potential dollar losses for structures in vulnerable areas. This risk assessment methodology includes an overview of assets at risk and offers historical average annual dollar losses for all hazards for which historical event data are available. Additional loss estimates are provided separately for those hazards for which sufficient data is available. These estimates can be found within the relevant hazard profiles.

Average annual losses from historical occurrences can be calculated for those hazards for which there is a robust historical record and for which monetary damages are recorded. Two main pieces of data are used for this formula.

- **Total Damages in Dollars:** This is the total dollar amount of all property and crop damages recorded in federal, state, and local data sources. The limitation of these data sources is that dollar figures are usually estimates and often do not include all damages from every event but only officially recorded damages from reported events.

- **Total Years of Record:** This is the years in which data is available for recorded events.

An example of the Event Damage Estimate is found below:

$$\textbf{Annual Damages } (\$) = \frac{Total\ Damages\ in\ Dollars\ (\$)}{Total\ Years\ Recorded\ (\#)}$$

FEMA Standard Economic Values

As part of FEMA's Benefit-Cost Analysis Toolkit, standard economic values were developed to help better estimate the avoided loss of services when implementing a hazard mitigation project. These standard economic values can also help assess potential future economic impacts from a hazard event. The table below gives the economic value for traffic delays for roads and bridges, loss of electric services, loss of wastewater services, loss of potable water services, and loss of communications/IT services. The assumed damages do not consider physical damage to utility equipment and infrastructure but do consider the impact on economic activity and residential customers. To learn more about how these values were calculated, visit FEMA's Benefit-Cost Analysis Sustainment and Enhancements.[2]

FEMA Standard Economic Values

Service Lost	Economic Value
Traffic Delays on Roads and Bridges	$35.60/Vehicle/Hour
Loss of Electric Services	$182/Person/Day
Loss of Wastewater Services	$60/Person/Day
Loss of Potable Water Services	$116/Person/Day
Loss of Communications/IT Services	$130/Person/Day

Source: FEMA, 2022[3]

FEMA's standard economic values will not be used to determine average annual damages and average damage per event estimates for each hazard profile. Past hazard events do not list the total number of people or vehicles impacted, and thus, it is impossible to retroactively calculate the total economic impact using these values. The values are provided in this plan so that participants can better estimate potential losses and determine the benefits of potential future mitigation actions.

Historical Probability

Historical probability can be calculated based on the total years of record and the years in which an event occurred. It is important to note that the number of total events is not used for this formula because multiple events may take place in a single year. This would skew the historical probability higher than it is. An example of the historical probability estimate is found below:

2 Federal Emergency Management Agency. September 2022. "Benefit-Cost Analysis Sustainment and Enhancements". https://www.fema.gov/sites/default/files/documents/fema_standard-economic-values-methodology-report_092022.pdf.

3 FEMA. September 2022. "Benefit-Cost Analysis Sustainment and Enhancement". https://www.fema.gov/sites/default/files/documents/fema_standard-economic-values-methodology-report_092022.pdf.

$$\textbf{Annual Probability}\ (\%) = \frac{Total\ Years\ with\ an\ Event\ Occuring\ (\#)}{Total\ Years\ of\ Record\ (\#)}\ x\ 100$$

Future Likelihood

Future likelihood is the probability that a hazard will occur in the future. While historical probability tells us how often a hazard happened in the past, it does not provide a complete picture of what could happen in the future. Future conditions are likely to change the probability of hazard events. Climate change and future changes in development will bring changes to probability, risk, and vulnerability. For this hazard mitigation plan, historical probability, climate change, and future development will be considered when determining the likelihood of a hazard event occurring. Because future conditions are difficult to quantify with percentages, future likelihood is broken down into the four categories below.

Very Unlikely = Hazard is expected to occur once every 50+ years.

Unlikely = Hazard is expected to occur once every 10+ to 50 years.

Likely = Hazard is expected to occur once every 5+ to 10 years.

Very Likely = Hazard is expected to occur once every 1 to 5 years.

Hazard Profiles

Information from participating jurisdictions was collected and reviewed alongside hazard occurrence, magnitude, and event narratives as provided by local, state, and federal databases. Based on this information, profiled hazards were determined to have a historical record of occurrence or the potential for occurrence in the future. The following profiles will broadly examine the identified hazards across Ouray County. Hazards of local concern or events that have deviated from the norm are discussed in greater detail in each respective jurisdictional profile (see *Section Eight: Participant Profiles*).

Avalanche

An avalanche is a mass of snow, ice, and debris flowing and sliding rapidly down a steep slope. Avalanches can be highly destructive due to the tremendous impact forces of the rapidly moving snow and debris and the burial of areas in the run-out zone. Four factors contribute to an avalanche: a steep slope, a snow cover, a weak layer in the snow cover, and a trigger. Nine different types of avalanches could occur. Definitions and graphics for each type are from the Colorado Avalanche Information Center.[4]

Loose Dry

Release of dry, unconsolidated snow. These avalanches typically occur within layers of soft snow near the snowpack's surface. Loose-dry avalanches start at a point and entrain snow as they move downhill, forming a fan-shaped avalanche. Other names for loose-dry avalanches include point-release avalanches or sluffs. Loose-dry avalanches can trigger slab avalanches that break into deeper snow layers. Loose Dry avalanches are usually relatively harmless to people unless they are above rocks, dense timber, a cliff, or a crevasse.



Storm Slab

Release of a soft cohesive layer (a slab) of new snow that breaks within the storm snow or on the old snow surface. Storm-slab problems typically last between a few hours and a few days. Storm slabs that form over a persistent weak layer (surface hoar, depth hoar, or near-surface facets) may be termed Persistent Slabs or may develop into Persistent Slabs. Storm slabs are most dangerous on slopes with terrain traps, such as timber, gullies, over cliffs, or terrain features that make it difficult for a rider to escape off the side.



Wind Slab

Release of a cohesive layer of snow (a slab) formed by the wind. Wind typically transports snow from the upwind sides of terrain features and deposits snow on the downwind side. Wind slabs are often smooth and rounded, sometimes sound hollow, and can range from soft to hard. Wind slabs that form over a persistent weak layer (surface hoar, depth hoar, or near-surface facets) may be termed Persistent Slabs or may develop into Persistent Slabs.

4 Colorado Avalanche Information Center. 2023. “Avalanche Problems”. https://avalanche.state.co.us/forecasts/tutorial/avalanche-problems.

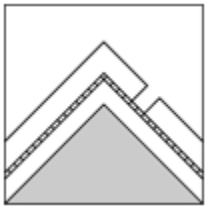
Wind Slabs form in specific areas and are confined to lee and cross-loaded terrain features. They can be avoided by sticking to sheltered or wind-scoured areas.



Persistent Slab

Release of a cohesive layer of soft to hard snow (a slab) in the middle to upper snowpack when the bond to an underlying persistent weak layer breaks. Persistent layers include surface hoars, depth hoars, near-surface facets, or faceted snow. Persistent weak layers can continue to produce avalanches for days, weeks, or even months, making them especially dangerous and tricky. As additional snow and wind events build a thicker slab on top of the persistent weak layer, this avalanche problem may develop into a Deep Persistent Slab.

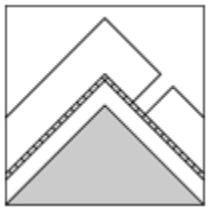
The best way to manage the risk from Persistent Slabs is to make conservative terrain choices. They can be triggered by light loads and weeks after the last storm. The slabs often propagate in surprising and unpredictable ways. This makes this problem difficult to predict and manage and requires a wide safety buffer to handle the uncertainty.



Deep Persistent Slab

Release of a thick cohesive layer of hard snow (a slab) when the bond breaks between the slab and an underlying persistent weak layer, deep in the snowpack or near the ground. The most common persistent weak layers involved in deep, persistent slabs are depth hoars or facets surrounding a deeply buried crust. Deep persistent slabs are typically hard to trigger, are very destructive, and are dangerous due to the large mass of snow involved. They can persist for months once they have developed. They are often triggered from areas where the snow is shallow and weak and are particularly difficult to forecast and manage. They commonly develop when Persistent Slabs become more deeply buried over time.

Deep Persistent Slabs are destructive and deadly events that can take months to stabilize. The Colorado Avalanche Information Center no longer uses this avalanche problem in avalanche forecasts.



Loose Wet

Release of wet, unconsolidated snow or slush. These avalanches typically occur within layers of wet snow near the snowpack's surface, but they may quickly gouge into lower snowpack layers. Like Loose Dry Avalanches, they start at a point and entrain snow as they move downhill, forming a fan-shaped avalanche. They generally move slowly but can contain enough mass to cause significant damage to trees, cars, or buildings. Other names for loose-wet avalanches include point-release avalanches or sluffs. Loose Wet avalanches can trigger slab avalanches that break into deeper snow layers.



Wet Slab

Release of a cohesive layer of snow (a slab) that is generally moist or wet when the flow of liquid water weakens the bond between the slab and the surface below (snow or ground). They often occur during prolonged warming events and/or rain-on-snow events. Wet Slabs can be very destructive.



Cornice Fall

Cornice Fall is the release of an overhanging mass of snow that forms as the wind moves snow over a sharp terrain feature, such as a ridge, and deposits snow on the downwind (leeward) side. Cornices range in size from small wind lips of soft snow to large overhangs of hard snow that are 30 feet (10 meters) or taller. They can break off the terrain suddenly and pull back onto the ridge top and catch people by surprise even on the flat ground above the slope. Even small cornices can have enough mass to be destructive and deadly. Cornice Fall can entrain loose surface snow or trigger slab avalanches.

Cornices can never be trusted; avoiding them is necessary for safe backcountry travel. Stay well back from ridge line areas with cornices. They often overhang the ridge edge and can be triggered remotely. Avoid areas underneath cornices. Even a tiny Cornice Fall can trigger a larger avalanche, and a large Cornice Fall can easily crush a human. Periods of significant temperature warm-up are times to be particularly aware.



Glide

Release of the entire snow cover due to gliding over the ground. Glide avalanches can be composed of wet, moist, or almost entirely dry snow. They typically occur on particular paths where the slope is steep enough, and the ground surface is relatively smooth. They are often preceded by full-depth cracks (glide cracks), though the time between the appearance of a crack and an avalanche can vary between seconds and months. Glide avalanches are unlikely to be triggered by a person, are nearly impossible to forecast, and thus pose a hazard that is extremely difficult to manage.

Predicting the release of Glide Avalanches is very challenging. Because Glide Avalanches only occur on particular slopes, safe travel relies on identifying and avoiding those slopes. Glide cracks are a significant indicator, as are recent Glide Avalanches. The Colorado Avalanche Information Center no longer uses this avalanche problem in avalanche forecasts.

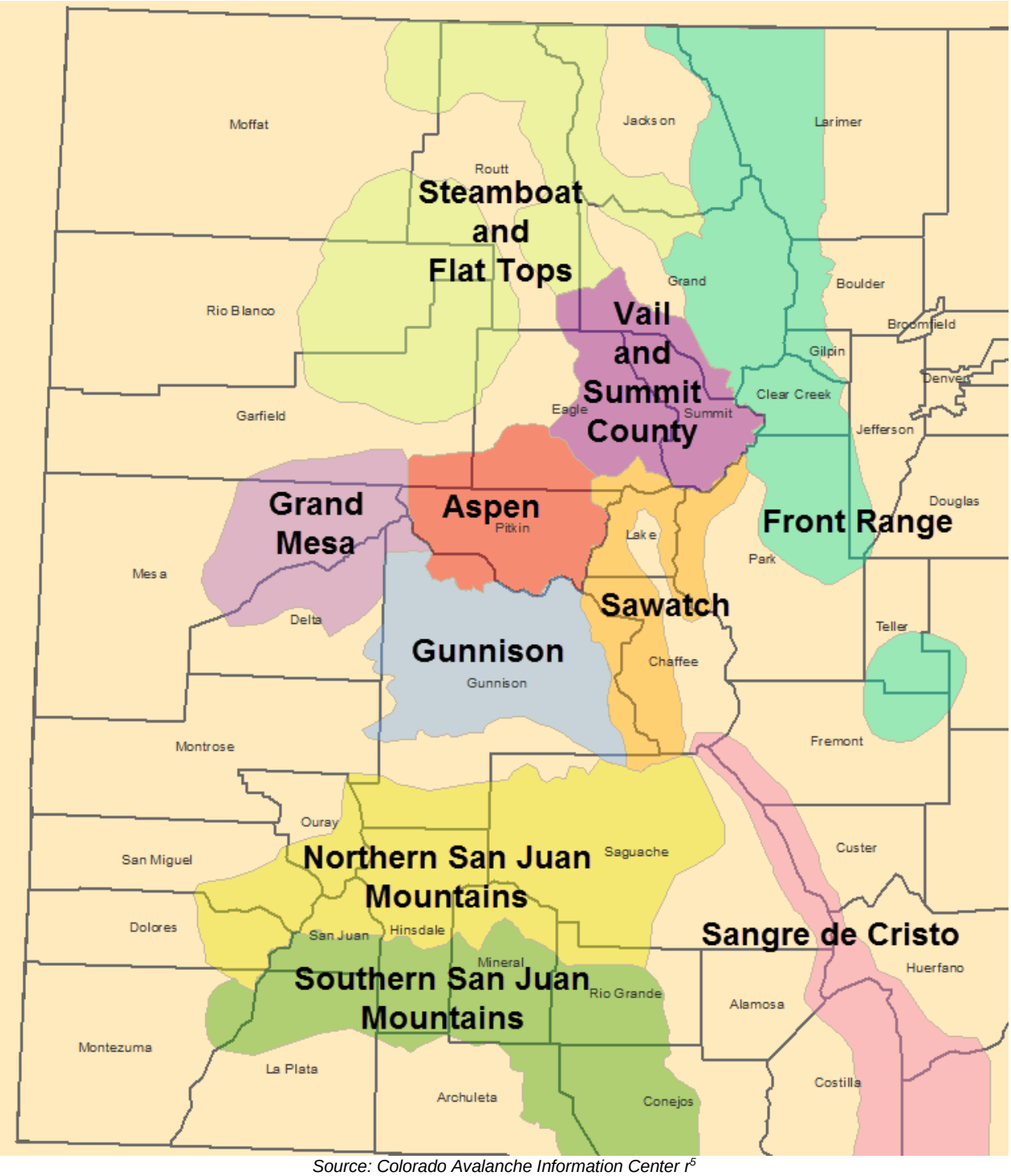


Location

The greatest avalanche threats are locations in Ouray County with significant elevation changes. Steeply sloped areas (30 to 45 degrees) are highly subject to avalanches, primarily on south-exposed slopes where unstable snow conditions are most likely. Most avalanches in the state occur on slopes of 25-50 degrees. The Colorado Avalanche Information Center forecasts backcountry avalanche and mountain weather conditions for ten zones in the mountains of Colorado (Avalanche Forecast Zones). The figure on the next page shows the 10 ten zones. The northern and eastern portions of Ouray County are in the Northern San Juan Mountains zone. These mountains are regarded as one of the most avalanche-prone regions in Colorado.

Southern Ouray County high country and State Highway 550 over Red Mountain Pass and the Camp Bird Road area are particularly prone to avalanches, and the area is a popular destination for backcountry users. Imogene Pass and Engineer Pass are backcountry routes that are prone to avalanches. Box Canyon and Bear Creek Trail are popular recreation areas with regular avalanche activity. A map of known avalanche paths affecting Highway 550 south of the City of Oury is provided in the figure below.

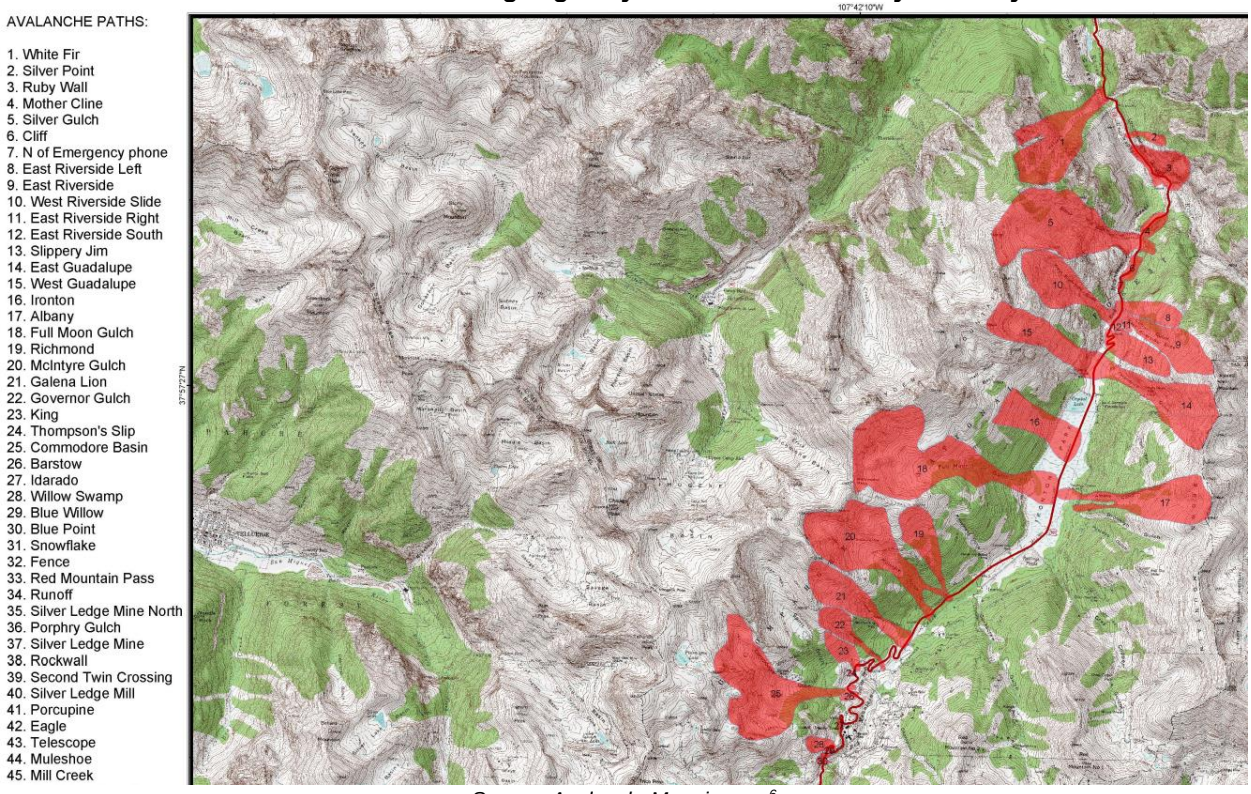
Avalanche Forecast Zones



Source: Colorado Avalanche Information Center r[5]

5 Colorado Avalanche Information Center. 2024. “Forecast Zones”. https://lb.avalanche.state.co.us/forecasts/help/forecast-zones/.

Avalanche Paths Along Highway 550 South of the City of Ouray



Source: AvalancheMapping.org[6]

Extent

Since local avalanche extent data is limited, the following information is from the state plan. The destructive potential of avalanches is a function of the mass, speed, and density of avalanche debris paired with the length and cross-section of the avalanche path. Observers rate the size of an avalanche based on its destructive potential.[7] The table below gives the destructive potential scale for avalanche events.

Avalanche Destructive Potential Scale

Size	Destructive Potential	Typical Length	Typical Size and Depth
D1	Relatively harmless to people.	Bus	Average apartment size, 3 feet deep
D2	Injure, bury, or kill a person	Football field	Flood size of a large home, ~6 feet deep
D3	Bury/destroy a car or structure	½ mile	Hockey rink, 6-10 feet deep
D4	Destroy a large truck or 10-acre forest	1+ miles	1 full football field, 13 feet deep
D5	Destroy a village or 100-acre forest	2+ miles	5+ full football field, 13 feet deep

Source: Avalanche.org[8]

6 AvalancheMapping.org. 2005. "Avalanche Paths of Highway 550 Ouray to Silverton Area, San Juan Mountains, Colorado. https://www.avalanchemapping.org/images/Ouraysilvertonweb.pdf#:~:text=AVALANCHE%20PATHS%20OF%20HIGHWAY%20550%20OURAY%20TO%20SILVERTON%20AREA%2C%20SAN%20JUAN%20MOUNTAINS%2C%20COLORADO&text=Avalanche%20data%20from%20CAIC/CDOT%20Avalanche.

7 Colorado Division of Homeland Security and Emergency Management. 2023. "Colorado Enhanced State Hazard Mitigation Plan 2023-2028." https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

8 Avalanche.org. 2017. "Destructive Force (D Scale)". https://avalanche.org/avalanche-encyclopedia/avalanche/avalanche-problems/avalanche-size/destructive-force-d-scale/.

Historical Occurrences

Avalanches occur naturally every winter in the county, but many are not documented, as they occur away from people and property. A detailed account of avalanche history in Ouray County has been compiled in *Avalanche Hazard In Ouray County, Colorado 1877-1976* by Betsy Armstrong. In the report, 62 lives were lost, and 192 people were caught in avalanches between 1877 and 1976. Thirty-three sites of human activity, including mines and towns, have been damaged or destroyed.[9]

According to the National Centers for Environmental Information (NCEI) and Ouray County Emergency Management, there were 63 reported avalanche events in Ouray County between 1996 and January 2025. These events resulted in 14 injuries and 14 deaths. Damage from the avalanche events totaled $201,750.[10] Select events with extensive property damage, multiple deaths, and a recent event are discussed below.

- **January 7, 2005:** A prolonged period of moderate to heavy snow and strong winds resulted in one of the most widespread natural avalanche cycles in decades. The snow started on January 7 and effectively cleared out on January 12. Many avalanche paths ran full track, taking out mature timber, and several slides came out that hadn't affected area roads in years. Avalanches caused closures of Red Mountain, Molas, and Coal Bank Passes, among other road closures. The spree of avalanches closed Red Mountain Pass for nearly a week before plow drivers broke through the last 30 feet to 40 feet of snow covering the road. One slide struck a Front Range Wireless/Verizon Cell building that had been built on the top of Coal Bank Pass in the fall of 2004. The building was destroyed and buried by at least 6 feet of debris. There was reported $200,000 in damage from the event.

- **February 1, 2021:** Backcountry skiers triggered a large avalanche while on a multi-day trip near the Nose, Middle Fork Mineral Creek, southeast of Ophir. This soft slab avalanche was 1,000 feet wide and ran 1,500 vertical feet. Four skiers were caught in the avalanche, with three fatalities and four injuries.

- **January 7, 2025:** A weak snowpack covered by several inches of snow on Red Mountain Pass caused an avalanche. The avalanche was about 800 feet wide and traveled 400 vertical feet. A skier was descending at the time of the avalanche. They were wearing an avalanche rescue transceiver and an avalanche airbag backpack. The backpack was armed and functional, but it did not deploy. As a result, the skier was buried and died from the event.

Average Annual Losses

The 63 reported avalanche events in Ouray County from 1996 to January 2025 resulted in $201,750 in property damage, $0 in crop loss, 14 injuries, and 14 deaths. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Many of the avalanche events resulted in extended closures of highways for hours, days, and even weeks at a time, and the total economic impact cannot be overstated.

9 Armstrong, Betsy. 1977. “Avalanche Hazard In Ouray County, Colorado 1877-1976”. https://instaar.colorado.edu/uploads/occasional-papers/OP24-Armstrong-1977.pdf.

10 National Centers for Environmental Information. March 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

Avalanche Losses

Number of Events[1]	Average Events Per Year	Total Property Loss[1]	Average Annual Property Loss [1]	Total Crop Loss[2]	Average Annual Crop Loss[2]
63	2.2	$201,750	$6,957	$0	$0

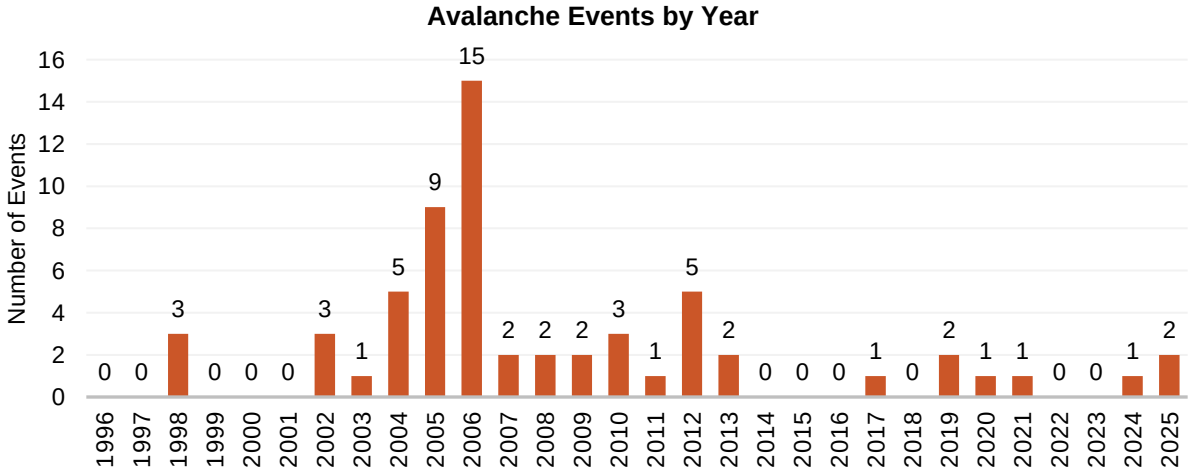
Source: 1 Indicates data is from NCEI (Jan 1996 to March 2024)[11] & Ouray County Emergency Management; 2 Indicates data is from SHELDUS (1960 to 2021)[12]

Historical Probability & Future Likelihood

Given the historical record of avalanches in Ouray County, as shown in the figure below (18 out of 29 years), the historical probability of an avalanche occurrence is 62 percent. Due to the anticipated impacts of climate change and future development, the future likelihood of an avalanche event in the county is very likely.

Historical Probability & Future Likelihood – Avalanche

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Avalanche	62%	Increase in Frequency	Increase in Frequency and Impacts	**Very Likely**



Source: NCEI[13]& Ouray County Emergency Management

Climate Change

The Colorado Enhanced State Hazard Mitigation Plan 2023-2028 indicated that avalanche risk will likely increase due to a more inconsistent and thinner snowpack that does not bond well to new layers of snow and warming temperatures. There will be more rain-on-snow events, which will lead to earlier wet avalanche activity.[14] With avalanches being a possibility every winter in Ouray County and winter backcountry recreation remaining popular, it will be imperative for avalanche forecasters to monitor these changes and incorporate them into avalanche predictions and education in the future.

11 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
12 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.
13 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
14 Colorado Division of Homeland Security and Emergency Management. December 2023. "Colorado Enhanced State Hazard Mitigation Plan 2023-2028." https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

Future Development

Any future development in Ouray County, especially in remote high-elevation areas, increases the likelihood that avalanche events will impact people and property. Before construction, developers and Ouray County should evaluate surrounding grades, annual average snowpack loads, and potential run-out zones in high-risk areas. Emergency access should also be reviewed, as the terrain limits these areas. An increase in backcountry recreation during the winter could cause more avalanches to occur.

A continued interest in mining is occurring in the Camp Bird Road area. The county and the mine have entered an annual winter maintenance agreement where the mine maintains Campbird Mine Road up to the mine, including avalanche mitigation and plowing.

Potential Impacts

Avalanches could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Backcountry users such as skiers, snowboarders, and snowmobilers are at the highest risk of being caught, buried, or injured.
- Residents in vulnerable areas may experience property damage, injury, or loss of life.
- Survivors and affected communities may face trauma, especially in cases of fatalities.
- Tourists may reconsider visiting, leading to a potential decline in outdoor recreation revenue.

Community Lifeline Impacts

- Safety and Security
    - Avalanches can bury victims under deep, compacted snow, making timely rescues challenging, especially in remote areas.
    - Local emergency services may be overwhelmed by the need for rescues, medical care, and logistical support for stranded individuals.
    - Road closures and hazardous conditions could prevent aid from reaching affected areas quickly.
- Food, Hydration, Shelter
    - Road closures can delay the delivery of food and water to local stores, leading to shortages.
    - Those trapped in avalanches may require immediate shelter, food, and water until rescued.
- Health and Medical
    - Avalanche-prone roads may block access for ambulances and emergency medical personnel, delaying critical care.
    - Patients in remote areas may be unable to reach clinics or hospitals due to transportation challenges.
    - Avalanches often result in injuries ranging from hypothermia to trauma, placing additional strain on local healthcare facilities.

- Energy (Power and Fuel)
    - Power lines and utility infrastructure in avalanche paths may be damaged, causing extended power outages. Cellular and broadband services could be disrupted if towers in high-altitude regions are affected.
    - Road closures can prevent the delivery of propane, gasoline, and other fuels, particularly to remote areas that rely on regular resupply.

- Communications
    - Damage to communication towers in high-altitude or remote locations could impact cellular and internet services.
    - Communication failures during avalanche events can hinder the ability to coordinate emergency responses effectively.

- Transportation
    - Highway 550 is particularly vulnerable, and closures due to avalanches or control operations would severely limit access between Ouray and Silverton.
    - Residents, tourists, and commercial traffic may face prolonged delays. Emergency responders and supply deliveries may be significantly slowed.
    - Small, remote communities relying on mountain passes could be temporarily cut off, especially if alternative routes are unavailable.

- Hazardous Materials
    - If transportation routes for hazardous materials are disrupted by avalanches, spills could occur, contaminating local water supplies or environments.
    - Hazardous material spills caused by avalanches could take longer to mitigate due to the rugged terrain and road closures.

- Water Systems
    - Avalanches might damage the affected zones' water and wastewater pipelines, reservoirs, or treatment facilities.

- Cumulative Impacts
    - The disruption of one lifeline often has cascading effects on others. For example, transportation interruptions can delay medical services, while power outages may impact water treatment facilities or heating during winter months. In Ouray County, the combined isolation, rugged terrain, and reliance on a limited number of transportation routes amplify these vulnerabilities.

<u>Economic Impacts</u>

- Perceived danger could deter tourists, affecting local businesses reliant on tourism, including lodging, dining, and outdoor recreation services.

- Road closures and the need for avalanche control operations (e.g., blasting) incur significant costs.

- Homes and businesses in avalanche-prone zones may suffer costly damages, with potential loss of property value in high-risk areas.

- Road closures would delay or prevent the delivery of goods, including essentials like food and fuel.

Environmental Impacts

- Avalanches often strip slopes of trees, shrubs, and topsoil, leading to long-term ecological changes.
- Sediment and debris from avalanches could enter streams and rivers, affecting water quality and aquatic habitats.
- Avalanches disrupt natural habitats and can cause injuries or displacement of wildlife.

Vulnerabilities

It is public safety that is threatened the most by this hazard. Those most vulnerable include individuals recreating in and traveling through or under avalanche hazard areas. Avalanches frequently close State Highway 550 over Red Mountain Pass. The closures inconvenience travelers and commerce but serve to minimize life safety impacts as CDOT does avalanche control work. While road closures help to mitigate the effects on travelers on Highway 550, CDOT snowplow drivers can still be exposed while clearing roads of snow or avalanche debris. Additionally, costs associated with removing the avalanche debris can be significant. Avalanches inside and outside the county can disrupt transportation in and out of the County due to the limited number of roads. State Highway 145 at Lizard Head Pass in San Miguel County often experiences avalanche closures during the same time as Highway 550, thus obstructing all access to the county from the south and west. This can negatively impact residents, businesses, and travelers and may result in economic losses to local businesses. Stranded travelers or commuters are often faced with a lack of lodging availability. Avalanche mitigation is done on County Road 361 by the operator of the Revenue Mine.

Homes and cabins located near steep slopes, particularly in the subdivisions of Idarado or close to Red Mountain Pass, face higher risks during avalanche season. Power lines, communication towers, and water infrastructure in remote areas can become damaged during an avalanche.

Backcountry avalanche incidents involve search and rescue teams and resources, which can put these personnel in areas of risk. Additionally, Ouray County is known as a worldwide destination for ice climbing. Many of the climbs are at the bottom of avalanche chutes. Thus, climbers may not be aware of dangers lurking high above them. The keys to limiting impacts to individuals recreating (hiking, skiing, climbing, snowboarding, snowmobiling) in avalanche areas are knowledge and awareness of the hazard and being adequately equipped for self-rescue, if necessary, with tools such as locater beacons, shovels, and probes. Additionally, people living in rural, mountainous areas may face challenges in evacuation or access to emergency services. Tourists and seasonal workers may lack knowledge of avalanche risks and property safety measures.

Ouray County experiences challenges with managing the impacts of avalanches due to the multi-jurisdictional nature of an event. For example, avalanches may originate on USFS land, cross a CDOT highway, and impact the City of Ouray through debris-clogging creeks.

None of Ouray County's owned and identified community lifelines are in known avalanche areas. While they would not be directly damaged, their services could be impacted. The following table

provides a summary of the county's avalanche vulnerabilities. Participant-specific vulnerabilities can be found after the table.

Avalanche Vulnerabilities

Sector	Vulnerability
People	-Backcountry skiers, snowboarders, snowmobilers, backpackers, ice climbers, and hikers in mountainous areas. -Residents in isolated areas. -Tourists and seasonal workers. -First responders to avalanche areas where snow is still unstable. -Motorists driving in the county.
Economic	-Road closures could prevent residents and tourists from traveling and accessing local businesses.
Built Environment	-Localized impacts to homes in the county.
Community Lifelines	-Road closures. -Damage to power lines, communication towers, and water infrastructure in remote areas.
Recreation	-Backcountry skiers, snowboarders, snowmobilers, backpackers, ice climbers, and hikers in mountainous areas -Multiple events may cause a lower number of recreational tourists.

City of Ouray

It is possible that an avalanche could impact buildings and infrastructure in the community, but the risk is low as the city is located in a valley. The city's community lifelines are not situated in known avalanche areas. Transportation impacts are much more likely, especially along Highway 550 and Camp Bird Road to the south. These two roads are the only ways south out of the city. A prolonged closure of Highway 550 would cut off the city from valuable supply lines, reduce the number of visitors to Ouray, and impact the local economy.

Town of Ridgway

Avalanches are unlikely to occur in or near the community. However, transportation along Highways 550 and 62 to the south and west could be impacted. This could reduce the number of visitors to Ridgway if significant long-term closures occurred. None of Ridgway's community lifelines would be directly affected by an avalanche. However, the Town Hall and Decker Room would house people or serve as reunification sites if needed.

Dallas Park Cemetery District

There is no risk of an avalanche negatively impacting the cemetery's owned community lifelines, operations, or individuals. There are no steep slopes near the cemetery.

Jurisdictions Ranking Avalanche as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders that identified avalanches as a prioritized hazard of concern.

- Ouray County

Dam Failure

Dam failures are primarily a result of hydrologic or structural deficiencies. The operation of an artificial reservoir can also influence the structure's safety. Dam failure by hydrologic deficiency is a result of inadequate spillway capacity, which can cause the level of a reservoir to exceed the capacity or height of the dam, also known as overtopping, during large flows into the reservoir. Dam failure by hydrologic deficiency typically occurs from excessive runoff after unusually heavy precipitation in the basin. Large waves generated from landslides into a reservoir, or the sudden inflow from upstream dam failures, are other causes of dam failure by overtopping. Overtopping is especially dangerous for an earth dam because the down-rush of water over the crest erodes the dam's face. If it continues long enough, the down-rush of water breaches the dam embankment and suddenly releases all the stored water into the downstream floodplain.

The mechanics of a structural failure depend on the type of dam and the mode of failure. While they can occur anytime, earthen dams appear most susceptible to structural failure during the fall and spring freezing and thawing cycles.

Examples of structural deficiencies include seepage through the embankment, piping along internal conduits, erosion, cracking, sliding, overturning, rodent tunneling, and other weaknesses in the structure. Old age is often at the root of structural deficiencies. Seismic activity in Colorado has also been recognized as a potential source of structural problems due to the liquefaction of sand layers in the embankment of a dam.

The Colorado Division of Water Resources has classified dams into two main categories based on the size of the dam's reservoir: jurisdictional dams and non-jurisdictional dams.

- **Non-Jurisdictional Dam** is a dam creating a reservoir with a capacity of 100 acre-feet or less and a surface area of 20 acres or less and with a height measured as defined in Rules 4.2.5.1 and 4.2.19 of 10 feet or less.

- **Jurisdictional Dam** is a dam creating a reservoir with a capacity of more than 100 acre-feet or creates a reservoir with a surface area of more than 20 acres at the high-water line or exceeds 10 feet in height measured vertically from the elevation of the lowest point of the natural surface of the ground where that point occurs along the longitudinal centerline of the dam up to the crest of the emergency spillway of the dam.

Jurisdictional dams are further classified by the potential hazard each poses to human life and economic loss. The following are classifications and descriptions for each hazard class of jurisdictional dams:

- **No Public Hazard** – Dams assigned the No Public Hazard potential classification are those for which no loss of human life is expected and for which damage only to the dam owner's property will result from failure.

- **Low Hazard Potential** – Dams assigned the low hazard potential classification are those where failure or misoperation results in no probable loss of human life and significant damage to structures and public facilities as defined for a significant hazard dam is not expected.

- **Significant Hazard Potential** – Dams assigned the significant hazard potential classification are those dams where failure or misoperation results in no probable loss of human life but can cause economic loss, environmental damage, infrastructure disruption critical to community lifelines, or other concerns.

- **High Hazard** – Dams assigned the high hazard potential classification are those where the loss of human life is expected in the event of a failure.[15]

Dams that are classified with high hazard potential require the creation of an Emergency Action Plan. The Emergency Action Plan defines responsibilities and provides procedures to identify unusual and unlikely conditions that may endanger the dam's structural integrity within sufficient time to take mitigating actions and notify the appropriate emergency management officials of possible, impending, or actual dam failure. The Emergency Action Plan may also notify when flood releases will create significant flooding. An emergency can occur at any time; however, it is more likely to happen when extreme conditions occur. The Emergency Action Plan includes information regarding the notification of emergency response entities so that proper action can be taken to prevent the loss of life and property. Local emergency response entities generally included in an Emergency Action Plan include but are not limited to 911 Dispatch, County Sheriff, Local Fire Departments, Emergency Management Agency Director, County Highway Department, and the National Weather Service.

Location

Communities or areas downstream of a dam, especially high hazard dams, are at the most significant risk of property or infrastructure damage and loss of life due to dam failure. In total, 19 dams are located in Ouray County. The dam location map shows the locations of all the dams in the county. Non-jurisdictional dams were not mapped as location data was unavailable for all dams.

Dams in Ouray County

Non-Jurisdictional	No Public Hazard	Low Hazard	Significant Hazard	High Hazard	Total
14	0	2	1	2	19

Source: Colorado Division of Water Resources [16]

The following table lists dams classified as “High Hazard” in Ouray County.

High Hazard Dams in Ouray County

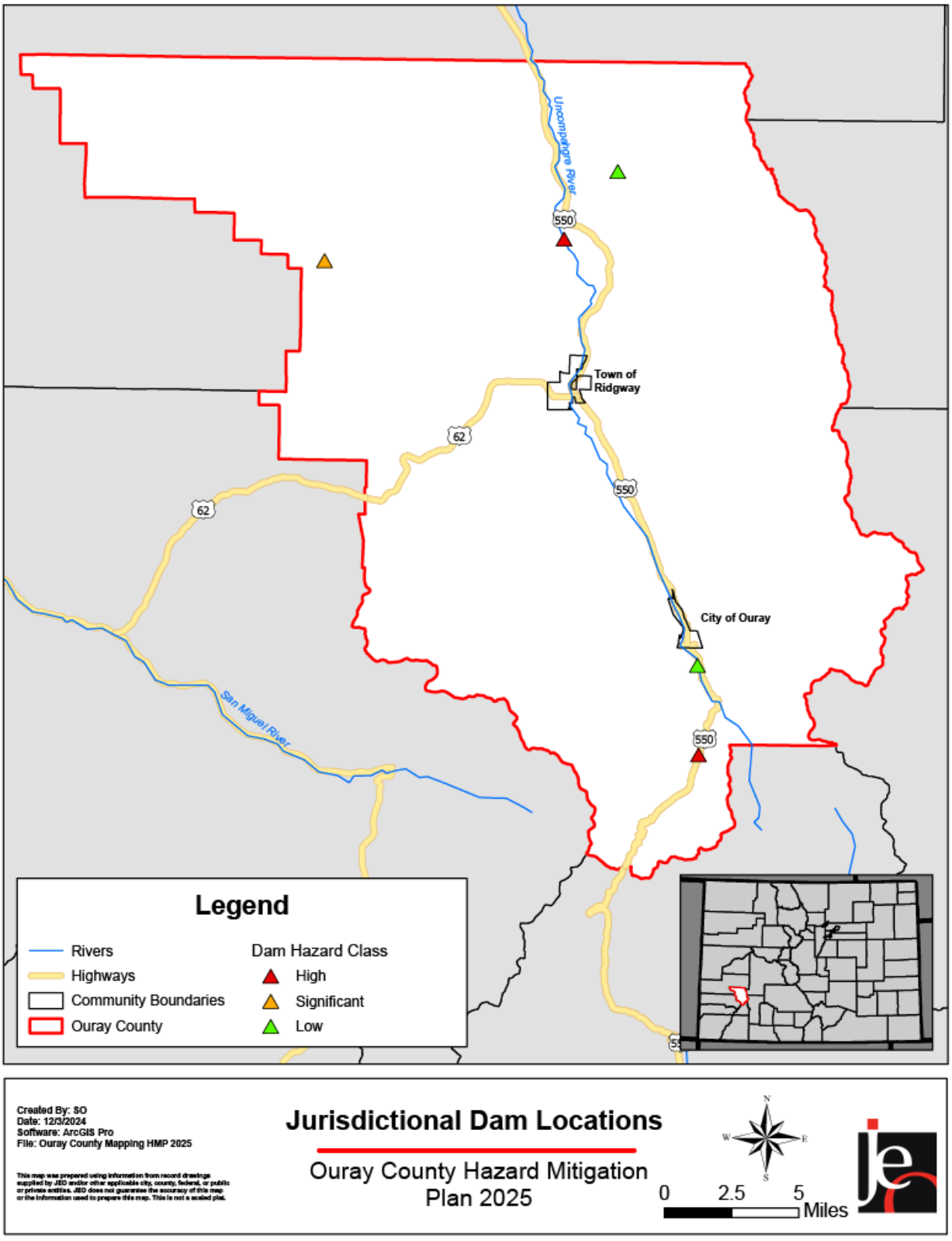
Dam Name (National ID)	Owner	Condition Assessment	Downstream Town	Dam Height	Normal Storage (Acre-Ft)
Full Moon (Crystal Lake) (CO00306)	Rocky Mountain Region Dam Program	N/A	Ouray	11’	31
Ridgway (CO02706)	U.S. Bureau of Reclamation	N/A	Montrose	233’	94,126

Source: Colorado Division of Water Resources, 2024

15 Colorado Department of Natural Resources Division of Water Resources. November 2010. “Guidelines for Hazard Classification”. https://damfailures.org/wp-content/uploads/2019/08/Colorado-Guidelines-for-Hazard-Classification.pdf.

16 Colorado Department of Natural Resources Division of Water Resources. October 2024. "Dam Safety". https://dwr.colorado.gov/services/dam-safety.

Ouray County Jurisdictional Dam Locations



Lastly, the county has 93 livestock water tank and erosion control dams. These structures include all reservoirs built after April 17, 1941, on watercourses that the state engineer has determined to be "normally dry" and having a capacity of not more than ten-acre feet and a vertical height not exceeding fifteen feet from the bottom of the channel to the bottom of the spillway.[17]

Upstream Dams Outside Ouray County

According to the Colorado Department of Natural Resources Dam Safety team, no known upstream dams outside of Ouray County could impact the county if they were to fail.

Extent

The extent of dam failure is indicated by its hazard classification and dam inundation maps. Hazard classification does not indicate the likelihood of a dam failure event occurring but rather the extent of potential damage that may arise in case of a failure. Thus, the high hazard dams in Ouray County would have the most significant impact if they were to fail. Additionally, the extent can be measured by factors such as speed of onset and warning time. The speed of onset depends on the type of failure. Small leaks allow for adequate warning time if a dam is inspected regularly. Once a dam is breached, however, failure and resulting flooding occur rapidly. Dams can fail at any time of year, but the results are catastrophic when the dams fill or overtop during winter or spring rain/snowmelt events. Dam inundation maps are maintained by dam owners, included in each dam's Emergency Action Plan, and shared with Ouray County Emergency Management.

Historical Occurrences

According to the Stanford University National Performance of Dams Program, there are no reported dam failures within the county.[18] Though not considered a dam failure, in April 2024, the water level of Crystal Reservoir had to be lowered because of public safety concerns arising from a crack in the Full Moon Dam. A May 2023 inspection revealed a crack approximately 100 feet along the centerline, about two inches deep in some spots. The report noted seepage at the toe of the dam – about 13 ounces in 35 seconds – and bulging, excessive vegetation, wave erosion, and soft areas in various locations. The U.S. Forest Service is performing more inspections and contacting stakeholders to determine the dam's fate.[19]

The owner should inspect all dams regularly and after heavy rainfall or snowmelt events. If problems are found during an inspection, the dam should be repaired to preserve its structural integrity. The Colorado Department of Natural Resources Division of Water Resources provides periodic inspections of dams and recommendations for repair to the dam owners.

Average Annual Losses

With no reported dam failure events in the county, average annual losses from dam failure are $0 in property damage and $0 in crop loss.

17 Colorado Department of Natural Resources Division of Water Resources. September 2024. "DWR Livestock Water Tank and Erosion Control Dams". https://data.colorado.gov/Water/DWR-Livestock-Water-Tank-and-Erosion-Control-Dams/r2rp-ecjb/about_data.

18 Stanford University. September 2023. "National Performance of Dams Program". http://npdp.stanford.edu/.

19 Montrose Press. March 29. "Concerns for Crystal Lake grow in wake of dam crack; Forest Services says removal of Full Moon Dam above Ouray not currently in the works". https://www.montrosepress.com/news/concerns-for-crystal-lake-grow-in-wake-of-dam-crack-forest-service-says-removal-of/article_4ff767b0-ee08-11ee-9c3c-c73cd6d160a8.html.

Historical Probability & Future Likelihood

Stanford University's National Performance of Dams Program reports zero dam failure events from 1890 to September 2023. Based on the historical record, there is a less than 1% historical probability that dam failure will occur annually in Ouray County. Due to the anticipated impacts of climate change and future development, the future likelihood of a dam failure event in the county is very unlikely.

Historical Probability & Future Likelihood – Dam Failure

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Less than 1%	Increase in Frequency	Neither Increase nor Decrease in Frequency Increase in Impacts	**Very Unlikely**

Climate Change

While climate change does not directly affect dam failure events, changes in precipitation and temperature swings can affect them. Increased rainfall events, either in frequency or magnitude, will exacerbate stress on infrastructure systems, including dams. Additionally, historical streamflow records are typically used to design or determine dam construction and maintenance requirements. Climate change may impact these systems in the following ways.

- Drought: land subsidence, erosion, embankment settling, or foundation cracking.
- Flooding: increased embankment erosion, sloughing, overtopping risk, or damage from ice jams.

Future Development

Any future growth in dam inundation areas increases the impacts of dam failure. Additionally, any increase in development downstream of existing dams may elevate these dams to a higher hazard rating. Closer to the dam, the breach inundation zone is frequently more extensive than the identified floodplain, so caution should be used when developing areas just downstream of a dam. Communities could implement requirements for any new development or substantial improvements in dam inundation areas, like floodplain ordinances, to minimize the number of people and property impacted during a dam failure event.

Potential Impacts

Dam failure could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- People in the inundation area, especially those with limited evacuation time, are at risk.
- Flooding would force residents and tourists to evacuate, potentially leading to long-term displacement for affected households.
- Damaged homes and businesses would lead to financial hardship for residents.

Community Lifeline Impacts

- Safety and Security
  - Sudden and rapid flooding would make evacuations difficult, particularly in narrow valleys.
  - Rapid flooding would require immediate and extensive search and rescue efforts.
  - Damage to communication and transportation infrastructure would complicate emergency responses.
  - Communities and tourists in the inundation area could experience injuries or fatalities.

- Food, Hydration, Shelter
  - Supply chains for groceries could be interrupted due to transportation challenges.
  - Flooded homes and businesses could leave residents without shelter, requiring emergency housing.

- Health and Medical
  - Road damage could prevent patients from reaching hospitals or clinics.
  - Injuries and health complications (e.g., waterborne diseases) would strain local healthcare facilities.

- Energy (Power and Fuel)
  - Floodwaters could damage power lines, substations, and other energy infrastructure.
  - Washed-out roads could delay fuel deliveries to remote areas.

- Communications
  - Flooding could disrupt cell towers, internet infrastructure, and landline services, affecting emergency coordination.
  - Dam failure may hinder the ability to communicate warnings promptly.

- Transportation
  - Floodwaters could wash out roads, including Highway 550 and bridges along the Uncompahgre River, isolating communities.
  - Damage to key transportation routes would hinder emergency response and the movement of goods and people.

- Hazardous Materials
  - Floodwaters could cause spills of hazardous materials stored near industrial or agricultural areas.
  - Managing hazardous waste and debris would delay recovery efforts.

- Water Systems
  - Floodwater could damage water and wastewater pipelines in inundation areas. This could result in a loss of services.
  - Flooding could overwhelm wastewater systems and contaminate drinking water supplies.

Economic Impacts

- Perceptions of risk and damage to recreational areas, like Ridgway State Park, would reduce tourist visits.
- Flooding would damage fields, irrigation systems, and crops in the Uncompahgre Valley.
- Rebuilding infrastructure and homes would require significant resources, potentially overburdening local government budgets.

Environmental Impacts

- Floodwaters would disrupt river ecosystems, washing away vegetation and wildlife habitats.
- Contaminants and debris from flooded areas would pollute the Uncompahgre River and other water bodies.
- Sediment carried by floodwaters could clog streams and reservoirs downstream, affecting water flow and quality.

Vulnerabilities

Dam failures can result in downstream flooding. Water released by a failed dam generates tremendous energy and can cause a flood that is catastrophic to life and property. Three factors that influence the potential severity of a full or partial dam failure are the amount of water impounded, the density, type, and value of downstream development and infrastructure, and the nature of the terrain between the dam and the downstream development. A dam failure event can dislodge trees and boulders, carrying them downstream into developed areas.

A catastrophic dam failure could challenge local response capabilities and require evacuations to save lives. Impacts on life safety would depend on the warning time and the resources available to notify and evacuate the public and could include significant loss of life and potentially catastrophic damage to roads, bridges, and homes. Associated water quality and health concerns could also be an issue.

The Ridgway Dam is one of two high hazard dams in the county. If this dam were to fail, the Uncompahgre River valley downstream of the Ridgway Reservoir would be inundated in an area larger than a 100-year floodplain. The most significant impact would be in Montrose County to the north of Ouray County. A failure of the Ridgway Dam could impact County Road 2. The proximity of this dam to potentially active faults has led the Bureau of Reclamation to regularly monitor the dam and microseismicity of the area (see earthquake profile). The core of the Ridgway Dam has been designed to withstand a magnitude 8.0 earthquake. The Ridgway Dam has an electronic notification system that would alert the Bureau of Reclamation in the event of a problem with the dam from an earthquake. The abutments have been shored up, and an inactive fault below the dam was filled in during construction. Seismic monitoring is ongoing.

The Full Moon Dam is the other high hazard dam in the county. If this dam were to fail, the Red Mountain Creek downstream of Crystal Lake would be inundated. The inundation area would be slightly larger than the 100-year floodplain and impact parts of the City of Ouray. Highway 550 would likely see minimal impacts near Crystal Lake. As mentioned earlier in this section, the Full

Moon Dam had water levels behind it lowered due to public safety concerns arising from a crack in the dam. The U.S. Forest Service is performing more inspections to determine the dam's fate.[20]

The Cornerstone Dam in the northern portion of the county was constructed in 2006-2007 and is rated as a significant hazard dam. It could impact Government Springs Road and one home below it. Other homes downstream in Montrose could be damaged, but the risk is not considered life-threatening. The Cornerstone, Full Moon, and Ridgway dams have emergency action plans.

Inundation areas for high hazard dams are available through the individual dam owners. These areas are not shown in this plan due to security concerns. However, an analysis of the total number of structures and value in the inundation area was completed, which can be found in the table below.

Dam Inundation Area Building Impacts

Dam	Number of Buildings in the Inundation Area	Value of Buildings in the Inundation Area
Full Moon Dam	91	Unknown
Ridgeway Dam	140	$233,888,120

None of Ouray County's owned and identified community lifelines are in an inundation area caused by a dam. While they would not be directly damaged, their services could be impacted. The following table provides a summary of the county's dam failure vulnerabilities. Participant-specific vulnerabilities can be found after the table.

County Dam Failure Vulnerabilities

Sector	Vulnerability
People	-Evacuation needs are likely with high hazard dam failures -Elderly or residents with decreased mobility may have trouble evacuating -Residents living in dam inundation areas -Those without adequate notification (text alerts, sirens, internet, or cable access) may be at greater risk -Those at recreational sites situated near high hazard dams
Economic	-Business closures or damages may have significant impacts -Closed roads would impact commercial transportation of goods -Employees of closed businesses may be out of work for an extended period
Built Environment	-Buildings may be damaged
Community Lifelines	-Damages to roadways and bridges -Wastewater and water treatment facilities are at risk, particularly those in dam inundation areas -Infrastructure, especially those in dam inundation areas, are at risk of damage
Recreation	-Potential unsafe fishing and hiking conditions -Loss of recreation tourism

City of Ouray

Ouray is downstream from the low hazard Ouray Dam and the high hazard Full Moon Dam. As a low hazard dam, the failure of the Ouray Dam would likely result in no probable loss of life or significant damage to structures. If the Full Moon Dam were to fail, it would likely flood an area slightly larger than the 100-year floodplain along the Uncompahgre River. It is estimated that the inundation area would include approximately 80 structures in the city. None of the community

20 Montrose Press. March 29. "Concerns for Crystal Lake grow in wake of dam crack; Forest Services says removal of Full Moon Dam above Ouray not currently in the works". https://www.montrosepress.com/news/concerns-for-crystal-lake-grow-in-wake-of-dam-crack-forest-service-says-removal-of/article_4ff767b0-ee08-11ee-9c3c-c73cd6d160a8.html.

lifelines would be impacted. Transportation routes to and from the city would likely only see minimal impacts.

Town of Ridgway
Ridgway is downstream from the low hazard Chaffee Gulch Detention #6 Dam. As a low hazard dam, the failure of the Chafee Gulch Detention #6 Dam would likely result in no probable loss of life or significant damage to structures. None of Ridgway's community lifelines would be directly impacted by dam failure. However, the Town Hall and Decker Room would house people or serve as reunification sites if needed.

Dallas Park Cemetery District
There is no risk of dam failure impacting the cemetery's owned community lifelines, operations, or individuals. The cemetery and lifelines are not located in an inundation area of a dam.

Jurisdictions Ranking Dam Failure as a Prioritized Hazard of Concern

No jurisdictions or stakeholders identified dam failure as a prioritized hazard of concern.

Debris Flow

Debris flows, also called mudflows, are defined by the Colorado Geological Survey as a mass of water and fine-grained earth that flows down a stream, ravine, canyon, arroyo, or gulch, and more than half of the solids in the mass are larger than sand grains. If more than half of the solids in the mass are larger than sand grains, the event is called a debris flow. The volume of fine sediment (silt, clay, and fine sands in the fluid matrix) controls the properties of the flow, including viscosity, density, and yield stress. Due to their density and sediment, debris flows have significantly slower velocities than water floods on the same slope. The fine sediments increase the density of the fluid matrix, which increases the buoyancy of sediments, thereby creating conditions that allow gravel to boulder-sized material to be transported near the flow surface by debris flows.[21] They can occur on gentle slopes, move rapidly for considerable distances, and increase in size as they move.

Three of the five conditions necessary for debris flows to occur: (1) steep slopes, (2) loose rock and soil material, and (3) clay minerals, are adequately met by the geography and geology in the county. The last two conditions for debris-flow occurrence, (4) sufficient antecedent soil moisture and (5) rainfall of adequate intensity and duration to initiate slope movement, are provided by snowmelt and intense summer thunderstorms.

Following a wildfire, soil conditions can make the burned area extremely susceptible to debris flows during heavy rains. Burned soil may become hydrophobic, which dramatically reduces the ability of the soil to absorb rainfall. Ash and other fine debris from a burned area may be carried along with the water, which can increase the volume of debris flows, obstruct drainages, and cause significant infrastructure damage.

Location

Due to the geology and steep topography in Ouray County, debris flows are most likely to occur in the southern and central portions of the county, particularly in and around the City of Ouray and the Highway 550 corridor, following heavy rains. The Town of Ridgway is also susceptible to debris flows, as seen by the August 2024 event. The Uncompahgre Gorge and Bear Creek Trail were identified as specific areas with ideal conditions for debris flow initiation and channeling.

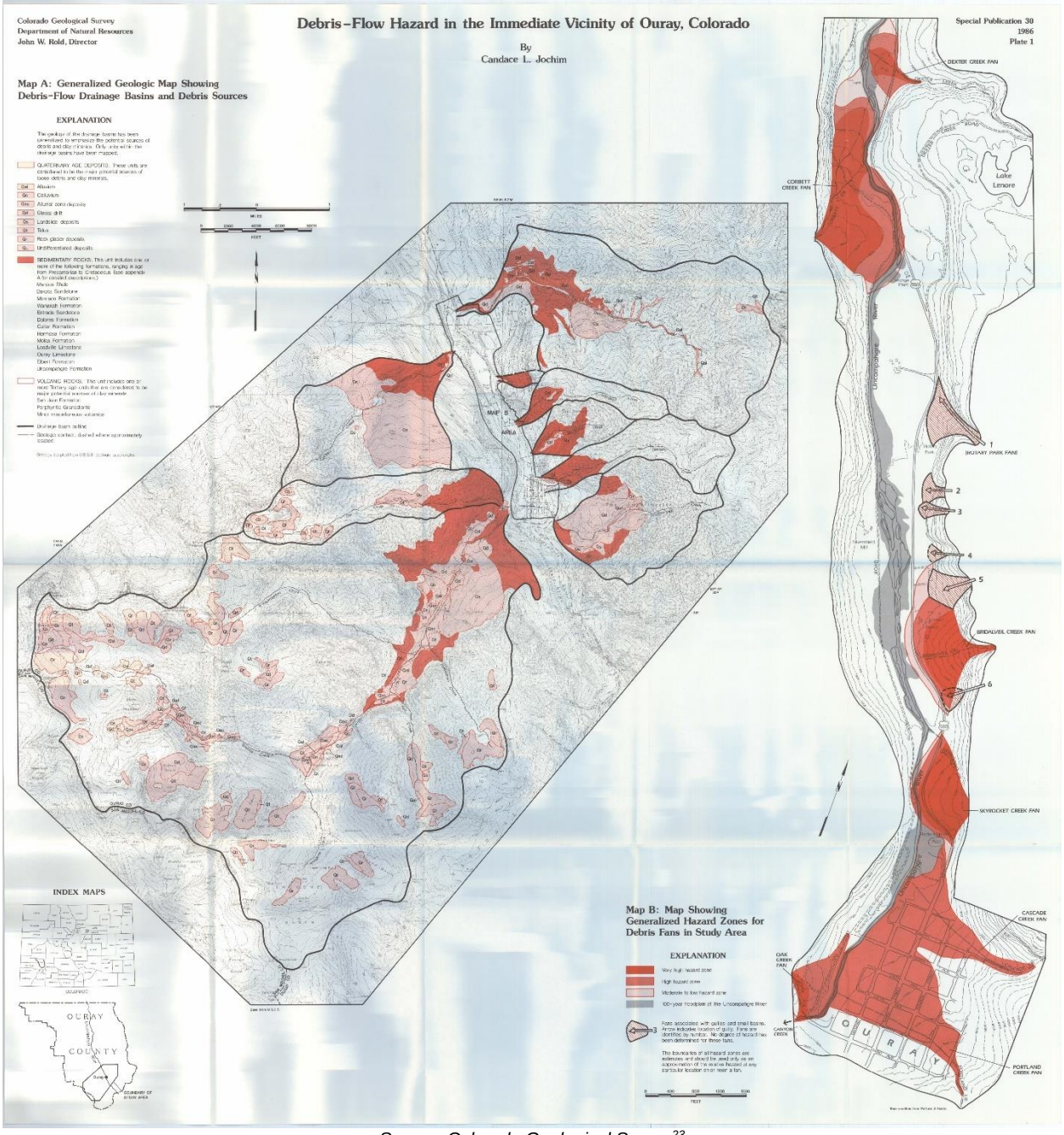
Many of Colorado's mountain communities are located on or near debris fans. A debris fan is a conical landform produced by successive mud and debris flow deposits and the likely spot for a future event. The main part of the City of Ouray is located on the debris fans of Portland, Cascade, and Oak creeks, with parts of the corporate limits including Skyrocket and Bridalveil creeks debris fans.

Debris flow hazard areas around the City of Ouray have been studied and mapped in Colorado Geological Survey 1986 Special Publication 30. The maps detail very high, high, and moderate to low hazard zones. Most of the Bridalveil Creek Fan and Skyrocket Creek Fan are designated very high hazards. The Cascade Creek and Portland Creek fans are designated as high hazards.[22] Additionally, The Corbett Creek fan and Dexter Creek fan are debris flow-susceptible areas in unincorporated Ouray County. The figure below shows debris fans in the City of Ouray and its vicinity.

21 Mussetter Engineering Inc. May 2009. "Cornet Creek Watershed and Alluvial Fan Debris Flow Analysis." https://www.sanmiguelcountyco.gov/DocumentCenter/View/273/Telluride-2009-Cornet-Creek-Debris-Flow-Report-PDF.

22 Jochim, Candace. Colorado Geological Survey. 1986. "Debris-Flow Hazard in the Immediate Vicinity of Ouray, Colorado."

Debris Flow Hazard Near the City of Ouray

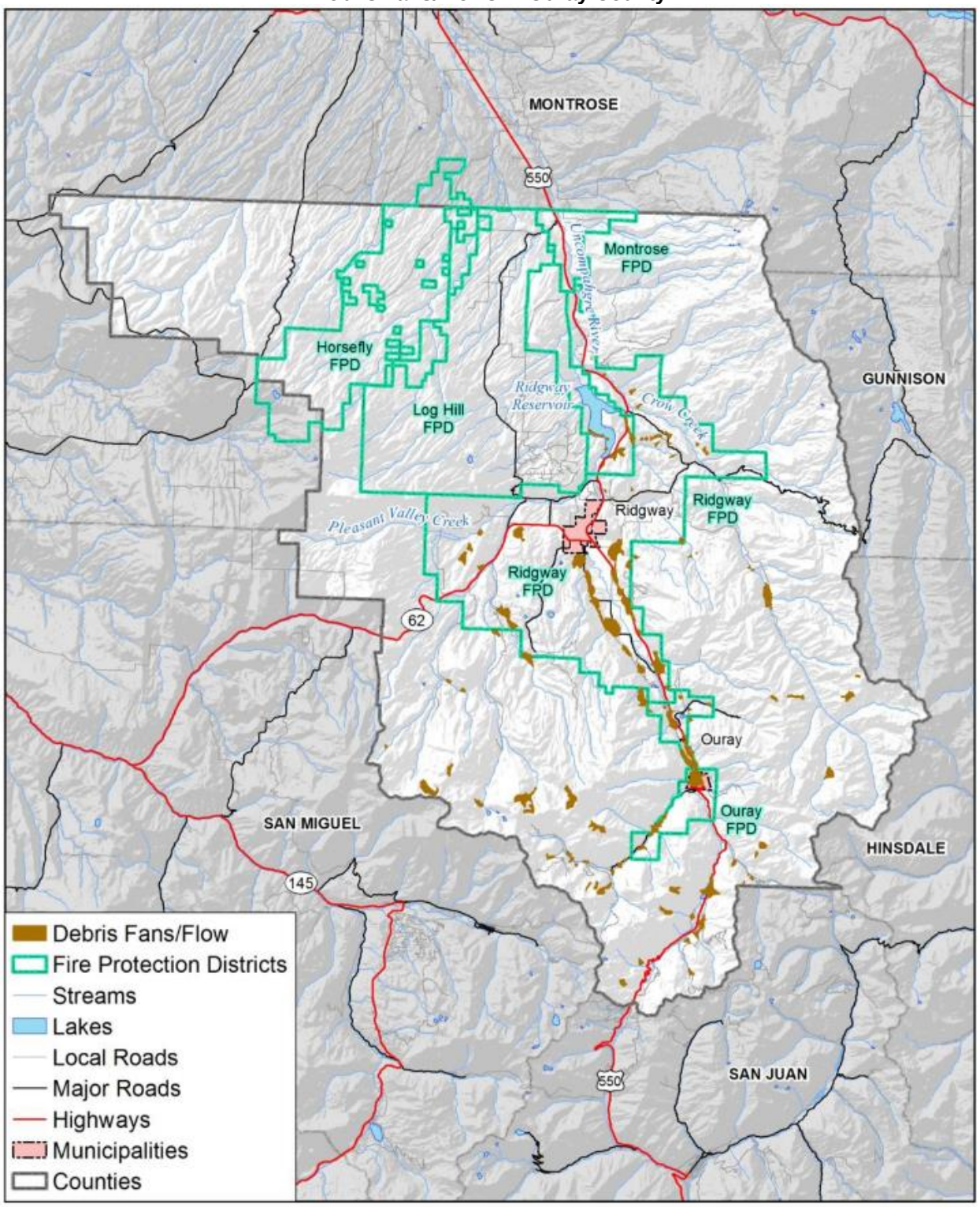


Source: Colorado Geological Survey[23]

According to the county, County Roads 5 and 7 southwest of Ridgway require regular repairs and inspection due to damage from debris flows. County Road 17 near Corbett Creek has also been impacted several times. Mudslides have also overrun and closed State Highways 62 and 145 several times yearly. County Roads 23, 361, and Coal Creek Road are also susceptible to debris flows in the spring. GIS data was not available for this Plan. Therefore, the county-level mapping of debris fans from the 2015 Ouray County Hazard Mitigation Plan is shown below.

23 Jochim, Candace. Colorado Geological Survey. 1986. “Debris-Flow Hazard in the Immediate Vicinity of Ouray, Colorado.”

Debris Fans/Flows in Ouray County



Source: 2015 Ouray County Hazard Mitigation Plan

In addition to areas mapped as prone to debris flows, post-wildfire burn areas are highly susceptible to mud and debris flow events. There are a couple of burn scars located near the Uncompahgre National Forest. After a wildfire, the probability of mud and debris flows increases

significantly. The loss of vegetative cover in burn areas increases run-off rates. The burned and barren slopes are more prone to erosion, resulting in increased peak discharge and bulking rates.[24] Relatively frequent storm events of high intensity and short durations have the potential to cause substantial mudflow events in post-wildfire conditions.[25] The burning of organic material matter on the ground can: (1) create high temperatures on the ground, causing hydrophobicity, which is the tendency of the soil to resist wetting or infiltration of moisture; (2) decrease the roughness of the ground; and (3) increase the erosive capacity of the soil.

Extent

Debris flows can occur rapidly with little warning during torrential rains. Debris and mudflows generally occur with floods and downpours associated with the late summer monsoon season. The Colorado Geological Survey 1986 Special Publication 30 identifies debris flow hazard areas based on the following scale.[26]

- Very High Hazard Zone—This is the zone with the greatest hazards. It is estimated that in this area, the greatest impact from, and most frequent exposure to, debris flows and floods occurs. The zone is characterized by steep slopes, deposits of large boulders (greater than two feet in diameter), tree scars and burial, channels, levees, and lobes. Damage in this zone could include structural damage, such as buildings being moved off their foundations, walls, and windows being broken, significant accumulations of debris being piled in and around buildings, trees being toppled or severely damaged, and severe mud and water damage. Plugs of debris should be expected in this zone, and loss of life is possible.

- High Hazard Zone—This is the zone of high hazard. This zone is subject to debris flows and floods but does not experience the maximum impact of the events. However, events may be just as frequent as in the Very High Hazard Zone. The zone is generally characterized by moderate to steep slopes, boulders, levees, lobes, tree scars and burial, and channels. Damage in this zone could include moderate damage to structures resulting from the pounding of boulders and logs, broken windows, basements filled with mud and debris, piles of rubble in and around structures and in yards and streets, and severe mud and water damage.

- Moderate to Low Hazard Zone—This hazard zone is usually subjected primarily to mud and water flooding as a result of debris-flow events. This zone is characterized by low to moderate slopes, deposits of abundant mud, and minor debris (small boulders, one foot or less, and logs). Damage is usually comparatively minor, consisting of mud and water damage to the outer walls of buildings, basements, and yards.

Historical Occurrences

According to the NCEI, 26 reported debris flow events in Ouray County occurred between 1996 and March 2024. These events resulted in $551,000 in property damage.[27] Before 1996, there were other notable debris flow events in 1878, 1909, 1927, 1951, 1965, 1971, 1981, 1982, 1984, and 1988. The Colorado Geological Survey 1986 Special Publication 30 indicates that the 1981 and 1982 events had damage and cleanup costs of $196,000 and $360,000, respectively.

24 White, J. L., Wait, TC, and Morgan M.L. 2008. “Geologic Hazards Mapping Project for Montrose County, Colorado.” CGS Department of Natural Resources.
25 Rosgen, D. and Rosgen, B. 2013. “Restoring Alluvial Fan Connectivity for Post-Fire Flood Alleviation and Sediment Reduction.”
26 Jochim, Candace. Colorado Geological Survey. 1986. “Debris-Flow Hazard in the Immediate Vicinity of Ouray, Colorado.”
27 National Centers for Environmental Information. March 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

Additionally, there was an extensive flooding and debris flow event recently in August 2024. Select events with considerable property damage, deaths, or multiple injuries are discussed below.

- **July 8, 2018:** Around four to ten feet of mud and rock covered Colorado Highway 550 about two miles south of Ouray due to heavy rainfall. The rockslides and debris flows destroyed a section of the highway and crib wall supporting the highway. Highway 550 was closed for almost 24 hours until the debris was removed, and then the highway was limited to one lane for many weeks thereafter as the road was repaired. There was a reported $500,000 in damage from the event.

- **July 27, 2022:** Heavy rain from thunderstorms resulted in flash flooding and debris flow across County Road 361, specifically in the Senator Gulch/Yankee Boy Basin area. Ouray County Road and Bridge reported that the mudslide significantly damaged a critical Hilfiker wall and culvert. Approximately 50 people could not leave the Yankee Boy Basin area until the debris was cleared. There was a reported $10,000 in damage from the event.

- **August 2024:** Ouray County received significant rainfall due to a monsoonal event that caused flooding, debris flow, and mudflows through the county. County Roads 17, 23, and 361 experienced mudslides that closed the roads. Many homes and other structures were damaged due to mudflows. Bridal Veil Bridge, Fedel Court, Skyrocket, and Oak Creek also experienced damage.

  The Town of Ridgway's Beaver Creek diversion infrastructure was damaged. The event filled the Ridgway Ditch with a mud slurry from bank to bank to the top of the ditch for hundreds of feet. As a result, the town could not divert water from Beaver Creek, the community's primary water source. A similar amount of mud, rocks, and gravel impacted the Grizzly Diversion Trough. Initial estimates for damage are at $3.5 million, with that total expected to rise. An emergency disaster declaration was made during this event.

Washed Out Road in August 2024



Source: Ouray County Plaindealer

Debris Build-Up from the August 2024 Event



Source: Ouray County Emergency Management

Average Annual Losses

The 26 reported debris flow events in Ouray County from 1996 to March 2024 resulted in $551,000 in property damage and $0 in crop loss. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Debris flows have resulted in extended closures of highways for hours, days, and even weeks at a time, and the total economic impact cannot be overstated.

Debris Flow Losses

Number of Events[1]	Average Events Per Year	Total Property Loss[1]	Average Annual Property Loss [1]	Total Crop Loss[2]	Average Annual Crop Loss[2]
26	0.9	$551,000	$19,679	$0	$0

Source: 1 Indicates data is from NCEI (Jan 1996 to March 2024)[28]; 2 Indicates data is from SHELDUS (1960 to 2021)[29]

Historical Probability & Future Likelihood

Given the historical occurrence record for debris flows as shown in the figure below (12 out of 28 years), the annual historical probability of debris flow occurrence is 46 percent for this plan. However, the number of debris flow events is likely much higher as many events are unreported.

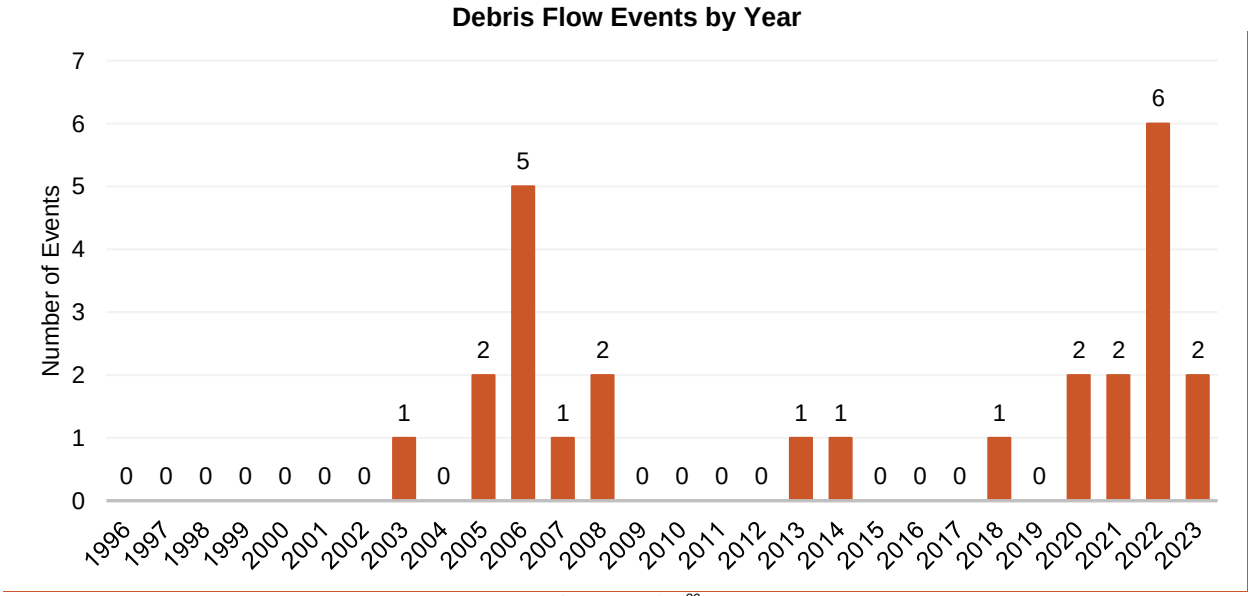
28 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

29 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.

Due to the anticipated impacts of climate change and future development, the future likelihood of a debris flow event in the county is very likely.

Historical Probability & Future Likelihood – Debris Flow

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
42%	Increase in Frequency	Increase in Frequency and Impact	**Very Likely**

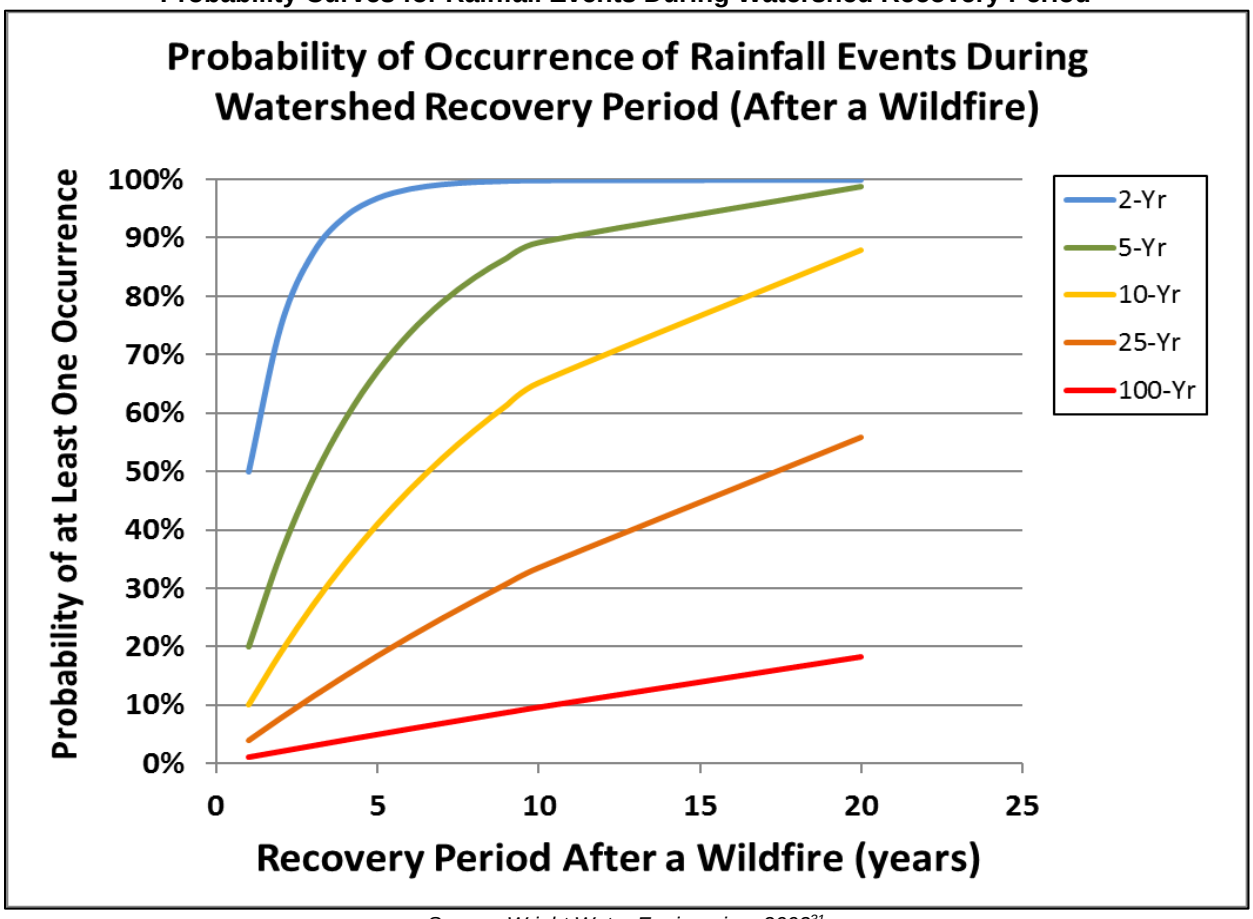


Source: NCEI[30]

Large mudflows can occur when a typical rainfall event happens over a watershed that has been exposed to wildfire. As the vegetation and soil in a burned area recover and the watershed returns to its pre-burn hydrologic condition, the depth and intensity of rainfall necessary to generate a mudflow will increase for a given location. Probability curves have been developed to understand the relationship between storm events' return frequency and the probability that a storm will occur at least once over 20 years, as shown in the following figure. The probability of occurrence for a 2-year event within 10 years is virtually 100 percent, while the likelihood of a 25-year event and 100-year event are 34 percent and 10 percent, respectively, within 10 years.

30 National Centers for Environmental Information. May 2023. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

Probability Curves for Rainfall Events During Watershed Recovery Period



Source: Wright Water Engineering, 2003[31]

Climate Change

According to the Colorado Geological Survey, increased precipitation and melting snowpack often activate hazards such as debris flows and mud flows. This is why, historically, in Colorado, these hazards occur in the spring and summer, when rainfall and snowmelt are most significant.[32,33] Climate modeling predictions are more dependable for temperature than for precipitation. Given this, a report from the Intergovernmental Panel on Climate Change, Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation states the following.

> There is high confidence that changes in heat waves, glacial retreat, and/or permafrost degradation will affect high mountain phenomena such as slope instabilities, mass movements, and glacial lake outburst floods. There is medium confidence that high-mountain debris flows will begin earlier in the year because of earlier snowmelt and that continued mountain permafrost degradation and glacier retreat will further decrease the stability of slopes.[34]

31 Wright Water Engineering. 2003. "Compilation of Technical Research: Part 1: A Curve Number Approach to Evaluation of Post-Fire Subbasin Recovery Following the Cerro Grande Fire, Los Alamos, New Mexico. Part 2: Post-Burn Assessment of Hydrologic Conditions and Forest Recovery at the Three-Year Anniversary of the Cerro Grande Fire. Part 3: Summary of Mesa Verde 2000 Bircher Fire Basin Recovery in Morefield Canyon."
32 Colorado Geological Survey. 2024. "Debris and Mud Flows". https://coloradogeologicalsurvey.org/hazards/debris-flows/.
33 Colorado Geological Survey. 2024. "Landslides". https://coloradogeologicalsurvey.org/hazards/landslides/.
34 The Intergovernmental Panel on Climate Change. 2012. "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation". https://www.ipcc.ch/report/managing-the-risks-of-extreme-events-and-disasters-to-advance-climate-change-adaptation/.

While warming temperatures, heavy precipitation, and earlier snowmelt increase the risk of debris flows in the spring and early summer months, localized factors, including geology and wildfire history, also play a role through vegetation and soil structure changes.

Future Developments

Although debris flows are a natural geologic process, their incidence and impacts on people can be exacerbated by human activities. Grading for road construction and development can increase slope steepness, leading to increased debris flows. Other human activities affecting debris flows include excavation, drainage and groundwater alterations, and changes in vegetation. Hazard maps and land use codes could be designed to discourage development on or near known debris flow areas.

Potential Impacts

Debris flows could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Rapid-moving debris flows threaten anyone in their path, particularly in recreational or residential areas.
- Families and individuals living near affected slopes or waterways could be forced to evacuate temporarily or permanently.
- Property damage and disruptions to daily life would impose financial burdens on residents.

Community Lifeline Impacts

- Safety and Security
  - Rapid, high-energy flows could endanger residents, tourists, and outdoor workers.
  - Debris flows may block evacuation routes, trapping people in affected areas.
  - During response efforts, emergency services would be stretched thin.
  - Emergency services may struggle to reach affected areas due to blocked roads.
  - Search and rescue operations would be hampered by unstable terrain and ongoing hazards.
  - Narrow, winding roads may be insufficient for rapid evacuation.
- Food, Hydration, Shelter
  - People displaced by debris flow events would require emergency housing.
  - Transportation disruptions could delay food deliveries to local stores.
- Health and Medical
  - Debris flows can cause trauma, such as broken bones or lacerations, requiring medical attention.
  - Blocked roads may prevent patients from reaching hospitals or clinics.
  - Contaminated water supplies may lead to outbreaks of waterborne illnesses.

- Energy (Power and Fuel)
  - Debris flows can damage power lines and utility infrastructure.
  - Blocked roads may delay fuel deliveries to remote areas.

- Communications
  - Damage to communication lines and towers could disrupt phone and internet services.
  - Disrupted communication systems may hinder the issuing of timely warnings.

- Transportation
  - U.S. Highway 550 and other critical routes may be blocked by debris, isolating communities.
  - Debris flows can damage or destroy bridges, further disrupting transportation networks.
  - Blocked roads could delay rescue and relief operations.

- Hazardous Materials
  - Debris flows could damage industrial sites or storage facilities, leading to hazardous material releases.
  - Removing debris and managing hazardous waste would require significant resources.

- Water Systems
  - Water treatment facilities could be overwhelmed by sediment and debris.
  - Debris flows can introduce sediment and pollutants into water sources, affecting drinking water.

Economic Impacts

- Damaged recreation areas or perceptions of risk could deter tourists, affecting local businesses.

- Flooded fields or damaged irrigation systems would impact farms in the region.

- Removing debris, repairing infrastructure, and restoring landscapes would require significant investment.

Environmental Impacts

- Sediment and debris can change the course of rivers, disrupt habitats, and harm aquatic life.

- Debris flows can strip vegetation from slopes, leading to long-term ecological damage.

- Pollutants and sediment can degrade water quality in the Uncompahgre River and other waterways.

Vulnerabilities

Debris flows can damage property, close roads, damage utility infrastructure, impact downstream water quality, block hiking routes, and cause injuries or death. A road closed due to debris flow activity can result in severe transportation disruptions due to the limited number of roads in the

county. This has happened repeatedly along County Road 17 and Highways 62, 145, and 550. When Highway 550 is closed, it severely reduces north/south access in and out of the county.

The Ouray County Courthouse, emergency management office, and Ouray County Public Health are all located in known debris flow or debris fan areas. These community lifelines could be damaged and services lost due to debris flow events. The other identified and owned community lifelines are unlikely to be directly damaged by debris flow events. While they would not be directly damaged, their services could be impacted.

Vulnerable populations include outdoor recreationists who may not know the risks, residents living on or near steep slopes or the floodplain, and those with limited mobility to evacuate. The following table provides a summary of the county's debris flow vulnerabilities. Participant-specific vulnerabilities can be found after the table.

County Debris Flow Vulnerabilities

Sector	Vulnerability
People	-People driving on roadways on or near sloped areas -People living in homes located on or near steep slopes or the floodplain
Economic	-Disruption of local and interstate commerce due to disruption of major transportation routes -Loss of accessibility and potential damage to businesses
Built Environment	-Damage to homes and other buildings located on slopes
Community Lifelines	-Damage to roadways and bridges -Damage or breaking of underground utility lines -Damage to above-ground water infrastructure
Recreation	-Block hiking routes -Impact downstream water quality -Outdoor recreationists

City of Ouray

A debris flow within the city could block major streets, making movement within the community essentially impossible and severely hindering emergency response. When Highway 550 is closed, it severely reduces north/south access in and out of the city. Debris flows from Portland and Cascade creeks have seriously threatened the City of Ouray residents and residential and commercial property. Ouray has done significant work to mitigate the debris flow hazard. The threat has been reduced by flumes that have been constructed to divert debris and flow through the city. There is still the potential for a significant event to overwhelm these flumes or to be plugged with debris during an event, resulting in debris spilling onto local streets.

Development on the debris fans of Skyrocket and Bridalveil creeks incorporate geotechnical investigations and recommendations to reduce potential impacts. Homes on the debris fans are protected by dredged channels with berms that divert flows. These are not engineered structures and could be susceptible to failure or overtopping during a significant event. Skyrocket Creek threatens the hot springs pool, which has been filled with debris in the past. The pool is an important economic engine for the city and can have 300-400 visitors at a time in the busy summer months. A worst-case scenario would be if a debris flow struck the crowded pool. Residential development on the Corbett Creek and Dexter Creek debris fans could also be at risk. There are currently no warning systems in any of the problem drainage areas. Community lifelines are in places where debris flows will not directly damage them. However, services to and from these lifelines could be impacted.

The Colorado Geological Survey 1988 Colorado Landslide Mitigation Plan lists the City of Ouray as a Tier One debris flow area. Tier One listings are severe cases needing immediate or ongoing action or attention because of the severity of potential impacts.[35]

Town of Ridgway

Debris flow events can damage the town's diversion infrastructure, ditches, and troughs. Past events have damaged the Beaver Creek diversion infrastructure and filled the Ridgway Ditch and Grizzly Diversion Trough with hundreds of feet of mud, rocks, and gravel. As a result, the town could not divert water from Beaver Creek, the community's primary water source. Debris flows can also impact surrounding roadways to the south and west. This could impact transportation into and out of these areas.

The areas along Cottonwood Creek that run through Ridgway are at increased risk from debris flows. The area around Highway 62 and Amelia Street intersection is also at risk if rainstorms intensify. The volume of water and debris coming off the hill on the west side of town could overwhelm the stormwater system or breach the system if debris plugs up culverts and storm drains.

Community lifelines are in areas where debris flows will not directly damage them. However, if a debris flow impacted the town's two primary water sources, it would affect the Water Treatment Plant and its ability to produce water.

Dallas Park Cemetery District

There is no risk of debris flow impacting the cemetery's community lifelines, operations, or individuals. Past flood events that affected the cemetery did not include debris.

Jurisdictions Ranking Debris Flows as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders which identified debris flows as a prioritized hazard of concern.

- Ouray County
- City of Ouray
- Town of Ridgway

35 Colorado Geological Survey. 1988. "Colorado Landslide Hazard Mitigation Plan".

Drought

Drought is generally defined as a natural hazard that results from a substantial period of below-normal precipitation. Drought is typically a slow-onset, creeping phenomenon. However, "flash droughts" can sometimes occur quickly and last for shorter periods. Drought and its impacts vary from region to region. In Colorado's Rocky Mountain Region, winter snowpack sustains towns, agriculture, and recreation. The amount of winter precipitation usually sets the tone for drought conditions from year to year.[36]

> **Drought** can develop in diverse ways, which makes predicting drought challenging. 'Average' snowpack does not necessarily translate to average streamflows or mean that we won't experience drought conditions.
>
> – Colorado State University Extension

The impacts of drought spread over a larger geographical area and typically affect more people than other natural hazards. Detection and early warning signs of drought conditions have improved recently but are still more challenging to identify than quick-onset natural hazards (e.g., floods, winter storms, tornadoes). According to the National Drought Mitigation Center, droughts are classified into four major types: [37]

- **Meteorological Drought** is defined based on the degree of dryness and the duration of the dry period. Meteorological drought is often the first type of drought to be identified and should be defined regionally as precipitation rates, frequencies (norms), and winds vary.

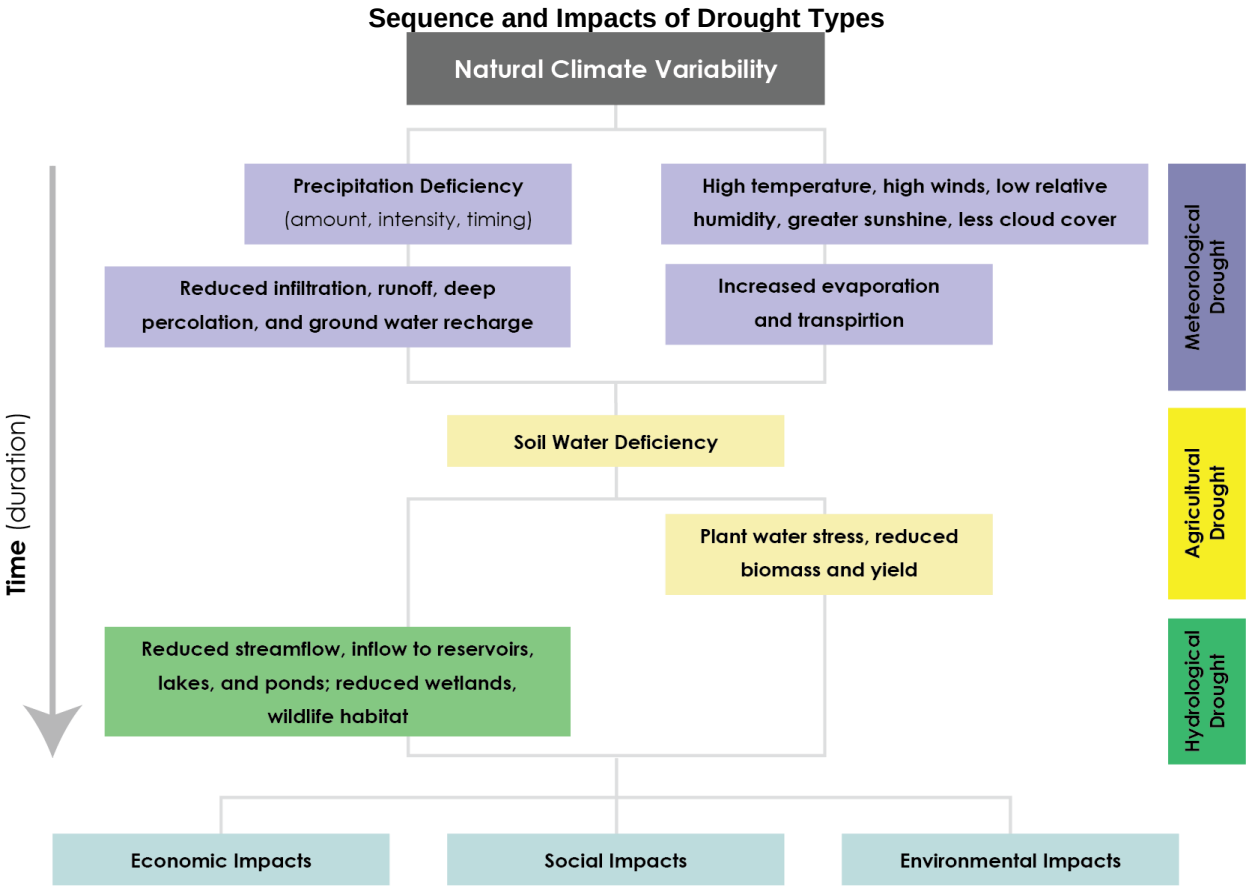
- **Agricultural Drought** occurs when deficient moisture hinders planting germination, leading to a low plant population per hectare and a reduction of final yield. Agricultural drought is closely linked with meteorological and hydrological drought, as agricultural water supplies are contingent upon the two sectors.

- **Hydrologic Drought** occurs when water available in aquifers, lakes, and reservoirs falls below the statistical average. This situation can arise even when the area of interest receives average precipitation. This is due to the reserves diminishing from increased water usage, usually from agricultural use or high evapotranspiration levels resulting from prolonged high temperatures. Hydrological drought is often identified later than meteorological and agricultural drought. Impacts from hydrological drought may manifest themselves in decreased hydropower production and loss of water-based recreation.

- **Socioeconomic Drought** occurs when the demand for an economic good exceeds supply due to a weather-related shortfall in water supply. The supply of many economic goods includes, but is not limited to, water, forage, food grains, fish, and hydroelectric power.

The figure on the next page presents the different types of droughts, their temporal sequence, and the various types of effects they can have.

36 National Integrated Drought Information System (National Oceanic and Atmospheric Administration). 2024. "Drought in the Intermountain West". https://www.drought.gov/states/colorado.
37 National Drought Mitigation Center. 2017. "Drought Basics". https://drought.unl.edu/.



Location

The entire county is at risk of drought conditions, including the populated areas of local water supplies for the City of Ouray and Town of Ridgway (domestic needs) and rural areas of the county (agricultural, environmental, and recreational needs). Areas that rely on snowmelt and seasonal precipitation, particularly in lower elevations, experience drought more frequently.

Extent

Climatologists utilize the Palmer Drought Severity Index to standardize global long-term drought analysis. The table below shows the details of Palmer Drought Severity Index classifications.

Palmer Drought Severity Index Classification

Numerical Value	Description		Numerical Value	Description
4.0 or more	Extremely wet		**-0.5 to -0.99**	Incipient dry spell
3.0 to 3.99	Very wet		**-1.0 to -1.99**	Mild drought
2.0 to 2.99	Moderately wet		**-2.0 to -2.99**	Moderate drought
1.0 to 1.99	Slightly wet		**-3.0 to -3.99**	Severe drought
0.5 to 0.99	Incipient wet spell		**-4.0 or beyond**	Extreme drought
0.49 to -0.49	Near normal		--	--

Source: Climate Prediction Center[38]

38 National Weather Service. 2017. "Climate Prediction Center". https://www.cpc.ncep.noaa.gov/.

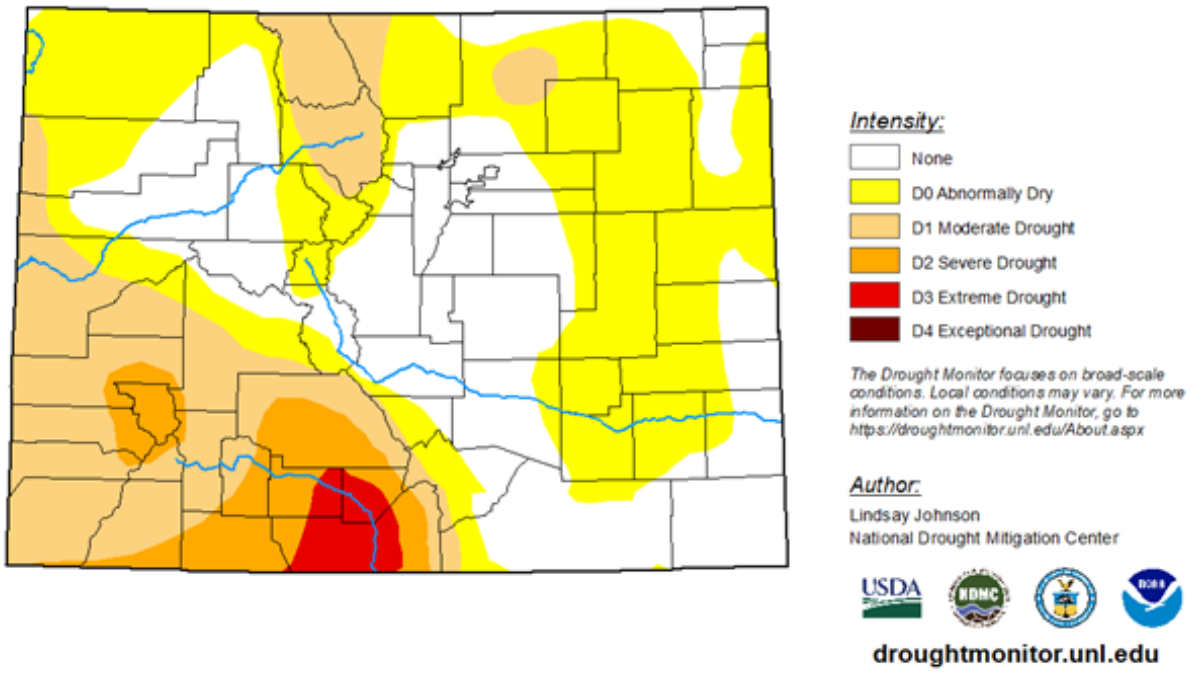
The U.S. Drought Monitor shows where drought is and its extent across the United States. The map uses six classifications, as shown in the table below. The U.S. Drought Monitor is produced jointly between the National Drought Mitigation Center, the National Oceanic and Atmospheric Administration, and the U.S. Department of Agriculture. It uses physical data at multiple scales, drought impacts, and feedback from local experts.[39] Communities and jurisdictions across Ouray County are likely to experience similar extent impacts from drought.

United States Drought Monitor Classification

Category	Description	PDSI Ranges	Possible Impacts
D0	Abnormally Dry	-1.0 to -1.9	Going into drought: short-term dryness slowing planting growth of crops or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate Drought	-2.0 to -2.9	Some damage to crops, pastures; streams, reservoirs, or wells low, some water shortages developing or imminent; voluntary water-use restrictions requested
D2	Severe Drought	-3.0 to -3.9	Crop or pasture losses likely, water shortages common; water restrictions imposed
D3	Extreme Drought	-4.0 to -4.9	Major crop/pasture losses; widespread water shortages or restrictions
D4	Exceptional Drought	-5.0 or less	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells create water emergencies.

Source: National Drought Mitigation Center, 2017[40]

U.S. Drought Monitor for Colorado



This figure is not intended to show current drought conditions, as conditions constantly change.
Source: National Drought Mitigation Center[41]

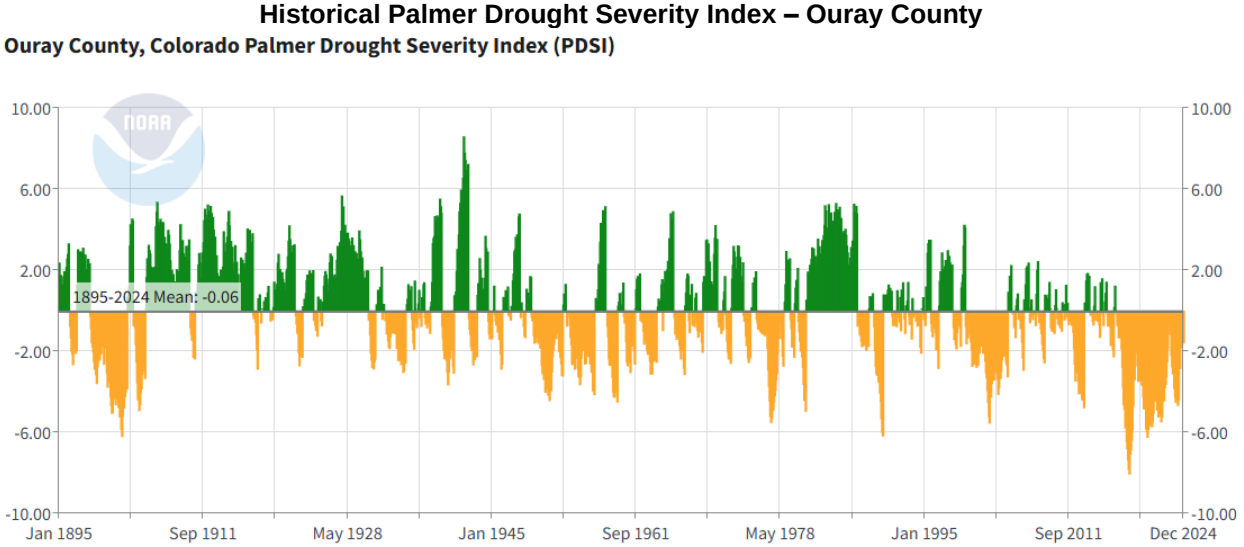
39 National Drought Mitigation Center. 2023. "What is the USDM?". https://droughtmonitor.unl.edu/About/WhatistheUSDM.aspx.
40 National Drought Mitigation Center. 2017. "Types of Drought." http://drought.unl.edu/DroughtBasics/TypesofDrought.aspx.
41 National Drought Mitigation Center. January 2024. "U.S. Drought Monitor Colorado". https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?fips_08037.

The onset of drought in the western Colorado mountainous counties is usually signaled by a lack of significant winter snowfall. Ouray County receives most precipitation as snow in the higher elevations between November and April. Hot and dry conditions that persist into the spring, summer, and fall can aggravate drought conditions, making the effects of drought more pronounced as water demands increase during the growing season and summer months.

Historical Occurrences

Between 1895 and 2024, portions of Ouray County experienced some drought during 23% of the months on record.[42] The figure below shows that the drought conditions in Ouray County are highly variable. The table shows the number of months at each drought magnitude.

Historical Palmer Drought Severity Index – Ouray County



Source: NCEI, Jan. 1895-Dec 2024[43]

Historical Drought in Ouray County

Drought Magnitude	Total Months
-1 Magnitude (Mild)	164
-2 Magnitude (Moderate)	83
-3 Magnitude (Severe)	67
-4 Magnitude or Greater (Extreme)	46
Total Months in Drought	**360**
Total Months Not in Drought	**1,188**

Source: NCEI, Jan 1895-Oct 2024

In 2002, the drought-imposed fire restrictions impacted camping activity and canceled the 4th of July fireworks. The 2002 and 2012 droughts threatened the municipal water supply for the City of Ouray. The city does not have senior water rights. Because of this, users downstream with senior water rights can call on the city to curtail its water usage. This happened in both 2002 and 2012. The 2012 drought also increased hay costs, decreased agricultural production, reduced cattle herds, and increased beetle-killed trees.

42 National Centers for Environmental Information. 1895-Oct 2024. "County Time Series". https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CO-037/pdsi/all/9/1895-2023?base_prd=true&begbaseyear=1901&endbaseyear=2000.

43 National Centers for Environmental Information. 1895-Dec 2024. "County Time Series". https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CO-091/pdsi/1/0/1895-2023?base_prd=true&begbaseyear=1895&endbaseyear=2024

The winter of 2018 brought extremely low snowpack totals to southwest Colorado, leaving the April 1, 2018, snowpack totals between 50% and 69% of normal for Ouray County. The snowpack above Ridgway Reservoir was only at 46% of average, and streamflow into the reservoir was approximately 40% of average. Governor Hickenlooper activated the Colorado Drought Mitigation and Response Plan for the agricultural sector in 34 of the State's 64 counties, including Ouray. The county was fortunate that reservoir storage levels were adequate to offset the historically low snowfall levels. The 2018 drought brought extremely dry conditions into the summer months in the County. This led to Stage 2 fire restrictions. The City of Ouray also canceled the 4th of July fireworks show, again causing economic repercussions. Stage 2 fire restrictions were enabled for the Uncompahgre National Forest in the County. Stage 3 fire restrictions were imposed on the San Juan National Forest, closing campgrounds, day-use areas, roads, and trails. No hiking or camping was allowed in the Forest during these closures. Although the San Juan National Forest is not in Ouray County, it borders the Uncompahgre National Forest and is an economic driver in the region.

The Drought Impact Reporter has recorded 141 drought-related impacts throughout Ouray County. This is not a comprehensive list of droughts that may have impacted the county, but only those with reported impacts. The following are the categories and the number of total reported impacts for all drought events. Note that some impacts have been assigned to more than one category. Some of these impacts are summarized in the following table.

- Agriculture: 61
- Business & Industry: 8
- Energy: 1
- Fire: 21
- General Awareness: 52
- Plants & Wildlife: 46
- Relief, Response & Restrictions: 46
- Society & Public Health: 5
- Tourism & Recreation: 15
- Water Supply & Quality: 69

Drought Impacts in Ouray County

Category	Date	Title
Tourism & Recreation; Relief, Response & Restrictions, Society & Public Health, Water Supply & Quality	2/18/2024	The Ouray Ice Festival suffered from reduced water for the festival and had to find an alternative source.
Fire; Relief, Response & Restrictions	8/20/2020	Wildfires' persistent dry weather sparks a new round of fire restrictions.
Agriculture; General Awareness; Relief, Response & Restrictions; Water Supply & Quality,	6/23/2020	Colorado activates drought plan, a task force to address creeping drought in 40 counties.
Business & Industry; Tourism & Recreation	1/16/2018	Colorado skier numbers down amid warm, dry winter.
Agriculture; Relief, Response & Restrictions	6/12/2013	USDA designates six counties in Colorado as primary natural disaster areas.

Source: National Drought Mitigation Center, 2000-Oct 2024[44]

Average Annual Losses

The direct and indirect effects of drought are difficult to quantify. Still, drought can lead to complex and widespread impacts on people, wildlife, the environment, and the economy of Ouray County. The annual property loss estimates for Ouray County were determined based on the NCEI Storm Events Database since 1996. Annual crop loss for Ouray County was determined based on the SHELDUS data from 1960 to 2021.

44 National Drought Mitigation Center. October 2024. "Drought Impact Reporter". https://unldroughtcenter.maps.arcgis.com/apps/dashboards/46afe627bb60422f85944d70069c09cf

Loss Estimate for Drought

Hazard Type	Total Property Loss[1]	Average Annual Property Loss[1]	Total Crop Loss[2]	Average Annual Crop Loss[2]
Drought	$0	$0	$943,396	$15,466

Source: 1 Indicates data is from NCEI (Jan 1996 to March 2024)[45]; 2 Indicates data is from SHELDUS (1960 to 2021)[46]

Historical Probability & Future Likelihood

Given the historical record of drought occurrence, as shown in the table below, the historical probability of a drought for this plan is 23 percent. Due to the anticipated impacts of climate change and future development, the future likelihood of a drought event in the county is very likely.

Historical Drought Probability in Ouray County

Drought Magnitude	Total Months	Percent Chance
-1 Magnitude (Mild)	164	11%
-2 Magnitude (Moderate)	83	5%
-3 Magnitude (Severe)	67	4%
-4 Magnitude or Greater (Extreme)	46	3%
Total Months in Drought	**360**	**23%**
Total Months Not in Drought	**1,188**	**77%**

Source: NCEI, Jan 1895-Oct 2024[47]

Historical Probability & Future Likelihood – Drought

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
23%	Increase in Frequency and Intensity	Increase in Frequency and Impact	**Very Likely**

The U.S. Seasonal Drought Outlook provides a short-term drought forecast that local officials and residents can utilize to examine the likelihood of drought developing or continuing within three months based on existing conditions. The drought outlook is updated throughout the year and should be reviewed continuously. The figure on the next page provides the drought outlook from October 17, 2024, to January 31, 2025, as an example.

Climate Change

Projected warming will increase the rate of soil moisture loss during dry spells, increasing the intensity of future naturally occurring droughts.[48] The increase in drought intensity will also increase the frequency and severity of wildfire events as vegetation becomes drier. The table below shows the likelihood of a year-plus drought and a year-plus extreme drought in the county with different warming scenarios.

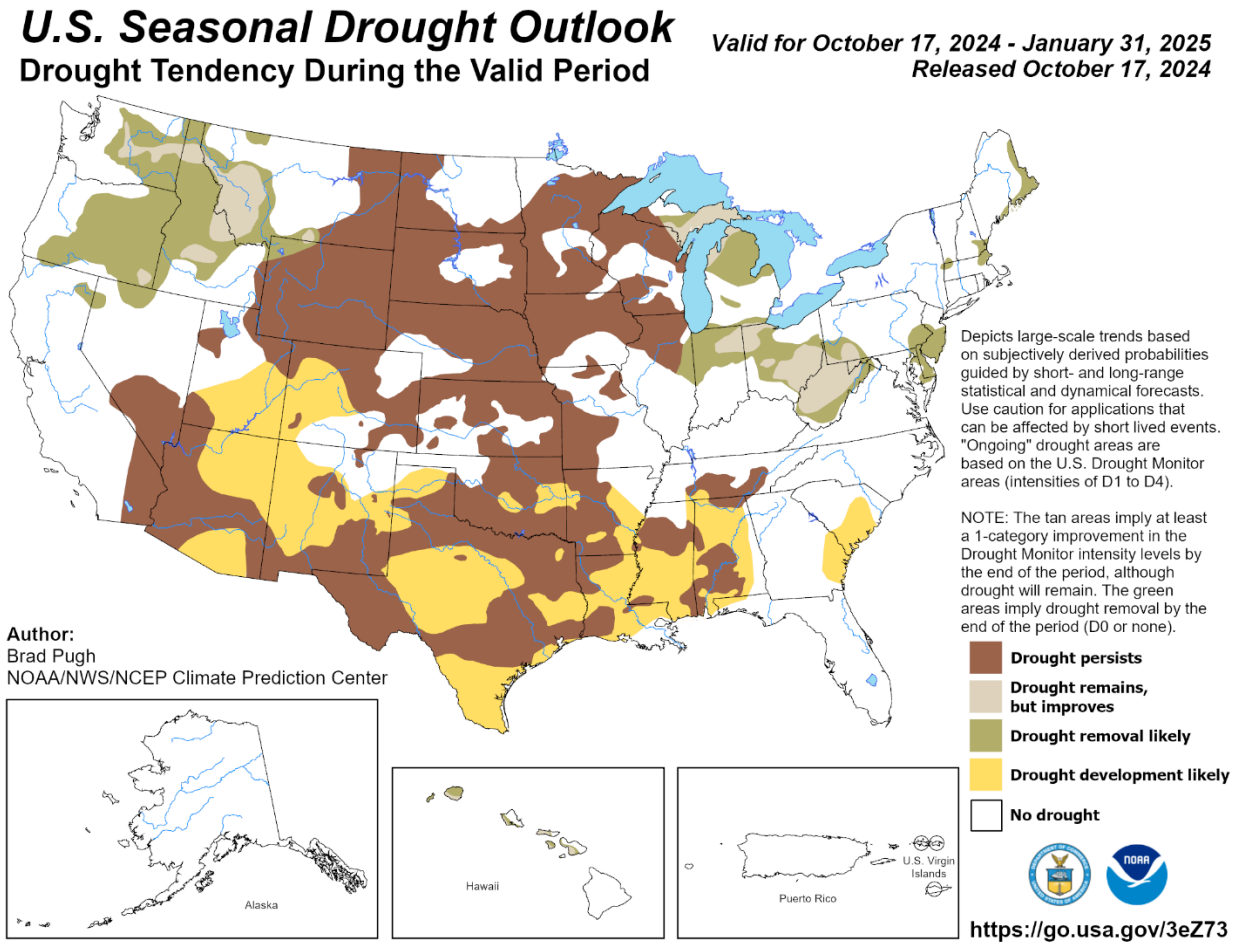
45 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
46 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.
47 National Centers for Environmental Information. 1895-Oct 2024. "County Time Series". https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CO-037/pdsi/all/9/1895-2023?base_prd=true&begbaseyear=1901&endbaseyear=2000.
48 NCEI. 2022. "State Climate Summaries – Colorado". https://statesummaries.ncics.org/chapter/co/.

Projected Climate Change Impacts on Drought

	Warming Scenarios			
Likelihood of	**0.5° C**	**1° C**	**2° C**	**3° C**
Year-Plus Drought	11-33%	11-33%	11-33%	11-50%
Year-Plus Extreme Drought	0-10%	0-10%	0-20%	0-20%

Source: Probable Futures[49]

U.S. Seasonal Drought Outlook



Source: National Oceanic and Atmospheric Administration[50]

A specific tool developed and utilized in the State of Colorado includes the Future Avoided Cost Explorer[51] to assess drought-associated costs. This tool presents an in-depth look at the potential future economic impacts of drought on specific sectors of the Colorado economy. The following table and figures show the expected impacts of drought on the current climate and the projected future 'Moderate' and 'More Severe Climate' impacts with various growth rates for Ouray County.

Based on the Future Avoided Cost Explorer assessments, it is likely that Ouray County will experience worsening impacts from climate change regarding drought. At the current growth rate

49 Probable Futures. "Maps of Dryness". December 2024. https://probablefutures.org/.
50 National Oceanic and Atmospheric Administration. December 2024. "U.S. Seasonal Drought Outlook". https://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php.
51 Colorado Water Conservation Board. 2020. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

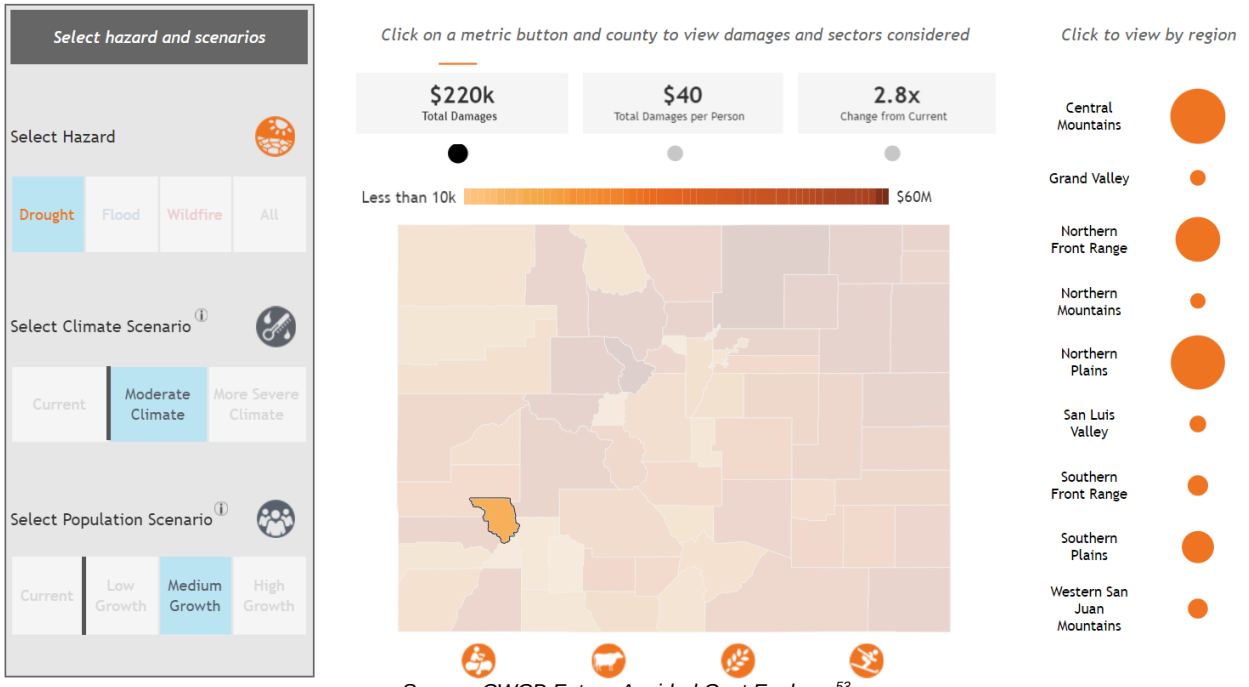
and only moderate climate impacts, Ouray County may experience up to $330,000 in total damage annually. Damages may vary across sectors and regions, such as bridges, buildings, livestock, crops, rafting, skiing, and fire suppression activities.

Future Avoided Cost Explorer Anticipated Ouray County Damages for Drought Matrix

Population Scenario	Climate Scenario		
	Current Climate	Moderate Climate	More Severe Climate
Current Growth Rate	$80,000 $20 per person	$220,000 $50 per person	$230,000 $50 per person
Low Growth Rate	$110,000 $30 per person	$220,000 $50 per person	$330,000 $80 per person
Medium Growth Rate	$110,000 Total Damages $20 per person	$220,000 $40 per person	$330,000 $60 per person
High Growth Rate	$110,000 $20 per person	$220,000 $30 per person	$330,000 $60 per person

Source: CWCB Future Avoided Cost Explorer[52]

Future Avoided Cost Explorer Drought Analysis Example for



Source: CWCB Future Avoided Cost Explorer[53]

Suggested actions to improve resilience to drought from Future Avoided Cost Explorer are shown in the graphic below.

52 Colorado Water Conservation Board. Accessed December 2024. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.
53 Colorado Water Conservation Board. Accessed December 2024. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

Exploring Resilience Actions for Drought



Source: CWCB Future Avoided Cost Explorer[54]

Future Development

Any future developments are likely to increase water demand, increase travel on local transportation routes, and influence the continued growth of economic sectors at risk from the impacts of drought. Growing communities will need to adapt and account for increased water demands for residential, commercial, and industrial development.

Potential Impacts

Drought poses significant challenges to Ouray County, affecting agriculture, water resources, recreation, and the environment. Below is an overview of the potential impacts on those areas.

Human Impacts

- Residents relying on wells or small water systems may experience shortages, requiring rationing or alternative water sources.
- Agricultural producers face lower yields and higher operating costs, and tourism-dependent businesses see reduced revenue.
- Drought conditions elevate wildfire risks, potentially causing evacuations, property loss, and long-term displacement.

54 Colorado Water Conservation Board. Accessed December 2024. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

Community Lifeline Impacts

- Safety and Security
  - Drought dries vegetation, creating conditions for more frequent and severe wildfires.
  - Responding to wildfires and heat-related emergencies would strain local resources.

- Food, Hydration, Shelter
  - Limited water for irrigation reduces yields, impacting food production.
  - Increased food, water, and energy costs during droughts disproportionately affect low-income residents.

- Health and Medical
  - Drought can increase respiratory problems due to dry air and dust.
  - Water shortages may reduce access to safe drinking water.

- Energy (Power and Fuel)
  - Reduced water levels in reservoirs affect electricity generation where hydropower is used.
  - Hotter, drier conditions lead to higher electricity usage for cooling, stressing power grids.

- Communications
  - Wildfires fueled by drought could damage communication towers and disrupt services.

- Transportation
  - Fires may necessitate road closures, disrupting travel and supply chains.

- Hazardous Materials
  - Lack of water can lead to dry, eroded soils, creating dust hazards and affecting air quality.
  - Reduced water flows can concentrate pollutants in rivers and streams, increasing hazardous material risks.

- Water Systems
  - Reduced flows could damage or strain municipal water systems, wells, and irrigation infrastructure.
  - Reduced water availability affects municipal systems, private wells, and agricultural irrigation.

Economic Impacts

- Reduced irrigation water would lower crop and livestock productivity.

- Lower water levels in reservoirs and rivers impact recreational activities, reducing tourism revenue.

- Rising food, water, and energy prices create financial challenges for residents and businesses.

Environmental Impacts

- Drought reduces water availability for wildlife, degrades habitats, and leads to loss of biodiversity.
- Lower water levels harm aquatic ecosystems and increase water temperatures, endangering fish and other species.
- Lack of moisture leads to erosion and long-term damage to agricultural land.

Vulnerabilities

According to the 2018 Colorado Drought Mitigation and Response Plan, Ouray County was in the lowest group of vulnerability to drought compared to other counties in the state.[55] Drought in Ouray County can have a wide range of impacts on people, vegetation, livestock, recreational areas, and industries. Impacts of drought in Ouray County include water shortages for people and livestock, drier forests and vegetation resulting in longer fire seasons and more extreme wildfire behavior, changes to wildlife habitat, accelerated beetle and pest damage to forests, and threats to many of Ouray County's economic drivers (recreation, agriculture, fishing, etc.).

Drought conditions can also cause soil to compact, increasing an area's susceptibility to flooding and reducing vegetation cover, which exposes soil to wind and erosion. Reducing electric power generation and deteriorating water quality are also potential problems. Drought impacts increase with the length of a drought, as carry-over supplies in reservoirs are depleted and water levels in groundwater basins decline.

Ridgway Reservoir and Ridgway State Park are state and local assets vulnerable to drought in terms of water supply, water quality, and recreation. Recent reservoir renovations have helped to increase storage capacity. The reservoir does not provide a water supply to Ouray residents. The water supply to much of the county is from a diversion from the Gunnison Basin, but water from Ouray County is required in exchange for Gunnison Basin water. However, the reservoir and park are popular attractions for camping, biking, boating, winter sports, and birding, boosting the local economy.

After the 2012 drought, the Ouray County Water Users Association was founded. The association and local partner organizations, such as the Ouray County government, funded a water needs study in 2016. The study found significant supply gaps in agriculture, as well as some gaps in recreation, drinking, and other uses. A severe drought will affect the entire economy, particularly tourism, water supply, and wildfire. Drought is one of the few hazards that has the potential to directly or indirectly impact every person within Ouray County, as well as adversely affect the local economy.

A drought event would damage none of Ouray County's owned and identified community lifelines. The following table provides information related to countywide vulnerabilities. Participant-specific vulnerabilities can be found after the table.

55 Colorado Water Conservation Board Department of Natural Resources. August 2018. "Colorado Drought Mitigation and Response Plan". https://drive.google.com/drive/folders/1ixpT9RH5yoVNhx_NjFThe1c-eLeQI7TF.

County Drought Vulnerabilities

Sector	Vulnerability
People	-Insufficient water supply -Loss of jobs in the agricultural sector -Residents in poverty if food prices increase -Residents in rural areas on private wells or small water systems
Economic	-Loss of tourism dollars -Challenges for livestock and agriculture -Closure of water-intensive businesses (carwashes, pools, etc.)
Built Environment	-Cracking foundations (residential and commercial structures) -Damages to landscapes
Community Lifelines	-Damages to waterlines below ground -Damage to water resources
Recreation	-Reduced stream/river flows for fishing -Reduced water level in reservoirs for recreation -Less ice for ice climbing. -Less snow for skiing, snowboarding, and snowmobiling -Damage to forest health

City of Ouray

Drought can threaten the municipal water supply for the City of Ouray. The city does not have senior water rights, and because of this, users downstream with senior water rights can call on the city to curtail their water usage. This happened in both 2002 and 2012. It is reasonable to expect that the city will again be called on to curtail its water usage in the future. Additionally, drought can cause water loss in the Ouray Ice Park, which is a significant attraction in the county and contributes to the local economy. Ouray's community lifelines are not likely to be directly impacted by drought. However, the water plant will likely process less water.

Town of Ridgway

Ridgway Reservoir is a local asset vulnerable to drought in terms of water supply, quality, and recreation. Recent reservoir renovations have helped to increase storage capacity. The reservoir is a popular attraction for camping, biking, boating, winter sports, and birding, boosting the local economy. Drought could also impact the municipal water supply and cause the town to implement water restrictions. Ridgway is a very water-conscious community because of how high they are in the watershed and its proximity and reliance on the snowpack. Drought is unlikely to directly damage any of the identified community lifelines. However, the water treatment plant would likely process less water.

Dallas Park Cemetery District

The district uses the Dallas Ditch for irrigation of the cemetery. During a drought, the district may be unable to irrigate, which could cause dry conditions, increasing the risk of wildfire. Trees in the cemetery could also be impacted. District-owned lifelines would likely not be affected.

Jurisdictions Ranking Drought as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders which identified drought as a prioritized hazard of concern.

- Town of Ridgway

Earthquake

An earthquake results from a sudden release of energy in the Earth's tectonic plates that creates seismic waves. The seismic activity of an area refers to the frequency, type, and size of earthquakes experienced over a period of time. Ground shaking, landslides, liquefaction, and amplification are the specific hazards associated with earthquakes. The severity of these hazards depends on several factors, including soil and slope conditions, proximity to a fault, earthquake magnitude, and type of earthquake.

- **Ground shaking** is the motion felt on the earth's surface caused by seismic waves generated by an earthquake. Ground shaking is the primary cause of earthquake damage. The strength of ground shaking depends on the earthquake's magnitude, the type of fault, and the distance from the epicenter (where the earthquake originates). Buildings on poorly consolidated and thick soils will typically see more damage than buildings on consolidated soils and bedrock.

- **Earthquake-induced landslides** are secondary earthquake hazards that occur from ground shaking. They can destroy roads, buildings, utilities, and other critical facilities necessary to respond to recover from an earthquake.

- **Liquefaction** occurs when ground shaking causes wet granular soils to change from solid to liquid. This results in the loss of soil strength and the soil's ability to support weight. Buildings and their occupants are at risk when the ground can no longer support these buildings and structures.

- **Amplification** is the phenomenon when soils and soft sedimentary rocks near the earth's surface increase the magnitude of the seismic waves generated by the earthquake. The amount of amplification is determined by the thickness of geologic materials and their physical properties. Buildings and structures built on soft and unconsolidated soils face greater risk.

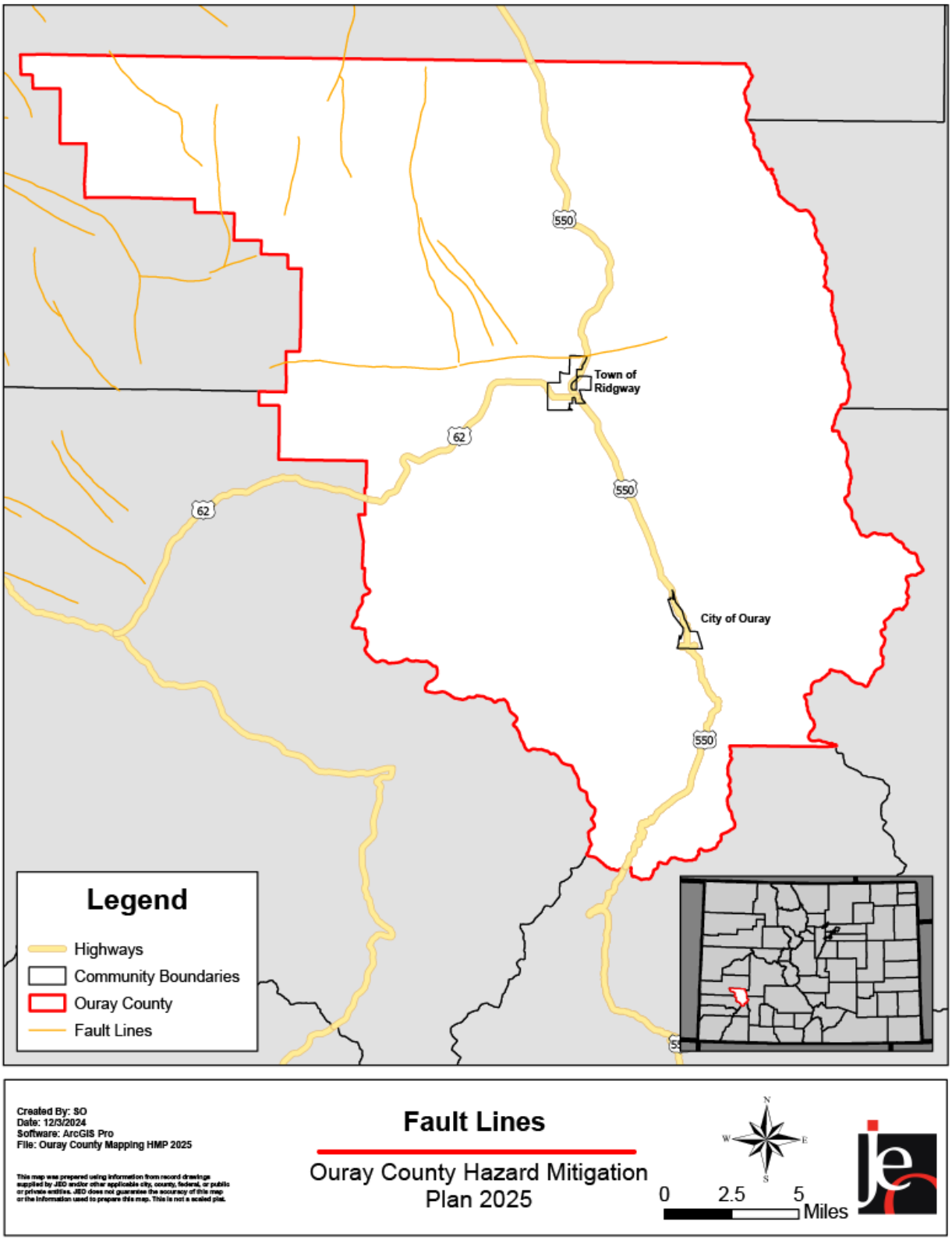
Location

All of Ouray County could be impacted by earthquakes. The most likely locations to experience an earthquake are near a fault line. According to the Colorado Geological Survey, there are several faults in Ouray County, primarily located in the central and northern portions of the county. There are five unnamed faults in northwestern Ouray County. The Busted Boiler Fault, the Log Hill Mesa Graben Fault, the Ridgway Fault, the Cow Creek Fault, and the Ridgway Quarry Faults are all located in the north-central portion of the county.[56] The figure below shows the location of the faults. Additionally, several faults in Montrose County, Gunnison County, San Miguel County, and Hinsdale County could impact Ouray County.

Historical and active mining operations can also induce seismic activity, particularly in areas with abandoned mines or injection wells for wastewater disposal.

56 Colorado Geological Survey. October 2024. "Colorado Earthquake and Fault Map Server". https://cgsarcimage.mines.edu/ON-001/.

Fault Lines in Ouray County



Extent

Earthquakes are measured by magnitude and intensity. Magnitude is measured by the Richter Scale, a base-10 logarithmic scale, which uses seismographs worldwide to measure the amount of energy released by an earthquake. Intensity is measured by the Modified Mercalli Intensity Scale, which determines the intensity of an earthquake by comparing actual damage against damage patterns of earthquakes with known intensities. The following tables summarize the Richter Scale and Modified Mercalli Scale. Based on historical records, earthquakes in the county are likely to measure five or less on the Richter Scale.

Richter Scale

Richter Magnitudes	Earthquake Effects
Less than 3.5	Generally not felt, but recorded.
3.5 – 5.4	Often felt, but rarely causes damage.
5.4 – 6.0	At most, slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.
6.1 – 6.9	Can be destructive in areas up to about 100 kilometers from where people live.
7.0 – 7.9	Major earthquake. Can cause serious damage over larger areas.
8 or Greater	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

Source: USGS, 2016[57]

Modified Mercalli Intensity Scale

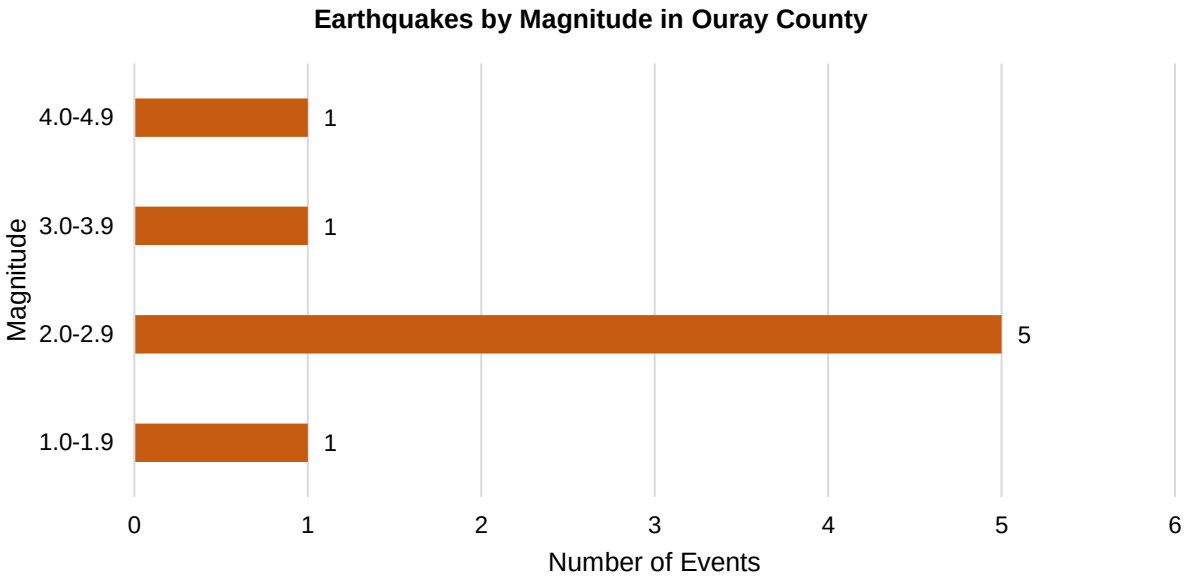
Scale	Shaking	Description of Effects
I	Not Felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on the upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on the upper floors of buildings. Many people do not recognize it as an earthquake. Standing cars may rock slightly. Vibrations are similar to the passing of a truck. Duration Estimated.
IV	Light	Felt indoors by many and outdoors by few during the day. At night, some awakened. Dishes, windows, and doors are disturbed; walls make cracking sounds. Sensation like a heavy truck striking a building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very Strong	Damage is negligible in buildings of good design and construction, slight to moderate in well-built ordinary structures, considerable damage in poorly built or badly designed structures, and some broken chimneys.
VII	Severe	Damage is slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage is great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, and walls. Heavy furniture overturned.
IX	Violent	Damage is considerable in specially designed structures; well-designed frame structures are thrown out of plumb. Damage is great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures are destroyed; most masonry and frame structures are destroyed with foundations. Rails bent.

Source: USGS

57 U.S. Geological Survey. October 2024. “Earthquake Magnitude, Energy Release, and Shaking Intensity”. https://www.usgs.gov/programs/earthquake-hazards/earthquake-magnitude-energy-release-and-shaking-intensity.

Historical Occurrences

According to the USGS, eight earthquakes in Ouray County occurred between 1889 and July 2024.[58] As seen in the figure below, most earthquakes occurred in northern Ouray County, with half occurring near the Town of Ridgway. The following statistics show the breakdown of reported earthquakes by magnitude and the location of the earthquakes.



Source: USGS, 1889-July 2024

Average Annual Losses

According to SHELDUS data from 1960 – 2021, there was no property or crop damage from earthquakes in Ouray County.[59] This does not include losses from displacement, functional downtime, or economic loss. According to the 2019 Ouray County Hazard Mitigation Plan, impacts from earthquakes in 1913 and 1960 included cracked plaster, chimneys, and windows, fallen pictures from walls, broken dishes, and damages to the Ridgway school ceiling.

HAZUS Loss Estimation

The 2019 Ouray County Hazard Mitigation Plan used FEMA's HAZUS loss estimation software to model earthquake loss estimation. The risk assessment used census tract data, a 6.25 magnitude earthquake, and a 2,500-year return period for the scenario. The results from the 2019 HAZUS scenario run are given below.

Many variables are included in HAZUS analyses to arrive at the estimated loss values due to earthquakes. For this reason, it is essential to note that the HAZUS loss estimates detailed below should not be used as a precise measure but instead viewed from the perspective of the potential magnitudes of expected losses.

HAZUS estimates that there are over 3,000 buildings in the county that have an aggregate total replacement value of $730 million (excluding contents). It is estimated that about 258 buildings will be at least moderately damaged. This is over 8% of the buildings in the county. There are an

58 U.S. Geological Survey. July 2024. "Search Earthquake Catalog". https://earthquake.usgs.gov/earthquakes/search/.
59 Arizona State University. 2021. "SHELDUS". https://cemhs.asu.edu/sheldus.

estimated two buildings that will be damaged beyond repair. Residential homes will be the most impacted.

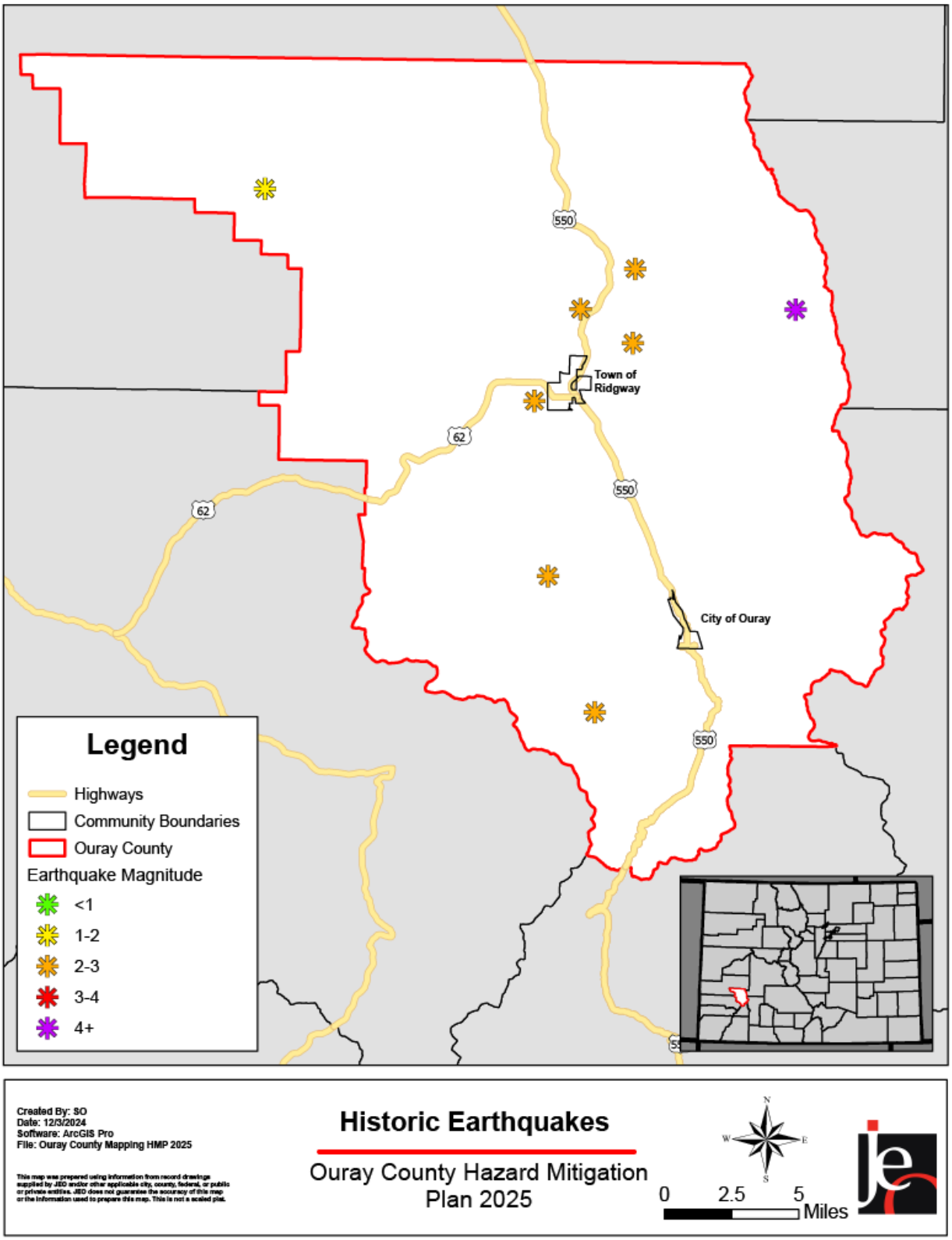
The total economic loss estimated for the earthquake is $42.77 million, which includes building and lifeline-related losses. The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. Business interruption losses are the losses associated with an inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those displaced from their homes because of the earthquake. The total building-related losses were $23.61 million; 19% of the estimated losses were related to the business interruption of the county. The residential occupancies sustained the most extensive loss, which comprised over 69% of the total loss. Because the entire county is aggregated as one Census Tract, it is not possible to determine losses by jurisdiction. It can be assumed the highest losses will be in areas with a higher concentration of buildings, particularly the City of Ouray, Town of Ridgway, and Loghill Mesa.

The model estimates that 5,000 tons of debris will be generated. Brick/Wood comprises 39% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, 200 truckloads (at 25 tons/truck) will be required to remove the earthquake-generated debris.

HAZUS estimates the number of households expected to be displaced due to the earthquake and the number of displaced people requiring accommodations in temporary public shelters. The model estimates two households to be displaced due to the earthquake. Only one person is estimated to seek temporary shelter.

HAZUS also estimates casualties due to the earthquake at three different times, including 2:00 am, when residential occupancy is at a maximum; 2:00 pm, when business sectors are at a maximum; and 5:00 pm, representing peak commute time. At 2:00 am, there were an estimated two casualties, both being injuries that required medical attention but no hospitalization. At 2:00 pm, there were an estimated two casualties, both being injuries that required medical attention but no hospitalization. At 5:00 pm, there are also an estimated two casualties, both being injuries that require medical attention but no hospitalization. It should be noted that this analysis is based on the county's 2010 population. If an earthquake were to occur during peak tourism times (for example, summer weekends or holiday weekends), the potential for casualties would be much higher.

Earthquake Events in Ouray County



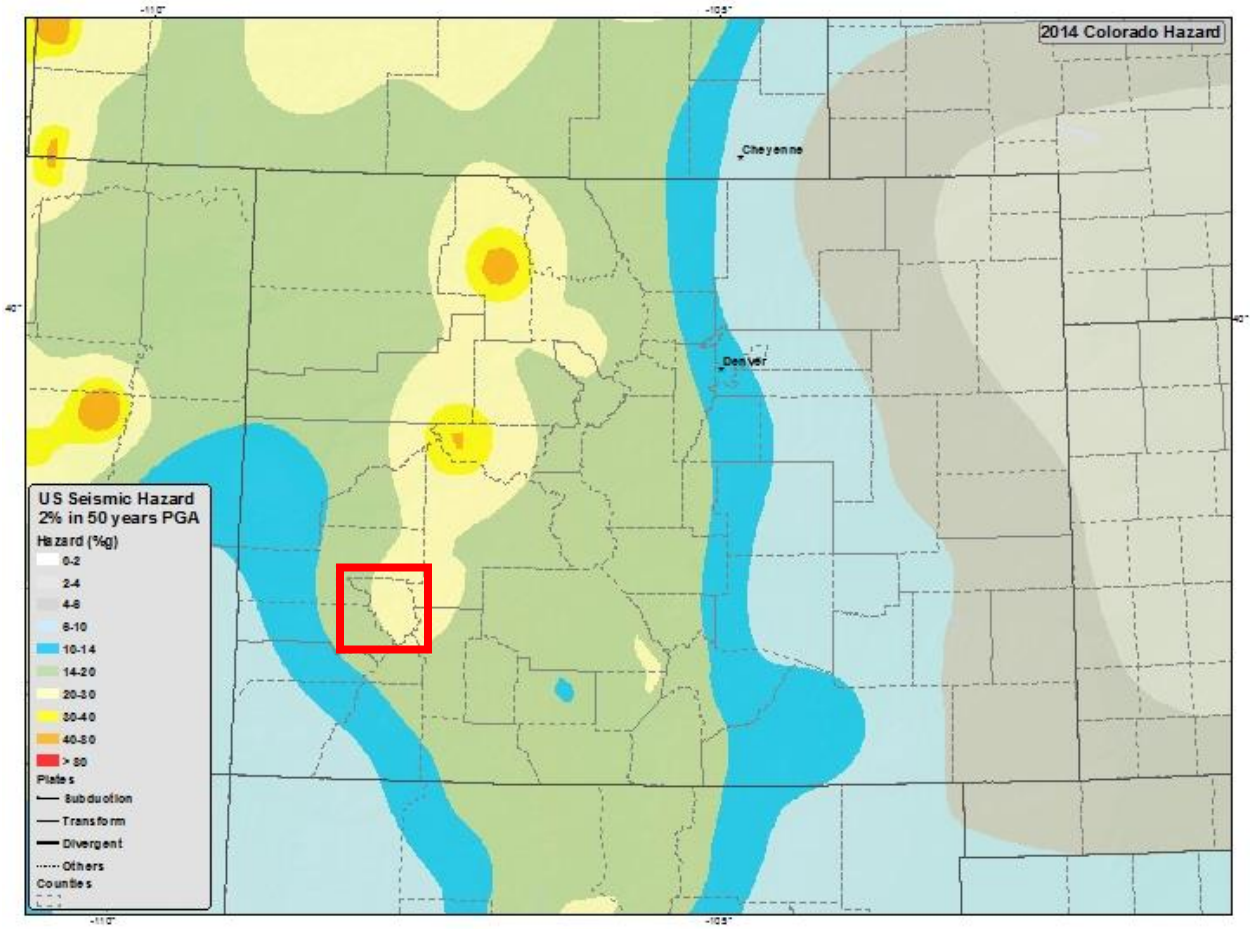
Historical Probability & Future Likelihood

The following figure summarizes the probability of an intense earthquake occurring in the county in the next 50 years. Most of Ouray falls in the 20-30% range. Based on the six years with a recorded occurrence of an earthquake over 135 years, the historical probability of an earthquake in the county is four percent. Due to the anticipated impacts of climate change and future development, the future likelihood of an earthquake event in the county is unlikely.

Historical Probability & Future Likelihood – Earthquake

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
4%	No Change in Frequency or Impact	Increase in Impact	**Unlikely**

2014 Seismic Hazard Map - Colorado



Source: USGS, 2014[60]

Climate Change

There is no known direct association between climate change and earthquake events. However, as climate change exacerbates effects on other hazard types, such as drought, it may produce more frequent or greater earthquake events. A report in 2017 by NASA's Jet Propulsion

60 United States Geological Survey. 2014. "2014 Seismic Hazard Map – Colorado". https://www.usgs.gov/media/images/2014-seismic-hazard-map-colorado.

Laboratory[61] found that alternating periods of drought and heavy precipitation caused the Sierra Mountain Range in California to rise and fall as the ground swelled/contracted. The study did not specifically look at potential impacts on fault lines, but such stress changes could be felt on faults.

Future Developments

Any population growth and development in the county will not likely be dictated by earthquake risk. Any new construction built to code should be able to withstand earthquakes, but the potential for nonstructural damage will increase with new development.

Potential Impacts

While earthquakes are less frequent in Ouray County than other natural hazards, the region is not immune due to its location within the Rocky Mountain region, where tectonic and geologic activity can induce seismic events. Below is an overview of the potential impacts on those areas.

Human Impacts

- Collapsing structures, landslides, and debris would result in injuries and fatalities.
- Residents in damaged homes or buildings may require temporary or long-term relocation.
- Property damage and infrastructure repairs would financially strain residents and local governments.

Community Lifeline Impacts

- Safety and Security
  - Collapsing structures and landslides pose immediate dangers to residents and visitors.
  - Damaged infrastructure may hinder evacuations and emergency responses.
  - Search and rescue efforts would stretch local resources.
  - Emergency responders may face difficulties reaching affected areas due to road damage and landslides.
  - Local emergency services could be overwhelmed by the need for search and rescue, medical care, and shelter provision.
  - Communication and transportation disruptions would complicate recovery efforts.
- Food, Hydration, Shelter
  - Collapsed or damaged buildings could force residents into temporary shelters.
  - Transportation disruptions could affect deliveries to grocery stores.
- Health and Medical
  - Collapsing structures, falling debris, and landslides would cause injuries and overwhelm local healthcare facilities.
  - Damaged roads may prevent access to hospitals and clinics.

61 Argus, D. et al. 2017. “Sierras lost water weight, grew taller during drought.” NASA’s Jet Propulsion Laboratories. https://science.nasa.gov/earth/water-on-earth/sierras-lost-water-weight-grew-taller-during-drought/.

- Energy (Power and Fuel)
    - Shaking could damage power lines, substations, and other energy infrastructure.
    - Blocked roads might prevent fuel deliveries, affecting heating and transportation.

- Communications
    - Earthquake damage to communication towers or underground cables could interrupt phone and internet services.
    - Communication outages could hinder the dissemination of critical information.

- Transportation
    - Earthquakes could damage or destroy critical transportation infrastructure, such as U.S. Highway 550 and local bridges.
    - Seismic activity could trigger landslides that isolate communities.

- Hazardous Materials
    - Seismic shaking could damage storage tanks, pipelines, or hazardous materials facilities.
    - Earthquakes near mining sites may release toxic substances into the environment.

- Water Systems
    - Shaking could damage water treatment facilities, pipelines, and wells.

Economic Impacts

- Damage to recreational areas, hotels, and infrastructure could deter visitors.

- Rebuilding damaged infrastructure and homes would require significant financial resources.

- Local businesses could face prolonged closures due to structural damage and infrastructure failures.

Environmental Impacts

- Shaking could destabilize slopes, causing landslides that damage ecosystems and infrastructure.

- Earthquakes may alter river courses or damage water storage systems, affecting aquatic ecosystems.

Vulnerabilities

It can be assumed that all existing and future buildings and populations are at risk of an earthquake event. However, building codes can help reduce the risk to structures during an earthquake. Historical structures are more at risk because many were built before code regulations. Previous damage from earthquakes in Ouray County includes cracked plaster, chimneys, and windows; fallen pictures from walls; broken dishes; and damage to the Ridgway school ceiling. The largest earthquake to date in the county was 4.7 magnitude. At this magnitude,

there could be slight damage to well-designed buildings and possibly significant damage to poorly constructed buildings.

An additional concern is the Ridgway Reservoir. There have been several earthquakes near the reservoir in its history. According to *Colorado Earthquake Information, 1867-1996*, the U.S. Bureau of Reclamation, cooperating with the USGS, has monitored seismicity near Ridgway Dam since 1985. Seismicity near Ridgway Dam increased about seven-fold after reservoir filling, which may be associated with north-trending branch faults of the Ridgway Fault. The most persistent seismicity observed in the region occurs near the Cimarron Ridge. The report shows a good correlation between the fault locations and recorded seismicity.[62]

There are also secondary impacts associated with earthquakes. They can trigger landslides, avalanches, or dam failures. Landslides triggered by seismic activity could occur on steep slopes, especially in areas like Red Mountain Pass and the Uncompahgre Gorge.

Earthquakes could damage or destroy all of Ouray County's owned and identified community lifelines. This could result in a temporary or prolonged loss of services for lifelines. The following table provides a summary of the county's earthquake vulnerabilities. Participant-specific vulnerabilities can be found after the table.

County Earthquake Vulnerabilities

Sector	Vulnerability
People	-Risk of injury or death from falling objects and structures -Low-income individuals and families may lack the financial resources to improve their homes to prevent earthquake damage -Mobility-limited individuals may have difficulty evacuating or sheltering in place
Economic	-Short-term to long-term interruption of business
Built Environment	-Damage to buildings, homes, or other structures from foundation cracking, falling objects, shattered windows, etc. -Historic buildings are at an increased risk of damage
Community Lifelines	-Damage to subterranean infrastructure (i.e., waterlines, gas lines) -Damage to roadways -Many community lifeline buildings are housed in older buildings that earthquakes could more easily damage
Recreation	-Landslides or rockfalls triggered by earthquakes causing blocked paths or injuries

City of Ouray

The City of Ouray has vulnerabilities similar to those of the rest of the county. The city has three historical locations, which may have increased vulnerabilities due to a lack of building codes when built. The community is also likely to see more impacts from earthquakes due to a higher density of buildings and infrastructure. All three community lifelines could be damaged or even destroyed by an earthquake. This could result in a prolonged loss of services for water, wastewater, and other city services.

Town of Ridgway

The Town of Ridgway has vulnerabilities similar to those of the rest of the county. The town will likely see more impacts from an earthquake due to a higher density of buildings and infrastructure.

62 Colorado Geological Survey. 2000. "Colorado Earthquake Information, 1867-1996". https://coloradogeologicalsurvey.org/publications/colorado-earthquake-information-1867-1996/.

All five community lifelines could be damaged or even destroyed by an earthquake. This could result in a prolonged loss of services for water, wastewater, power, and other city services.

In the 2019 Ouray County Hazard Mitigation Plan, the Ridgway School District was concerned that the elementary school building may not adequately protect students in the event of a major earthquake due to the age of the structure. This structure has not been updated or improved since the last plan.

Dallas Park Cemetery District
An earthquake could damage trees and roadways in the cemetery. The cemetery's office and maintenance could be damaged or destroyed depending on the size of the earthquake. This would likely cause a temporary loss of services.

Jurisdictions Ranking Earthquakes as a Prioritized Hazard of Concern

No jurisdictions or stakeholders identified earthquakes as a prioritized hazard of concern.

Extreme Temperatures

Extreme temperatures include durations of time at both the low and high ends of the thermometer. What constitutes extreme temperatures varies from region to region but is generally accepted as being temperatures that are significantly lower or higher than the average. For this plan, extreme cold is defined as below -15°F, while extreme heat is defined as being 90°F or higher. There are many homes in the county without air conditioning, and at 90°F, the risk of heat impacting people dramatically increases. At -15°F, human safety increases, and infrastructure systems begin to fail.

Location

Extreme cold temperatures can impact the entire county, with high elevations being especially dangerous. The Ridgway area is a known "cold sink" and can frequently experience extremely cold temperatures. Extreme heat can impact the lower elevations of the county and the municipalities, but generally, the relatively high elevation of Ouray County is not prone to extreme heat.

Extent

The National Weather Service (NWS) is responsible for issuing excessive heat or cold temperature outlooks, forecasts, watches, or warnings. The NWS definitions are provided below.[63,64]

- **Heat Advisories: Be Aware.** A Heat Advisory is issued within 12 hours of the onset of hazardous heat conditions. The general rule of thumb for this advisory is when the maximum heat index temperature is expected to be 100° or higher for at least 2 days, and nighttime air temperatures will not drop below 75°; however, these criteria vary across the country, especially for areas that are not used to dangerous heat conditions. Take precautions to avoid heat illness. If you don't take precautions, you may become seriously ill or even die.

- **Cold Weather Advisory: Be Aware.** A Cold Weather Advisory is issued when seasonably cold air temperatures or wind chill values, but not extremely cold values, are expected or occurring. Be sure you and your loved ones dress appropriately and cover exposed skin when venturing outdoors.

- **Excessive Heat Watches: Be Prepared.** Heat watches are issued when conditions are favorable for an excessive heat event in the next 24 to 72 hours. A Watch is used when the risk of a heat wave has increased, but its occurrence and timing are still uncertain.

- **Extreme Cold Watch: Be Prepared.** An Extreme Cold Watch is issued when dangerously cold air temperatures or wind chill values are possible. As with a Warning, adjust your plans to avoid being outside during the coldest parts of the day. Make sure your car has at least half a tank of gas, and update your winter survival kit.

- **Excessive Heat Warnings: Take Action!** An Excessive Heat Warning is issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this Warning is when the maximum heat index temperature is expected to be 105° or

63 National Weather Service. 2024. "Understanding Cold Weather Alerts". https://www.weather.gov/safety/cold-ww.
64 National Weather Service. 2024. "Heat Watch vs. Warning". https://www.weather.gov/safety/heat-ww.

higher for at least 2 days, and nighttime air temperatures will not drop below 75°; however, these criteria vary across the country, especially for areas not used to extreme heat conditions. If you don't take precautions immediately when conditions are extreme, you may become seriously ill or even die.

- **Extreme Cold Warning: Take Action!** An Extreme Cold Warning is issued when dangerously cold air temperatures or wind chill values are expected or occurring. If you are in an area with an Extreme Cold Warning, avoid going outside. If you have to go outside, dress in layers, cover exposed skin, and make sure at least one other person knows your whereabouts. Update them when you arrive safely at your destination.

A key factor to consider regarding extreme heat situations is the humidity level relative to the temperature. As is indicated in the following figure from the National Oceanic and Atmospheric Administration, as the relative humidity increases, the temperature needed to cause a dangerous situation decreases. For example, for 100% relative humidity, dangerous heat levels begin at 86°F, whereas a relative humidity of 50% starts at 94°F. The figure below is designed for shady and light wind conditions. Exposure to full sunshine or strong winds can increase hazardous conditions and raise heat index values by up to 15°F.

Wind chills are a key factor when dealing with extreme cold situations. The NWS developed the Wind Chill Index to determine the decrease in air temperature felt by the body on exposed skin due to wind. The wind chill is always lower than the air temperature and can quicken the effects of hypothermia or frostbite as it gets lower. The figure on the next page shows the Wind Chill Index used by the NWS.

NOAA Heat Index

Temperature (°F)

Relative Humidity (%)	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution | Extreme Caution | Danger | Extreme Danger

Source: NOAA[65]

65 National Oceanic and Atmospheric Administration, National Weather Service. 2020. "Heat Index". http://www.nws.noaa.gov/om/heat/heat_index.shtml.

Wind Chill Index Chart

Temperature (°F)

Wind (mph)	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-82	-89	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98

Frostbite Times — 30 Minutes — 10 MInutes — 5 Minutes

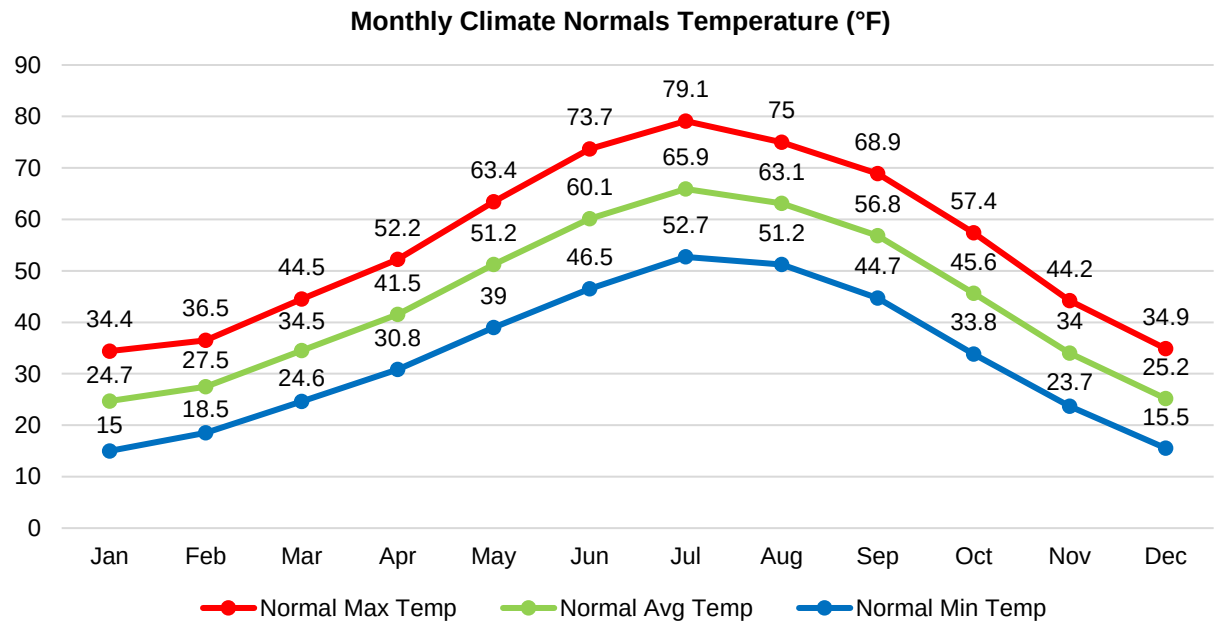
Wind Chill (°F) = 35.74 + 0.6215T - 35.75($V^{0.16}$) + 0.4275T($V^{0.16}$)

T = Air Tempurature (°F) **V** = Wind Speed (mph)

Source: NWS[66]

For the county, the coldest months of the year are December, January, and February. The average low temperatures for these months are all below freezing (the average low for the three months is 16.3°F). The average high temperature for these months is 35.3°F. In the county, the months with the highest temperatures are June, July, and August. The average high temperature for these months is approximately 75.9°F, while the average low temperature is 63.0°F.

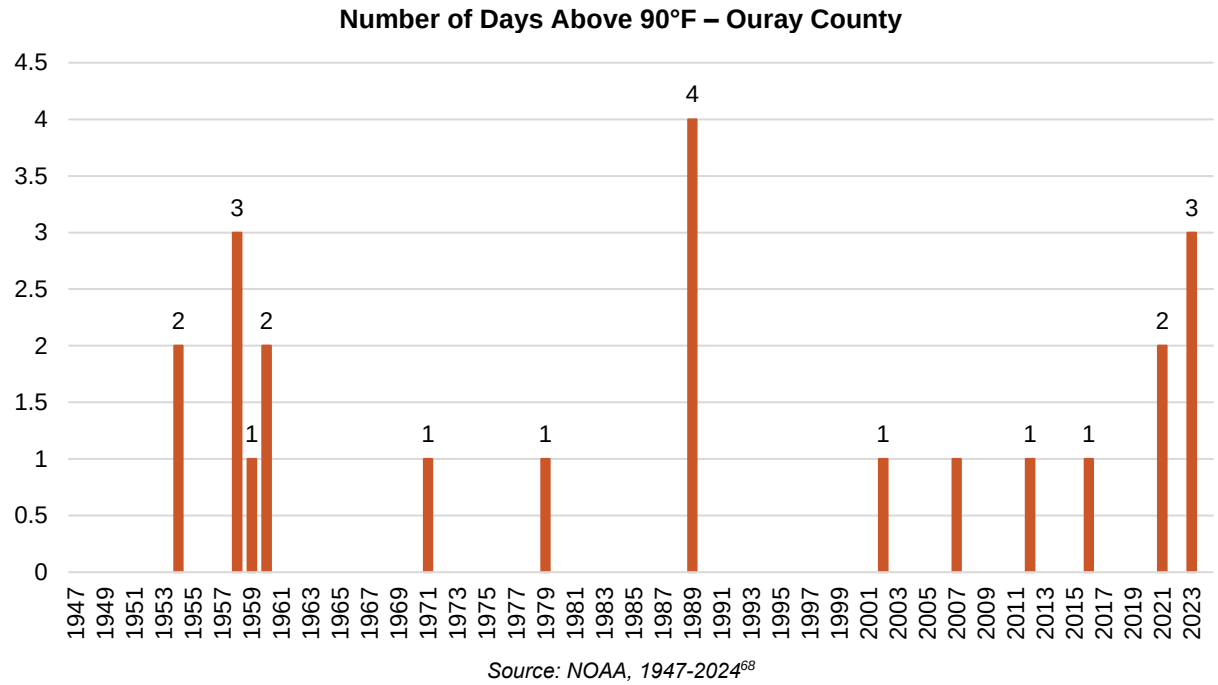
66 NOAA National Weather Service. 2001. "Wind Chill Chart". http://www.nws.noaa.gov/om/cold/wind_chill.shtml.



Source: NOAA, 1991-2020[67]

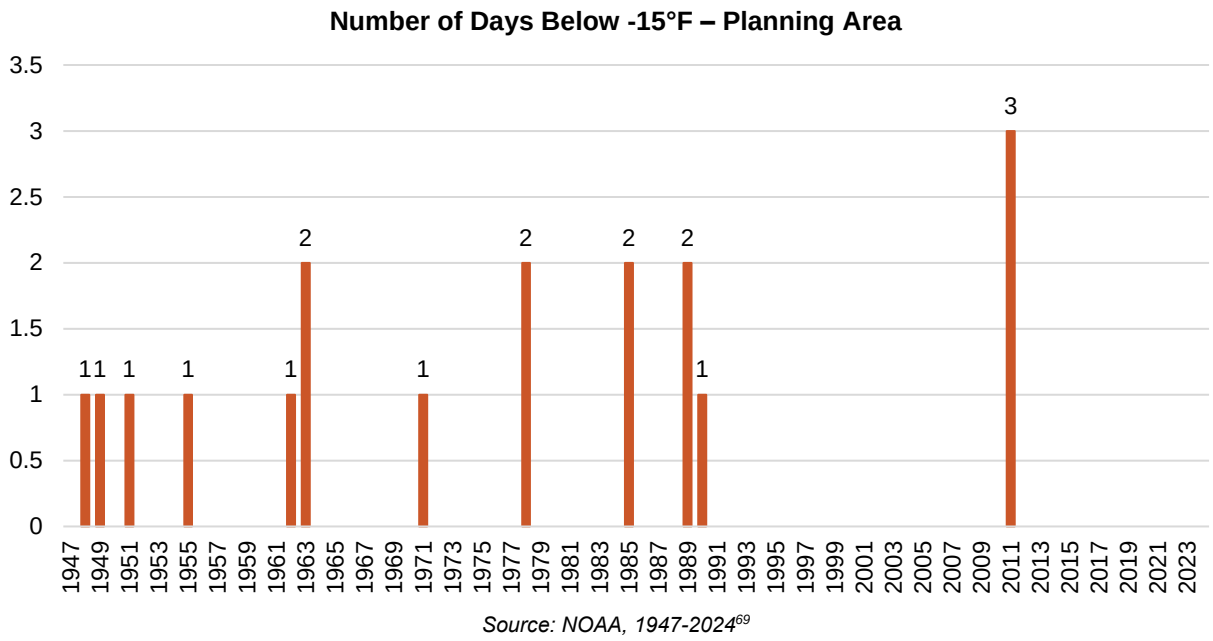
Historical Occurrences

According to the National Oceanic and Atmospheric Administration (NOAA), the county experiences less than one day above 90°F per year on average. The county experienced the most days on record above 90°F in 1989 with 4 days. On average, the county experiences less than one day a year with temperatures below -15°F per year. The county experienced the most days on record below -15°F in 2011 with 3 days.



Source: NOAA, 1947-2024[68]

67 National Oceanic and Atmospheric Administration National Centers for Environmental Information. November 2024. "Data Tools: 1991-2020 Normals". https://www.ncei.noaa.gov/access/us-climate-normals/.
68 National Oceanic and Atmospheric Administration ACIS. November 2024. "SC ACIS". 1947-2024. https://scacis.rcc-acis.org/.



Source: NOAA, 1947-2024[69]

Average Annual Losses

Average annual property and crop loss are unavailable through the NCEI Storm Events Database or other sources. The direct and indirect effects of extreme temperatures are difficult to quantify. Losses such as power outages could affect businesses, homes, and community lifelines. High demand and intense use of air conditioning, heaters, and water pumps can overload the electrical systems and damage infrastructure.

Historical Probability & Future Likelihood

Extreme temperatures are a regular part of the climate of the county. With 13 years out of 78 having at least one day of 90°F temperatures, the historical probability for extreme heat is 17%. With 12 years out of 78 having at least one day of temperatures less than -15°F, the historical probability for extreme heat is 65%. Due to the anticipated impacts of climate change and future development, the future likelihood of extreme temperature events is very likely in the county.

Historical Probability & Future Likelihood – Extreme Temperatures

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Extreme Heat	17%	Increase in Frequency and Extent	Increase Exposure	**Very Likely**
Extreme Cold	15%	Very Little Change in Frequency and Extent	Increase Exposure	**Likely**

Climate Change

Climate change is anticipated to increase the number of extreme heat days. The Union for Concerned Scientists released a report in July 2019 titled *Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days*[70] , which included predictions for extreme heat events in the future dependent on future climate actions. The table below summarizes those findings for the planning area.

69 National Oceanic and Atmospheric Administration ACIS. November 2024. "SC ACIS". 1947-2024. https://scacis.rcc-acis.org/.
70 Union of Concerned Scientists. 2019. "Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days". https://www.ucsusa.org/sites/default/files/attach/2019/07/killer-heat-analysis-full-report.pdf.

Extreme Heat Predictions for Days over 90F

Midcentury Prediction 2036-2065 (Days per year)	Late Century Prediction 2070-2099 (Days per year)
1	10

Source: Union of Concerned Scientists

The Fifth National Climate Assessment found that overall cold extremes are becoming less frequent and milder, with the number of days below freezing going down. However, some studies have found that Arctic warming results in the polar vortex spilling down over the United States.[71] The table below shows the number of freezing days in Ouray County with different warming scenarios. The number of freezing days is expected to remain the same with higher warming temperatures, likely due to the high elevation of the county.

Number of Freezing Days

	Warming Scenarios			
	1° C	1.5° C	2° C	3° C
Number of Freezing Days	31-180 Days per Year	31-180 Days per Year	31-180 Days per Year	31-180 Days per Year

Source: Probable Futures[72]

Future Development

Any increases in population and development will elevate exposure levels to extreme heat and extreme cold. There are several ways for communities to minimize the impacts of extreme heat. Communities can plant trees and other vegetation to provide more natural shade and improve green infrastructure. Many of these options can be required during new development but can also be added to already developed areas. Facilities such as nursing homes, hospitals, clinics, and daycares should be designed with access to backup power generation. Public cooling or warming centers should be established across the planning area for residents.

Potential Impacts

Extreme temperatures could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Heat-related illnesses, especially during summer, include dehydration, heat exhaustion, and heatstroke.
- Cold-related illnesses in winter, such as frostbite and hypothermia.
- Increased cardiovascular and respiratory issues, particularly for vulnerable populations.

71 U.S. Global Change Research Program. 2023. “Fifth National Climate Assessment”. https://nca2023.globalchange.gov/.
72 Probable Futures. October 2024. “Maps of Temperature”. https://probablefutures.org/.

Community Lifeline Impacts

- Safety and Security
  - Loss of power to key safety and security buildings could result in a temporary loss or delay in services.
  - Transportation disruptions lead to reduced mobility and delayed emergency responses.

- Food, Hydration, Shelter
  - Agriculture and local food supplies may be reduced, impacting food security.

- Health and Medical
  - Hospitals and clinics might face increased patient loads due to heatstroke, hypothermia, dehydration, or respiratory issues exacerbated by temperature extremes.

- Energy (Power and Fuel)
  - Increased demand for heating or cooling could strain energy grids, potentially leading to outages. Propane or wood shortages might affect residents who rely on these for heating.

- Communications
  - Power outages could lead to a loss of communication.

- Transportation
  - Extreme heat can cause asphalt damage or rail expansion, while extreme cold can lead to icy roads, unsafe travel conditions, and equipment malfunctions.

- Hazardous Materials
  - Hazardous materials are likely to be unimpacted by extreme temperatures.

- Water Systems
  - Extreme heat or cold can disrupt water availability by causing drought or freezing pipes.

Economic Impacts

- Reduced agricultural productivity due to temperature stress on crops and livestock.

- Increased energy costs for heating or cooling, straining household budgets.

- Disruptions to tourism if conditions become unsafe.

Environmental Impacts

- Increased wildfire risk during heatwaves could threaten homes, natural areas, and infrastructure.

- Impact on local wildlife, with extreme temperatures potentially disrupting habitats and migration patterns.

Vulnerabilities

The impacts of extreme temperatures, specifically extreme heat, are exacerbated by other risk factors such as diabetes, obesity, heart disease, or other health equity concerns. Many vulnerable communities and populations at risk face greater exposure to heat or cold, have fewer resources to respond or escape conditions, and are more likely to suffer severe consequences if left unassisted. Populations at highest risk are those who work outside, are without shelter, are stranded, or live in poorly insulated homes or without adequate HVAC systems. Other impacts of extreme temperatures include asphyxiation (unconsciousness or death from a lack of oxygen) from toxic fumes from emergency heaters; household fires, which can be caused by fireplaces and emergency heaters, and frozen/burst pipes. The elderly and young children are considered particularly vulnerable to the impacts of extreme temperature events. Extreme temperatures can cause people to overuse furnaces and air conditioners, leading to power failures. Power outages for prolonged periods increase the risk of health events such as heat stroke or hypothermia and subsequent fatalities.

Extreme cold can occasionally cause problems with communications facilities, and freeze-thaw cycles can severely damage roads and contribute to rockfall. Several parts of the county, including Ridgway, Ouray, Elk Meadows, and Log Hill Mesa, experience problems with frozen water lines. Cold temperatures can cause fuel to congeal in storage tanks and supply lines. Most of the population in Ouray County is accustomed to extremely cold temperatures and has adequate heating sources to combat the impacts of cold temperatures. However, residents in rural parts of the county rely on propane for heat. On December 24, 2018, Governor Hickenlooper issued a disaster emergency in response to an anticipated shortage of propane that could affect approximately 33,000 residents living in 20 counties that rely on propane for heating their homes. The shortage was blamed on production issues, and it was determined that customers may not be able to receive enough propane to heat their homes. During this time, southern Colorado expected extremely cold temperatures accompanying a winter storm.[73] Ouray County was included in the emergency declaration. Without propane for heat, extreme cold could become deadly for Ouray County residents.

Typically, Ouray County does not experience extremely high temperatures. However, since residents are accustomed to mild temperatures, days that are hotter than average in the summer months can impact residents who are not prepared or accustomed to these temperatures. Due to the mild temperatures, many homes do not have air conditioning, which can cause residents not to have a way to cool down during an extreme heat event. Additionally, Ouray County experiences a large influx of tourists during the summer months, many of whom come to enjoy outdoor activities in the county. Unprepared tourists are vulnerable to extreme heat. Impacts of extreme heat on people include heat exhaustion, heat stroke, cramps, sunstroke, exhaustion, and fatigue. Extreme heat can exacerbate drought, which in turn depletes water supplies for livestock and crops. Wildfire risk also increases during extreme heat. Hot, dry weather can cause more wildfires to ignite and become devasting.

Along with humans, animals also can be affected by extreme heat. Cattle and other farm animals respond to heat by reducing feed intake and increasing their respiration rate and body temperature. These responses assist the animal in cooling itself, but this is usually insufficient. When animals overheat, they will begin to shut down body processes that are not vital to survival, such as milk production, reproduction, or muscle building.

73 CBS News. December 25, 2018. “Colorado Governor Declares Disaster Emergency Over Propane Shortage”. https://www.cbsnews.com/colorado/news/colorado-governor-propane-emergency-disaster-shortage/.

Impacts on Ouray County's owned and identified community lifelines will likely be minimal. The 4-H event center, emergency operations center, county courthouse, courthouse annex, and public health office could experience burst pipes from the cold temperatures. Services are not likely to be impacted.

The following table provides a summary of the county's extreme temperature vulnerabilities. Participant-specific vulnerabilities can be found after the table.

County Extreme Temperature Vulnerabilities

Sector	Vulnerability
People	-Hypothermia -Heat exhaustion -Heat stroke Vulnerable populations include: -People working or recreating outdoors -People without adequate air conditioning or heating -Young children outdoors or without air conditioning or heating -Elderly outdoors or without air conditioning or heating
Economic	-Short-term interruption of business -Agricultural and livestock losses
Built Environment	-Damage to air conditioning and heating systems if overworked -Older buildings that may lack insulation or modern heating/cooling systems -Frozen and broken pipes -Fuel congealed
Community Lifelines	-Damages to roadways (freeze-thaw) -Stressing electrical systems (brownouts during peak usage) -Loss of power
Recreation	-People recreating outdoors for extended periods -Visitors who are unfamiliar with local temperature extremes

City of Ouray

The City of Ouray has vulnerabilities similar to those of the rest of the county. Ouray has a large percentage of individuals over the age of 65. These individuals are more vulnerable to extreme temperatures. Water consumption in the City of Ouray can become excessive in wintertime as the city advises residents to leave water running to help prevent frozen pipes that are not buried deeply enough or not appropriately insulated. Ouray's community lifelines are not likely directly impacted by extreme temperatures. The water plant may need to process more water, and city hall could experience burst pipes. The services provided by these lifelines will likely only see minor impacts.

Town of Ridgway

The Town of Ridgway has vulnerabilities similar to those of the rest of the county. Ridgway has a large percentage of individuals over the age of 65. These individuals may be more vulnerable to extreme temperatures. The town has had issues in the past with frozen water lines. Ridgway's community lifelines are not likely to be directly damaged by extreme temperatures. The water treatment plant may need to process more water, and all the lifeline buildings could experience bust pipes. The services provided by these lifelines will likely only see minor impacts.

In the 2019 Ouray County Hazard Mitigation Plan, the Ridgway School District noted that extreme cold once caused the school to close as school buses would not start in temperatures of -37°F or colder.

Dallas Park Cemetery District
The extreme cold would not impact the cemetery. A prolonged extreme heat event could cause dry conditions, increasing the wildfire risk. District-owned community lifelines would likely not be directly affected.

Jurisdictions Ranking Extreme Temperature as a Prioritized Hazard of Concern

No jurisdictions or stakeholders identified extreme temperatures as a prioritized hazard of concern.

Flooding

The National Weather Service defines a flood as "*An overflow of water onto normally dry land. The inundation of a normally dry area caused by rising water in an existing waterway, such as a river, stream, or drainage ditch.*" Typical river flooding gradually begins and may last days or weeks, while flash flooding may occur in minutes.

Floods can occur locally, sometimes affecting only a few streets, but can also extend throughout a large area, affecting whole drainage basins and property in multiple states. Heavy accumulations of ice or snow can also cause flooding during the melting and freezing stages. These events are complicated by the freeze/thaw cycles characterized by moisture thawing during the day and freezing at night. There are two main types of flooding in western Colorado: river flooding and flash flooding.

River Flooding

River floods occur when river levels rise and overflow their banks or the edges of their main channel and inundate usually dry areas. The rate of water levels rising is slower than a flash flood. However, it typically covers a larger area. River flooding in Colorado is generally caused by:

- **Snow Melt:** Most often occurs in the spring when rapidly warming temperatures quickly melt the snow. If the ground is completely saturated, melted snow runs off into nearby streams and rivers. If the rate of snowmelt is high, the volume of excess runoff will start to exceed channel banks. However, this rate is highly dependent on spring weather patterns.

- **Excessive Runoff from longer-lasting rainstorms** is most likely to occur during the North American Monsoon, which typically impacts western Colorado from July through September. After prolonged rain over the same area, the ground may become saturated. Any additional rainfall at this point becomes runoff, filling nearby streams and rivers, which can result in water levels exceeding riverbanks.

Flash Flooding

Flash floods generally occur over a short period, creating a rapid rise in the water level of a stream or normally dry channel. Flash floods frequently carry mud and debris, can be challenging to model, and commonly impact areas outside identified flood hazard zones. Flash flood events can be caused by the following.

- **Heavy rainfall** over a localized area is the most common cause of flash flooding. This can occur when slow-moving or multiple thunderstorms move over the same location and drop much precipitation over a short period. These sudden downpours can rapidly change the water levels in a stream or creek and turn small waterways into violent, raging rivers. Flash floods caused by intense rainfall may also contain significant mud and debris. Thunderstorms with the highest risk of causing flash flooding of this nature typically occur during the monsoon season (June 15 – September 30).

- **Burn scar debris/mud flow** results from post-wildfire conditions, where vegetation has burned away and soil properties are altered, leaving behind light ashy debris and bare ground that tends to repel water. When heavy rain falls on a burn scar, the ground cannot absorb the water and can rapidly flow downhill. Burn scar flash flooding frequently results

in fast currents and high volumes of debris, ash, mud, and even large boulders that can overwhelm drainages and cause significant damage to homes and infrastructure.

- **Ice/debris jam release** occurs as the ice melts or the jam weakens to a point that the ice releases downstream. This can result in a wall of water and a rapid rise in water levels to areas downstream.

- **Rain on snow events** results from an unusually warm storm producing rain over mountain snowpack. These events can trigger flash flooding conditions when the surface is already saturated, and all rainfall can run into nearby streams and rivers. The intensity and duration of the rain event can trigger an elevated response in snowmelt, translating into a rapidly rising river/drainage.

Location

Ouray County's flood events are typically flash floods from intense cloudburst storms over small and steep watersheds in the summer and fall and snowmelt-driven floods in June. Sources of riverine flooding in the County include the Uncompahgre River, Dallas Creek, Cedar Creek, Cuddigan Gulch, Coal Creek, and Unnamed Creek. Steep, rocky tributaries of the Uncompahgre River draining relatively small, confined basins flood frequently and intensely. These areas are notable in Portland, Cascade, Skyrocket, Corbett, Oak, Canyon, Cutler, Dexter, Forsman, Blowout, Plummer, Coal, Bridalveil, and Cottonwood creeks, and numerous other intermittent creeks and drainages. The Uncompahgre River's headwaters lie south of the City of Ouray in the high peaks of the San Juan Mountains. The river flows through an extremely narrow gorge just south of the City and flattens into a broad, gentle floodplain between Ouray and Ridgway. This floodplain tends to absorb floodwaters and debris from floods on nearby tributaries. The area between the City of Ouray and Ridgway, known as Idlewild, is also at risk of flooding.

The table below shows the current statuses of Flood Insurance Rate Map panels. The figures on the following few pages show the mapped floodplain for Ouray County. For jurisdictional-specific maps, please refer to *Section Eight: Participant Profiles.* While not in a mapped floodplain, the planning team identified Box Canyon as a location that floods due to narrow passages and steep terrain.

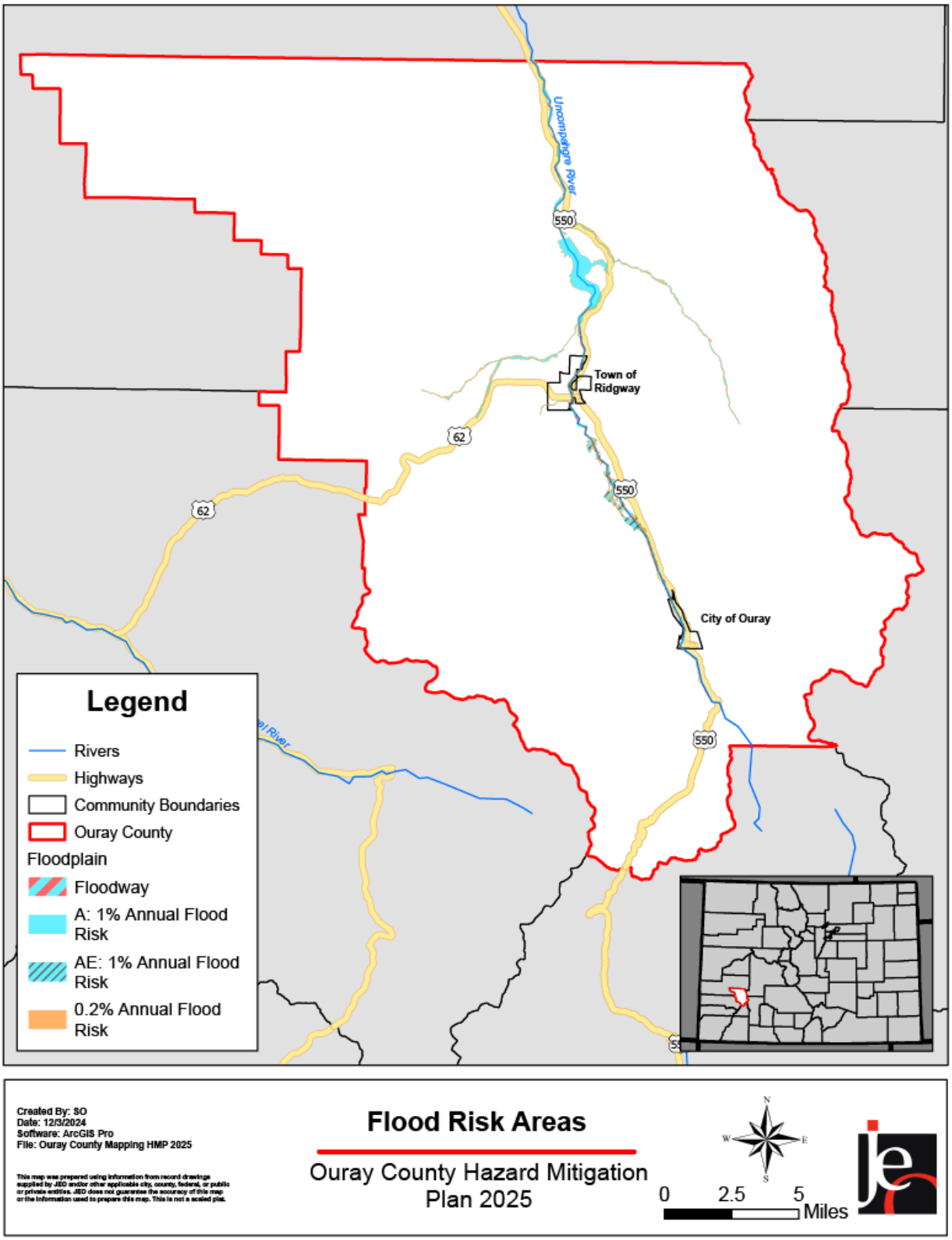
FEMA Flood Insurance Rate Map Panel Status

Jurisdiction	Panel Number	Effective Date
Ouray County	08091CIND0A, 0891C0085E, 0891C0095E, 0891C0210E, 0891C0215E, 0891C0217E, 0891C0219E, 0891C0220E, 0891C0230E, 0891C0236E, 0891C0238E, 0891C0250E, 0891C0326E, 0891C0327E, 0891C0328E, 0891C0329E, 0891C0337E, 0891C0341E, 0891C0343E	01/11/2024
City of Ouray	08091CIND0A, 0891C0085E, 0891C0236E, 0891C0238E, 0891C0250E, 0891C0326E, 0891C0327E, 0891C0328E, 0891C0329E, 0891C0337E, 0891C0341E, 0891C0343E	01/11/2024
Town of Ridgway	08091CIND0A, 0891C0217E, 0891C0219E, 0891C0236E, 0891C0238E	01/11/2024

Source: FEMA, 2023[74]

74 Federal Emergency Management Agency. 2024. "FEMA Flood Map Service Center". http://msc.fema.gov/portal/advanceSearch.

Flood Risk Areas – Ouray County



Extent

Flood events are typically described based on frequency, such as the 100-year or 500-year flood events. Frequencies are determined by plotting a graph of the size of all known floods for an area and determining how often floods of a particular size occur. Another way of expressing the flood frequency is the chance of occurrence each year, which is the percentage of the probability of flooding each year. For example, the 100-year flood has a 1% chance of occurring in any given year, and the 500-year flood drops to a 0.2% chance in any given year. Therefore, they are commonly called the 1% annual chance flood and 0.2% annual flood. It should be noted that flooding is possible every year and even multiple times each year.

Additionally, flash floods are common in Ouray County, particularly during the summer monsoon season. Flash floods occur very suddenly but usually dissipate within hours. Flash floods are typically preceded by warnings from the National Weather Service regarding flash flood advisories, watches, and warnings. According to the National Weather Service, a Flash Flood Watch is issued when conditions are favorable for a specific hazardous weather event. A Flood Watch is issued when conditions are favorable for flooding. It does not mean flooding will occur, but it is possible. A Flash Flood Warning is issued when a flash flood is imminent or occurring.[75]

The National Weather Service has four flood severity categories, as indicated in the table below. Actual impacts will vary by community depending on the severity of the flood event and local conditions, such as the total developed area in the floodplain or existing flood risk reduction structures.

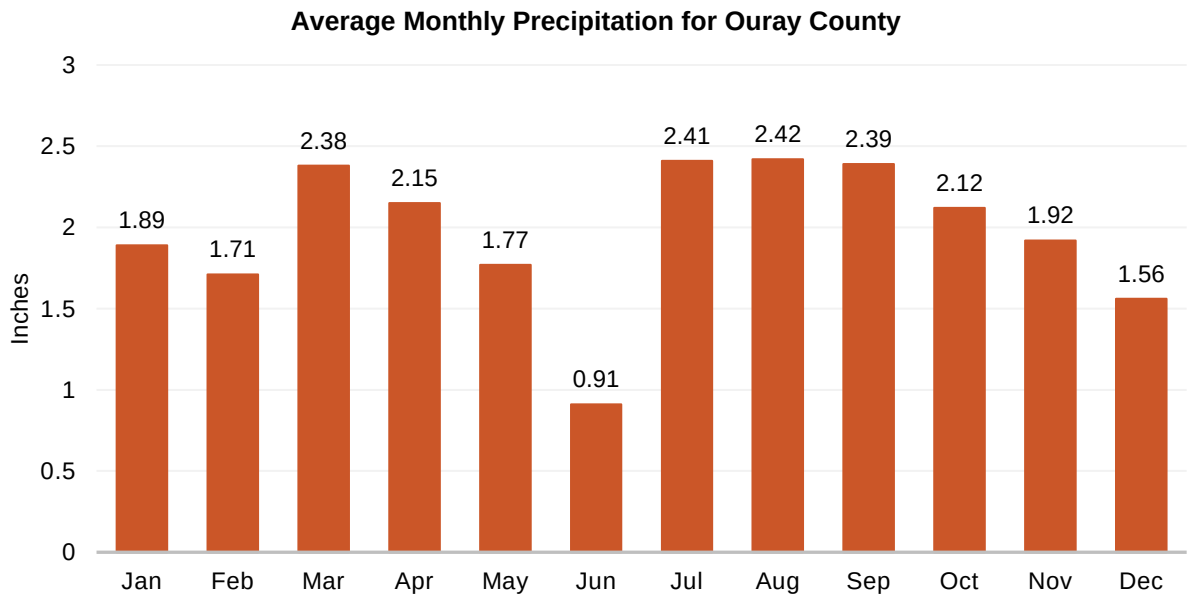
Flooding Stages

Flood Stage	Description of flood impacts
Action Stage	Water may cause minor impacts and be a nuisance to people near the stream. Local governments or agencies may take actions to reduce property damage and danger to life.
Minor Flooding	Some property flooding and public threats may occur. Roadways, trails, parkland, and private property near the stream may become flooded.
Moderate Flooding	Flooding of structures and main roadways may occur. Residences and numerous roadways near the stream may become flooded. Evacuations may be necessary. Disruptions to daily life.
Major Flooding	Extensive flooding of structures, main roadways, and other critical infrastructure may occur. Schools, hospitals, police stations, fire stations, residences, businesses, and roadways may become flooded. Evacuations may be necessary. Significant disruptions to daily life.

Source: National Weather Service[76]

The figure below shows the normal average monthly precipitation for Ouray County, which helps determine whether any given month is above, below, or near normal in precipitation. This does not include snowfall totals.

75 National Weather Service. 2024. “Flood Warning VS. Watch”. https://www.weather.gov/safety/flood-watch-warning.
76 National Weather Service. 2024. “Hydrology Terms and Definitions”. https://www.weather.gov/lot/hydrology_definitions.



Source: NOAA, 1991-2020[77]

Historical Occurrences

According to the NCEI, 19 flash flood events resulted in $1,607,000 in property damage, while three riverine flood events resulted in $1,000 in property damage in Ouray County from 1996 to March 2024. These events did not result in any injuries or fatalities.[78] All of the flooding events occurred in July or August. SHELDUS data does not distinguish the difference between riverine flood damage and flash flood damage. The total crop loss, according to SHELDUS, is $172,414.[79] The NCEI and planning team have provided descriptions of the most damaging flood events, and they are listed below.

- **July 31, 1999 – Flash Flood:** Heavy rainfall at the headwaters of Dallas Creek and Pleasant Valley Creek resulted in flash flooding downstream to Ridgway Reservoir. In some areas, the rushing water was nearly 20 feet higher than the normal stream flow. The flash flooding damaged or destroyed several county bridges and a footbridge, damaged about two miles of County Road 24, flooded a few residences, damaged several outbuildings, and carried away or flooded several vehicles. The water also flooded part of a golf course. A family was rescued from the loft of a barn, where the rising flood waters trapped them. The only livestock fatalities were a chicken and an ostrich. The USGS stream gage on Dallas Creek was washed away and never found. The estimated peak flow of water in Dallas Creek was 2,300 cubic feet per second, more than double the record flow of 1,120 set in August 1923. Rainfall measurements in the area ranged from 1.84 inches in Ridgway to 3.77 inches in Pleasant Valley, most of which came within two hours. This event caused an estimated $1,250,000 in property damage.

- **August 9, 2008 – Flash Flood:** A flash flood came down Corbett Creek, leaving a debris fan several hundred yards long, 300 feet wide, and five feet deep. A house on Whispering

77 National Oceanic and Atmospheric Administration National Centers for Environmental Information. November 2024. "Data Tools: 1991-2020 Normals". https://www.ncei.noaa.gov/access/us-climate-normals/.
78 National Centers for Environmental Information. March 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
79 Arizona State University. 2021. “Spatial Hazard Events and Losses Database for the United States”. https://sheldus.asu.edu/SHELDUS/.

Pines Drive sustained extensive damage to the foundation and exterior, with the deck ripped off. Another house on Chipmunk Way had debris up to a half foot deep into the basement and garage and a deposit of debris up to 2 feet deep on the deck and against the house. A family of hikers on the Dallas Trail became stranded when their parked car was washed away. Their car was a total loss. Another car was carried away from a driveway and dropped over a short cliff. A boulder the size of a small car fell onto nearby Highway 550. County Road 17 was washed out, and another nearby private road was washed out in some places. The flash flood resulted in Corbett Creek carving out a new channel. A local official said this was the worst flash flood in that area since 1991. This event caused an estimated $80,000 in property damage.

- **June 27, 2010 – Flash Flood:** Heavy rainfall caused flash flooding in Dexter Creek and Skyrocket Creek north of Ouray and along Cascade Creek in Ouray. In some sections of Dexter Creek, the flash flood waters were nearly 20 feet deep. A section of road was washed out, and the remaining buildings from the abandoned Old Maid Mine and town, built in the late 1800s, were completely obliterated, with only some foundations remaining. An enormous amount of debris flowed through and collected in sections of Dexter Creek, the primary water source for many residents in Ouray County. Log jams and boulders the size of large trucks clogged a quarter-mile section of Dexter Creek, filling the creek up to 20 feet deep from the original creek bed elevation. Skyrocket Creek flowed a foot deep across Highway 550 as the highway culvert was filled beyond capacity. A motel on the west side of the highway experienced flooding in the parking lot and in some lower-level motel rooms. Skyrocket Creek deposited about 8,000 cubic yards of debris, mostly rocks and boulders, in a catch basin just above the Uncompahgre River. About 2,000 cubic yards of debris filled up a catch basin near Highway 550 just before Cascade Creek dumps into the Uncompahgre River. The Uncompahgre River gage near Ridgway measured a stage jump of nearly two feet that evening due to the upstream inflow from the flooding creeks. Radar storm total rainfall estimates over the mountains near Ouray ranged from 1.5 to 1.75 inches, most of which fell within 60 minutes. This event caused an estimated $100,000 in property damage.

- **August 2024 – Flash Flood:** Ouray County received significant rainfall due to a monsoonal event that caused flooding, debris flow, and mudflows through the county. County Roads 17, 23, and 361 experienced mudslides that closed the roads. Agricultural fields were flooded along with several homes and buildings.

  The Town of Ridgway's Beaver Creek diversion infrastructure was damaged. The event filled the Ridgway Ditch with a mud slurry from bank to bank to the top of the ditch for hundreds of feet. As a result, the town could not divert water from Beaver Creek, the community's primary water source. A similar amount of mud, rocks, and gravel impacted the Grizzly Diversion Trough. Initial estimates for damage are at $3.5 million, with that total expected to rise. An emergency disaster declaration was made during this event.

Loss of life from flooding in Ouray County has been rare. Four incidents have been documented, three in 1906 and one in 1927. The 1906 incident involved a train engineer who died when his locomotive went over a chasm where the bridge was washed out. The other two were miners seeking shelter in a small tunnel that became filled with debris. The 1927 incident involved a rancher found in a field near his cabin following flooding on the Uncompahgre River.

Average Annual Losses

The average damage per event estimate was determined based on the NCEI Storm Events Database since 1996 and the number of historical occurrences. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Flooding caused an average of $57,429 in property damage and $2,781 in yearly crop losses for Ouray County.[80],[81]

Flooding Loss Estimate

Number of Events[1]	Average Events Per Year	Total Property Loss[1]	Average Annual Property Loss[1]	Total Crop Loss[2]	Average Annual Crop Loss [2]
22	0.8	$1,608,000	$57,429	$172,414	$2,781

Source: 1 Indicates data is from NCEI (1996 to March 2024)[82]; 2 Indicates data is from SHELDUS (1960 to 2021)[83]

Building Exposure in the Floodplain

The planning team acquired GIS parcel data from the County Assessor and Microsoft building footprint data to analyze the location, number, and value of buildings in the 100-year and 500-year floodplains. A summary of the results of this analysis is provided in the following tables.

Exposure in the 100-Year Floodplain (1% Annual Flood Risk Area)

Jurisdiction	Number of Structures	Total Value of Structures	Percentage of Structures
Ouray County	85	$69,055,200	2%
City of Ouray	3	$1,129,830	0.5%
Town of Ridgway	3	$1,643,900	0.5%

Source: County Assessor, 2024; Microsoft, 2024

Exposure in the 500-Year (0.2% Annual Flood Risk Area)

Jurisdiction	Number of Structures	Total Value of Structures	Percentage of Structures
Ouray County	11	$13,113,370	0.3%
City of Ouray	0	$0	0%
Town of Ridgway	1	$721,480	0.2%

Structures identified in this table are in the 500-year floodplain but not the 100-year floodplain.
Source: County Assessor, 2024; Microsoft, 2024

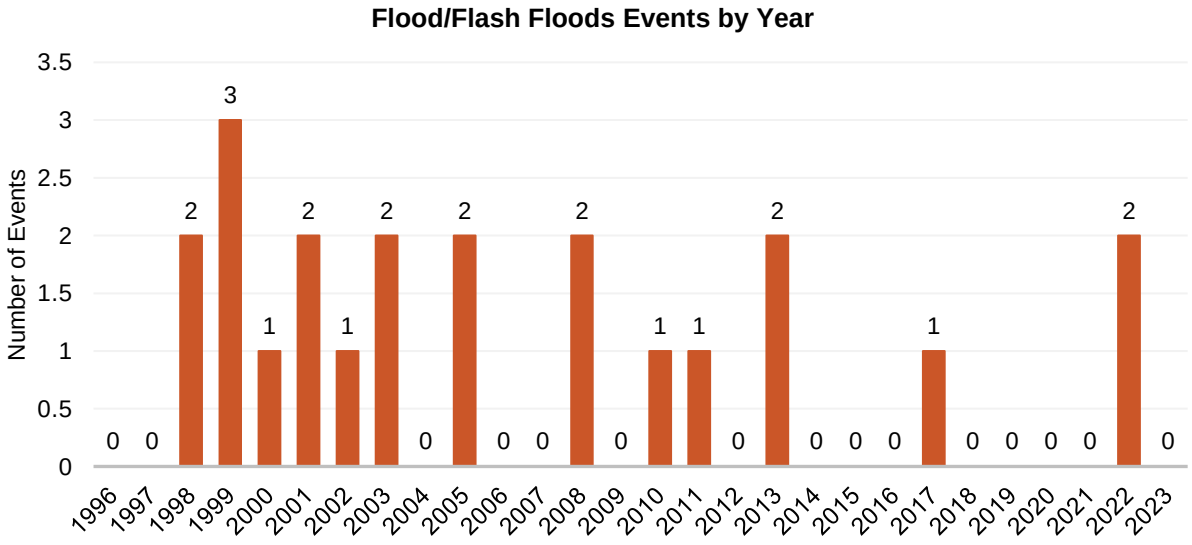
Historical Probability & Future Likelihood

The NCEI reports 19 flash floods and three riverine flood events for a total of 22 events from 1996 to March 2024. Some years had multiple flood events. The figure below shows the events broken down by year. There is a 46% historical probability that floods will occur annually in Ouray County. Due to the anticipated impacts of climate change and future development, the future likelihood of a flooding event in the county is very likely.

80 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
81 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.
82 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
83 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.

Historical Probability & Future Likelihood – Flooding

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
46%	Increased Frequency of Flash Flooding. Decreased Frequency of Riverine Flooding	No Impact on Frequency	**Very Likely**



Source: NCEI, 1996-March 2024[84]

Climate Change

Current climatic trends are expected to decrease summer precipitation, reducing streamflow in Colorado's major rivers. As a result, the risk of riverine flooding may be reduced. The likely decrease in snowpack and earlier snowmelt is attributed to general warming trends in mountain regions. This, combined with increased surface temperatures, would lead to earlier and larger spring runoffs, likely leading to an increase in riverine flooding during spring and early summer months and a decrease in riverine flooding thereafter. However, precipitation may increasingly come in the form of extreme storms. These high-intensity rainfall events could lead to increased flash flood conditions, which are already a primary flooding concern for the county.[85]

A specific tool developed and utilized in the State of Colorado includes Future Avoided Cost Explorer to assess costs associated with flooding.[86] This tool presents an in-depth look at the potential future economic impacts of flooding on specific sectors of the Colorado economy. The following table and figures show the expected consequences of flooding for the current climate and projected future "Moderate" and "More Severe Climate" impacts with the anticipated growth for Ouray County.

Based on the Future Avoided Cost Explorer assessments, it is likely that Ouray County will experience worsening impacts from climate change regarding floods. At the current growth rate and only moderate climate impacts, Ouray County may experience up to $1.3 million in total

84 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
85 U.S. Global Change Research Program. 2023. "Fifth National Climate Assessment". https://nca2023.globalchange.gov/.
86 Colorado Water Conservation Board. Accessed October 2024. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

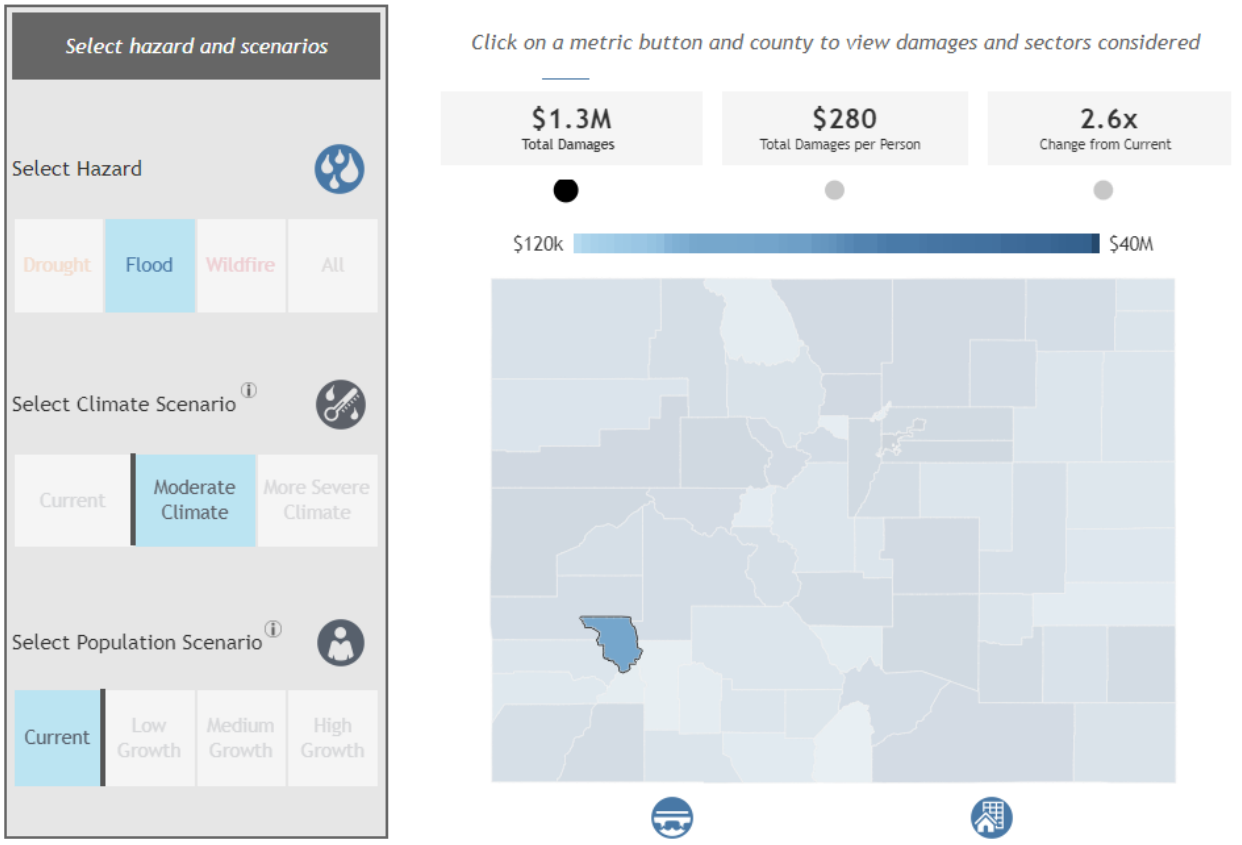
damages annually. Damages may vary across sectors and regions, such as bridges and buildings.

Future Avoided Cost Explorer Anticipated Damages for Flooding Matrix

Population Scenario	Climate Scenario		
	Current Climate	Moderate Climate	More Severe Climate
Current Growth Rate	$500,000 $110 per person	$1.3 million $280 per person	$3 million $650 per person
Low Growth Rate	$500,000 $120 per person	$1.2 million $280 per person	$2.9 million $690 per person
Medium Growth Rate	$500,000 $90 per person	$1.3 million $230 per person	$3 million $540 per person
High Growth Rate	$600,000 $90 per person	$1.5 million $210 per person	$3 million $430 per person

Source: Colorado Water Conservation Board Future Avoided Cost Explorer

Future Avoided Cost Explorer Flooding Analysis Example

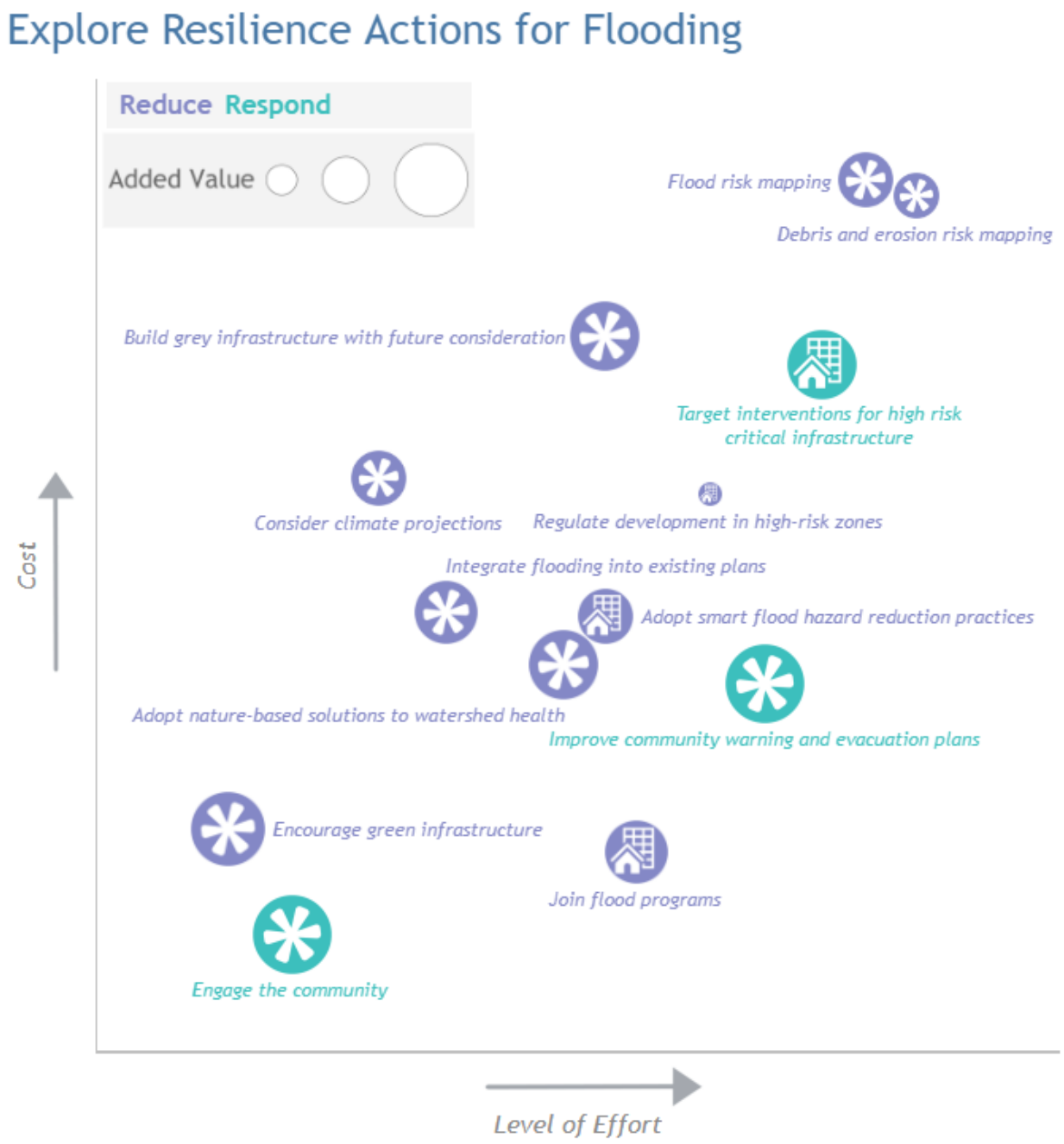


Source: Colorado Water Conservation Board Future Avoided Cost Explorer[87]

87 Colorado Water Conservation Board. Accessed October 2024. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

Suggested actions to improve resilience to flooding from Future Avoided Cost Explorer are shown in the graphic below.

Exploring Resilience Actions for Flooding



Source: Colorado Water Conservation Board Future Avoided Cost Explorer[88]

88 Colorado Water Conservation Board. Accessed October 2024. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

Future Development

Any future building or development inside the floodplain should be discouraged to protect future assets. Land-use regulations should be used to limit development in floodplains and other flood-prone areas, as well as preserve natural flood mitigation features. Buyout programs can eliminate properties in floodplains, especially properties that have experienced repetitive losses. Communities may also consider incorporating “Green Infrastructure” to address flooding concerns. Examples would include using permeable surfaces for parking areas, using rainwater retention swales, developing rain gardens, developing green roofs, and establishing greenways. To further reduce future flood risk, communities can implement stormwater management plans and participate in the National Pollutant Discharge Elimination System program, the National Flood Insurance Program, and the Community Rating System.

Potential Impacts

Flooding could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Injuries or fatalities from drowning, debris, or structural collapse.
- Increased incidence of waterborne diseases from contaminated water supplies
- Mental health impacts, such as stress and trauma, particularly for displaced individuals.

Community Lifeline Impacts

- Safety and Security
  - Flooding can damage telecommunications infrastructure, disrupting communication with emergency services or family members.
- Food, Hydration, Shelter
  - Agricultural areas might suffer crop losses or livestock displacement, reducing the local food supply.
- Health and Medical
  - Flooding can contaminate water supplies, increasing the risk of waterborne illnesses.
  - Emergency medical services may be delayed or unable to reach affected areas due to impassable roads.
- Energy (Power and Fuel)
  - Floodwaters can damage power infrastructure, including substations and utility poles, leading to outages.
  - Access to fuel supplies might be disrupted due to road closures or damaged pipelines.
- Communications
  - Damage to communication infrastructure from floodwaters.

- Transportation
  - Roads, bridges, and rail systems may become impassable due to floodwaters or washouts.
  - Mudslides and debris flows can block mountain roads, isolating communities.

- Hazardous Materials
  - Spread of hazardous materials if industrial sites or waste storage facilities are inundated.

- Water Systems
  - Damage to water treatment facilities can disrupt clean water access.

Economic Impacts

- High costs for repairing damaged infrastructure, homes, and businesses.

- Loss of income for affected industries, such as tourism, agriculture, and retail.

- Increased insurance premiums or loss of insurance coverage for residents in flood-prone areas.

Environmental Impacts

- Erosion of riverbanks and destruction of natural habitats.

- Spread of hazardous materials if industrial sites or waste storage facilities are inundated

- Long-term damage to ecosystems, including soil degradation and loss of vegetation.

Vulnerabilities

An updated national study examining social vulnerability, as it relates to flood events, found that low-income and minority populations are disproportionately vulnerable to flood events.[89] These groups may lack the resources needed to mitigate potential flood events, as well as the resources necessary for evacuation and response. In addition, low-income residents are more likely to live in areas vulnerable to the threat of flooding but lack the resources required to purchase flood insurance. The study found that flash floods are more often responsible for more injuries and fatalities than prolonged flood events.

Other groups that may be more vulnerable to floods, specifically flash floods, include older adults, those outdoors during rain events, and those in low-lying areas. Elderly residents may suffer from a decrease or complete lack of mobility and, as a result, be caught in flood-prone areas. Residents in campgrounds or public parks may be more vulnerable to flooding events. Many of these areas exist in natural floodplains and can experience rapid rises in water levels, resulting in injury or death.

Many tourist facilities in the county are located along the Uncompahgre River and could be at risk during a flood event. Roads closed due to floods can result in severe transportation disruptions

89 Tate, E., Rahman, M.A., Emrich, C.T. et al. Flood exposure and social vulnerability in the United States. Nat Hazards (2021). https://doi.org/10.1007/s11069-020-04470-2.

due to the limited number of roads in the county. Pipeline infrastructure could become damaged, impacting water and wastewater systems.

None of Ouray County's owned and identified community lifelines are located in a flood hazard area and are unlikely to be damaged by a flood event. However, supplies to these lifelines and their services could be disrupted. The following table provides a summary of the flooding vulnerabilities of the county. Participant-specific vulnerabilities can be found after the table.

County Flooding Vulnerabilities

Sector	Vulnerability
People	-Low-income and minority populations may lack the resources needed for evacuation, response, or to mitigate the potential for flooding -Elderly or residents with decreased mobility may have trouble evacuating -Residents in low-lying areas, especially campgrounds, are vulnerable during flash flood events -Residents living in narrow canyons -Those without adequate notification (text alerts, sirens, internet, or cable access) may be at greater risk
Economic	-Business closures or damages -Closed tourist facilities -Closed roads would impact commercial transportation of goods
Built Environment	-Buildings may be damaged
Community Lifelines	-Damages to roadways and bridges causing closed roads -Wastewater and water treatment facilities are at risk, particularly those in the floodplain -Pipeline infrastructure damages
Recreation	-Potential unsafe rafting, fishing, and hiking conditions -Loss of recreation tourism

City of Ouray

The City of Ouray has six very steep and rocky drainages that discharge in the city's immediate vicinity. These drainages have a long history of intense and devastating floods. The primary problem drainages are Portland, Cascade, and Skyrocket creeks. Portland and Cascade creeks drain from the "Amphitheater," a dramatic confined drainage east of the city, and continue toward the Uncompahgre River. Since the early 1900s, attempts were made to confine these drainages to flumes. These flumes channel the flow of water to prevent the natural wanderings over the cumulative alluvial fans on which much of the City of Ouray has been built. Most mapped floodplains are located along the Uncompahgre River and the flumes. However, debris often clogs the creeks and flumes, causing flooding in nearby buildings that are not located in the mapped floodplain. These flumes have been repaired and altered over the years and often require maintenance to clean out debris. None of the city's community lifelines are in the floodplain or have been damaged in the past by flooding. However, Ouray noted that flash flood events on Canyon Creek or Weehawken Creek have repeatedly damaged the Weehawken Spring transmission line that delivers water to the City of Ouray's water storage tanks and water plant. This could cause a loss of services for the plant.

Town of Ridgway

While the mapped floodplain is primarily located on the community's east side, much of the town was built on a relatively flat area, making natural drainage insufficient. Storm drains installed downtown have alleviated much of the flooding concerns in the downtown area of Ridgway. However, there are still undersized culverts throughout the community. Often, debris can plug these culverts, causing additional flooding impacts. Properties on the west side of town are the

most likely to be damaged from a flood event, even though they are not located in a mapped floodplain. Areas along Cottonwood Creek are the most vulnerable to flooding. None of the town's community lifelines are situated in the floodplain or have been damaged in the past by flooding.

Dallas Park Cemetery District

The Dallas Ditch, which runs along the cemetery's southern border, is at a higher elevation than much of the cemetery. During a flood event, the ditch can flood, which causes water to flow down the main road. This has caused road damage and burial ground damage. District-owned community lifelines would not be impacted by flooding.

Risk Mapping, Assessment, and Planning Products

Risk Mapping, Assessment, and Planning is a FEMA program that provides communities with flood information and additional flood risk data (e.g., flood depth grids, percent chance grids, areas of mitigation interest, etc.) that can be used to protect their citizens better. No parts of Ouray County have gone through Risk Mapping, Assessment, and Planning, and there are no planned projects in the county at this time.

National Flood Insurance Program

The National Flood Insurance Program was established in 1968 to reduce flood losses and disaster relief costs by guiding future development away from flood hazard areas where feasible, by requiring flood-resistant design and construction practices, and by transferring the costs of flood losses to the owners of structures located in floodplains through flood insurance premiums.

In return for the availability of federally backed flood insurance, jurisdictions participating in the National Flood Insurance Program must agree to adopt and enforce floodplain management standards to regulate development in special flood hazard areas as defined by FEMA's flood maps. One of the program's strengths has been keeping people away from flooding rather than keeping the flooding away from people through historically expensive flood control projects. The following tables summarize National Flood Insurance Program participation and active policies within Ouray County. Additional information about National Flood Insurance Program participation, implementation, and enforcement is located in *Section 7*.

National Flood Insurance Program Participation

Jurisdiction	Participate in NFIP	Eligible-Regular Program	Date Current Map	Sanction	Suspension	Rescinded
Ouray County	Yes	7/03/1985	1/11/2024	-	-	-
City of Ouray	Yes	7/03/1985	1/11/2024	-	-	-
Town of Ridgway	Yes	3/18/1977	1/11/2024	-	-	-

Source: FEMA, National Flood Insurance Program[90]

90 FEMA. October 2024. "Community Status Book Report". https://www.fema.gov/cis/NE.html.

National Flood Insurance Program Policies in Force and Total Payments

Jurisdiction	Policies In-force	Total Coverage	Total Losses	Total Payments
Ouray County	19	$5,768,000	0	$0
City of Ouray	18	$5,106,000	5	$33,045
Town of Ridgway	0	$0	0	$0

Source: FEMA[91]

It should be noted that while the number of policies in force may change monthly and annually as representatives enroll, maintain, or lapse policies, the total number of losses and payments is cumulative over time.

All participating counties and communities have confirmed they will remain in good standing and continue involvement with the National Flood Insurance Program. Compliance with the National Flood Insurance Program should remain a top priority for each participant. Jurisdictions are encouraged to initiate activities above the minimum participation requirements described in the Community Rating System Coordinator's Manual (FIA-15/2017) and its 2021 Addendum. As of October 2024, there are no CRS communities in Ouray County.

National Flood Insurance Program Repetitive Loss Structures

The Colorado Department of Natural Resources was contacted to determine if any existing properties are classified as National Flood Insurance Program Repetitive Loss Structures. Note there are two definitions for repetitive loss structures. Severe repetitive loss is a grant definition for HMA purposes with specific criteria, while repetitive loss is a general National Flood Insurance Program definition. No repetitive or severe repetitive loss properties are located in Ouray County as of December 2024.

National Flood Insurance Program Repetitive Loss: Repetitive Loss Structure refers to a structure covered by a contract for flood insurance under the National Flood Insurance Program that has incurred flood-related damage on two occasions during a 10-year period, each resulting in at least a $1,000 claim payment.

National Flood Insurance Program Severe Repetitive Loss: Severe Repetitive Loss Properties are defined as single or multifamily residential properties that are covered under a National Flood Insurance Program flood insurance policy and:

(1) That have incurred flood-related damage for which four or more separate claims payments have been made, with the amount of each claim (including building and contents payments) exceeding $5,000 and with the cumulative amount of such claim payments exceeding $20,000 or

(2) For which at least two separate claims payments (building payments only) have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the building.

(3) In both instances, at least two of the claims must be within 10 years of each other, and claims made within 10 days of each other will be counted as one claim.

91 FEMA. June 2024. "Policy and Loss Data by Geography (HUDEX)". https://nfipservices.floodsmart.gov/reports-flood-insurance-data.

Hazard Mitigation Assistance Repetitive Loss: A repetitive loss property is a structure covered by a contract for flood insurance made available under the National Flood Insurance Program that:

(1) Has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such food event; and

(2) At the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

Hazard Mitigation Assistance Severe Repetitive Loss: A severe repetitive loss property is a structure that:

(1) It is covered under a contract for flood insurance made available under the National Flood Insurance Program.

(2) Has incurred flood-related damage –

(a) For which four or more separate claims payments (including building and contents) have been made under flood insurance coverage with the amount of each such claim exceeding $5,000 and with the cumulative amount of such claim payments exceeding $20,000 or

(b) For which at least two separate claims payments (including only building) have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

Jurisdictions Ranking Flooding as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders that identified flooding as a prioritized hazard of concern.

- Ouray County
- Town of Ridgway
- Dallas Park Cemetery District

Hazardous Materials Incident

The following description for hazardous materials is provided by the Federal Emergency Management Agency (FEMA):

> Chemicals are found everywhere. They purify drinking water, increase crop production, and simplify household chores. However, chemicals can also be hazardous to humans or the environment if used or released improperly. Hazards can occur during production, storage, transportation, use, or disposal. You and your community are at risk if a chemical is used unsafely or released in harmful amounts into the environment where you live, work, or play.[92]

Hazardous materials incidents generally involve releases at fixed-site facilities that manufacture, store, process, or otherwise handle hazardous materials or along transportation routes such as major highways, railways, navigable waterways, and pipelines. Many spills also occur during the loading and unloading of chemicals.

Fixed sites involve chemical manufacturing sites, stationary storage facilities, and hazardous waste sites. The Environmental Protection Agency (EPA) requires submitting the types and locations of hazardous chemicals stored at any facility within the state over the previous calendar year. This is completed by submitting a Tier II form to the EPA as a requirement of the Emergency Planning and Community Right-to-Know Act of 1986.[93]

Likewise, through the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA), the U.S. Department of Transportation has broad jurisdiction to regulate the transportation of hazardous materials, including the discretion to decide which materials shall be classified as hazardous. These materials are placed into one of nine hazard classes based on their chemical and physical properties. The hazard schedules may be further subdivided into divisions based on their characteristics. Because the properties and characteristics of materials are crucial in understanding the dynamics of a spill during a transportation incident, it is vital for response personnel to understand the hazard classes and their divisions.

The table below shows the nine hazardous material classes according to the 2020 Emergency Response Guidebook.

92 Federal Emergency Management Agency. 2017. “Hazardous Materials Incidents”. https://www.ready.gov/hazardous-materials-incidents.

93 Emergency Planning and Community Right-to-Know Act of 1986, Pub. L. No. 116 § 10904. (1986).

Hazardous Materials Classes

Class	Type of Material	Divisions
1	Explosives	1.1 Explosives which have a mass explosion hazard 1.2 Explosives which have a projection hazard but not a mass explosion hazard 1.3 Explosives which have a fire hazard and either a minor blast hazard or a minor projection hazard or both but not a mass explosion hazard 1.4 Explosives that present no significant hazard 1.5 Very insensitive explosives with a mass explosion hazard 1.6 Extremely insensitive articles which do not have a mass explosion hazard
2	Gases	2.1 Flammable gases 2.2 Non-flammable, non-toxic gases 2.3 Toxic gases
3	Flammable liquids (and Combustible liquids)	
4	Flammable solids; Substances liable to spontaneous combustion; Substances which, on contact with water, emit flammable gases	4.1 Flammable solids, self-reactive substances and solid-desensitized explosives 4.2 Substances liable to spontaneous combustion 4.3 Substances which in contact with water emit flammable gases
5	Oxidizing substances and Organic peroxides	5.1 Oxidizing substances 5.2 Organic peroxides
6	Toxic Substances and infectious substances	6.1 Toxic substances 6.2 Infectious substances
7	Radioactive materials	-
8	Corrosive substances	-
9	Miscellaneous hazardous materials/dangerous goods and articles	-

Source: Emergency Response Guidebook, 2020[94]

Location

Transportation

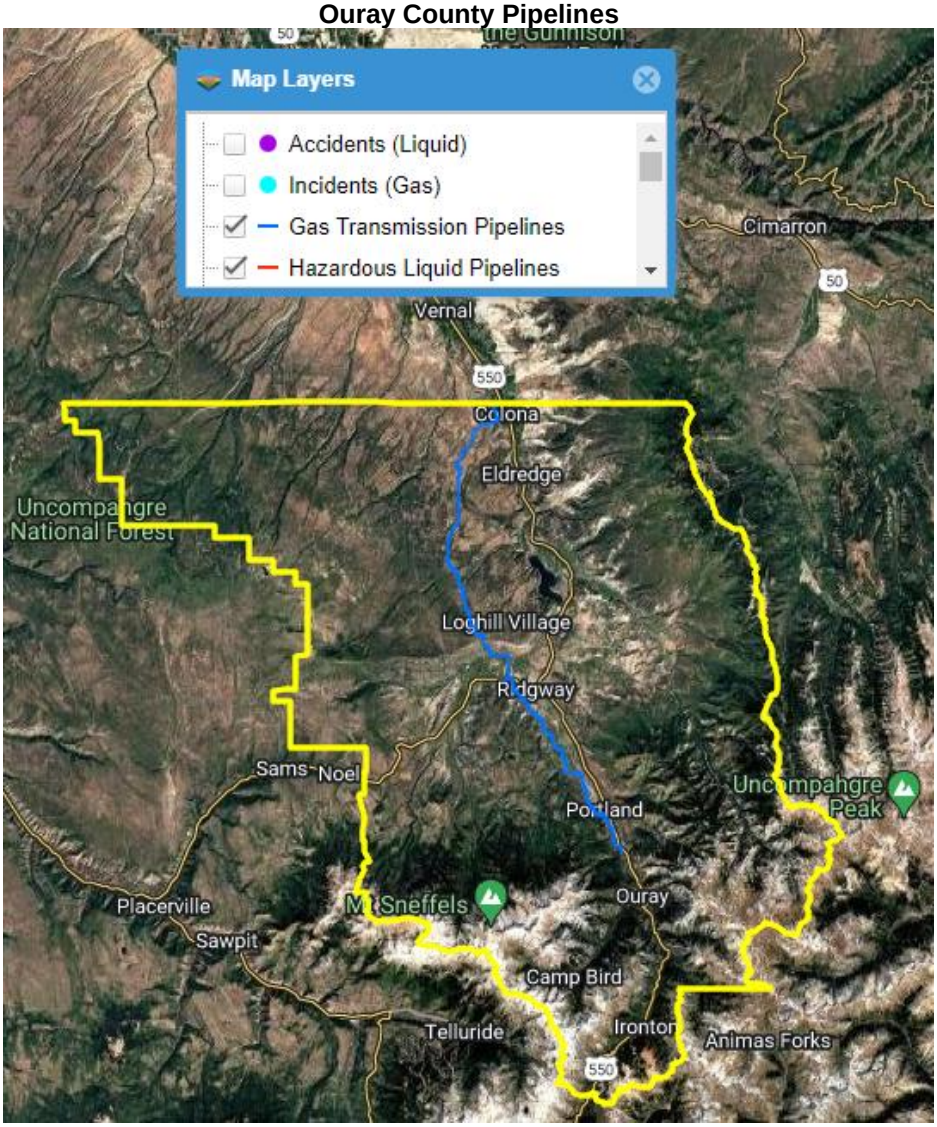
There are no designated hazardous or nuclear materials routes through Ouray County.[95] However, illicit transportation of hazardous materials has been known to occur on Highways 550 and 62. While hazardous materials are not allowed to be transported through the county, other chemicals, like fuel, can be transported. Since mountains and diverse terrain surround Ouray County, the transportation of chemicals is at higher risk of accidents on high mountain passes with severe weather conditions and ice, wildlife, and debris on the roadways. Hazardous materials releases during transportation primarily occur on major transportation routes.

94 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2022. "2020 Emergency Response Guidebook". https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg.

95 Colorado State Patrol – Hazardous Materials Section. 2022. "Colorado Hazardous and Nuclear Materials Route Restrictions". https://dtdapps.coloradodot.info/staticdata/Downloads/StatewideMaps/HazMatMap.pdf.

Chemical transportation can also occur using pipelines. According to the National Pipeline Mapping System, one gas transmission pipeline is in the county.[96] A map of the pipeline can be seen below.

Ouray County Pipelines



Source: National Pipeline Mapping System

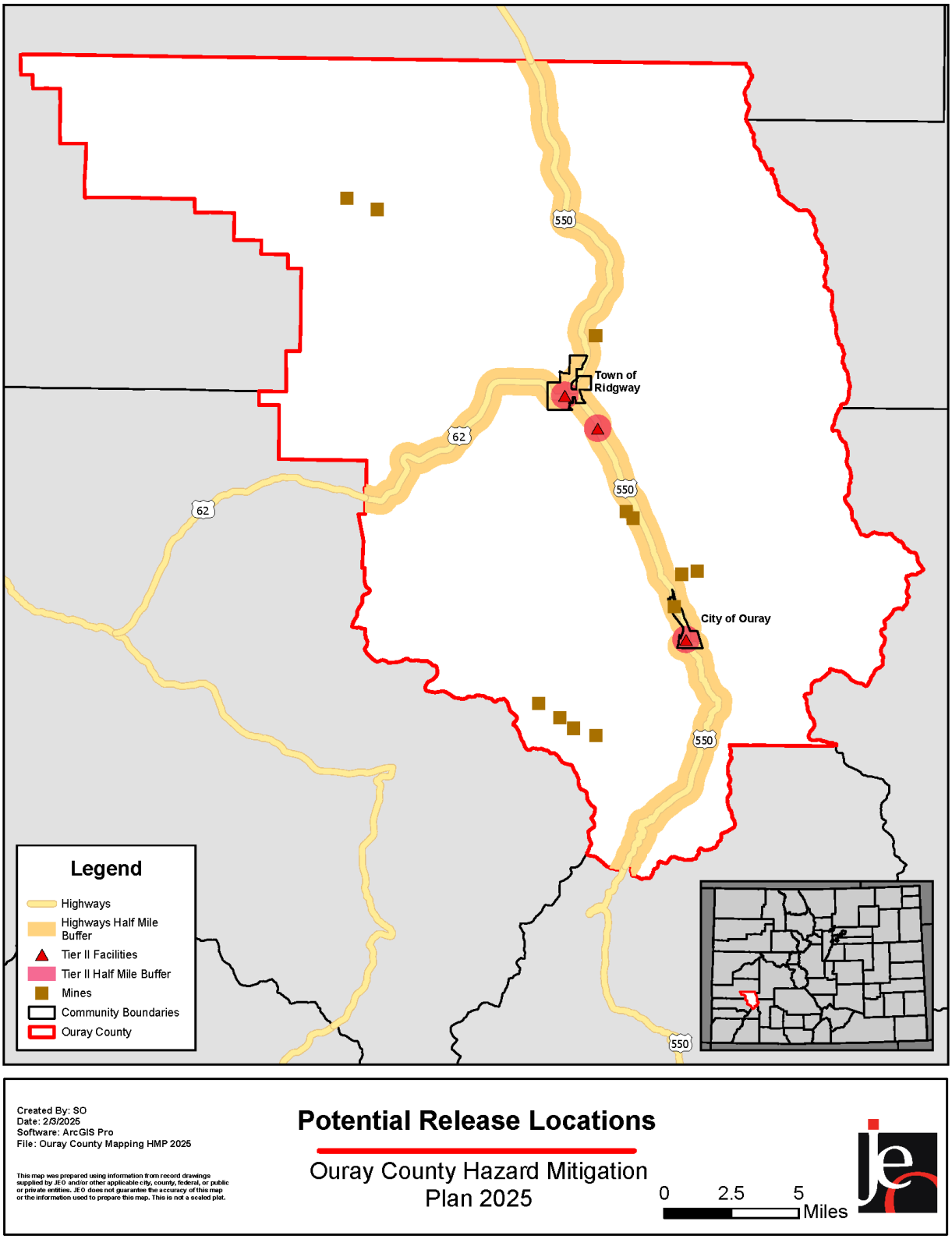
Fixed Site

There are three facility locations across Ouray County that submitted Tier II reports to the Colorado Department of Public Health in 2023. These locations are shown in the figure on the next page. The locations include a half-mile buffer to show the potential evacuation area during a hazardous materials release. A half mile was chosen because, in the 2020 Emergency Response Guidebook, the initial evacuation area for a "Mixed Load/Unidentified Cargo" involved in a fire is a half mile in all directions.[97] Chemical releases associated with the mining industry could also occur in Ouray County.

96 National Pipeline Mapping System. October 2024. "National Pipeline Mapping System Public Viewer". https://pvnpms.phmsa.dot.gov/PublicViewer/.

97 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2022. "2020 Emergency Response Guidebook". https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg.

Potential Release Locations



Extent

The extent of hazardous materials incidents varies and depends on the type of chemical released, with most events localized to the facility or container. Five fixed site and transportation releases have occurred in the county, and the total amount spilled ranged from unknown to 1,00 gallons.

Historical Occurrences

Fixed Site

According to the U.S. Coast Guard's National Response Center database (NRC), four hazardous materials incidents occurred at fixed sites from 1990 to July 2024 in Ouray County. There was no property damage, injuries, fatalities, or evacuations.[98] The following table displays information about each of the spills.

Fixed Site Hazardous Material Incidents

Year of Event	Location of Release	Quantity Spilled	Material Involved	Incident Description
2007	Ouray	Unknown	Oil, Fuel, Paint	The caller reported that an owner dumped 55-gallon barrels of diesel onto the ground and is burying metal as well. The owner also had workers washing out paint brushes in the creek.
2007	Ouray	Unknown	Plastics, PVC Pipes, Paints, Rubber	The caller stated that there was a toxic cloud in the area due to materials being burned by an unknown company. The caller stated this is a controlled fire that has been going on for four days.
2008	Ouray	Unknown	Unknown	The caller is reporting a milky discoloration in a creek. The caller suspects that employees of a local mine are dumping products into the creek.
2014	Ouray	Unknown	Sodium Hydroxide, Unknown Chemicals	Sodium hydroxide, a chemical floating agent, and other unknown chemicals are released from the water that comes from the underground portal that is being pumped out into the water supply that feeds down.

Source: National Response Center, 1990-July 2024

Transportation

According to the Pipeline and Hazardous Materials Safety Administration (PHMSA), one hazardous materials incident occurred during transportation in the county between 1971 and 2023. During this event, there were no injuries, no fatalities, no evacuations, and $78,700 in damage.[99] The following table provides information about the spill.

Transportation Hazardous Materials Incidents

98 U.S. Coast Guard National Response Center. July 2024. "Chemical Pollution and Railroad Incidents, 1990-2024." [datafile]. https://nrc.uscg.mil/.

99 U.S. Department of Transportation - Pipeline and Hazardous Materials Safety Administration. 1971-2023. "Incident Statistics". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.

Year of Event	Location of Release	Material Involved	Method of Transportation	Amount	Total Damage
2001	Ridgway	Asphalt	Highway	1,000 gallons	$78,100

Source: PHMSA, 1971-2023[100]

Additionally, the Idarado Mine, located between Telluride and Ouray, was listed as a Natural Resource Damage Site. The eastern portal of the mine is located approximately 11 miles south of Ouray. Heavy metals were present in the mine tailings, specifically lead and cadmium. The main impact of heavy metals was on aquatic ecosystems, and human contact was minimal. However, elevated lead levels presented a concern for children in the area. The site has since been remediated.[101]

According to the planning team, there have been several incidents in which a pipeline was breached. Depending on the location of the incident and the extent of damage to the pipeline, impacts could be severe.

Average Annual Damages

Using data from the tables above, average annual damage from hazardous materials incidents can be estimated. There have been four fixed site spills in the county, as reported by the NRC, and one transportation spill, as reported by PHMSA. Neither the NRC nor PHMSA track crop losses from chemical spills. These events reported $78,700 in damage. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life.

Hazardous Materials Incident Loss Estimate

Hazard Type	Number of Events	Events Per Year	Injuries	Fatalities	Total Damages	Average Annual Chemical Spill Loss
Hazardous Materials Incident (Fixed Site)	4	0.1	0	0	$0	$0
Hazardous Materials Incident (Transportation)	1	0.02	0	0	$78,700	$1,485

Source: National Response Center, 1990-July 2024[102]*; PHMSA, 1971-2023*[103]

Historical Probability & Future Likelihood

Given the historical record of three years with a chemical spill out of 34 years (one year had two chemical spills occur), the annual historical probability of occurrence for hazardous materials incidents at fixed sites is 9%. Due to the anticipated impacts of climate change and future development, the future likelihood of fixed-site chemical spills is likely.

Given the historic record of one year with a chemical spill out of 53 years, the annual historical probability of occurrence for hazardous materials incidents during transportation is 2%. Due to

100 U.S. Department of Transportation - Pipeline and Hazardous Materials Safety Administration. 1971-2023. "Incident Statistics". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.
101 Colorado Department of Public Health & Environment. 2024. “Idarado Mine Cleanup”. https://cdphe.colorado.gov/hm/idarado.
102 U.S. Coast Guard National Response Center. July 2024. "Chemical Pollution and Railroad Incidents, 1990-2024." [datafile]. https://nrc.uscg.mil/.
103 U.S. Department of Transportation - Pipeline and Hazardous Materials Safety Administration. 1971-2023. "Incident Statistics". https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics.

the anticipated impacts of climate change and future development, the future likelihood of a transportation spill event is unlikely.

Historical Probability & Future Likelihood – Hazardous Materials Incident

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Fixed Site	9%	Neither Increase nor Decrease in Frequency	Increase in Frequency and Exposure	**Likely**
Transportation	2%	Neither Increase nor Decrease in Frequency	Increase in Frequency and Exposure	**Unlikely**

Climate Change

Climate trends are not anticipated to impact hazardous materials incidents directly. However, future spills will likely occur as events continue to impact infrastructure used by and for hazardous materials. For example, flash flooding is likely to increase, which could damage roadways and pipelines, causing more spills to occur.

Future Development

Future development will likely increase the frequency of hazardous materials incidents because there will be more traffic and chemical storage sites. To reduce the risk to people and property damage, future development should encourage chemical storage and manufacturing facilities to be built away from community lifelines, such as hospitals, schools, daycares, nursing homes, and other residential areas. Likewise, residential development and locations that house vulnerable populations should be built away from major transportation corridors used for chemical transportation.

Potential Impacts

Hazardous materials releases could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Increased cases of respiratory issues or other health impacts from exposure to chemicals.

Community Lifeline Impacts

- Safety and Security
  - Emergency services may be overwhelmed, affecting the ability to respond effectively to incidents.
- Food, Hydration, Shelter
  - Food supply chains could be affected by transportation issues or contamination.
- Health and Medical
  - Health services may experience increased demand for treatment of exposure-related illnesses, and local hospitals might face capacity issues.

- Energy (Power and Fuel)
  - The release of hazardous materials is unlikely to impact energy.

- Communications
  - The release of hazardous materials is unlikely to impact communications.

- Transportation
  - Routes may be closed or restricted due to hazardous materials spills, impacting logistics and access to emergency services.

- Hazardous Materials
  - Spread of hazardous materials due to a leak or release.

- Water Systems
  - Contamination of water sources could disrupt access to safe drinking water.

Economic Impacts

- Loss of business and tourism revenue due to contamination concerns and restricted access to affected areas.

Environmental Impacts

- Contamination of soil and water sources impacts local ecosystems and wildlife.

Vulnerabilities

Ouray County is susceptible to accidents involving hazardous materials on roads, highways, and fixed facilities that manufacture, use, or store dangerous chemical substances. A hazardous materials incident may occur during routine business operations or due to a natural disaster. The release of hazardous materials can threaten people and natural resources near the accident. Air releases can prompt large-scale population evacuations, and spills into water or onto the ground can adversely affect public water and sewer systems. A spill could cause road closures, which are a concern for the county due to limited access in and out. Additionally, the county's mountainous terrain and remote areas make it difficult for emergency responders to access locations quickly during an incident. Releases in the environment may require costly remediation and can cause environmental damage, which could impact tourism and recreation in the county.

Hazardous materials in various forms can cause fatalities, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Many products containing hazardous chemicals are used and stored in homes routinely. Chemicals posing a health hazard include carcinogens, toxic agents, reproductive toxins, irritants, and many other substances that can harm human organs or vital biological processes.

An analysis was performed using the half-mile buffers for the major transportation routes and fixed chemical sites to identify community lifelines within those buffer areas. The half-mile buffer was chosen because, in the 2020 Emergency Response Guidebook, the initial evacuation area for a "Mixed Load/Unidentified Cargo" involved in a fire is a half mile in all directions.[104] While some of the fixed chemical sites may not house chemical types or quantities that would require a

104 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2022. "2020 Emergency Response Guidebook". https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg.

half-mile evacuation area, this does give an idea of what may need to be evacuated until the impacted or spilled material is identified. This does not mean that all identified community lifelines will be affected by every hazardous materials release; it merely shows the lifelines more vulnerable to hazardous materials incidents due to their proximity to these locations. In total, 21 out of 24 community lifelines are within a half mile of a major transportation route, and 15 out of 24 community lifelines are within a half mile of a fixed chemical site. Five of Ouray County's community lifelines (4-H event center, emergency operations center, county courthouse, courthouse annex, and public health office) are less than two blocks from Highway 550. The emergency operations center, county courthouse, courthouse annex, and public health office are all located within half a mile of a Tier II chemical site. While they are unlikely to be damaged from a spill, there could be a temporary loss of services if any of these locations needed to be evacuated.

The following table summarizes the vulnerabilities of hazardous materials incidents in the county. Participant-specific vulnerabilities can be found after the table.

County Hazardous Materials Incident Vulnerabilities

Sector	Vulnerability
People	-Those near chemical fixed sites or transportation corridors could have minor to moderate health impacts -Possible evacuation
Economic	-Evacuations and closed transportation routes could impact businesses near the spill
Built Environment	-Risk of fire or explosion
Community Lifelines	-Transportation routes can be closed -Community lifelines are at risk of evacuation -Water systems could be compromised
Recreation	-Environmental damage causing a loss of tourism and recreation

City of Ouray

The City of Ouray has vulnerabilities similar to those of the rest of the county. Populated areas could experience a higher number of people exposed to the impacts of hazardous materials release. Therefore, the City of Ouray is at a higher risk from the effects of a release. Highway 550 travels through the community and is the main route for chemical transportation in the county, increasing the risk of a release. All three community lifelines are within half a mile of Highway 550, and City Hall and the Sewer Plant are less than a block away. City Hall is located within half a mile of a Tier II chemical site. A release nearby could cause a loss of services from all the community lifelines. None are likely to be directly damaged from a release.

Town of Ridgway

The Town of Ridgway has vulnerabilities similar to those of the rest of the county. Populated areas could experience a higher amount of people exposed to the impacts of a release. Therefore, the Town of Ridgway is at a higher risk from the effects of a hazmat release on people. Highways 62 and 550 travel through the community, increasing the risk of a release. Three community lifelines (Decker Community Room, Town Hall, and the Wastewater Treatment) are within half a mile of a major transportation route and a Tier II chemical site. The Decker Community Room and Town Hall are less than two blocks from Highway 62. A release nearby could cause a loss of services from these community lifelines. None are likely to be directly damaged from a release. A hazardous materials incident in Ridgway would likely take much staff time and resources to navigate. It would also require assistance from outside agencies.

Dallas Park Cemetery District
Highway 62 runs alongside the northern border of the cemetery. There is a possibility that a spill would occur near the cemetery, which would temporarily shut down the cemetery to the public. District-owned lifelines would likely not be impacted.

Jurisdictions Ranking Hazardous Materials Incident as a Prioritized Hazard of Concern

No jurisdictions or stakeholders identified hazardous materials incidents as a prioritized hazard of concern.

Imminent Threat

For this plan, imminent threats include terrorism, cyber-attacks, active shooter incidents, and other intentional human-caused threats that pose a significant hazard to life safety, property, infrastructure, or the environment.

Active Shooter
One or more individuals actively engaged in killing or attempting to kill people in a populated area.

Domestic Terrorism
Violent, criminal acts committed by individuals and/or groups to further ideological goals stemming from domestic influences within the United States, such as those of a political, religious, social, racial, or environmental nature.

International Terrorism
Violent, criminal acts committed by individuals and/or groups inspired by or associated with designated foreign terrorist organizations or nations.

Ecoterrorism
The use or threatened use of violence of a criminal nature against innocent victims or property by an environmentally oriented group for environmental-political reasons or aimed at an audience beyond the target, often of a symbolic nature.

Cyber-Attack
A cyber-attack involves the theft or modification of information on computer systems that can compromise the system or potentially disrupt essential services. A cyber-attack incident can impact governmental agencies, private utilities, or critical infrastructure/key resources like a power grid, public transportation system, and wireless networks. Cyberinfrastructure includes electronic information and communications systems, as well as the information contained in those systems. Computer systems, control systems, and networks like the Internet are all part of cyberinfrastructure.

Nation-states, criminal organizations, terrorists, and other malicious actors conduct attacks against critical cyber infrastructure on an ongoing basis. The impact of a serious cyber incident or successful cyber-attack would devastate state, local, tribal, and territorial governments' assets, systems, and/or networks, the information contained in those networks, and the confidence of those who trust governments to secure those systems.

A cyber-attack can affect a system's:

- Confidentiality: protecting a user's private information
- Integrity: ensuring that data is protected and cannot be altered by unauthorized parties
- Availability: keeping services running and giving administration access to key networks and controls.

> "Many of the Nation's essential and emergency services, as well as our critical infrastructure, rely on the uninterrupted use of the Internet and the communications systems, data, monitoring, and control systems that comprise our cyber infrastructure. A cyber-attack could be debilitating to our highly interdependent critical infrastructure and key resources and ultimately to our economy and national security."
>
> - National Strategy for Homeland Security

Imminent threats may be based on ideology (i.e., religious fundamentalism, national separatist movements, and social revolutionary movements), but attacks can also be random with no ties to ideological reasoning.

Threat assessment, mitigation, and response to terrorism are federal and state directives that work with local law enforcement and county emergency management.

Location

Imminent threats can occur throughout Ouray County. Most attacks in the United States have occurred in business/commercial sites, public open spaces, and schools. However, government buildings, healthcare facilities, and houses of worship can also be targets for ideologically motivated attacks. Critical infrastructure and commercial, private, and government computer systems may also be targeted for physical or cyber-attacks.[105] Other specific areas in the county that could be targeted include active mines, resorts in the northwest corner of the county, Ridgway Reservoir and Dam, and the Ouray Hydroelectric Power Plant.

Extent

Imminent threats can vary significantly in scale and magnitude, depending on the attack's location, method, and target. They can range from an entire water system to a single building or structure.

Historical Occurrences

Previous accounts of terrorism in the planning area were gathered from the Global Terrorism Database, maintained by the University of Maryland and the National Consortium for the Study of Terrorism and Responses to Terrorism. According to this database, there have been no terrorist incidents in Ouray County since 1970.[106] However, according to county personnel, there have been two incidents that could be considered terrorist activities. A suicide bomber blew himself up on Highway 550 near the East Riverside avalanche shed in the 1970s. In 1920, there was an incident in Ridgway that involved unknown perpetrators blowing up some buildings in the downtown area with dynamite. Their motives were unknown. In addition to those incidents, in the 1920s, there were Ku Klux Klan rallies in Ridgway and Ouray. The Idarado Mine in Ouray was the source of explosives for terrorist activity in Boulder County during the 1980s.

Cyber-attacks are a common occurrence, and government and private sector organizations are regularly targeted by various types of cyber-attacks. These attacks have been stopped before impacting county infrastructure; however, the threat continually evolves.

105 Federal Bureau of Investigation. 2022. "Active Shooter Incidents in the United States in 2022". https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2022-042623.pdf/view.

106 University of Maryland and National Consortium for the Study of Terrorism and Response to Terrorism. 1970-2020. "Global Terrorism Database". https://www.start.umd.edu/gtd/.

Average Annual Losses

According to county officials, there have been two imminent threat events in Ouray County. However, there is no estimated damage from these events. It is known that several buildings sustained damage from the 1920 event. There was one known death, which was the suicide bomber from the 1970 event.

Historical Probability & Future Likelihood

Based on historical occurrences, the historical probability of an imminent threat event is 2%. However, historical occurrences may not be a useful measure of future probability. At the national level, the annual occurrence of active shooter attacks and ideologically motivated violence in the United States has increased substantially over the past 20 years.[107,108]

Cyber-attacks are occurring continuously across Ouray County. While defense systems have become more adept at catching cyber-attacks before they cause significant infrastructure or service disruption, the frequency and sophistication of cyber-attacks are expected to continue to increase.

Due to the anticipated impacts of climate change and future development, the future likelihood of an imminent threat event is unlikely.

Historical Probability & Future Likelihood – Imminent Threat

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
2%	Limited Increase in Frequency	Increase in Frequency and Exposure	**Unlikely**

Climate Change

Climate change will likely have a minimal direct impact on imminent threats. However, the effects of climate change will likely put additional stress on social structures and may contribute to an increase in social disenfranchisement and politically motivated violence. The impact of climate change could also cause an increase in eco-terrorism to draw attention to the issue.

Future Development

As the county's population grows, more people could be impacted by an imminent threat. Additionally, increased population density can increase the risk of becoming a target. Increased security measures at vulnerable locations such as schools or government buildings will reduce the likelihood and impacts of an imminent threat. Measures can include bollards to protect from vehicles, fencing, security cameras, advanced locks, etc. Having strong cyber security can keep bad actors from taking control of municipal systems with the intent to cause harm to humans and damage to buildings.

107 Federal Bureau of Investigation. 2022. “Active Shooter Incidents in the United States in 2022”. https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2022-042623.pdf/view.

108 Federal Bureau of Investigation. May 2021. “Active Shooter Incidents 20-Year Review, 2000-2019”. https://www.fbi.gov/file-repository/active-shooter-incidents-20-year-review-2000-2019-060121.pdf/view.

Potential Impacts

An imminent threat could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- There could be serious injuries or fatalities, particularly among vulnerable populations such as the elderly, children, or those with disabilities who may struggle to evacuate or seek safety.

Community Lifeline Impacts

- Safety and Security
  - Emergency services may be stretched thin, leading to response times and resource allocation delays during crises.

- Food, Hydration, Shelter
  - Food and shelter locations could be potential targets and become damaged or destroyed.

- Health and Medical
  - Local healthcare facilities may face surges in patients due to injuries or health complications related to imminent threats, potentially overwhelming their capacity.

- Energy (Power and Fuel)
  - Energy locations could be potential targets and become damaged or destroyed.

- Communications
  - Communication infrastructure could be a potential target and become damaged or destroyed.

- Transportation
  - Access routes may become blocked or unsafe during emergencies, which can hinder evacuation efforts and the delivery of supplies.
  - Transportation routes could be potential targets and become damaged or destroyed.

- Hazardous Materials
  - Hazardous materials sites could be potential targets and become damaged or destroyed, leading to compounding issues of chemical releases.

- Water Systems
  - Water infrastructure could be a potential target and become damaged or destroyed.

Economic Impacts

- Local businesses could suffer losses due to damage, reduced foot traffic during emergencies, and increased costs related to recovery efforts.

Environmental Impacts

- Secondary impacts like fire or chemical releases could negatively impact nearby vegetation or animals.

Vulnerabilities

Ouray County could be a source of explosives for imminent threats to public safety. These sources could be from active mines (dynamite) or hand charges and shells for howitzers the Colorado Department of Transportation used for avalanche control. The mines themselves could be targets of radical environmental groups. There are families and individuals in Ouray County with a history of strong anti-governmental statements, actions, and signage. Due to the ecological resources in the county, the planning team is especially concerned about eco-terrorism.

An attack could cause deaths, injuries, structural damage, and economic damage in Ouray County. These impacts could be long-term as communities recover after an attack. Cyber-attacks can significantly impact the economy and safety of the county. An attack that occurs during peak tourist season when large groups of people are concentrated in a small area, such as the 4th of July, could cause severe impacts such as mass injuries and fatalities. Additionally, high-risk targets, such as schools, churches, or government buildings, are at risk of mass shootings or other attacks. All identified community lifelines in the county are also at risk of an attack.

The county is also vulnerable to cyber-attacks due to their assumed lack of IT capabilities by hackers. Smaller communities and county governments may not have the resources to fight off a cyber-attack and are believed to be more willing to pay a hacker to restore their data, increasing their risk of these attacks.

All of the county-owned and identified community lifelines could be the target of a terroristic attack or cyber-attack. This could damage or destroy the locations and cause a prolonged loss of services. The following table provides a summary of imminent threat vulnerabilities to the county. Participant-specific vulnerabilities can be found after the table.

County Imminent Threat Vulnerabilities

Sector	Vulnerability
People	-Civilians at risk of injury or death -Students and staff at school facilities at risk of injury or death from school shootings -Police officers and first responders at risk of injury or death
Economic	-Damaged businesses can cause loss of revenue and loss of income for workers -Mines can be a source of explosives and a target of attacks
Built Environment	-Targeted buildings may sustain heavy damage
Community Lifelines	-Water supply, power plants, and utilities may be damaged -Police stations, schools, and government offices are at a higher risk
Recreation	-Recreation areas may be the target of eco-terrorism

City of Ouray

The City of Ouray may be at an increased risk of imminent threat because of the larger population base and the site of many lifelines and events. The city hosts many events that draw thousands of people inside and outside the county. Some of the more significant events include the Ouray Ice Fest and the 4th of July festival, which attracts up to 25,000 people. Any of these events could be targeted by terrorists and cause massive loss of life and damage to buildings and infrastructure. All three community lifelines could be the target of a terroristic attack or cyber-attack. This could damage or destroy the buildings and cause a prolonged loss of services.

Town of Ridgway

The Town of Ridgway may be at an increased risk of imminent threat because of the larger population base, which is the site of many lifelines and events. Schools and community lifelines would be the most likely target of an attack. This could damage or destroy the buildings and cause a prolonged loss of services. An imminent threat incident in Ridgway would likely take much staff time and resources to navigate. It would also require assistance from outside agencies.

Dallas Park Cemetery District

There is no risk of imminent threat impacting the cemetery's owned community lifelines, operations, or individuals. The cemetery would not be a target for an imminent threat event.

Jurisdictions Ranking Imminent Threat as a Prioritized Hazard of Concern

No jurisdictions or stakeholders identified imminent threat as a prioritized hazard of concern.

Landslides/Rockfall

Landslides
Typical landslides are the downward and outward movement of slopes with dirt, rocks, vegetation, and other debris. Landslides may also be called slumps, rockslides, debris slides, lateral spreading, debris avalanches, earth flows, and soil creep. The size of a landslide usually depends on the geology and landslide-triggering mechanism. Landslides initiated by rainfall tend to be smaller, while those triggered by earthquakes may be very large.

Landslides are typically triggered by periods of heavy rainfall or rapid snowmelt. Earthquakes, hydrology changes, vegetation removal, and excavations may also trigger landslides. Certain geologic formations are more susceptible to landslides than others. Human activities, grading of steep slopes, extensive irrigation, artificial fill, removal of vegetation, construction of impermeable surfaces, and groundwater withdrawal can also increase susceptibility to landslide events. Landslides on steep slopes are more dangerous because movements can be rapid. Some characteristics that determine the type of landslide are the slope of the hillside, moisture content, and the nature of the underlying materials.

Slow-moving landslides can occur on relatively gentle slopes and cause significant property damage. However, slow-moving landslides are far less likely to result in serious injuries than rapidly moving landslides, which can leave little time for evacuation.

Rock Falls
Rock falls occur when blocks of material come loose on steep slopes. Weathering, erosion, or excavations, such as those along highways, can cause falls where the road has been cut through bedrock. They are fast-moving, with the materials free-falling or bouncing down the slope. The volume of material involved could be large or small, and the velocity of the fall may cause significant damage. Rockfalls can threaten human life, impact transportation corridors and communication systems, and damage other property. Spring is typically the rockfall season in Colorado as snow melts and saturates the soil, and temperatures enter into freeze/thaw cycles.

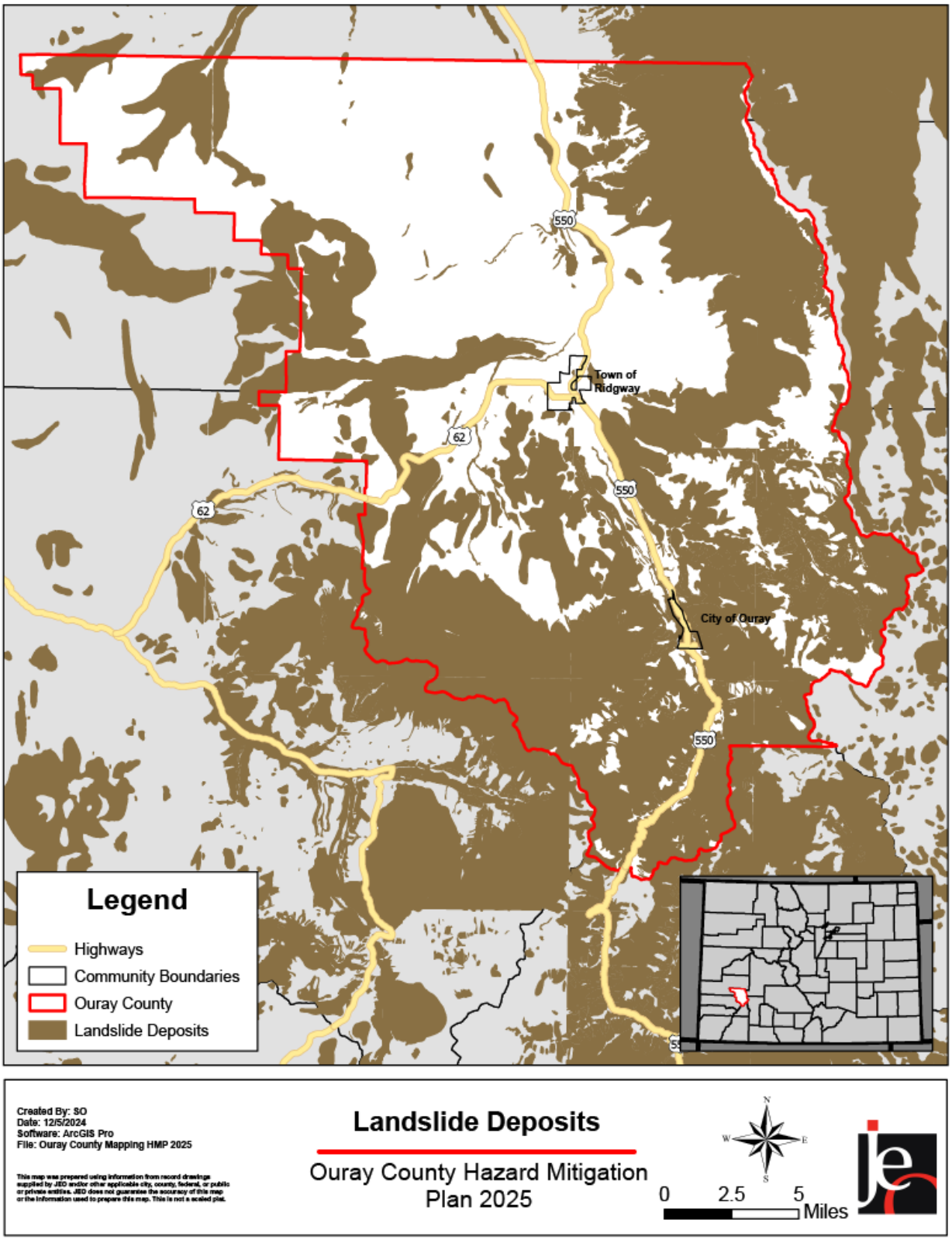
Location

Landslides
Due to the mountainous topography, nearly all areas of Ouray County with sloping terrain may experience landslide and rockfall hazards. A landslide has caused occasional problems on Highway 550 near Colona. Another landslide problem area includes the 11000 block of County Road 1 as it climbs the escarpment. The road is showing possible damage due to the sliding of the foundation. Other known landslide locations include Red Mountain Pass, Imogene Pass, West Ouray along Pinecrest and Oak Street, and County Roads 17 and 23.

The Colorado Geological Survey has an inventory of mapped landslide deposits across the State of Colorado from various sources.[109] Below is a map of Ouray County with the landslide maps from the Colorado Geological Survey. Most of the landslide areas are located in areas with steep slopes on the southern, western, and eastern portions of the county.

109 Colorado Geological Survey. February 2022. “Colorado Landslide Inventory”. https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=9dd73db7fbc34139abe51599396e2648.

Landslide Deposits in Ouray County



Rockfall

Rockfall hazard areas in Ouray County are usually marked by fist to boulder-sized rocks that accumulate below cliff areas, steep slopes, or talus fields on mountainsides. Steep slopes in the county's southern half are prone to this hazard, particularly around the City of Ouray, Camp Bird Road, and Highway 550. Box Canyon also experiences rockfalls due to the steep canyon walls.

According to the 2019 Ouray County Hazard Mitigation Plan, the Colorado Department of Transportation (CDOT) identified 756 sites throughout Colorado that have ongoing issues with rockfall. There are 14 such sites in Ouray County. CDOT identifies these areas using the Colorado Rockfall Hazard Rating System, which combines traffic data, geology information, and slope measurements. The table below details the 14 rockfall hazards in the county by mile marker. Motorists should be cautious and aware of the rockfall hazards along that stretch of highway.

Ouray County Rockfall Hazard Areas

Route	Segment ID	Beginning Mile Maker	Ending Mile Marker
550	US550-SB80.9A	80.901	80.963
550	US550-NB88.0A	88.058	88.116
550	US550-NB88.1B	88.131	88.239
550	US550-NB88.2C	88.250	88.424
550	US550-NB88.4D	88.424	88.588
550	US550-NB88.6E	88.641	88.749
550	US550-NB88.8F	88.816	88.881
550	US550-NB88.9G	88.890	89.257
550	US550-NB89.3A	89.350	89.415
550	US550-NB89.9B	89.907	90.264
550	US550-NB90.3A	90.290	90.341
550	US550-NB90.6B	90.600	90.630
550	US550-NB90.6C	90.653	90.692
550	US550-NB106.3A	106.250	106.381

Extent

Rapidly moving landslides present the most significant risk to human life. Persons living in or traveling through areas prone to rapidly moving landslides should take caution. Slow-moving landslides can cause substantial property damage but are less likely to result in serious human injuries.

Landslides can be massive or disturb only a few cubic feet of material. Most events in Ouray County will likely cause limited property damage, no deaths and injuries, and little or no impacts on infrastructure critical to community lifelines. However, events near populated areas or key infrastructure may have significant consequences.

Rockfall on roadways can also present a risk to human life. Road obstructions can lead to motor vehicle accidents; in one case, a rock has fallen directly on a vehicle, leading to injury and death. A rock fall can be as small as one rock the size of a baseball to multiple rocks the size of a home.

Historical Occurrences

According to the NCEI, three reported landslide/rockfall events occurred in Ouray County between 1996 and March 2024. These events resulted in $10,000 in property damage, one death, and one injury.[110] Additionally, the Ouray County Emergency Manager, local planning teams, and news sites identified nine other landslide/rockfall events in the county. These events caused an estimated $135,000 in damage. It should be noted that these are not the only rockfall/landslide events to occur in the county, only the ones with documented impacts. The actual number of events is likely much higher. Documented events are discussed below.

- **February 6, 2003 – Rockfall:** A large rockslide covered US Highway 550 about two miles south of Ouray, shutting down the highway for several hours.

- **November 18, 2005 – Rockfall:** Both directions of Highway 550 were closed for three and a half hours near Ouray after a large rockslide occurred. The slide covered at least 30 feet of the roadway and was about 10 feet tall.

- **June 30, 2006 – Rockfall:** A rockslide fell onto Camp Bird Road just south of Ouray and killed the driver of a Jeep when a boulder crashed through the roof of the vehicle. A passenger received minor injuries.

- **January 2014 – Landslide:** A large landslide closed Highway 550 near Red Mountain Pass. The initial slide took out power lines and covered a 200-foot section of the highway. Some piles were up to eight feet deep. The City of Ouray declared an economic disaster because of the prolonged closure of Highway 550.[111]

- **March 2016 – Rockfall:** A rockfall totaled a house in the City of Ouray.

- **November 2018 – Rockfall:** According to the Ouray County Emergency Manager, a rockfall occurred in the City of Ouray in November 2018 that impacted a home and caused flooding in a drainage ditch. Two boulders each “the size of a Volkswagen” came down the cliff that the couple’s log home has been sitting on since 1975, one on each side of their home, narrowly missing on both sides. One boulder hit their motor home, turning it on its side while tearing a giant hole “just like a rocket” through it as it came to rest further down the hill. The other boulder rushed down the other side of the home, splitting large trees from about waist-high and eradicating the snow shed built against the house. It also damaged the electric tram and stairs used to access the home.

- **March 8, 2019 – Rockfall:** A massive rockslide caused significant damage to County Road 17, approximately three miles north of the City of Ouray. Rocks the size of two large SUVs landed on the surface of the road above the gas main that supplies the City of Ouray and Whispering Pines neighborhood. The gas line was damaged; however, no leaks or service disruptions were identified. The estimated damage from the event was $27,000.

110 National Centers for Environmental Information. March 2024. “Storm Events Database”. https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
111 The Denver Post. January 2014. “Ouray requests emergency assistance after landslide”. https://www.denverpost.com/2014/05/14/ouray-requests-emergency-assistance-after-landslide/.

Rockfall on County Road 17



Source: 2019 Ouray County Hazard Mitigation Plan

- **August 2019 – Rockfall:** A rockfall landed on the catwalk and geothermal line that supplies the Ouray Hot Springs Pool. The event caused an estimated $8,000 in damage.

- **March 16, 2021 – Rockfall:** Over 12,000 pounds of rock fell in the Ouray Ice Park. The rockfall hit an area known as the Trestle, which helps access significant parts of the park. Approximately 70% of the park's ice-farming infrastructure is no longer usable. Estimated damages were $100,000.[112]

- **August 2024 – Rockfall & Landslides:** The flooding in August 2024 caused a rockfall that went through the 4-J Campground in the City of Ouray. Additional flooding in August caused major landslides and rockfalls across the county.

- **November 15, 2024 – Rockfall:** A large bolder fell onto Highway 550 between Silverton and Ouray. This caused the Highway to be closed in both directions for five days.[113]

112 Slavsky, Bennett. April 5, 2021. "Rockfall Wrecked the Ouray Ice Park, Now What?". https://www.climbing.com/news/rockfall-wrecked-the-ouray-ice-park-now-what/.

113 OurThere Colorado. November 15, 2024. "Rockfall closes iconic Colorado road meaning 5-plus hour detour for travelers". https://denvergazette.com/outtherecolorado/news/rockfall-closes-iconic-colorado-road-indefinitely-meaning-5-plus-hour-detour-for-travelers/article_74138fc2-a1e3-11ef-a3eb-47f32b2fb2c9.amp.html.

Rockfall Impacting the Ouray Hot Springs



Source: 2019 Ouray County Hazard Mitigation Plan

- **February 25, 2025 – Rockfall:** A large rockfall occurred on Camp Bird Road, approximately 3.5 miles from U.S. Highway 550. The rockfall completely blocked the road and significantly damaged the Hilficker retaining wall. A temporary road closure was issued until the rock could be removed, damage was fixed, and additional rockfalls were no longer likely. This rockfall cut off access to the Revenue Mine and much of the county's winter recreation areas. Exact damage amounts are not known currently, but costs are expected to be significant.

Rockfall Impact Camp Bird Road



Source: Ouray County Emergency Management

Average Annual Losses

According to the NCEI and other sources, 11 landslide/rockfall events were reported in Ouray County from 1996 to March 2024. These events resulted in $145,000 in property damage and $0 in crop loss. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life.

Landslide/Rockfall Losses

Number of Events	Average Events Per Year	Total Property Loss	Average Annual Property Loss	Total Crop Loss	Average Annual Crop Loss
12	0.4	$145,000	$5,189	$0	$0

Source: NCEI (Jan 1996 to March 2024)[114], Ouray County Emergency Manager, Local Planning Teams, Denver Post[115], Bennett Slavsky[116]

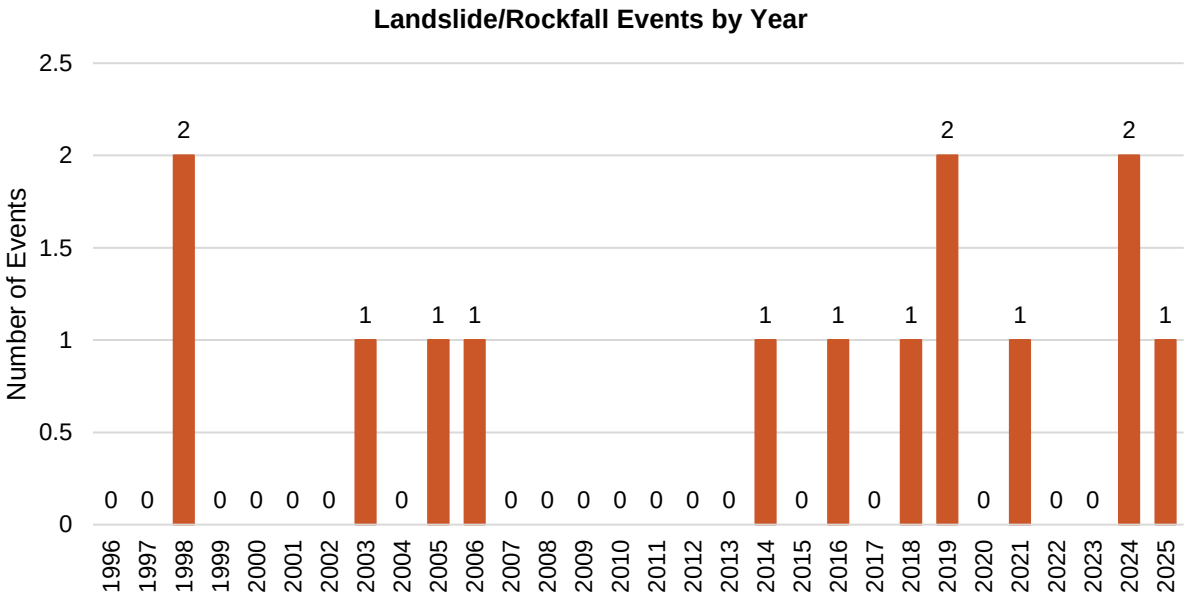
114 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

115 The Denver Post. January 2014. "Ouray requests emergency assistance after landslide". https://www.denverpost.com/2014/05/14/ouray-requests-emergency-assistance-after-landslide/.

116 Slavsky, Bennett. April 5, 2021. "Rockfall Wrecked the Ouray Ice Park, Now What?". https://www.climbing.com/news/rockfall-wrecked-the-ouray-ice-park-now-what/.

Historical Probability & Future Likelihood

Given the historical record of occurrence for landslides as shown in the figure below (8 out of 28 years), for this plan, the historical probability of a landslide occurrence is 29 percent. However, the number of landslide events is likely much higher as many are unreported. Due to the anticipated impacts of climate change and future development, the future likelihood of a landslide/rockfall event is very likely.



Historical Probability & Future Likelihood – Landslide/Rockfall

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
37%	Increase in Frequency	Increase in Frequency and Exposure	**Very Likely**

Climate Change

According to the Colorado Geological Survey, increased precipitation and melting snowpack often activate hazards like landslides. This is why, historically, in Colorado, these hazards occur in the spring and summer, when rainfall and snowmelt are greatest.[117] Climate modeling predictions are more dependable for temperature than for precipitation. Given this, a report from the Intergovernmental Panel on Climate Change, Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation states the following.

> There is high confidence that changes in heat waves, glacial retreat, and/or permafrost degradation will affect high mountain phenomena such as slope instabilities, mass movements, and glacial lake outburst floods, and medium confidence that temperature-related changes will influence bedrock stability. There is also high confidence that changes in heavy precipitation will affect landslides in some regions. There is medium confidence that earlier snowmelt, continued mountain permafrost degradation, and glacier retreat will further decrease the stability of rock slopes. There is low confidence regarding future

117 Colorado Geological Survey. 2024. “Landslides”. https://coloradogeologicalsurvey.org/hazards/landslides/.

locations and timing of large rock avalanches, as these depend on local geological conditions and other non-climatic factors.[118]

Future Developments

Although landslides/rockfalls are a natural geologic process, the incidence of landslides/rockfalls and their impacts on people can be exacerbated by human activities. Grading for road construction and development can increase slope steepness and decrease the stability of a hill slope by adding weight to the top of the slope, removing support at the base of the slope, and increasing water content. Other human activities affecting landslides/rockfalls include excavation, drainage and groundwater alterations, and changes in vegetation. If not accounted for in the siting and design, future development could be vulnerable to landslides/rockfalls and the infrastructure required to support this growth. Adverse effects can be mitigated by early recognition, avoiding incompatible land uses in these areas, or corrective engineering. Landslide risk is considered during permitting and construction per the county's development regulations.

Potential Impacts

Landslide/rockfall events could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Risk of injury or death from landslides and rockfalls.

Community Lifeline Impacts

- Safety and Security
  - Emergency response efforts could be hindered if access routes are blocked, affecting the ability of first responders to reach affected areas promptly.
- Food, Hydration, Shelter
  - Food supply lines could be impacted due to road closures.
- Health and Medical
  - Blocked transportation routes could impact emergency service times.
- Energy (Power and Fuel)
  - Utility lines and pipelines could be damaged by falling rocks or land movements, leading to power outages or disruptions in fuel supply.
- Communications
  - Telecommunication lines and towers could be damaged or destroyed, leading to disruptions in communication services, which are crucial during emergencies.

118 The Intergovernmental Panel on Climate Change. 2012. "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation". https://www.ipcc.ch/report/managing-the-risks-of-extreme-events-and-disasters-to-advance-climate-change-adaptation/.

- Transportation
    - Rockfalls and landslides can block roads, disrupt travel, and isolate communities, especially since Ouray County is mountainous with limited alternate routes.

- Hazardous Materials
    - Traffic accidents from landslides and rockfalls could cause chemical releases.

- Water Systems
    - Water infrastructure could be damaged or destroyed, leading to disruptions in the water supply.

Economic Impacts

- Tourism, a significant economic driver in Ouray County, could suffer due to road closures and potential safety concerns, affecting local businesses and employment.

Environmental Impacts

- Landslides can alter landscapes, affect habitats, and increase sediment in waterways, impacting the local ecosystem and water quality.

Vulnerabilities

Impacts from landslides and rockfalls are typically isolated to the direct area, and many of the issues can be mitigated with proper awareness and engineering design. Landslides could create flood hazards by blocking rivers or contributing to dam failures. Landslides and rockfall hazards threaten several transportation corridors in the county. Rockfall can cause severe injuries and fatalities. If a landslide event were to cut off a major roadway, people could become stranded, deliveries of supplies could be delayed, emergency response could be hindered, and businesses could be impacted due to fewer visitors. Landslides within and outside of the county also pose a threat to power lines and infrastructure. A landslide could impact power line infrastructure and thus contribute to extended power outages. Increased backcountry recreation in the county also exposes people to rockfall and landslide events. For example, the Camp Bird Road area is subject to rockfall, which is a popular location for residents and tourists to recreate. This area has continued to experience increased use over the last several years.

Based on previous occurrences and the hazard maps, it is evident that the City of Ouray, Highway 550 in southern Ouray County, County Road 17, and County Road 23 are susceptible to landslides and rockfalls. These roads provide essential access to and from the County, and the closure of these roads can hurt businesses in Ouray County. Based on analysis from the March 2019 rockfall event, from a geological perspective, there is a high risk of rockfall to the residences on North Pine Crest Drive and other similar locations along the base of the cliffs along County Road 17.

Five of Ouray County's community lifelines (communications tower, emergency operations center, county courthouse, courthouse annex, and public health) are in known landslide deposit locations. These locations could become damaged from a landslide event and experience a temporary loss of services.

The following table summarizes landslide/rockfall vulnerabilities in the county. Participant-specific vulnerabilities can be found after the table.

County Landslide/Rockfall Vulnerabilities

Sector	Vulnerability
People	-Exposure is more likely to occur driving on roadways and in sloped areas -People living in homes located on or near steep slopes -First responders in areas that are still geologically unstable
Economic	-Disruption of local commerce due to disruption of major transportation routes -Loss of accessibility and potential damage to businesses
Built Environment	-Damage building foundations due to moving soil -General damage to homes and other buildings located on slopes
Community Lifelines	-Damage to roadways and bridges -Damage or breaking of underground utility lines -Power loss from downed lines and poles
Recreation	-Block hiking routes or cause injuries to hikers -Cause flooding from blocked creeks and streams

City of Ouray

The landslide hazard maps and previous occurrences show that the City of Ouray and Highway 550 near Ouray are susceptible to landslides and rockfalls. Landslides/rockfalls on Highway 550 can impact transportation into and out of the community, which would have significant economic and safety impacts. During a recent closure of Highway 550, it was reported that local businesses experienced a 60% loss of revenue. West Ouray along Pinecrest and Oak Street has frequent rockfall and landslide events due to steep cliffs nearby.

Slippage events on Forest Service property and along County Road 361 have damaged the Weehawken Spring water transmission line. This transmission line delivers water to the City of Ouray's water storage tanks and water plant. The city has a limited water supply in storage, so damage to the Weehawken Spring transmission line can quickly become serious. The water plant could also become damaged by a large rockfall. This would also impact the city's ability to provide safe drinking water. The other two lifelines are not in known landslide or rockfall areas.

Town of Ridgway

Landslides and rockfalls will likely have little impact on the Town of Ridgway. However, Highway 550 to the south could see events that could impact transportation into and out of the community to the south. None of Ridgway's community lifelines would be directly affected by a landslide/rockfall. However, the Town Hall and Decker Room would house people or serve as reunification sites if needed.

Dallas Park Cemetery District

There is no risk of landslides/rockfalls impacting the cemetery's owned community lifelines, operations, or individuals. The cemetery and lifelines are not located near steep slopes.

Jurisdictions Ranking Landslides/Rockfalls as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders that identified landslides/rockfalls as a prioritized hazard of concern.

- Ouray County
- City of Ouray

Lightning

Lightning is an electrical discharge between a thunderstorm's positive and negative regions. A lightning flash comprises a series of strokes, averaging about four strokes per flash. The length and duration of each lightning stroke vary but typically average about 30 microseconds.

Intra-cloud lightning is the most common type of discharge. This occurs between oppositely charged centers within the same cloud. Usually, it takes place inside the cloud and looks from the outside of the cloud like a diffuse brightening that flickers. However, the flash may exit the boundary of the cloud, and a bright channel can be visible for many miles.

Although not as common, cloud-to-ground lightning is the most damaging and dangerous form. Most flashes originate near the lower-negative charge center and deliver negative charge to earth. However, a minority of flashes carry a positive charge to Earth. These positive flashes often occur during the dissipating stage of a thunderstorm's life. Positive flashes are also more common as a percentage of total ground strikes during winter. This type of lightning is hazardous for several reasons. It frequently strikes away from the rain core, ahead or behind the thunderstorm. It can strike as far as five or ten miles from the storm in areas that most people do not consider a threat. Positive lightning also lasts longer, so fires are more easily ignited. And, when positive lightning strikes, it usually carries a high peak electrical current, potentially resulting in more significant damage.

The cloud-to-ground and intra-cloud lightning ratio can vary significantly from storm to storm. Depending upon cloud height above ground and changes in electric field strength between cloud and earth, the discharge stays within the cloud or contacts the earth.

Location

The entire county is at risk of lightning strikes. Exposed areas at high altitudes are particularly vulnerable to lightning strikes. Common locations for lightning strikes include open fields, under trees, boats, golf courses, near heavy or large-scale equipment, telephone poles, high-elevation locations, and raised platforms.

Extent

Cloud-to-ground lightning is the most threatening due to its ability to cause death, injury, wildfire, and property damage. The extent of lightning depends on many factors, some of which explain the geographic extent of the most frequent lightning strikes in Colorado. Ground elevation, ground humidity, and wind currents are all ingredients that enhance the frequency of lightning.

Historical Occurrences

SHELDUS reports four lightning strikes that resulted in fatalities, injuries, or damage to property or infrastructure in Ouray County from 1960 to 2021. In total, these events were responsible for $1,61 in property damage. One injury and one fatality were reported in association with these events.[119]

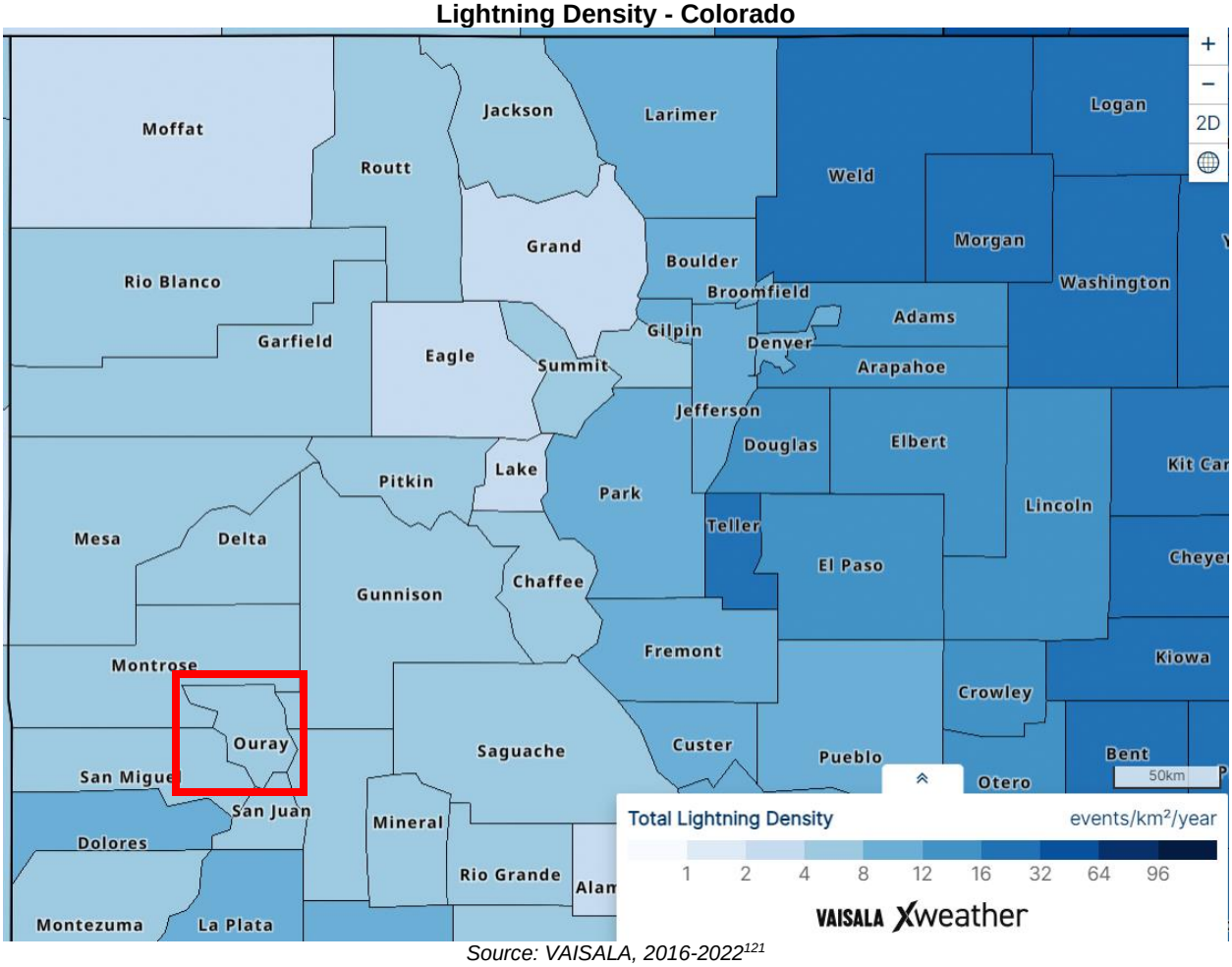
119 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.

- **June 13, 1996:** A man was struck and killed by lightning while hiking near the summit of Mt. Sneffles. Shortly before the lightning strike, he was warned of the potential danger of lightning from other hikers coming down from the summit.

- **August 17, 1999:** Lightning struck a power substation in the City of Ouray. Insulators were destroyed, and fuses were blown on a transformer, which caused a power outage for about one hour in the entire community. Damage was estimated at $1,000.

However, the actual number of lightning strikes is much higher, and thunderstorms with high levels of lightning activity are prevalent during the late summer months. Most lightning strikes are not reported unless they cause damage, injury, or death. VAISALA data shows Ouray County averages approximately 2,000 to 4,000 lightning strikes annually.[120] Additionally, lightning strikes are a common cause of wildfires in Ouray County, and those impacts are characterized in the Wildfire risk assessment of this plan.

Lightning Density - Colorado



Source: VAISALA, 2016-2022[121]

120 VAISALA. 2016-2022. "Global Lightning Density Map". https://interactive-lightning-map.vaisala.com/?_ga=2.241223942.528535091.1647036919-204568516.1647036919.
121 VAISALA. 2016-2022. "Global Lightning Density Map". https://interactive-lightning-map.vaisala.com/?_ga=2.241223942.528535091.1647036919-204568516.1647036919.

Average Annual Losses

The average damage per event estimate was determined based on recorded damages from SHELDUS from 1960 to 2021. This does not include losses from functional downtime, economic loss, injury, or loss of life. Lightning strikes cause an average of $19 per year in property damage.[122]

Lightning Loss Estimate

Number of Events	Average Events Per Year	Total Property Loss	Average Annual Property Loss	Total Crop Loss	Average Annual Crop Loss
4	0.06	$1,161	$19	$0	$0

Source: SHELDUS, 1960-2021

Historical Probability & Future Likelihood

While SHELDUS reported lightning events in only 4 out of 62 years in the period of record, lightning is likely to occur several times annually in Ouray County. For this plan, the historical probability of lightning is 100 percent. Due to the anticipated impacts of climate change and future development, the future likelihood of a lightning event is very likely.

Historical Probability & Future Likelihood – Lightning

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
100%	No Change In Frequency or Exposure	Increase in Exposure	**Very Likely**

Climate Change

Currently, climate change's impacts on lightning are still not fully understood. The 2023-2028 Colorado Enhanced State Hazard Mitigation Plan anticipates little change in the intensity and frequency of lightning events.[123]

Future Development

Lightning strikes will continue to threaten future development throughout Ouray County. Exposure will increase as people, visitors, and buildings increase. For future development, adequate protection from lightning strikes should be incorporated into building designs and plans. Lightning rods, protected rooftop utilities, surge protectors, and fuel reduction projects are possible steps new developments can take to reduce impacts from lightning.

Potential Impacts

Lightning strikes could impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Increased risk of injury from direct strikes or fallen tree limbs.

122 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.

123 Colorado Division of Homeland Security & Emergency Management. December 2023. "Colorado Enhanced State Hazard Mitigation Plan". https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

Community Lifeline Impacts

- Safety and Security
  - Power and data loss are possible if a building is directly struck. Building damage is also a possibility.

- Food, Hydration, Shelter
  - Lighting is not likely to cause significant impacts on food, hydration, or shelter.

- Health and Medical
  - Power and data loss are possible if a building is directly struck.

- Energy (Power and Fuel)
  - Lightning can damage power poles and substations, leading to localized outages.

- Communications
  - Lightning can damage communication towers and lines, disrupting communication networks and emergency coordination.

- Transportation
  - Transportation is not likely to be majorly impacted by lightning.

- Hazardous Materials
  - Hazardous materials are not likely to be impacted by lightning strikes.

- Water Systems
  - Power loss to water systems could temporarily impact water service.

Economic Impacts

- Businesses may face disruptions due to property damage and power outages.

Environmental Impacts

- Lightning strikes are a significant cause of wildfires, which can destroy large areas of land.

Vulnerabilities

Lightning can cause deaths, injuries, and property damage, including damage to buildings, communications systems, power lines, and electrical systems. It also causes wildland and structural fires. Damage from lightning occurs in four ways.

- Electrocution, severe electrical shock, and burns of humans and animals.
- Vaporization of materials in the path of the strike.
- Fire is caused by the high temperatures associated with lightning.
- Power surges that can damage electrical and electronic equipment.

When people are struck by lightning, the result is deep burns at the point of contact (usually on the head, neck, and shoulders). Approximately 70% of lightning survivors experience residual

effects such as vision and hearing loss or neuropsychiatric issues. These effects may develop slowly and only become apparent much later. Death occurs in 20% of lightning strike victims.

Aside from wildfire ignition, lightning strikes cause intense but localized damage. In contrast to other hazards, lightning does not typically cause widespread disruptions within the community. Structural fires, localized damage to buildings, damage to electronics and electrical appliances, and electrical power and communications outages are typical consequences of a lightning strike.

The indirect social and economic impacts of lightning damage are typically associated with losing electrical power. Since society relies heavily on electric power, any disruption in the supply, even for a short time, can have significant consequences. Wildland fires can also be an indirect result of a lightning strike.

People recreating outside are at the highest risk of a lightning strike. Large influxes of people visiting Ouray County during the summer months expose many people to lightning during the peak of the monsoon season when most lightning strikes occur. Many people visit Ouray County for outdoor beauty. If they are not prepared for the risks associated with lightning in the high country, tourists can be particularly vulnerable to lightning strikes.

All six of Ouray County's owned and identified community lifelines could sustain damage and loss of power from a lightning strike. The communications tower, emergency operations center, county courthouse, and courthouse annex have backup generators, so their services would likely not be impacted. The 4-H event center and public health office do not have backup generators and could experience a temporary loss of services.

The following table provides a summary of lightning vulnerabilities in the county. Participant-specific vulnerabilities can be found after the table.

County Lightning Vulnerabilities

Sector	Vulnerability
People	-Injuries can occur from not seeking shelter, standing near windows, and shattered windshields in vehicles -Those who work outside and emergency responders are more vulnerable
Economic	-Damage to computers and other electronics due to power surges -Potential loss of business from power outages
Built Environment	-Damage to building and rooftop utilities
Community Lifelines	-Power outages -Loss of information systems -Damage to critical buildings and rooftop utilities
Recreation	-Rafting, fishing, and other activities near water are at an increased risk -Hikers and campers who may not have nearby sheltering locations are more at risk

<u>City of Ouray</u>
The City of Ouray has the same vulnerabilities to lightning as the rest of the county. All three community lifelines could sustain building damage and loss of power. However, all three have backup generators, so their services would likely not be impacted.

<u>Town of Ridgway</u>
The Town of Ridgway has the same vulnerability to lightning as the rest of the county. All five community lifelines could sustain building damage and loss of power. The San Miguel Power

Association and water treatment plan have backup generators, so their services would likely not be impacted. The Decker Community Room, Town Hall, and wastewater treatment plant do not have backup generators and could experience a temporary loss of services.

Dallas Park Cemetery District
Lightning could damage the cemetery's office and maintenance building and cause it to lose power. Lightning could also cause a wildfire in or near the cemetery.

Jurisdictions Ranking Lightning as a Prioritized Hazard of Concern

No jurisdictions or stakeholders identified lightning as a prioritized hazard of concern.

Mass Casualty Events

In general, a mass casualty event is an incident in which local emergency response capabilities are overwhelmed by the number and severity of casualties. While many of the hazards profiled in this plan could result in such an incident, specific concerns are discussed within those individual hazard sections. This hazard is specifically concerned with transportation incidents that involve large numbers of people (e.g., a plane or bus crash). These incidents could be primary hazards or secondary effects of another hazard (e.g., an avalanche along a transportation corridor could bury vehicles). Incidents are influenced by several factors, including road conditions, weather conditions, density of traffic, type of roadway or transportation route, signage, and signaling. A plane crash in the rugged terrain of Ouray County is likely to have few survivors, whereas a tour or school bus crash could result in multiple injuries and fatalities. Additionally, the mining industry continues to operate in the county. Mass casualty events sometimes occur in the mining industry due to cave-ins or explosions.

Location

Traffic and bus accidents are most likely to occur along the Highway corridors of 550 and 62. The steeper, curvy sections of Highway 550 above and south of Ouray are particularly prone to accidents. The section of Highway 550, also known as the Million Dollar Highway, extending south from the City of Ouray to Silverton, is 27 miles of twisty mountain roads with very few guard rails. The first section up to the Ironton Park meadows runs along an eastern cliff side with up to 410-foot drops down to the bottom of the Uncompahgre River. Ouray County is particularly concerned that a tour/motor coach bus could go over the side of Highway 550. Because of the risk, Greyhound has changed their route and no longer goes through the City of Ouray, but some buses still travel along the highway. Mass casualty events could also occur in the county's active mines. The figures below show the major transportation routes in the county and current permitted mines.

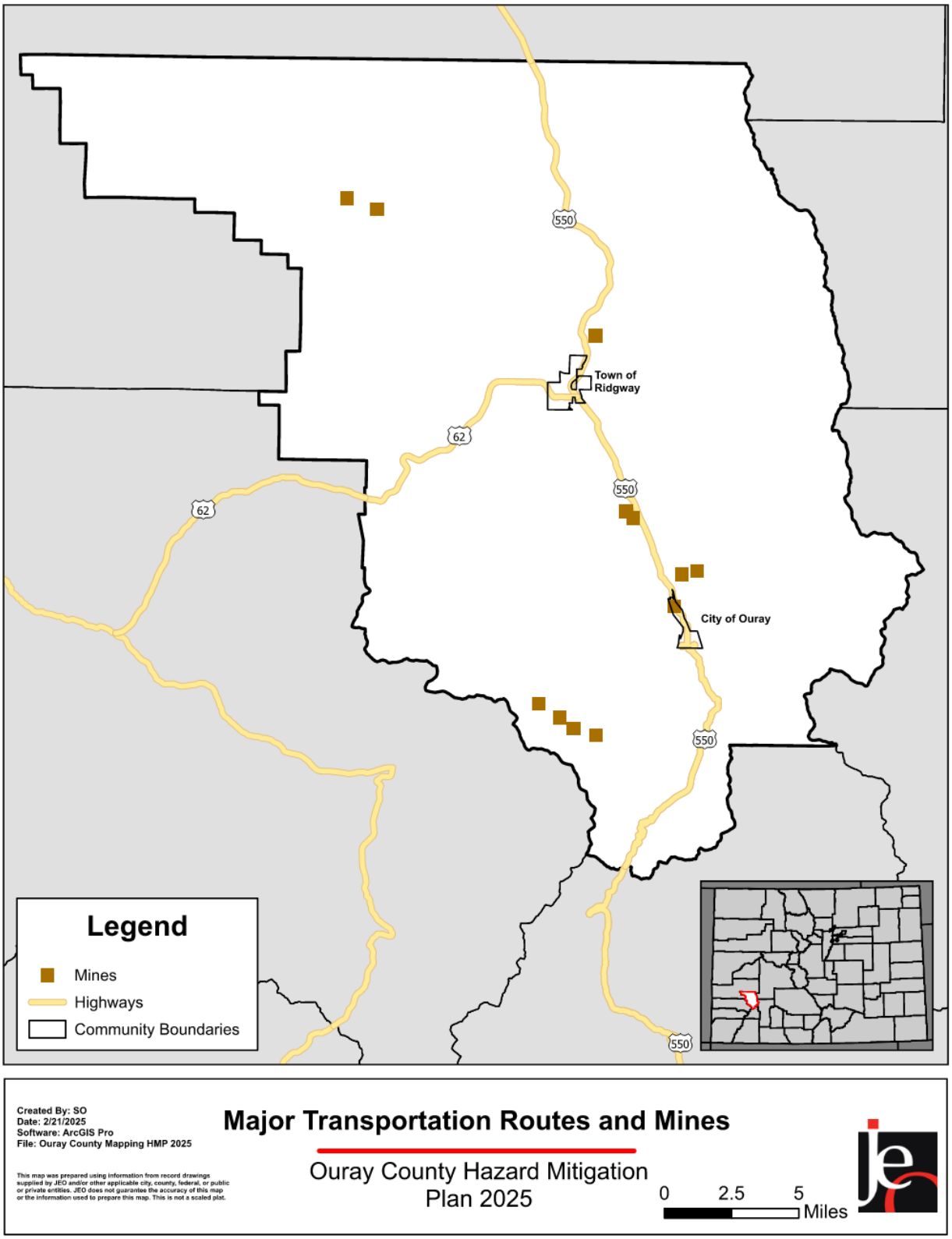
An event such as an airplane crash could occur anywhere in the county. While less likely than automobile accidents, a crash could happen at an airport during takeoff or landing. The county has no airports, but one private heliport, Ponderosa Heliport, is located five miles south of the City of Ouray.[124]

Extent

The extent of a mass casualty event is usually localized; however, catastrophic events can occur and may require assistance from outside jurisdictions. Transportation disruptions along Highways 550 and 62 can significantly impact surrounding counties and communities. A mass casualty incident would likely be a sudden, unpredictable occurrence.

124 Airport-Data.com. 2024. "Quick Search". https://airport-data.com/.

Major Transportation Routes and Mines in the County



Historical Occurrences

Since 2005, emergency services in Ouray County have responded to five incidents where a vehicle carrying enough people to be considered a mass casualty has gone over the side of the highway. Additional vehicles have gone off the side of the highway, although not considered a mass casualty. Impacts ranged from minor injuries to fatalities. One of these incidents, which received national attention, occurred in February 2005 when a van carrying six passengers hit a patch of black ice, flipped sideways, started rolling, and plunged approximately 400 feet down the mountain ravine (all passengers were able to walk away from the accident). Although none of these five events were mass casualty events, they indicate what could happen given the right circumstances.

On November 17, 2013, two miners at the Revenue-Virginius Mine died from carbon monoxide poisoning. Twenty other miners were taken to regional hospitals to be treated for carbon monoxide exposure. An area of the mine was contaminated with lethal levels of carbon monoxide from a previous explosive detonation.[125]

From 1962 to October 2023, there were five aviation accidents in Ouray County, as reported by the National Transportation Safety Board database (table below). The exact damage from these events is unknown; however, all the aircraft were destroyed or sustained substantial damage. These events resulted in 12 deaths and two injuries.[126] None of the events met the definition of a mass casualty event, as emergency response resources were not overwhelmed.

Aviation Accidents in Ouray County

Date of Event	Nearest Town	Aircraft Type	Deaths	Injuries	Aircraft Damage
7/26/1970	Ouray	Airplane	3	0	Destroyed
4/25/1977	Ridgway	Airplane	0	2	Destroyed
8/7/2001	Ouray	Helicopter	0	0	Substantial
Winter 2004	Ouray	Airplane	4	0	Destroyed
3/22/2014	Ridgway	Airplane	5	0	Substantial

Source: National Transportation Safety Board

The airplane crash in the winter of 2004 killed four people on Whitehouse Mountain, and the bodies could not be recovered until the following spring. During the event on March 22, 2014, a small plane carrying five people crashed into Ridgway Reservoir. No one survived the crash. The passengers, all from Alabama, were on their way to Montrose for a skiing trip. Ouray County Emergency Management noted that this incident tied up emergency responders in the county. If a second hazard event were to occur during this time, it would overwhelm emergency response resources.

Average Annual Losses

The damages from the events discussed above are unknown, so average annual losses cannot be determined. While not all of these events met the criteria of a mass casualty event, they did result in 14 fatalities and 22 injuries, and many of the events could have resulted in more. It was estimated that the March 22, 2014, plane crash took over 1,500 labor hours.

125 The Denver Post. November 17, 2013. “Two miners dead in Colorado, 20 others injured after Ouray blast”. https://www.denverpost.com/2013/11/17/two-miners-dead-in-colorado-20-others-injured-after-ouray-blast/.

126 National Transportation Safety Board. 1962-October 2024. “Aviation Accident Database”. https://www.ntsb.gov/Pages/AviationQueryV2.aspx.

Historical Probability & Future Likelihood

With no events reaching the mass casualty definition, there is a <1% historical probability of a mass casualty event. Even with the anticipated impacts of climate change and future development, the future likelihood of a mass casualty event is unlikely.

Historical Probability & Future Likelihood – Mass Casualty

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
<1%	Slight Increase in Frequency	Increase in Frequency	**Unlikely**

Climate Change

Climate trends are not anticipated to have a direct impact on transportation incidents. However, transportation routes may be impacted by an increase in other hazards. For example, debris flow, rockfall, and avalanches are likely to increase, which could damage roadways and lead to an increased chance of a mass casualty event.

Future Development

Future development and population growth will increase the likelihood of mass casualty events. As communities expand into natural habitats, impacts on animals will also increase. Additionally, with continued increases in visitors and residents traveling along Red Mountain Pass, risk on Highway 550 increases.

Potential Impacts

Mass Casualty events could significantly impact the people, community lifelines, and local economy of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Potential for significant injuries or fatalities, mainly if the event occurs in a densely populated area or during peak tourist season.

Community Lifeline Impacts

- Safety and Security
  - A mass casualty event can overwhelm local emergency services, limiting their ability to respond effectively to all needs.
- Food, Hydration, Shelter
  - Food, hydration, and shelter are unlikely to be impacted by a mass casualty event.
- Health and Medical
  - Limited healthcare facilities in the area may struggle to cope with a sudden influx of casualties, affecting the care and outcomes for those injured.
- Energy (Power and Fuel)
  - Energy is unlikely to be impacted by a mass casualty event.
- Communications
  - Communications are unlikely to be impacted by a mass casualty event.

- Transportation
    - Road closures or damage can isolate communities and hinder emergency response and evacuation efforts.

- Hazardous Materials
    - Hazardous materials are unlikely to be impacted by a mass casualty event.

- Water Systems
    - Water systems are unlikely to be impacted by a mass casualty event.

Economic Impacts

- Tourism and local businesses may be adversely affected, with potential long-term economic impacts if recovery is slow.

Environmental Impacts

- The environment is unlikely to be impacted by a mass casualty event.

Vulnerabilities

The impact on people would be the most severe in a mass casualty event due to the potentially large number of injuries and fatalities. Tourism is a significant economic driver in the county, particularly in the City of Ouray. This brings a large influx of people who visit, mainly to see the natural beauty in the county. This often means driving over Red Mountain Pass and the “Million Dollar Highway.” People driving on the highway are vulnerable to accidents. Tour bus crashes are more likely to occur during the tourist season, which is most busy, June through August, and when vans and buses are transporting people between the Telluride ski area and Montrose Airport during the winter. Local tourism and businesses could see a decline after a mass casualty event.

Additionally, a mine accident would largely impact people, causing injuries or death. This could happen from an incident similar to the 2013 event of carbon monoxide poisoning or from the physical impact of a mine collapse. There are thousands of historic mines throughout the county, and visitors can access some. Most are sealed off for public protection, but there are remote mines that are unsealed.

It is usual for people to suffer emotional and physical stress after a mass casualty event, even if they are not at or near the scene. This additional stress can worsen existing health conditions or trigger a new health problem.

None of the county’s owned and identified community lifelines would be damaged from a mass casualty event. However, services provided by the emergency operations center, county courthouse, courthouse annex, and public health office could be delayed as staff help with the event. The following table provides a summary of mass casualty vulnerabilities in the county. Participant-specific vulnerabilities can be found after the table.

County Mass Casualty Vulnerabilities

Sector	Vulnerability
People	-A large number of Injuries and fatalities -Emotional and physical stress -Emergency responders overwhelmed
Economic	-Loss of tourism and visitors
Built Environment	-Little to no damage unless the accident hits a building
Community Lifelines	-Transportation routes closed
Recreation	-Those using Highway 550 south of Ouray to get to recreation areas or activities are at a higher risk -Those visiting historic mines are at higher risk

City of Ouray

The City of Ouray has vulnerabilities similar to those of the rest of the county. Access to medical facilities is a concern because the closest facility is a 45-minute drive. A mass casualty event is more likely to occur in or near the city because of the larger population base. None of the city's community lifelines would be directly impacted by a mass casualty event. City hall services may be delayed as local staff help with the event.

Town of Ridgway

The Town of Ridgway has vulnerabilities similar to those of the rest of the county. Access to medical facilities is a concern because the closest facility is a 30-minute drive. A mass casualty event is more likely to occur in or near the town because of the larger population base. None of the town's community lifelines would be directly impacted by a mass casualty event. However, it would likely take a lot of staff time and resources to navigate. It would also require assistance from outside agencies.

Dallas Park Cemetery District

There is no risk of a mass casualty event negatively impacting the cemetery's owned community lifelines, operations, or individuals. The cemetery has room to bury a large number of people and could be used as a staging area if needed.

Jurisdictions Ranking Mass Casualty as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders that identified mass casualty as a prioritized hazard of concern.

- Ouray County Public Health

Public Health Emergencies

A public health emergency can be defined as a situation where health consequences have the potential to overwhelm local capabilities to address them.[127] The number of cases that qualify as a public health emergency depends on several factors, including the illness, its symptoms, ease of transmission, incubation period, available treatments or vaccinations, and local capabilities.

Under section 319 of the Public Health Services Act, the secretary of the U.S. Department of Health and Human Services can declare a Public Health Emergency if they determine that 1) a disease or disorder presents a public health emergency or 2) a public health emergency, including significant outbreaks of infectious diseases or bioterrorist attacks exist.[128]

With the advent of sanitary sewer systems and other improvements in hygiene since the 19th century, the spread of infectious diseases has greatly diminished. Additionally, the discovery of antibiotics and the implementation of universal childhood vaccination programs have significantly reduced human disease impacts. Today, the Centers for Disease Control and Prevention (CDC) and state organizations carefully track human disease incidences for possible epidemics and implement control systems. Ouray County Public Health works with the Colorado Department of Public Health & Environment to track any disease outbreaks in the county.

This plan will break down public health emergencies into three broad categories: Pandemic, Human Caused Health Emergencies, and Naturally Occurring Health Emergencies. Descriptions of each category can be found below.

Pandemic

A pandemic is an epidemic of an infectious disease that spreads across a large region and usually affects a large number of people. Pandemic diseases typically spread quickly from person to person and cause serious illness. These diseases can be known, i.e., influenza, but as seen during the COVID-19 pandemic, new strains or diseases can pop up and cause a pandemic event. The U.S. Centers for Disease Control and Prevention has been working closely with other countries and the World Health Organization to strengthen systems to detect outbreaks of influenza that might cause a pandemic and to assist with pandemic planning and preparation.

An especially severe pandemic could lead to high levels of illness, death, social disruption, and economic loss. Impacts could range from school and business closings to the interruption of essential services such as public transportation, health care, and the delivery of food and medicine.

Human-Caused Health Emergencies

This category includes any human-caused event that results in a public health emergency. It includes things like mass casualty events, biological or chemical terrorism, and hazardous materials incidents. This category will not be further discussed in this profile because each event is profiled individually in the risk assessment. For more information about each one, see the Hazardous Materials Incident section, the Imminent Threat section, and the Mass Casualty Events section.

127 Nelson, Christopher, et all. 2007. “Conceptualizing and Defining Public Health Emergency Preparedness”. https://pmc.ncbi.nlm.nih.gov/articles/PMC1854988/.

128 U.S Department of Health and Human Services. 2024. “Public Health Emergency Declaration Q&As”. https://aspr.hhs.gov/legal/PHE/Pages/phe-qa.aspx.

Naturally Occurring Health Emergencies

This category includes any health emergency that is not human-caused, naturally occurs in the environment, and is not considered a communicable disease. This can consist of zoonotic diseases from animals to humans and naturally occurring seeps (radon and methane).

Colorado's most common zoonotic diseases include hantavirus, malaria, plague, Q fever, rabies, tick-borne diseases, tularemia, and West Nile virus. Most of these diseases come from rodents, farm animals, ticks, and mosquitoes. The mosquito viruses of dengue, malaria, and West Nile virus have the highest number of cases in Colorado.[129] However, case counts represent residence in Colorado at the time of diagnosis and do not indicate where the patient was infected with the disease.

Radon is a naturally occurring colorless, odorless, radioactive gas that forms when uranium in the soil breaks down. Radon can then seep into homes and workplaces through cracks and openings in floors and crawlspaces and become part of the atmosphere. Radon exposure does not create an acute or immediate hazard; however, long-term exposure can significantly increase the risk of lung cancer. Radon is the second-leading cause of lung cancer in the United States (behind smoking) and is the leading cause of lung cancer in nonsmokers. Each year, about 21,000 deaths in the United States are attributed to radon-caused lung cancer. Lung cancer typically occurs 5-25 years after exposure.[130]

Methane is a colorless, odorless gas and is the main component of natural gas. It is associated with fossil fuels, primarily coal beds, and is also created by microorganisms in marshes, bogs, and landfills. Methane is not a toxic human health hazard; it is not considered a carcinogen and does not cause adverse health effects from ingestion, inhalation, or adsorption. However, if methane accumulates in a confined or poorly ventilated space, an explosion hazard can be created, and because oxygen is displaced, an asphyxiation hazard may also be created. High levels of methane gas in groundwater have also created a flammability hazard.

Location

Pandemic

The entire population of the county could potentially be affected by a pandemic. Areas with denser populations where more people are in contact with one another are more at risk of a pandemic. These areas include the City of Ouray, the Town of Ridgeway, and the Loghill area.

Naturally Occurring Health Emergencies

Areas where humans are more likely to interact with wild animals and farm animals have a higher risk of zoonotic diseases. The higher elevations of the county are less prone to mosquitoes. Thus, the lower elevations in the northern portions of the county are more likely to see mosquito-borne diseases. Most livestock and farms are located in the northern portions of the county, so animal diseases from farm animals are more likely to occur there. Rodents can be found throughout the county, especially in structures. Ticks are usually found in brushy areas along the edges of fields and woodlands or commonly traveled paths through grassy areas and shrublands. The Rocky Mountain Wood Tick, which can transmit Colorado tick fever and Rocky Mountain spotted fever, has been found in Ouray County.[131]

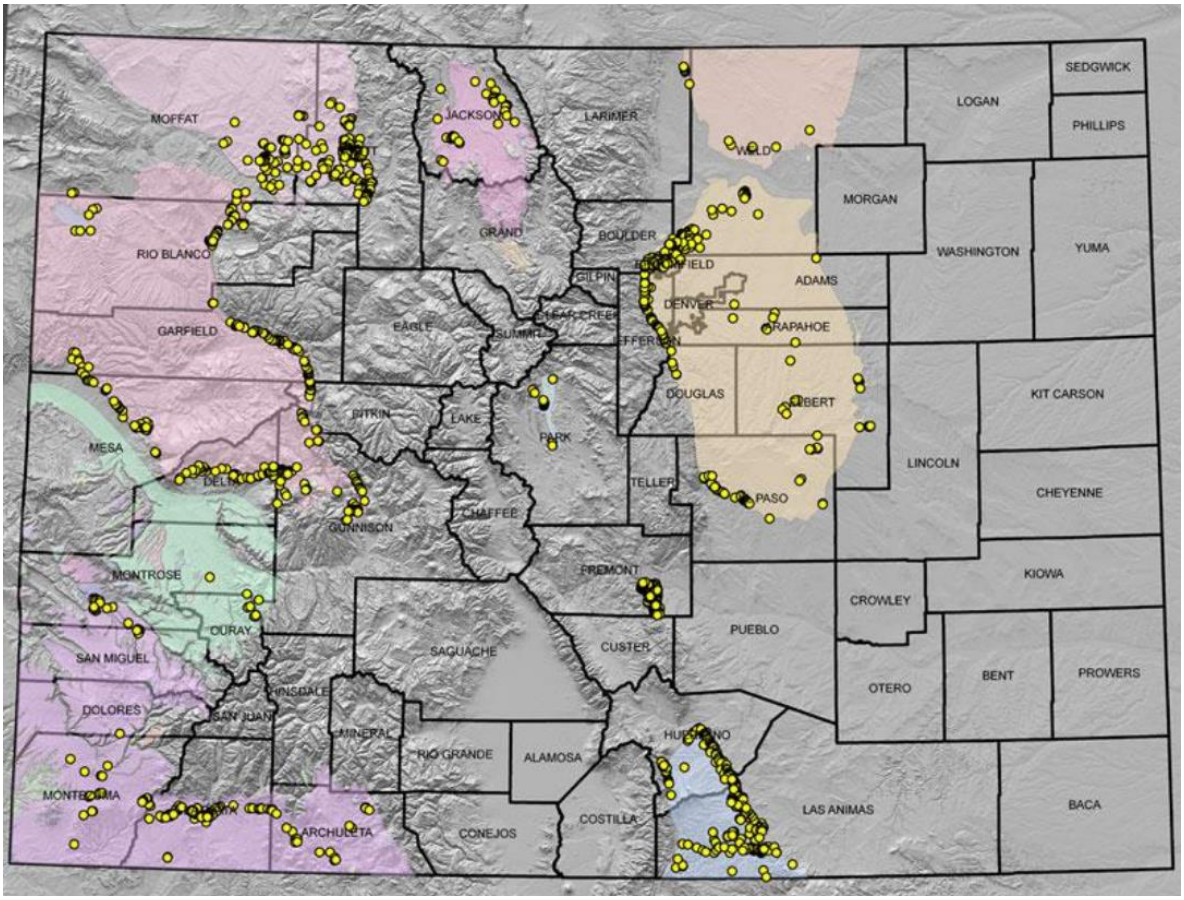
129 Colorado Department of Public Health & Environment. 2023. “2023 Colorado Annual Zoonoses Report”. 2018-2022. https://docs.google.com/document/d/e/2PACX-1vQiHGHnuA3a1eItYaqFdusko0oPPOXTDqc84Vre5iVq1hPgTF7oafN5_lUNiDdsDvy-PmFFpPw0L6iV/pub.

130 Colorado Department of Public Health & Environment. 2024. “Understanding Radon”. https://cdphe.colorado.gov/hm/understanding-radon.

131 Colorado Department of Public Health & Environment. 2024. “Tick Distribution in Colorado from 2014-2019”. https://docs.google.com/document/d/e/2PACX-

The entire county is exposed to radon. The exact level varies for each building, and at this time, building-level data is unavailable to determine areas that may experience higher levels of radon. Methane seepage is typically associated with coal bed areas in Colorado. According to the Colorado Geological Survey, the northern and central portions of Ouray County contain a coal bed and may be more susceptible to methane seeps.[132]

Coal Bed and Historic Coal Mine Locations - Colorado



Source: 2019 Ouray County Hazard Mitigation Plan

Extent

Pandemic

According to the Colorado Department of Public Health and Environment, pandemics can occur at any time of the year and naturally occur.[133] The extent varies from person to person, but the very young, very old, smokers, and people with preexisting conditions are at higher risk. In the county, it is estimated that 79% have received at least one COVID-19 vaccine.[134] In Colorado, it

1vS7BNfm4Oi5D8avU_tiXfDazYQW4TIfa2kqrh7k_DkpwRSQykqPHREfKkIUhWhyqGxp2B2YCvjBxhmD/pub?urp=gmail_link.

132 Colorado Geological Survey. 1980. "Conservation of Methane from Colorado's Mined/Minable Coal Beds: A Feasibility Study."

133 Colorado Department of Public Health & Environment. 2024. "Pandemic Influenza". https://cdphe.colorado.gov/topics/pandemic-influenza.

134 Colorado Department of Public Health & Environment. 2024. "Colorado's Covid-19 Vaccine Data". https://cdphe.colorado.gov/covid-19/vaccine-data.

is estimated that 40% of people over 18 have received a flu vaccine. This is higher than the national average of 37%.[135] Data is not available by county.

Naturally Occurring Health Emergencies

For zoonotic diseases, the extent varies from person to person and disease to disease. However, the very young, very old, and people with preexisting conditions are at a higher risk.

According to the Colorado Department of Public Health & Environment, all counties in Colorado are located in an EPA Radon Zone 1, which means there is high radon potential with probable indoor radon average of greater than four picocuries per liter. The exact level varies for each home in the county. The EPA action level for indoor radon is four picocuries per liter.[136] From 2005 to 2023, 243 home radon tests were performed in Ouray County. Of those, 54% were over four; the median test result was 4.2.[137] Typically, radon exposure occurs over a long span (such as in an individual's home), and effects from this exposure occur years later. Among people exposed to radon above four, 62 out of every 1,000 smokers and seven out of 1,000 nonsmokers could get lung cancer.[138]

Methane is an odorless gas, so exposure can be sudden and without warning. This can occur on a small scale, such as an individual in a house or vehicle, or at a larger scale, such as an indoor event.

Historical Occurrences

Pandemic

There have been five acknowledged pandemics that have impacted the United States. Information about each event is listed below.

- **1918-1919 Spanish flu (H1N1) –** This flu is estimated to have made 20-40% of the world's population sick. Over 20 million people lost their lives. Between September 1918 and April 1919, 500,000 Americans died. The flu spread rapidly; many died within a few days of infection, others from secondary complications. The attack rate and mortality were highest among adults 20-50 years old; the reasons for this are uncertain.[139] There is evidence that 15 people or more died in Ouray County during this outbreak.

- **1957-1958 Asian flu (H2N2) –** This virus was quickly identified due to technological advances, and a vaccine was produced. Infection rates were highest among school children, young adults, and pregnant women. The elderly had the highest rates of death. A second wave developed in 1958. In total, there were about 70,000 deaths in the United States. Worldwide deaths were estimated to be between 1 and 2 million.[140]

- **1968-1969 Hong Kong flu (H3N2) –** This strain caused approximately 34,000 deaths in the United States and more than 700,000 worldwide. It was first detected in Hong Kong in

135 Centers for Disease Control and Prevention. 2018. "State Influenza Coverage". https://cohealthviz.dphe.state.co.us/t/DCEED_Public/views/NIS_Flu_Pub/NISFlu?%3Adisplay_count=n&%3Aembed=y&%3AisGuestRedirectFromVizportal=y&%3Aorigin=viz_share_link&%3AshowAppBanner=false&%3AshowVizHome=n.

136 Colorado Department of Public Health & Environment. 2024. "Understanding Radon". https://cdphe.colorado.gov/hm/understanding-radon.

137 Colorado Department of Public Health & Environment. 2023. "Radon Data". https://coepht.colorado.gov/radon-data.

138 EPA. 2001. "Health Risk of Radon". https://www.epa.gov/radon/health-risk-radon.

139 Centers for Disease Control and Prevention. 2018. "History of 1918 Flu Pandemic". https://archive.cdc.gov/www_cdc_gov/flu/pandemic-resources/1918-commemoration/1918-pandemic-history.htm.

140 Centers for Disease Control and Prevention. 2019. "1957-1958 Pandemic (H2N2 virus)". https://archive.cdc.gov/www_cdc_gov/flu/pandemic-resources/1957-1958-pandemic.html.

early 1968 and spread to the United States later that year. Those over age 65 were most likely to die. This virus returned in 1970 and 1972 and still circulates today.[141]

- **2009-2010 Swine Flu (H1N1) –** This flu strain was first detected in the U.S. in California in April 2009. It was identified as H1N1 but was not the exact strain that appeared in 1918. Worldwide health response quickly ramped up in April in preparation for a pandemic. All 50 U.S. states reported cases of 2009 H1N1 by June 19, 2009. This strain caused 14,286 deaths worldwide and 2,117 laboratory-confirmed deaths in the U.S., according to the CDC.[142]

- **2020-2023 COVID-19 (SARS-CoV-2) –** In January 2020, the CDC confirmed the first case of COVID-19 in the United States, and it quickly spread across the country. By March 2020, the World Health Organization declared COVID-19 a pandemic, and travel bans were instituted around the globe. Primary symptoms of the infection included cough, fever or chills, shortness of breath or difficulty breathing, fatigue, muscle and body aches, headache, loss of taste or smell, sore throat, and others. As of October 19, 2024, the CDC reported 1,208,804 deaths attributed to COVID-19 in the United States.[143] In Ouray County, there have been 892 cases of COVID-19 and six deaths.[144]

Naturally Occurring Health Emergencies

From 2003 to 2024, there have not been any reported West Nile virus cases in Ouray County. Several surrounding counties have experienced the virus. From 2003 to 2024, Montrose County has experienced 131 cases, San Miguel County two cases, and Gunnison County three cases.[145] Data on other mosquito-borne illnesses is not available on a county scale.

From 1993 to 2023, there have been no reported cases of hantavirus in Ouray County.[146] From 2005 to 2021, no reported plague cases have been reported in Ouray County.[147] From 2012 to 2020, there have been no reported cases of tularemia in Ouray County.[148] From 2003 to 2022, there have been no Colorado tick fever cases in Ouray County.[149] No data on a county scale is available for Q fever and all other tick-related diseases.

No data is available for the number of radon-caused deaths or cancer cases. Overall, Colorado's incidence rate of lung cancer is 37.7 cancers per 100,000 residents; this is well below the national average of 53.1, due primarily to Colorado's low smoking rates. According to this data, Ouray

141 Centers for Disease Control and Prevention. 2019. "1968 Pandemic (H3N2 virus)". https://archive.cdc.gov/www_cdc_gov/flu/pandemic-resources/1968-pandemic.html.
142 Centers for Disease Control and Prevention. 2019. "2009 H1N1 Pandemic (H1N1 pdm09 virus)". https://archive.cdc.gov/www_cdc_gov/flu/pandemic-resources/2009-h1n1-pandemic.html.
143 Centers for Disease Control and Prevention. October 2024. "Trends in United States COVID-19 Deaths, Emergency Department Visits, and Test Positivity by Geographic Area". https://covid.cdc.gov/covid-data-tracker/#trends_totaldeaths_select_00.
144 USAFACTS. 2024. "Ouray County, Colorado Coronavirus Cases and Deaths". https://usafacts.org/visualizations/coronavirus-covid-19-spread-map/state/colorado/county/ouray-county/.
145 Colorado Department of Public Health & Environment. 2024. "West Nile Virus Data". 2003-2024. https://cdphe.colorado.gov/animal-related-diseases/west-nile-virus/west-nile-virus-data.
146 Colorado Department of Public Health & Environment. May 2024. "Hantavirus in Colorado since 1993". 1993-2023. https://docs.google.com/document/d/1BBBKElU9sUHKKXVh93anVcOnouyISJ2AgNExlkb3MmE/pub.
147 Colorado Department of Public Health & Environment. 2024. "Colorado plague data". 2005-2021. https://cdphe.colorado.gov/colorado-plague-data.
148 Colorado Department of Public Health & Environment. 2024. "Human Tularemia in Colorado, 2012-2020". 2012-2020. https://docs.google.com/document/d/1GzBJSCU3Qtf0dukBekDqJbzc72NgEj8e0NxEeQTo0uU/pub.
149 Centers for Disease Control and Prevention. 2023. "Data and Maps for Colorado Tick Fever. 2003-2022. https://www.cdc.gov/colorado-tick-fever/data-maps/index.html.

County experienced too few lung cancer cases (three or fewer) to calculate an incidence rate.[150] There have not been any previous occurrences of methane seepage incidents in Ouray County. However, with the presence of coal beds in the county, it remains a concern.

Average Annual Losses

Annual losses to the county from public health emergencies are not known. Most losses associated with public health emergencies are primarily the impact on people, causing sickness and death. There have been at least 21 known fatalities from these events, but the actual number is likely much higher.

Public health emergencies have direct economic impacts through response costs, loss of productivity at work and school, and reduced visitors to the area. In 2007, the national economic burden of influenza medical expenses, medical costs plus lost earnings, and the total economic burden was $10.4 billion, $26.8 billion, and $87.1 billion, respectively.[151] It is estimated that the COVID-19 pandemic will cause a total economic loss of $16 trillion.[152] The direct and indirect effects of significant health impacts are challenging to quantify and will vary depending on the type and spread of the disease.

Historical Probability & Future Likelihood

Pandemic

Based on five previous worldwide pandemic outbreaks that impacted the United States between 1900 and 2024, the historical probability is 4%. The likelihood of a pandemic will increase with the anticipated impacts of climate change and future development. However, there is no pattern as to when a pandemic will occur. Small-scale disease outbreaks will occur annually within the planning area. However, large-scale emergency events cannot be predicted.

Naturally Occurring Health Emergencies

There have not been any recorded naturally occurring health emergencies in Ouray County. This means the historical probability is <1%. With the anticipated impacts of climate change and future development, the likelihood of a naturally occurring health emergency is still very unlikely.

Historical Probability & Future Likelihood – Public Health Emergencies

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Pandemic	4%	Increase in Frequency	Increase in Exposure	**Unknown**
Naturally Occurring Health Emergencies	<1%	Increase in Frequency	Increase in Frequency and Exposure	**Very Unlikely**

150 National Cancer Institute. 2024. “State Cancer Profiles”. 2017-2021. https://statecancerprofiles.cancer.gov/incidencerates/index.php?stateFIPS=08&areatype=county&cancer=047&race=00&sex=0&age=001&stage=999&type=incd&sortVariableName=rate&sortOrder=default&output=0#results.

151 Molinari, N.M., Ortega-Sanchez, I.R., Messonnier, M., Thompson, W.W., Wortley, P.M., Weintraub, E., & Bridges, C.B. April 2007. “The annual impact of seasonal influenza in the US: measuring disease burden and costs”. DOI: 10.1016/j.vaccine.2007.03.046.

152 Cutler, David, et. all. 2020. “The COVID-19 Pandemic and the $16 Trillion Virus”. https://pmc.ncbi.nlm.nih.gov/articles/PMC7604733/#R1.

Climate Change

It is estimated that over the next 30 years, 143 million people are likely to migrate to other areas due to the effects of climate change, like increasing sea levels, drought, and other climate disaster events.[153] This global migration could lead to increased public health emergencies as different population groups come more in contact with each other and are exposed to various pathogens.

Shifting climatic conditions can alter the geographic range of disease-carrying insects and pests. The effect of climate change on the timing of bird migration and breeding patterns may also contribute to changes in long-range virus movement.[154] Many types of zoonotic diseases may initially spread faster as the local population is not aware of the proper steps to reduce their risk. Further research is needed to determine the impacts of climate change on radon and methane seeps.

Future Development

As the population in the county continues to grow, exposure to all public health emergency hazards increases. Additionally, as population density increases, diseases can spread more quickly. The impacts of a public health emergency could be lessened by building and/or designating mass vaccination sites and ensuring adequate rooms and beds at hospitals, nursing homes, and assisted living centers. Adding or replacing HVAC systems with improved filtration in these and other buildings, such as schools, would also lessen the impacts of this hazard. For radon and carbon monoxide, as new development occurs, radon testing and mitigation systems should be installed to decrease the risk of these hazards. As mining continues in the county, the risk of methane seeps is ongoing.

Potential Impacts

Public health emergencies could significantly impact the people, community lifelines, and local economy of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Potential for significant fatalities and long-term health impacts.
- Public health emergencies can lead to disruptions in daily life, with potential school closures, restricted gatherings, and impacts on mental health.

Community Lifeline Impacts

- Safety and Security
    - If the public health emergency leads to panic or unrest, it may impact the safety and security services, requiring additional law enforcement and emergency management resources.

- Food, Hydration, Shelter
    - Supply chains for food and essential goods could be disrupted, especially if isolation measures are implemented, affecting the availability of necessities.

153 Intergovernmental Panel on Climate Change. 2022. “Climate Change 2022: Impacts, Adaptation and Vulnerability”. https://www.ipcc.ch/report/ar6/wg2/.

154 EPA. June 2024. “Climate Change Indicators: West Nile Virus”. https://www.epa.gov/climate-indicators/climate-change-indicators-west-nile-virus.

- Health and Medical
  - The limited capacity of local healthcare facilities can lead to strained resources, affecting the treatment and outcomes for those impacted by the health emergency.

- Energy (Power and Fuel)
  - Energy is unlikely to be impacted by a public health emergency.

- Communications
  - Effective communication is crucial to disseminating information and guidelines to the public during health emergencies, and any disruption can hinder these efforts.

- Transportation
  - Transportation in the county is unlikely to be impacted by a public health emergency.

- Hazardous Materials
  - Hazardous materials are unlikely to be impacted by a public health emergency.

- Water Systems
  - Water systems may lack the available staff to operate efficiently and effectively.

Economic Impacts

- Local businesses, particularly those reliant on tourism, could suffer due to reduced visitor numbers and potential quarantine measures.

Environmental Impacts

- The environment is unlikely to be impacted by a public health emergency.

Vulnerability

An independent study conducted in 2023 by Trust for America's Health placed Colorado in the high-performance public health emergency preparedness tier.[155] Those most affected by public health emergencies are typically the very young, the very old, the immune-compromised, the economically vulnerable, and the unvaccinated. Roughly 14% of the planning area's population is 19 years or younger, and nearly 33% of the planning area is 65 years or older. These factors increase vulnerability to the impacts of pandemics. The more densely populated areas of the county, such as the City of Ouray, Town of Ridgway, and Loghill Mesa, would likely be more susceptible to the spread of the flu and COVID-19. The influx of tourists in the county can increase the spread of contagious diseases.

Vulnerability to a public health emergency is closely tied to the proximity or availability of health centers and services. No hospitals are located in the county, and the nearest hospital is in the City of Montrose. Certain geographic areas, populations, and facilities may experience a shortage of healthcare professionals, which results in a lack of access to healthcare in an area. The Health Resources and Services Administration (HRSA) assigns specific designations to shortage areas

155 Trust for America's Health. 2023. "State Profile: Colorado". https://www.tfah.org/state-details/colorado/.

to focus limited resources on communities with the most need. Shortage designations include Health Professional Shortage Areas (HPSAs), Medically Underserved Areas (MUAs), and Medically Underserved Populations (MUPs). Health Professional Shortage Areas are designated based on shortages in primary care, dental, or mental health providers in a geographic area, facility, or population. HPSAs are determined based on the number of health professionals relative to a high-need population. The following table identifies HPSA designations in the county.

Health Care Professional Shortage Areas in the Planning Area

Designation Type	Designation Date	Type of Care
Low-Income Population HPSA	9/19/1995	Primary Care
Geographic HPSA	12/1/2005	Mental Health

Source: Health Resources and Services Administration[156]

Medically Underserved Areas and Populations are designated by the HRSA as areas or populations having high poverty rates, high infant mortality rates, high elderly populations, or an insufficient number of primary care providers. Ouray County is designated as a Medically Underserved Area.[157]

People who work or recreate outside are at a higher risk of many zoonotic diseases, although the whole population of the county is at risk. People of any age can get a zoonotic disease; however, older adults are at the most significant risk for severe disease. Ouray County has had an aggressive mosquito program in place for several years, which includes mitigation, education, and tracking. The control methods used emphasize treatments with minimal environmental impact but proven effectiveness.

Radon-induced lung cancer impacts both children and adults alike, with all age groups having similar risk levels. Radon exposure has not been linked to other respiratory diseases like asthma. Radon can be tested for and mitigated in buildings to lower the risk of exposure in populations. Due to the widespread exposure to radon in Colorado, all jurisdictions have similar risks from radon exposure in Ouray County.

Methane seepages can cause explosions, which may cause injuries and fatalities as well as severe damage to structures. Additionally, if methane is contained in groundwater, it can make water unsafe to drink or, in some cases, flammable. All jurisdictions in the county are at risk of the impacts of methane seeps. However, there are documented coal bed areas in the northern/central portions of the county, putting those areas at a higher risk.

A public health emergency would not directly damage Ouray County's community lifelines. However, services may become delayed if staffing becomes an issue. Ouray County Public Health would likely see the largest impacts. The following table summarizes public health emergency vulnerabilities in the county. Participant-specific vulnerabilities can be found after the table.

156 Health Resources and Services Administration. 2024. "HPSA Find". https://data.hrsa.gov/tools/shortage-area/hpsa-find.
157 Health Resources and Services Administration. 2024. "MUA Find". https://data.hrsa.gov/tools/shortage-area/hpsa-find.

County Public Health Emergencies Vulnerability

Sector	Vulnerability
People	-Vulnerable populations include the very young, the very old, the unvaccinated, the economically vulnerable, pregnant women, and those with immunodeficiency disorders. -Long-term public health emergencies can have negative impacts on resident's mental health -Daycares and schools are at higher risk of contagious diseases -Those living or working in unmitigated basements have a higher risk of radon
Economic	-Large-scale or prolonged events may cause businesses to close and a loss of tourism, which could lead to significant economic loss
Built Environment	-Increased number of unoccupied business structures -Damage from methane explosion
Community Lifelines	-Healthcare facilities in the planning area may be overwhelmed quickly by widespread events -Community Lifelines could see suspended action or reduced resources due to sick staff
Recreation	-Those who recreate outdoors are at higher risk of West Nile

City of Ouray

Due to higher population density, the city is at higher risk of a public health emergency than most of the county. The city has a large population over the age of 65. Those individuals are at an increased risk from public health emergencies. Additionally, the community has no medical facilities, with the closest located in the City of Montrose, which is 45 minutes away. A public health emergency would not directly impact Ouray's community lifelines. However, services may become delayed if staffing becomes an issue.

Town of Ridgway

Due to a higher population density, the town is at higher risk of a public health emergency than the rest of the county. Ridgway also has a higher risk of methane seeps as coal beds are known to be located in that area of the county. The town has had an aggressive mosquito program in place for several years, which includes mitigation, education, and tracking. The control methods used emphasize treatments with minimal environmental impact but proven effectiveness. This program helps to reduce the town's vulnerability to mosquito-borne diseases. Access to medical facilities is a concern, with the closest located in the City of Montrose, which is 30 minutes away. During a public health emergency, there is a possibility for the Decker Room and Town Hall to be closed to members of the public. The other community lifelines would continue to operate.

Dallas Park Cemetery District

There is no risk of a pandemic event negatively impacting the cemetery's owned community lifelines. The cemetery has room to bury a large number of people and could be used as a staging area if needed. Operations could be impacted if staff or the board become sick. However, daily operation is not vital, and the likely impact would be for the cemetery to close temporarily.

Jurisdictions Ranking Public Health Emergencies as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders that identified public health emergencies as a prioritized hazard of concern.

- Ouray County Public Health

Severe Winter Storm

Severe winter storms are an annual occurrence in Colorado and Ouray County. Winter storms can bring extreme cold, freezing rain, heavy or drifting snow, snow squalls, and blizzards. Generally, winter storms occur as early as September and as late as May. Heavy snow is usually the most defining element of a winter storm. Large snow events can cripple an entire jurisdiction by hindering transportation, knocking down tree limbs and utility lines, and structurally damaging buildings.

Freezing Rain

Along with snow events, winter storms can potentially deposit significant amounts of ice. Ice buildup on tree limbs and power lines can cause them to collapse. This is most likely to occur when rain falls that freezes upon contact, especially in the presence of wind. Freezing rain is the name given to rain that falls when surface temperatures are below freezing. Unlike a mixture of rain and snow, ice pellets, or hail, freezing rain is made entirely of liquid droplets. Freezing rain can also lead to slick roads, causing automobile accidents and making vehicle travel difficult.

Snow Squalls

A snow squall is an intense, short-lived burst of heavy snowfall that quickly reduces visibility and is often accompanied by gusty winds. They move in and out rapidly and typically last less than an hour. The sudden white-out conditions and falling temperatures produce icy roads in just a few minutes. Snow squalls can cause extreme localized impacts on the traveling public and commerce for brief periods. Unfortunately, there is a long history of deadly traffic accidents associated with snow squalls. Although snow accumulations are typically an inch or less, the added combination of gusty winds, falling temperatures, and quick reductions in visibility can cause hazardous conditions.

Blizzards

Blizzards are particularly dangerous due to drifting snow and the potential for rapidly occurring whiteout conditions, significantly inhibiting vehicular traffic. Defined by the National Weather Service as a combination of sustained winds or frequent gusts of 35 mph or greater in the valleys, sustained wind speeds of 50 mph with gusts of 75 mph or greater in the mountains, and visibilities of less than a quarter mile from falling or blowing snow for three hours or more. The reduced visibility makes travel treacherous and disrupts key local transportation nodes, including emergency response efforts.

Location

The entire county is at risk of severe winter storms. Ouray County is accustomed to winter storms that bring large amounts of snow. Infrastructure and buildings at higher elevations or greater slopes will experience more risk of snow and ice.

Extent

The Sperry-Piltz Ice Accumulation Index was developed by the National Weather Service to predict the accumulation of ice and resulting damage. The Sperry-Piltz Ice Accumulation Index assesses total precipitation, wind, and temperatures to predict the intensity of ice storms. The figure on the next page shows the Sperry-Piltz Ice Accumulation Index.

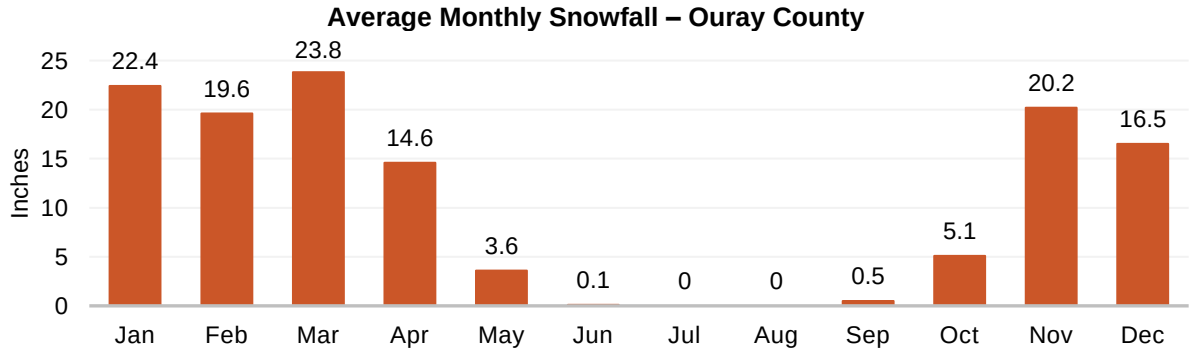
Sperry-Piltz Ice Accumulation Index

ICE DAMAGE INDEX	*AVERAGE ICE AMOUNT (in inches) *Revised: Oct. 2011*	WIND (mph)	DAMAGE AND IMPACT DESCRIPTIONS
0	<0.25	<15	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	0.10 – 0.25	15 – 25	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
	0.25 – 0.50	>15	
2	0.10 – 0.25	25 – 35	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
	0.25 – 0.50	15 – 25	
	0.50 – 0.75	>15	
3	0.10 – 0.25	> – 35	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
	0.25 – 0.50	25 – 35	
	0.50 – 0.75	15 – 25	
	0.75 –1.00	>15	
4	0.25 – 0.50	> – 35	Prolonged and widespread utility interruptions with extensive damage to main distribution feeder lines and some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
	0.50 – 0.75	25 – 35	
	0.75 –1.00	15 – 25	
	1.00 –1.50	>15	
5	0.50 – 0.75	> – 35	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeeks in some areas. Shelters needed.
	0.75 –1.00	> – 25	
	1.00 –1.50	> – 15	
	> 1.50	Any	

(Categories of damage are based upon combinations of precipitation totals, temperatures and wind speeds/directions.)

Source: Sperry-Piltz Ice Accumulation Index[158]

The average monthly snowfall for Ouray County is shown in the figure below. It shows the snowiest months are between November and March. Snowfall totals from one event can range from one inch to several feet. Locations in the county with higher elevations are likely to experience increased snowfalls from severe winter storms.



Source: NOAA, 1991-2020[159]

158 SPIA-Index. 2009. "Sperry-Piltz Ice Accumulation Index". Accessed June 2017. http://www.spia-index.com/index.php.
159 National Oceanic and Atmospheric Administration National Centers for Environmental Information. November 2024. "Data Tools: 1991-2020 Normals". https://www.ncei.noaa.gov/access/us-climate-normals/.

Historical Occurrences

According to the NCEI, Ouray County had 1,024 severe winter storm events from January 1996 to March 2024. NCEI typically severely underestimates property damage from winter storm events. SHELDUS data from 1960 to 2021 was used to calculate property damage, crop damage, injuries, and deaths. There was $963,074 in estimated property damage and $3,302,281 in estimated crop damage from severe winter storm events. Four fatalities and two injuries were reported. Specific large-scale events are discussed below.

- **December 23, 1982 – Winter Weather:** There was an estimated $793,651 in property damage from this event when part of the then-defunct Beaumont Hotel collapsed in a snowstorm and caused extensive interior damage.

- **March 1992:** An event in March 1992 dumped 30 inches of snow and closed Highway 550 for several days. An avalanche on Highway 550 killed a snowplow operator, and another was buried for 18 hours before digging out.

- **Winter 2018-2019:** Multiple storms brought high snow totals and extreme avalanche danger to Red Mountain Pass. Highway 550 was closed from March 3rd to March 22nd. There were snow depths of over 100 inches in some areas.

Clearing Snow from Highway 550 South of Ouray – 2024



Source: Colorado Department of Transportation[160]

160 Colorado Department of Transportation. March 25, 2024. "US 550 Red Mountain Pass will close tomorrow morning for winter maintenance". https://www.codot.gov/news/2024/march/us550-red-mountain-pass-closed-march26.

Average Annual Losses

The number of events is based on NCEI data from 1996 to March 2024. The average annual damage estimate was determined based on recorded damages from SHELDUS from 1960 to 2021. This does not include losses from functional downtime, economic loss, injury, or loss of life. Severe winter storms cause an average of $15,533 yearly in property damage and $53,263 yearly in crop damage.

Severe Winter Storms Loss Estimate

HAZARD	Number of Events[1]	Average Events Per Year[1]	Total Property Loss[2]	Average Annual Property Loss[2]	Total Crop Loss[2]	Average Annual Crop Loss[2]
Blizzard	11	0.4	$963,074	$15,533	$3,302,281	$53,263
Heavy Snow	114	4.1				
Ice Storm	0	0				
Winter Storm	326	11.6				
Winter Weather	545	19.5				

Source: 1 Indicates data is from NCEI (1996 to March 2024)[161]; 2 Indicates data is from SHELDUS (1960 to 2021)[162]

Historical Probability & Future Likelihood

Based on historical records, severe winter storm events are likely to occur annually. The NCEI reported a severe winter storm event yearly, resulting in 100% historical probability. Even with the uncertainty about how climate change will impact severe winter storms, the future likelihood is very likely.

Historical Probability & Future Likelihood – Public Health Emergencies

Hazard	Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
Severe Winter Storm	100%	Possible Increase or Decrease	Increase in Exposure	**Very Likely**

<u>Climate Change</u>

Colorado is expected to receive more rain in the fall and spring months and more snow during mid-winter months at higher elevations; however, Ouray County is experiencing reduced snowfall across all winter months.[163] It is uncertain whether climate change will increase or decrease the number of severe winter storms.

<u>Future Development</u>

All future developments will be affected by winter storms. New infrastructure in Ouray County creates a higher probability of damage from winter weather as more property is exposed to risk. The ability to withstand impacts lies in sound land use practices and consistent enforcement of codes and regulations for new construction. Population growth in the county and visitors can potentially increase the need for snow removal and emergency services.

161 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

162 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.

163 San Miguel & Ouray County. 2021. "San Miguel & Ouray County Regional Climate Action Plan." https://static1.squarespace.com/static/EAP_Regional+CAP.FINAL_2023.pdf

Potential Impacts

Severe winter storms could significantly impact the people, community lifelines, and local economy of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Increased risk of accidents and injuries due to slippery conditions, poor road conditions, and potential for carbon monoxide poisoning if alternative heating sources are misused.

Community Lifeline Impacts

- Safety and Security
  - Emergency services may face challenges in reaching affected areas, impacting response times and public safety.

- Food, Hydration, Shelter
  - Supply chains for food and essential goods could be disrupted, affecting the availability of necessities.

- Health and Medical
  - Poor road conditions could impact response times for emergency services.

- Energy (Power and Fuel)
  - Power lines and heating systems can be damaged by heavy snow and ice, leading to outages and increased demand for emergency heating.

- Communications
  - Harsh weather can affect communication infrastructure, leading to disruptions in emergency communication and coordination.

- Transportation
  - Roads can become impassable due to snow and ice, disrupting travel, emergency response, and supply chains.

- Hazardous Materials
  - Hazardous materials are unlikely to be impacted by severe winter storms.

- Water Systems
  - Power loss and broken water mains could impact water availability for short periods.

Economic Impacts

- Local businesses, particularly those relying on tourism, may suffer due to reduced accessibility and visitor numbers.

Environmental Impacts

- The environment is unlikely to be impacted by severe winter storms.

Vulnerabilities

The threat to public safety is typically the greatest concern regarding the impacts of winter storms. Many severe winter storm deaths occur because of traffic accidents on icy roads, heart attacks when shoveling snow, and hypothermia from prolonged exposure to the cold. Temporarily losing home heating can be tough for older adults, young children, and other vulnerable individuals. People who do backcountry recreation activities will continue to be susceptible to the impacts of winter storms.

These storms can also impact the local economy by disrupting transportation and commercial activities. Winter storms are occasionally severe enough to overwhelm snow removal efforts, transportation, livestock management, and business and commercial activities. Travelers on highways in Ouray County, particularly along remote stretches of road, can become stranded, requiring search and rescue assistance and shelter provisions. The county can experience high winds and drifting snow during winter storms that can occasionally isolate individuals and entire communities and severely damage livestock populations and crops. Winter storms also have the potential to disrupt the delivery of food and fuel into the county. Limited phone and cell phone service in parts of the county means emergency reporting may be impossible during severe winter storm events. Falling ice is sometimes a hazard on Highway 550 just north or south of the City of Ouray.

Structural damage from winter storms can result from severe snow loads on rooftops. Older buildings are more at risk, as are buildings with large flat rooftops (often found in public buildings such as schools). With the historic structures in Ridgway and the City of Ouray, the potential for damage exists, but information to quantify the amount and extent is currently unavailable. Additionally, ice, wind, and snow can affect the stability of trees, power and telephone lines, and TV and radio antennas. Downed trees and limbs can become significant hazards for houses, cars, utilities, and other properties. Below freezing temperatures can also lead to breaks in uninsulated water lines.

Severe winter storms could damage all of Ouray County's owned and identified community lifelines. However, damage is not likely to impact services for a prolonged period. Power loss to the buildings is the most probable impact. The communications tower, emergency operations center, courthouse, and courthouse annex all have backup generators. The 4-H event center and public health office do not, so they could temporarily lose services.

Heavy snowfall during winter can also lead to flooding or landslides in spring if the snowpack melts too quickly. Avalanche danger significantly increases during and immediately after heavy snowfall.

The following table provides information related to countywide vulnerabilities. Participant-specific vulnerabilities can be found after the table.

County Severe Winter Storm Vulnerabilities

Sector	Vulnerability
People	-Elderly citizens are at higher risk of injury or death, especially during extreme cold and heavy snow accumulations -Citizens without adequate heat and shelter are at higher risk of injury or death -Exposure or injury to first responders during working conditions -Exposure for motorists, hikers, or other people outdoors -Those living in isolated areas of the county
Economic	-Closed roads and power outages can shut down a region for days, leading to significant revenue loss and loss of income for workers
Built Environment	-Heavy snow loads can cause roofs to collapse -Significant tree damage possible, downing power lines and blocking roads
Community Lifelines	-Heavy snow and ice accumulation can lead to downed power lines and prolonged power outages -Transportation may be difficult or impossible during blizzards, heavy snow, and ice events -Damage to underground utility lines -Emergency response and recovery operations, communications, water treatment plants, and others are at risk of power outages, impassable roads, and other damages -Loss of access to vital records and information
Recreation	-Outdoor activities may become more difficult and have a higher risk of exposure

City of Ouray

Ouray has very similar vulnerabilities to the rest of the county. The city has inventoried 74 unreinforced masonry buildings, some of which are historic structures vulnerable to heavy snow loads. Transportation in and out of the city may become difficult during severe winter storms. This could cause the city to be cut off from essential supply lines and economic drivers. Community lifelines are not likely to be directly impacted. However, it may be difficult for staff to access these lifelines, which could cause a loss or reduction of services.

Town of Ridgway

Ridgway has very similar vulnerabilities to the rest of the county. Transportation in, out, and around the community may become difficult during severe winter storms. Snowfall and low temperatures could impact the ability of the San Miguel Power Association to provide power. If available and operating, the Town Hall and Decker Community Room would be made available to house people or serve as reunification sites.

Dallas Park Cemetery District

During winter storms, trees could fall and drop branches, damaging headstones, buildings, and cars. People can also lose track of the cemetery road and damage headstones. The cemetery would likely see minimal impacts to service if a fallen tree damaged the office and maintenance building.

Jurisdictions Ranking Severe Winter Storm as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders which identified severe winter storms as a prioritized hazard of concern.

- Ouray County
- Dallas Park Cemetery District

Wildfire

Wildfires, also known as wildland fires, grassfires, brushfires, or forest fires, are uncontrolled fires in the countryside, agricultural fields, or wildlands. Wildland areas may include but are not limited to grasslands, forests, woodlands, pastures, and other vegetated areas. Wildfires that begin in wildland areas can spread to structures and the built environment and vice versa.

Wildfires range in size from less than an acre to thousands of acres. Fire events can quickly spread from their source, change direction, and jump gaps such as roads, rivers, and fire breaks. Wildfire behavior mainly depends on the local conditions, including temperature, humidity, wind speed, wind direction, slope, topography, and available fuel load. While some wildfires burn in remote forested regions, others can cause extensive destruction of homes and other structures in the wildland-urban interface.

The risk of severe wildfires in Ouray County poses an immediate threat to the health and safety of its residents. Large-scale, high-severity wildfires can lead to a host of negative long-term impacts related to the destruction of private property and infrastructure, suppression costs, loss of natural resources, and reductions in water quality. Much has been accomplished to address wildfire risk in Ouray County. However, more can be done to reduce vegetative fuels, educate the public, address structural ignitability, and increase wildfire capabilities. The Ouray County CWPP lists ongoing and planned activities related to wildfires.[164]

Fire Protection

Four local fire districts and fire service providers are located entirely or partially in Ouray County. The following is a list of the fire departments, and the figure on the page below shows their jurisdictional boundaries.

- Log Hill Mesa Fire Protection District
- Montrose Fire Protection District
- Ouray Fire Protection District
- Ridgway Fire Protection District

Fire response on non-federal lands is the responsibility of the fire protection district and/or fire department service area where the fire occurs. Federal agencies are responsible for wildfire protection on federal lands. Fire response on federal lands in Ouray County is served by the U.S. Forest Service and Bureau of Land Management. Fires that occur on state and private lands that are not in a fire protection district fall under the purview of the County Sheriff.

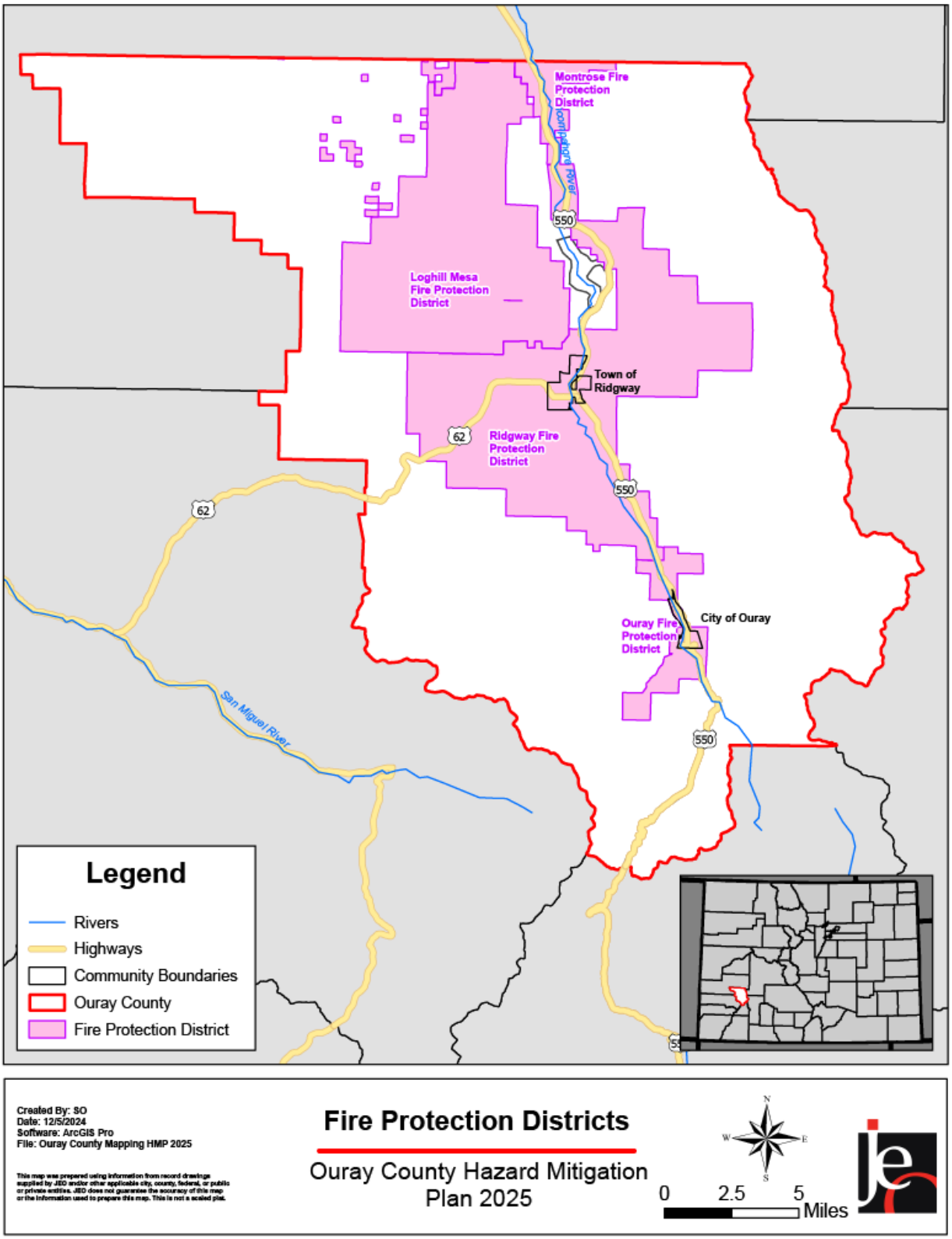
Firewise USA

Firewise USA is a national recognition program that provides resources to inform communities on how to adapt to living with wildfires and encourages neighbors to take action together to reduce their wildfire risk. Two areas in Ouray County have been recognized as Firewise: Log Hill Mesa and Fisher Canyon South.[165]

164 Ouray County. June 2011. “Ouray County, Colorado Community Wildfire Protection Plan”. https://static.colostate.edu/client-files/csfs/pdfs/Ouray_County_CWPP.pdf.

165 National Fire Protection Association. February 2025. “Firewise USA Sites”. https://www.nfpa.org/education-and-research/wildfire/firewise-usa/firewise-usa-sites.

Fire Districts in Ouray County



Community Wildfire Protection Plans

Even though wildfire is a natural part of the ecosystem, it can present a substantial hazard to life and property, especially in the wildland-urban interface. The county is updating the Ouray County CWPP and plans to complete it by the summer of 2025. The CWPP assesses the countywide risk of wildfire and identifies strategic investments to mitigate risk and promote preparedness. In addition to Ouray County's CWPP, two other communities have created local CWPPs to prepare for and mitigate wildfire risk. Those CWPPs include the 2007 4 Neighborhood CWPP[166] and the 2012 Log Hill Mesa Fire Protection District CWPP[167]. These CWPPs discuss historical wildfire occurrences and impacts, identify areas most at risk from wildfires, discuss protection capabilities, and identify wildfire mitigation strategies.

Location

Wildfires can occur throughout Ouray County. The 2025 Ouray County Community Wildfire Protection Plan (CWPP) created a combined wildfire and watershed risk map to identify county locations with a higher risk of wildfire. The combined wildfire and watershed risk map considers fire intensity, burn probability, potential control location suitability, and watershed risk. The map on the next page shows the combined wildfire and watershed risk map. More information about the creation of the map can be found in 2025 Ouray County CWPP. Higher risk areas include the eastern border and the south-central area north of the City of Ouray. Other locations of concern include:

- Uncompahgre National Forest: This sizeable forested area is prone to wildfires due to its dense vegetation and dry conditions, especially during summer.
- Log Hill Mesa: The combination of forested areas and residential development increases wildfire risk, particularly in dry and windy conditions.
- Dallas Divide: This area experiences wildfires due to its open landscapes and susceptibility to lightning strikes, which can ignite dry vegetation.
- Ridgway State Park Area: The park and surrounding areas can be vulnerable to wildfires, especially when dry conditions prevail during late summer and early fall.

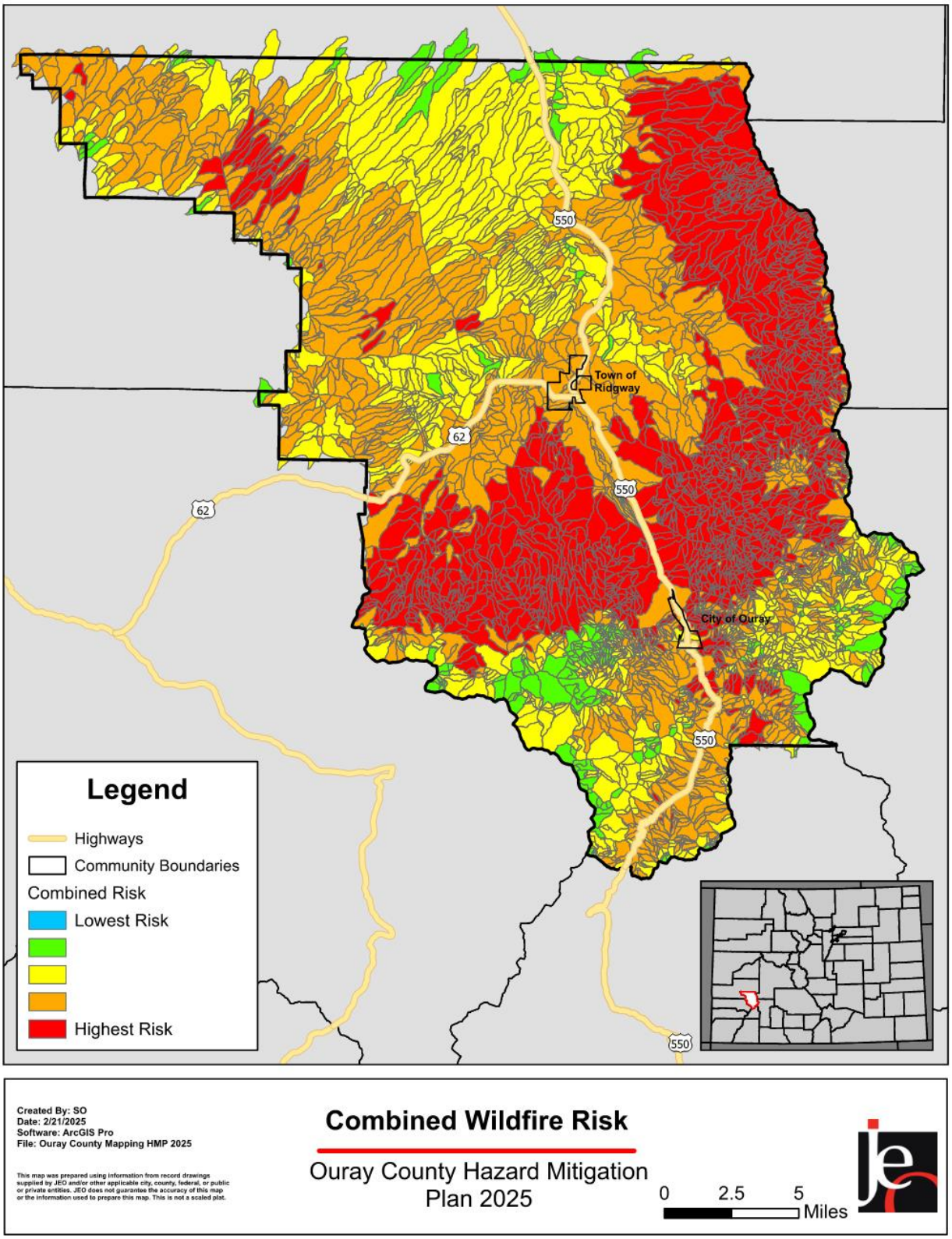
Wildland-Urban Interface

The wildland-urban interface (WUI) is generally defined as any area where improvements are built close to, or within, natural terrain and flammable vegetation and where potential for wildland fire exists. The 2025 Ouray County CWPP defined the entire county as being in the WUI. It then identified WUI priority areas. These areas are defined as half-mile buffers around power lines, buildings, emergency response and governmental services, communication towers, highways, and water infrastructure. The identified WUI is visualized in the map below.

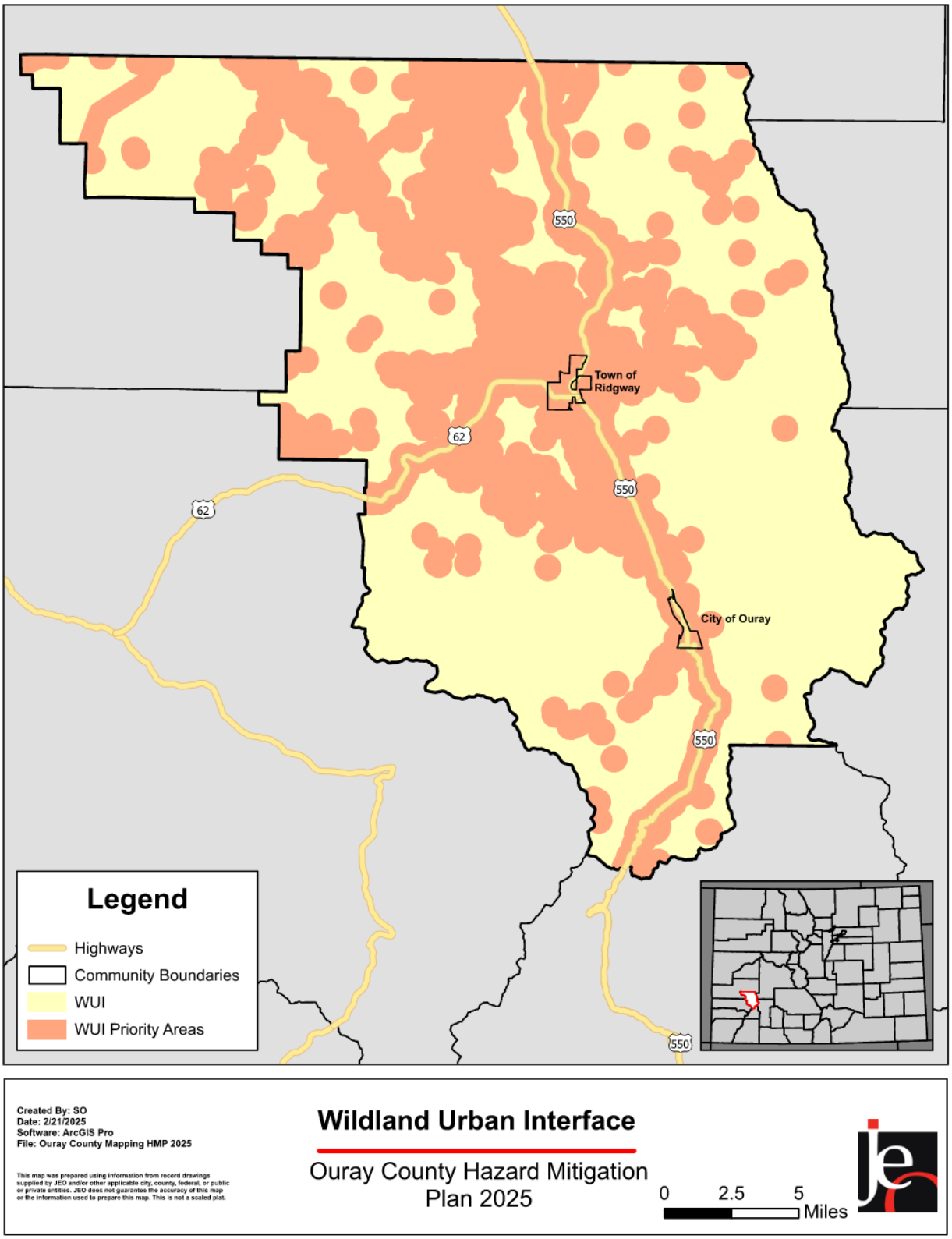
166 Whispering Pines, Panoramic Heights, Lake Lenore, Dexter/Cutler. August 2007. "4 Neighborhood Community Wildfire Protection Plan". https://static.colostate.edu/client-files/csfs/documents/4Neighborhood_cwpp.pdf.

167 Log Hill Mesa Fire Protection District. 2012. "Log Hill Mesa Fire Protection District". https://static.colostate.edu/client-files/csfs/pdfs/LogHillMesaFPD-CWPP.pdf.

Combined Wildfire and Watershed Risk Map



Ouray County Wildland-Urban Interface



Extent

The Fire Intensity Scale identifies areas with significant fuel hazards and associated dangerous fire behavior potential. The scale consists of five classes, where the order of magnitude between classes is ten-fold. The five different classes are shown in the table below and a map of the fire intensity in Ouray County is shown on the next page.

Fire Intensity Scale

Class	Intensity	Description
Class 1	Lowest Intensity	Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.
Class 2	Low Intensity	Small flames, usually less than 2 feet long; a small amount of very short-range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.
Class 3	Moderate Intensity	Flames up to 8 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozers and plows are generally effective. Increasing potential for harm or damage to life and property.
Class 4	High Intensity	Large flames up to 30 feet in length; short-range spotting common; medium-range spotting possible. A direct attack by trained firefighters, engines, and dozers is generally ineffective, and an indirect attack may be effective.
Class 5	Highest Intensity	Very large flames up to 150 feet in length; profuse short-range spotting; frequent long-range spotting; strong fire-induced winds. An indirect attack is marginally effective at the head of the fire. Great potential for harm or damage to life and property.

Source: CSFS[168]

The average wildfire in Ouray County burned seven acres. Of the reported fires, 86 percent burned less than one acre. Approximately one percent of recorded fires burned more than 100 acres.[169]

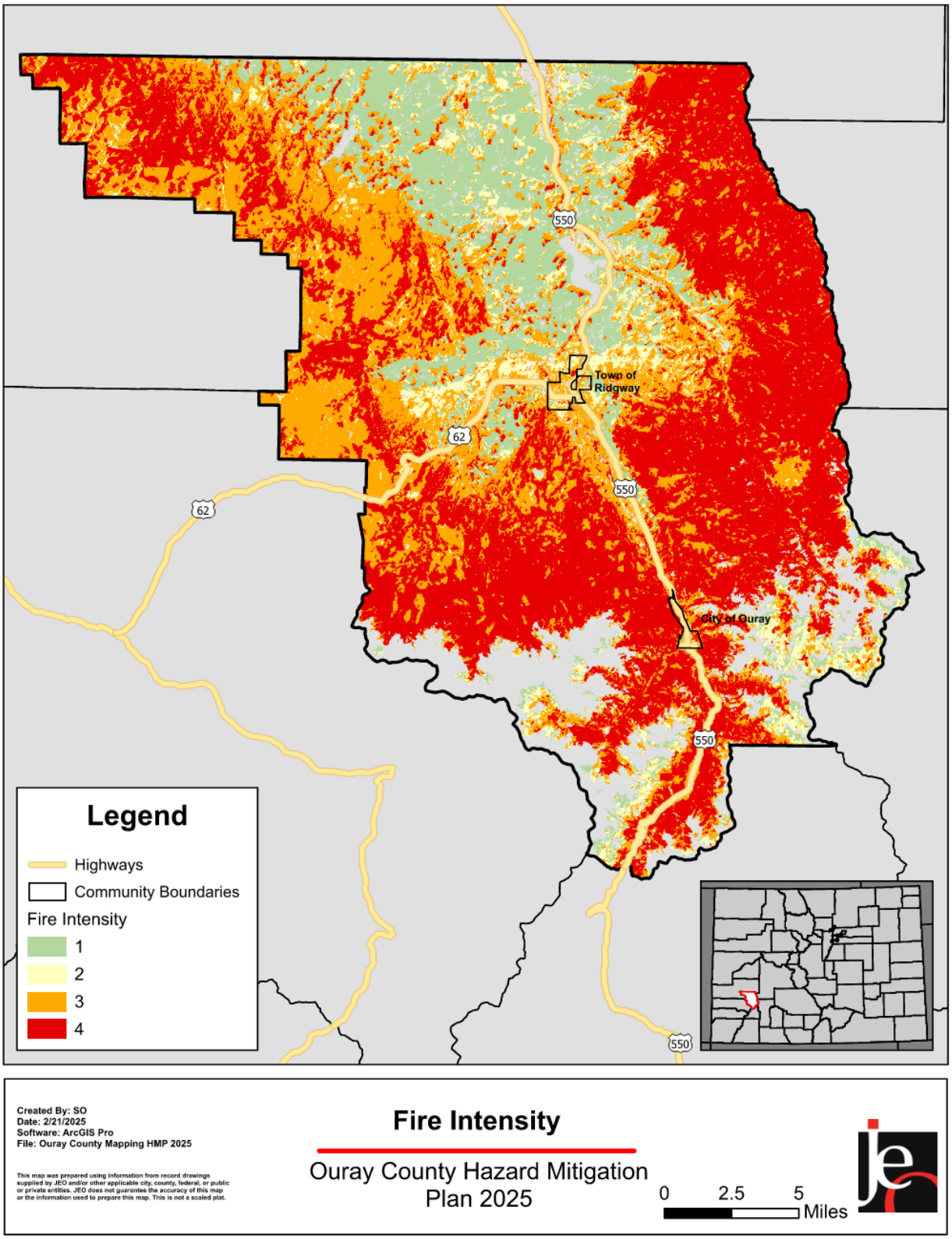
Historical Occurrences

Ouray County is a fire-prone area with dense vegetation and annual fire events; however, it is important to note that there is no comprehensive fire event database. Fire events, magnitude, and local responses were reported voluntarily by local fire departments, and local reporting standards can vary between departments. Actual fire events and their impacts are likely underreported in the available data.

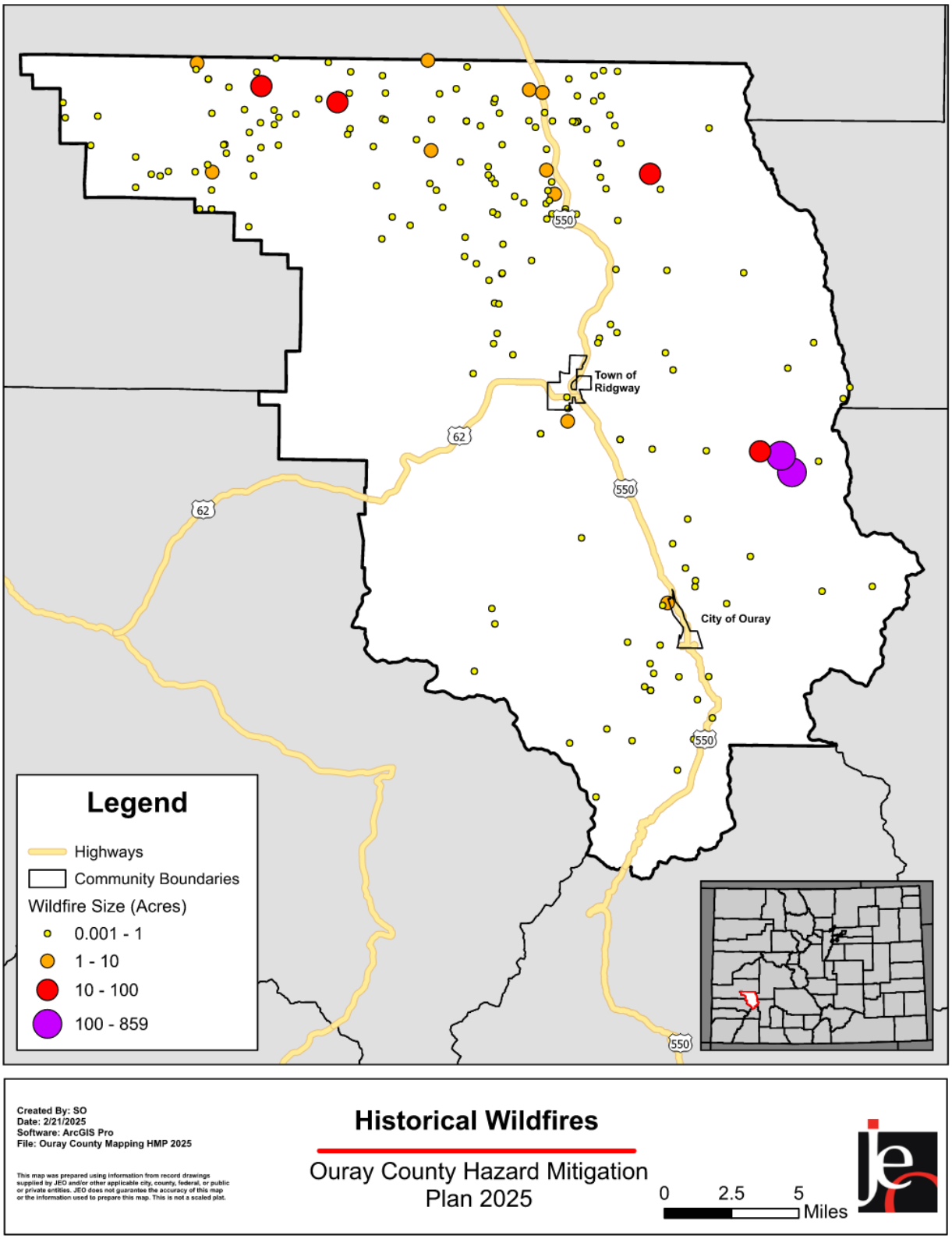
According to data from the U.S. Forest Service, 203 wildfire events were reported in Ouray County between 1992 and 2020. In this time frame, Ouray County averaged approximately seven fires per year. The average fire size was seven acres, with events ranging from less than one acre to 859 acres. No injuries or deaths were reported from these events.[170] While most fires are relatively insignificant in terms of size and fire intensity, several high-intensity fires have burned hundreds of acres and posed significant threats to structures or other human developments. The figure below shows the location and general size of wildfires in Ouray County. Recent large fires are further discussed below.

168 Colorado State Forest Service. 2025. "Colorado Wildfire Risk Public Viewer". https://co-pub.coloradoforestatlas.org/docs/CSFS-Wildfire%20Risk%20Public%20Viewer-Identify_Fire_Intensity_Results_Help.pdf.
169 U.S. Forest Service. 2022. "Spatial Wildfire Occurrence Data for the United States, 1992-2020". https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.
170 U.S. Forest Service. 2022. "Spatial Wildfire Occurrence Data for the United States, 1992-2020". https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.

Ouray County Fire Intensity



Historical Wildfire Occurrences



- **July 3, 2004 – Tappan Fire:** The Tappan Fire began from a lightning strike on July 3, 2004, and burned 80 acres along the Ouray and Montrose county lines. It was fought by resources from BLM, Log Hill Fire, and Montrose Fire and burned for 5 days.

- **June 27, 2006 – Red Creek Fire:** The Red Creek Fire was a lightning-caused fire that burned 401 acres. The fire occurred on June 27, 2006, about eight miles northeast of Ridgway. The fire consumed 350 acres of timber and resulted in the closure of trails in a wilderness area. Smoke from the fire impacted communities to the north, including the City of Montrose.

- **October 16, 2019 – Cow Creek Fire:** The Cow Creek Fire burned 850 acres in the Uncompahgre National Forest. The fire was caused by a wood-burning stove located inside a wall tent in the Green Mountain Camp. This fire incurred significant suppression costs fighting the fire.

Cow Creek Fire



Source: 2019 Ouray County Hazard Mitigation Plan

- **May 19, 2022 – Simms Incident:** The Simms Incident was a controlled burn of 188 acres that escaped containment on May 19th due to high winds. The fire ultimately burned 314 acres and destroyed several structures before being fully contained. Suppression costs were estimated at $3,000,000.

Simms Incident

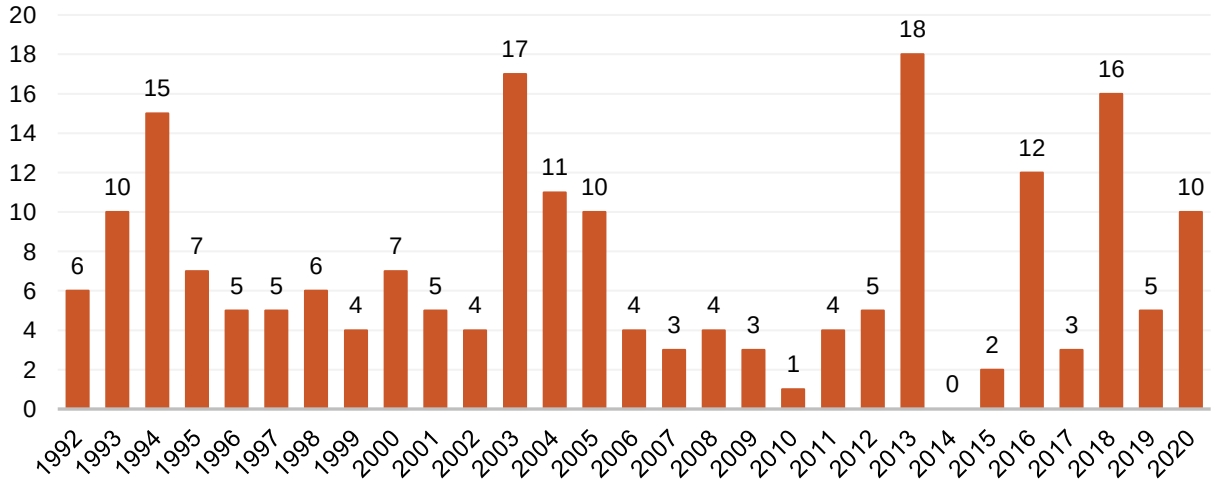


Source: West Slope Fire Information

- **September 10, 2023 – Spring Creek Fire:** The Spring Creek Fire began on September 10, 2023. It took several days to contain, and it burned 16 acres. Several trails and roads were closed due to the fire. Suppression costs were estimated at $1,000,000.

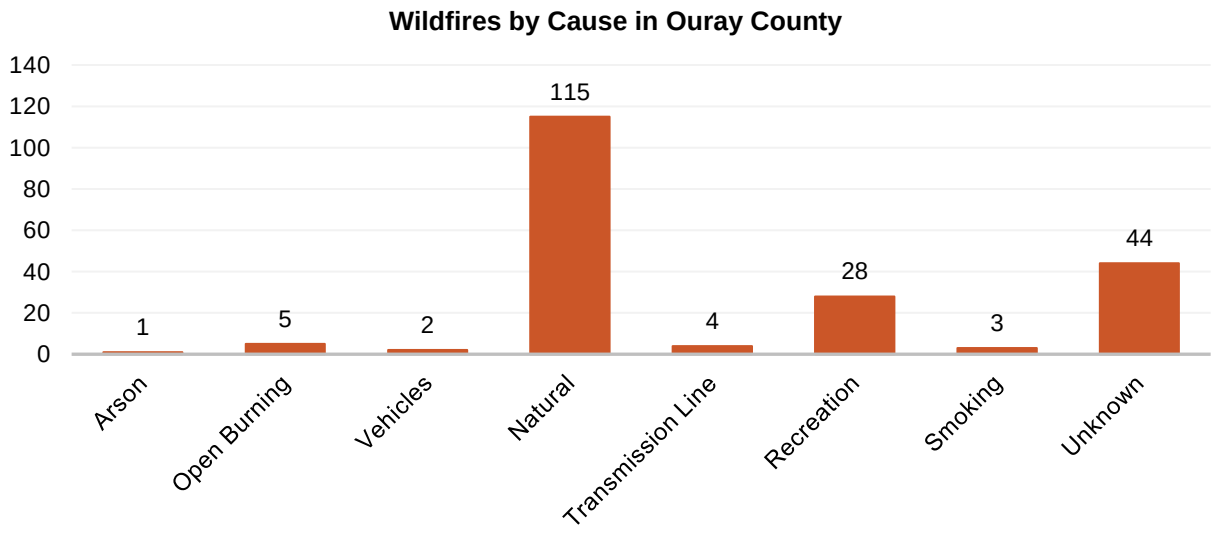
The figures below show the number of reported wildfire events by year and their causes. Natural causes (i.e., lightning) are the most common cause.

Wildfire Events by Year



Source: U.S. Forest Service, 1992-2020[171]

171 U.S. Forest Service. 2022. "Spatial Wildfire Occurrence Data for the United States, 1992-2020". https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.



Source: U.S. Forest Service, 1992-2020[172]

Average Annual Losses

The average damage and crop loss per event estimate was determined based on records from the NCEI database since 1996 for Ouray County. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. During these 29 years, the U.S. Forest Service reported 203 wildfires in Ouray County burned 1,488 acres, causing $20,000 in crop damage and $1,525,000 in property damage. No injuries or fatalities were reported from these events.

Damages caused by wildfires extend beyond the loss of building stock, recreation areas, timber, forage, wildlife habitat, and scenic views. Secondary effects of wildfires, including erosion, landslides, the introduction of invasive species, and changes in water quality, all increase due to the exposure to bare ground and loss of vegetative cover following a wildfire and can often be more disastrous than the fire itself in long-term recovery efforts.

Wildfire Loss Estimation

Hazard Type	Number of Events[1]	Events Per Year[1]	Average Acres Per Fire[1]	Total Property Loss[2]	Average Property Loss[2]	Total Crop Loss[2]	Average Annual Crop Loss[2]
Wildfire	203	7	7	$1,525,000	$54,464	$20,000	$714

Source: 1 U.S. Forest Service (1992-2020)[173]*, 2 NCEI (1996-March 2024)*[174]

Historical Probability & Future Likelihood

The figure on the pages below shows the burn probability for Ouray County. Burn probability is the annual probability of any location to burn due to wildfire. Areas with the highest probability of burning include the western and eastern borders and the southcentral area north of the City of Ouray.

172 U.S. Forest Service. 2022. "Spatial Wildfire Occurrence Data for the United States, 1992-2020". https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.
173 U.S. Forest Service. 2022. "Spatial Wildfire Occurrence Data for the United States, 1992-2020". https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6.
174 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

Given the historical record of wildfire events (at least one fire event reported each year on record except one) for this plan, the historical probability of wildfire occurrence is 97 percent. With the anticipated impacts of climate change and future development, the future likelihood of wildfire is very likely.

Historical Probability & Future Likelihood – Wildfire

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
97%	Increase in Frequency & Severity	Increase in Exposure	**Very Likely**

Climate Change

Current climate trends are expected to result in an increase in the frequency and severity of wildfires throughout the state of Colorado. Periods of drought can occur throughout the year, while elevated heat conditions during summer months significantly increase the potential for and magnitude of wildfires. During severe drought and dry conditions, large wildfires can more easily spread. Additionally, Colorado's wildfire season is projected to increase by several weeks.

A specific tool developed and utilized in the State of Colorado includes Future Avoided Cost Explorer to assess costs associated with wildfire.[175] This tool presents an in-depth look at the potential future economic impacts of flooding on specific sectors of the Colorado economy. The following table and figures show the effects expected of wildfire for the current climate and projected future "Moderate" and "More Severe Climate" impacts with the anticipated growth for Ouray County.

Based on the Future Avoided Cost Explorer assessments, it is likely that Ouray County will experience worsening impacts from climate change regarding wildfires. At the current growth rate and only moderate climate impacts, Ouray County may experience up to $770,000 in total damage annually. Damages may vary across sectors and regions, such as bridges, buildings, cattle, crops, and fire suppression activities.

Future Avoided Cost Explorer Anticipated Damages for Wildfire Matrix

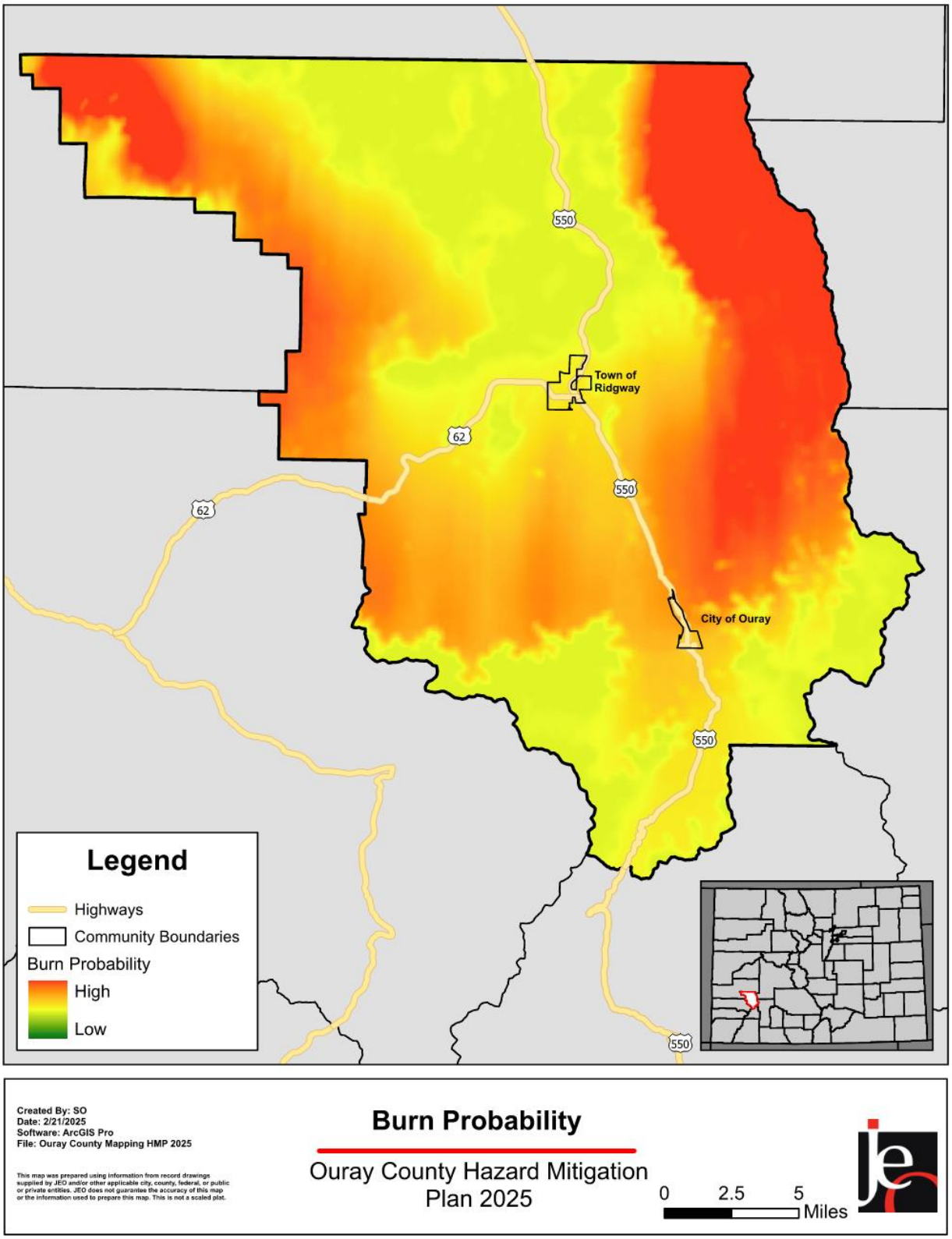
Population Scenario	Climate Scenario		
	Current Climate	Moderate Climate	More Severe Climate
Current Growth Rate	$560,000 $120 per person	$770,000 $170 per person	$770,000 $170 per person
Low Growth Rate	$560,000 $130 per person	$770,000 $180 per person	$870,000 $210 per person
Medium Growth Rate	$560,000 $100 per person	$770,000 $140 per person	$870,000 $160 per person
High Growth Rate	$560,000 $80 per person	$770,000 $110 per person	$870,000 $120 per person

Source: Colorado Water Conservation Board Future Avoided Cost Explorer[176]

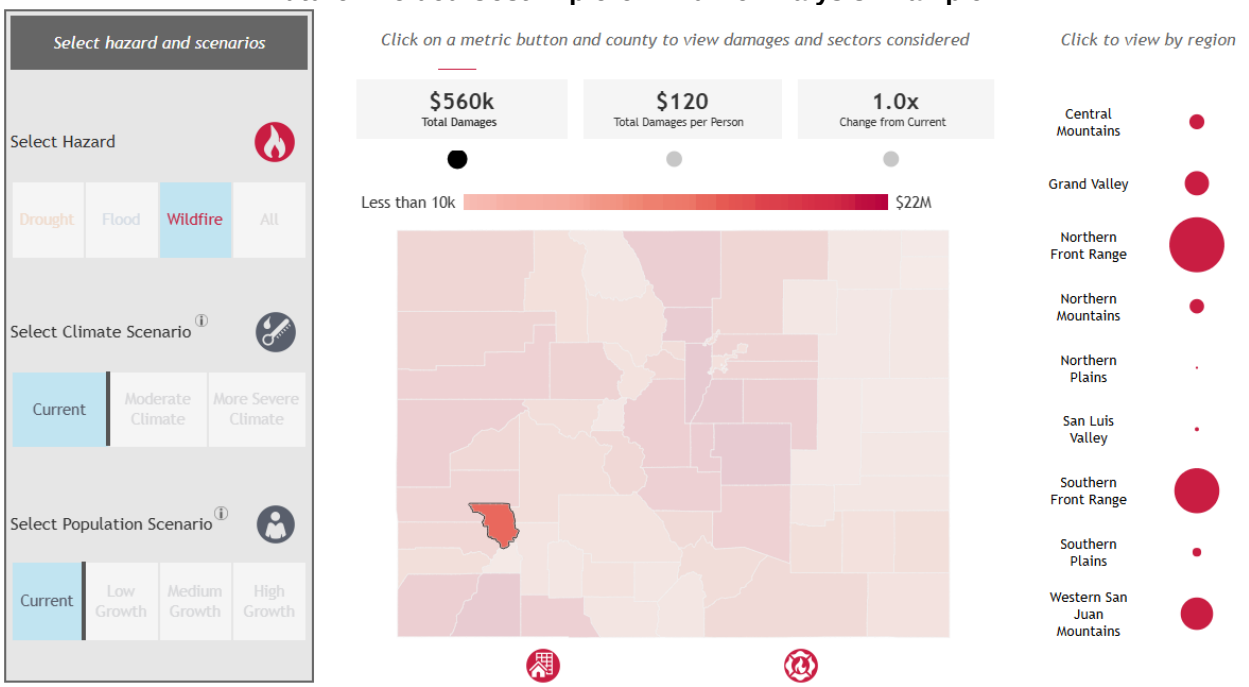
175 Colorado Water Conservation Board. February 2025. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

176 Colorado Water Conservation Board. February 2025. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

Ouray County Burn Probability



Future Avoided Cost Explorer Wildfire Analysis Example

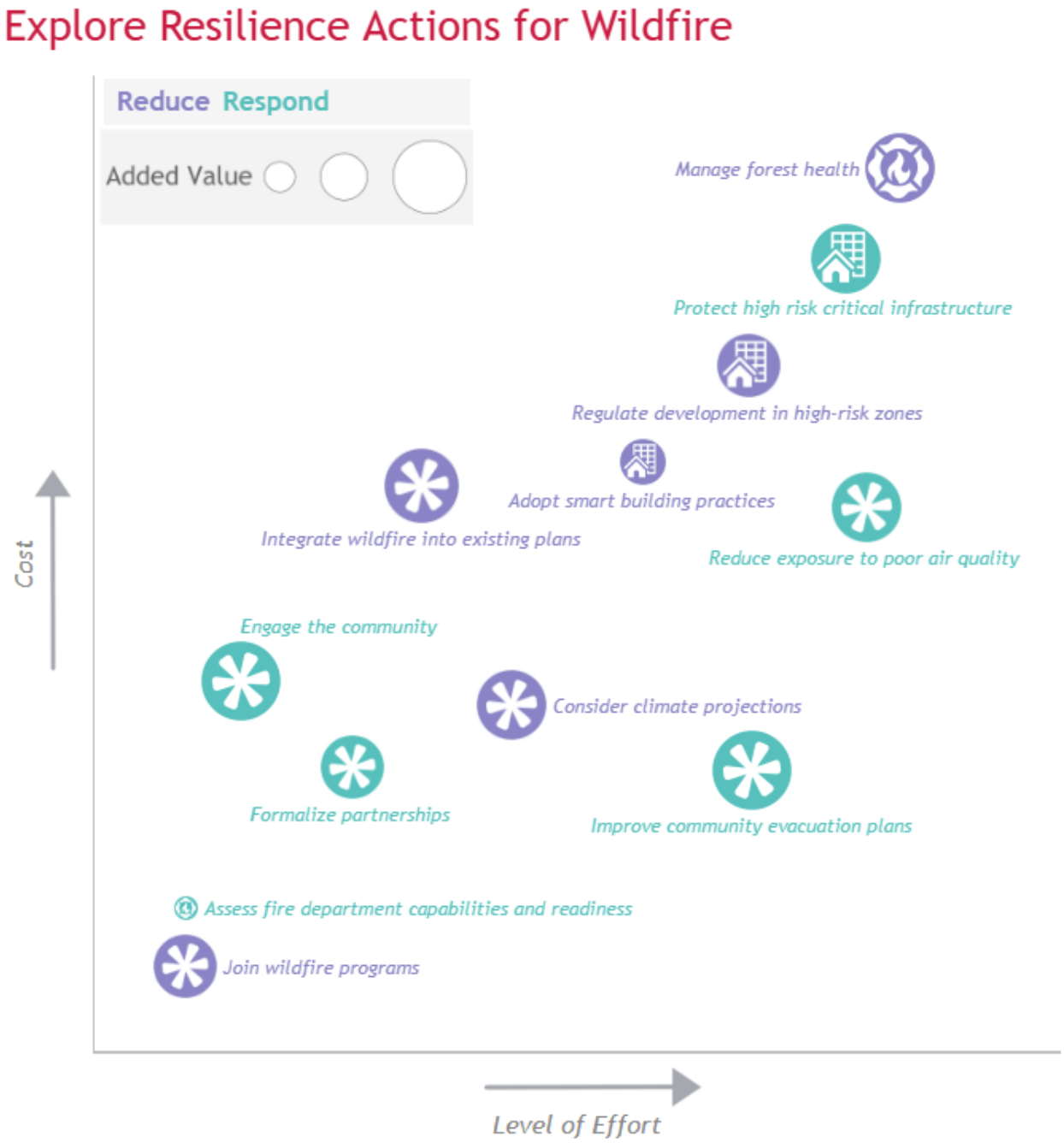


Source: Colorado Water Conservation Board Future Avoided Cost Explorer[177]

Suggested actions to improve resilience to wildfire from Future Avoided Cost Explorer are shown in the graphic below.

177 Colorado Water Conservation Board. February 2025. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

Exploring Resilience Actions for Wildfire



Source: Colorado Water Conservation Board Future Avoided Cost Explorer [178]

Future Development

New developments can substantially increase wildfire risk, with the entire county susceptible to wildfires. During a wildfire, growth increases the resources needed to protect development from burning and increases firefighting costs. Any new developments in the county should evaluate their risk of wildfire and practice Firewise principles to reduce their potential losses.

178 Colorado Water Conservation Board. February 2025. "Future Avoided Cost Explorer: Colorado Hazards." https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e.

In May 2022, the Ouray County Board of County Commissioners adopted revised wildfire mitigation regulations. These regulations were developed in cooperation with local fire departments, Colorado State Forest Service, and the West Region Wildfire Council and take into consideration recent scientific studies on wildfire and the WUI. Ouray County's revised Wildfire Mitigation Regulations will likely affect most future building projects and require additional information to be submitted with building permit applications. Roofs must be Class A ignition-resistant, doors must be ignition-resistant, defensible space is required for combustible siding, and a five-foot hardened zone is required. These regulations will help new developments reduce wildfire risks. The City of Ouray and the Town of Ridgway do not have wildfire building regulations.

Potential Impacts

Wildfires could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Residents in affected areas may need to evacuate, potentially leading to temporary displacement and shelter needs.
- Smoke from wildfires can significantly impact air quality, posing health risks to residents, particularly those with respiratory conditions.
- Risk of injury or death for those caught in a wildfire.

Community Lifeline Impacts

- Safety and Security
  - Evacuations may be necessary, and there may be increased demand for fire suppression and public safety emergency services.
- Food, Hydration, Shelter
  - If evacuations are needed, shelter locations could quickly be overwhelmed with the number of people.
- Health and Medical
  - Smoke from wildfires can impact air quality.
  - Road closures may impact emergency medical services.
- Energy (Power and Fuel)
  - Fire can damage power infrastructure, leading to outages and affecting the delivery of essential services.
- Communications
  - Communication lines and towers can be damaged, disrupting information dissemination and emergency coordination.
- Transportation
  - Fire may close or damage roads, affecting evacuation and access to emergency services.

- Hazardous Materials
    - Hazardous material storage locations could be damaged or destroyed from wildfires, causing secondary chemical spill impacts.

- Water Systems
    - Water systems may become stressed due to the additional water needed to fight the fires.

Economic Impacts

- Homes, businesses, and infrastructure in the path of the fire can be destroyed or severely damaged.

- Local economies, especially those reliant on tourism, may suffer due to evacuations, road closures, and damage to natural attractions.

Environmental Impacts

- Damage or destruction of natural habitats in burned areas can affect wildlife.

- Loss of vegetation can also lead to erosion, landslides, debris flows, and sedimentation in watersheds.

- Non-native, invasive plants may take over burned areas.

County Vulnerabilities

Although wildfires are a natural part of forested ecosystems, they threaten people and property in Ouray County. Wildfires can cause evacuations, injuries, and loss of life. Additionally, wildfires can cause severe damage to buildings and infrastructure in the county. Damage to homes and businesses can impact the livelihood of residents. A major wildfire can also affect visitors to the county in the summer months when tourism is at its peak. Life safety and human health are serious concerns due to the high influx of visitors to the county during summer festivals. Additionally, smoke from wildfires can have negative impacts on human health. Wildfire smoke is a contributor to particulate matter, which is dangerous because it becomes lodged deep in the lungs and can enter the bloodstream, triggering asthma attacks, heart attacks, strokes, and, in some cases, lung cancer. Ouray County can be impacted by smoke from fires outside the county boundaries, as experienced with recent fires. Challenges arise due to forests being managed by multiple agencies and the county's remoteness and rugged terrain of forests.

Due to the topography of Ouray County, many neighborhoods have limited ingress and egress, with only one way in and one way out. This can hinder evacuation efforts and first responders. Early notification and warning are paramount in these neighborhoods to safely evacuate everyone. On a larger scale, wildfires can impact major transportation routes, including Highway 550. During an evacuation, everyone would use Highway 550 and go north out of the county. Going south is not a good option due to a lack of shelter options and dangerous road conditions without guardrails. Housing-stranded travelers can also become an issue, especially during high visitor seasons. Ouray County recently completed a county-wide evacuation plan in 2024.

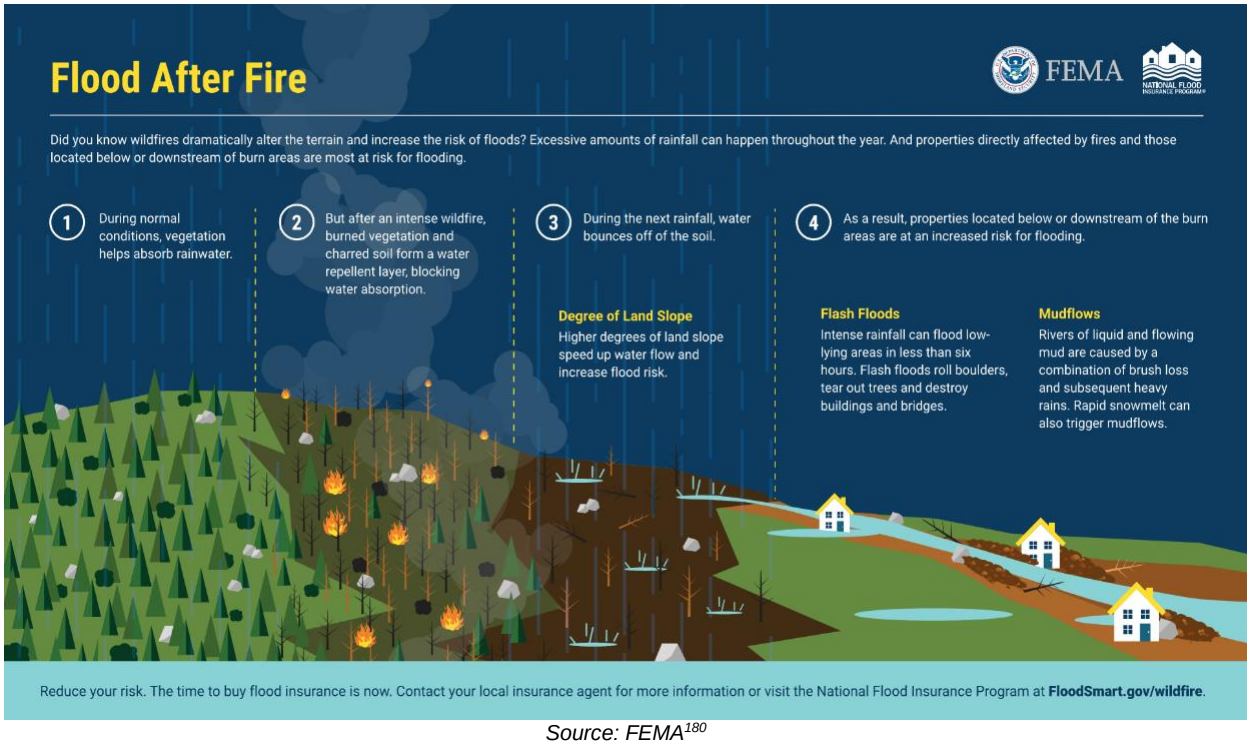
Impacts on water supplies and infrastructure can linger for months and even years after a wildfire event. Watersheds downstream of burned areas can experience water quality impacts, reduction in the capacity of reservoirs, damage to water delivery and transportation infrastructure,

degradation of aquatic habitat, and an increased risk of floods. Waterways can also become polluted from burned building materials, plastics, sediment, fire retardants, and many other chemicals that get burned or spread during suppression. This can tax local water systems, which may not be able to treat these pollutants.

The impacts of insects on the health of trees in Ouray County have been an ongoing concern. In 2023, the Western Balsam Bark Beetle, Western Spruce Budworm, Spruce Beetle, Douglas-Fir Beetle, Fir Engraver, Ips Pinon, and Pine Bark Beetle were all detected in the county.[179] These insects can leave stands of dead trees that may increase fuel for wildfires throughout the county.

Drought can intensify fires, as observed during the 2002 and 2018 fire seasons. Wildfire also increases the risk of other hazard events, compounding damage and straining resources. FEMA has provided additional information detailing the relationship between wildfire and flooding/debris flow events. Wildfire removes vegetation and hardens soil, reducing infiltration capabilities during heavy rain events. Subsequent severe storms that bring heavy precipitation can then escalate into flash flooding and landslides, dealing additional damage to jurisdictions.

FEMA Flood After Fire



Source: FEMA[180]

There has been much work in the county to reduce vegetative fuels. Since 2000, nearly 190,000 acres in the county have had fuel management activities performed on them. These include prescribed fire, reforestation, and thinning by the U.S. Forest Service, Bureau of Land Management, Colorado State Forest Service, Colorado Parks and Wildlife, and the National Park Service. In addition, the West Region Wildfire Council has reduced fuels on private lands. Additional projects around the City of Ouray, alongside Highway 550, Baldy Mountain, and Davewood, are planned.

179 Colorado State Forest Service. 2023. "2023 Report on the Health of Colorado's Forests". https://csfs.colostate.edu/forest-management/forest-health-report-2023/insects-and-diseases/.
180 FEMA. 2023. "Flood After Fire". https://agents.floodsmart.gov/marketing/participate-in-campaigns/flood-after-fire.

Loghill Mesa has done extensive wildfire mitigation work, such as a chipping program for slash, adding water lines and connections, evaluating all structures for wildfire risk, and hosting wildfire preparedness days and other educational activities. These efforts help mitigate the elevated risk of wildfire in the community.

Additionally, in partnership with the CSFS and USFS, the county has treated Douglas fir trees around the City of Ouray to mitigate against beetles using pheromone packets. The pheromone packets were placed in high-use areas, such as trees around the Ouray Amphitheater and campground, Cascade Falls, and other popular trails and recreation areas near Ouray and Telluride. In addition to pheromones, active management is utilized to cut down dead and diseased trees and remove dead trees from the forest floor.

Wildfires could damage or destroy all of Ouray County's owned and identified community lifelines. This would likely cause a prolonged loss of services for all lifelines. The communications tower has the highest risk due to its remote location and surrounding vegetation. The following table provides a summary of wildfire vulnerabilities in the county. Participant-specific vulnerabilities can be found after the table.

County Wildfire Vulnerabilities

Sector	Vulnerability
People	-Risk of injury or death for residents and firefighting personnel -Displacement of people and loss of homes -Increased health impacts on people with breathing difficulties
Economic	-Damages to buildings and property can cause significant losses to business owners -Loss of businesses -Loss of tourism
Built Environment	-Building and property damages -Transportation routes may be blocked by fire, impacting evacuation efforts
Community Lifelines	-Damage to power lines and utility structures -Contamination of water supplies -Potential loss of firefighting equipment and resources -Risk of damage to buildings
Recreation	-Hikers and other recreationists in remote areas -Loss of access to recreational areas -Loss of viewsheds

City of Ouray

The entire city is surrounded by dense wildland vegetation. A single wildfire event could damage or destroy all or most of the community. The topography surrounding the city makes evacuation very difficult, with very few ways in and out. According to the combined wildfire and watershed risk map, nearly all areas around the community are at very elevated risk. All three community lifelines could be damaged or destroyed during wildfires. This could cause a long-term loss of services. Both the sewer and water plants are in heavily vegetated areas, increasing their risk.

Town of Ridgway

According to the combined wildfire and watershed risk map, nearly all areas in and around Ridgway are at elevated risk. Areas to the southeast and southwest have higher risk due to increased vegetation and topography. The Vista Terrace neighborhood, located on the east side of Highway 550, is a concern due to the surrounding vegetation. All five community lifelines could be damaged or destroyed during a wildfire event. This could cause a long-term loss of services. The water treatment plant is in a heavily vegetated area, which increases its risk.

Dallas Park Cemetery District

Being in a rural area, the cemetery is more vulnerable to wildfire because of the wildland vegetation surrounding it. On the southern and western border, there are many trees, and there are tall grass and weeds in the southern portion of the cemetery. The cemetery district cannot properly mow the tall grass and weeds due to a lack of equipment and funds. It is possible for the cemetery office and maintenance building to be damaged or destroyed by a wildfire. This could cause a temporary loss of services.

Jurisdictions Ranking Wildfire as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders which identified wildfire as a prioritized hazard of concern.

- Ouray County
- City of Ouray
- Town of Ridgway
- Dallas Park Cemetery District
- Ouray County Public Health

Windstorm

High winds typically accompany thunderstorms, winter storms, tornadoes, and other large low-pressure systems, which can cause significant crop damage, downed power lines, loss of electricity, traffic flow obstructions, and considerable property damage, including trees.

There are several types of damaging winds:

- **Straight-line winds:** Any thunderstorm wind not associated with rotation; this term is used mainly to differentiate from tornado winds. Most thunderstorms produce some straight-line winds generated by the thunderstorm downdraft.

- **Downdrafts:** A small-scale column of air that rapidly sinks toward the ground.

- **Downbursts:** A strong downdraft with a horizontal dimension larger than 2.5 miles, resulting in an outward burst of damaging winds on or near the ground. Although usually associated with thunderstorms, downbursts can occur with showers too weak to produce thunder.

- **Microbursts:** A small, concentrated downburst that produces an outward burst of damaging winds at the surface. Microbursts are generally less than 2.5 miles across and short-lived, lasting only five to ten minutes, with maximum wind speeds of up to 168 mph.

- **Gust front:** a gust front is the leading edge of rain-cooled air that clashes with warmer thunderstorm inflow. Gust fronts are characterized by a wind shift, temperature drop, and gusty winds ahead of a thunderstorm. Sometimes, the winds push the air above them, forming a shelf cloud or detached roll cloud.

- **Derecho:** A derecho is a widespread thunderstorm wind caused when new thunderstorms form along the leading edge of an outflow boundary. The word “derecho” is of Spanish origin and means “straight ahead.” Thunderstorms feed on the boundary and continue to reproduce. Derechos typically occur in the summer when complexes of thunderstorms form over plains, producing heavy rain and severe wind. The damaging winds can last a long time and cover a large area.

- **Bow Echo:** A bow echo is a linear wind front bent outward in a bow shape. Damaging straight-line winds often occur near the center of a bow echo. Bow echoes can be 200 miles long, last several hours, and produce extensive ground-level wind damage.

- **Chinook/Bora Winds:** Unique wintertime wind conditions typically felt in Colorado. These winds occur seasonally due to convective air movements where the Rocky Mountains meet the Great Plains. Warm, dry winds descend from the mountains' eastern slopes, causing a rapid rise in temperature, snowmelt, and sometimes flooding.

Windstorms in Ouray County are typically straight-line winds. Straight-line winds are generally any thunderstorm wind not associated with rotation (i.e., it is not a tornado). These winds, which can exceed 100 miles per hour, represent the most common type of severe weather and are responsible for most wind damage related to thunderstorms. Since thunderstorms do not have

narrow tracks like tornadoes, the associated wind damage can be extensive and affect entire (and multiple) counties. Air pressure differences during cold and warm seasons cause high winds in Colorado. The western part of the State typically doesn't experience the Chinook winds that impact the Front Range, but Bora winds are common in western Colorado. Bora winds are cold winds caused by a strong low-pressure system coupling with a high-pressure system to the west.

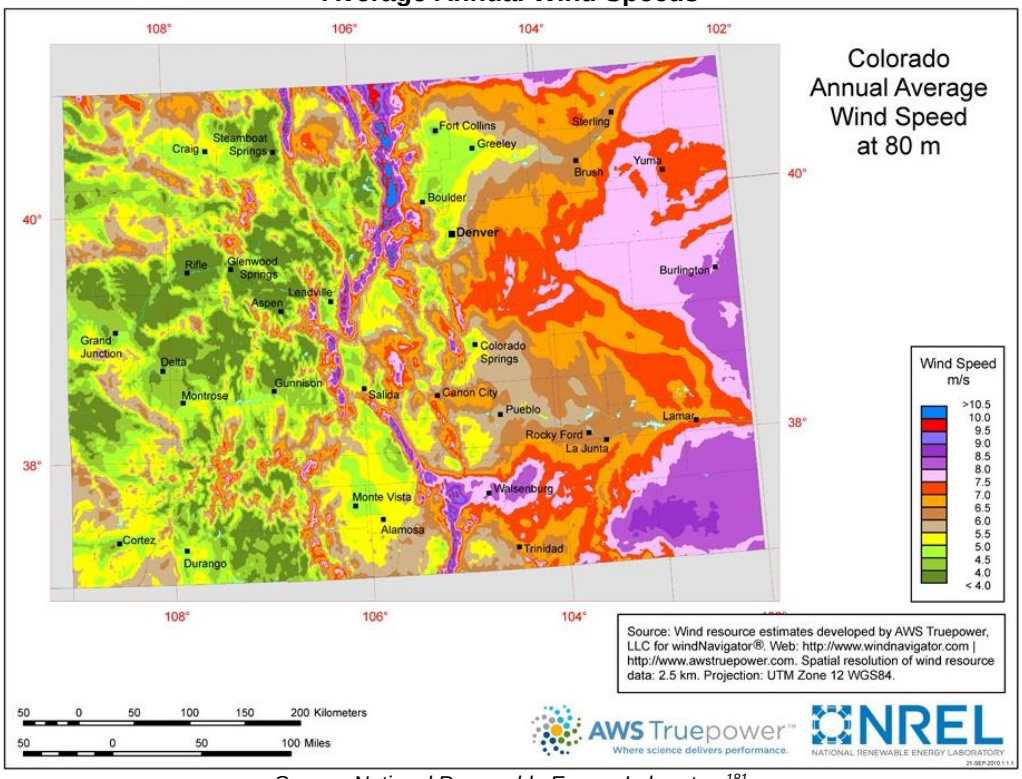
Windstorms can also contribute to extreme fire behavior, impact the strength of winter weather events, and impact many other hazards. For this plan, this windstorm hazard profile will focus primarily on impacts caused by the wind.

Location

Windstorms can occur throughout Ouray County. High peaks and exposed areas are especially vulnerable to high winds. Areas with more frequent windstorms are included in the list below. The figure below shows the annual average wind speed in Colorado.

- San Juan Mountains: This area's high elevations and rugged terrain can lead to strong wind events, particularly during seasonal changes.
- Ridgway Area: The open landscapes around Ridgway can experience high winds, especially when weather fronts move through the region.
- Red Mountain Pass: Known for its challenging weather conditions, this pass can experience severe winds, particularly during winter storms.
- Dallas Divide: This area is susceptible to strong winds due to its elevation and exposure to weather systems from the west.

Average Annual Wind Speeds

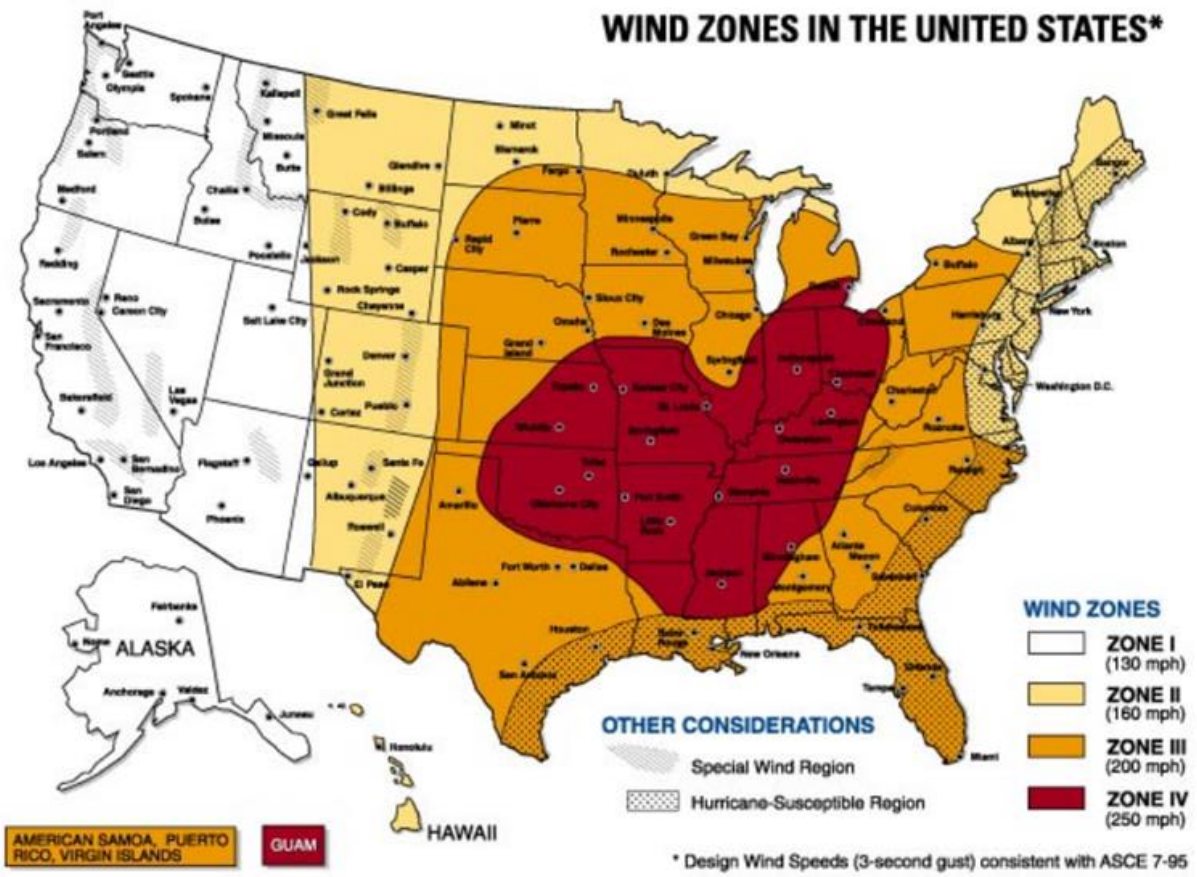


Source: National Renewable Energy Laboratory[181]

181 National Renewable Energy Laboratory. 2021. "Wind Energy in Colorado: Colorado Annual Average Wind Speed at 80m." https://windexchange.energy.gov/states/co.

FEMA recognizes four wind zones in the United States, as depicted in the figure below. Ouray County falls into Zone II, which can have wind speeds up to 160 miles per hour.[182]

Wind Zones in the United States



Source: FEMA[183]

Extent

The Beaufort Wind Scale can be used to classify and understand wind strength. The following table outlines the Beaufort scale, including wind speed ranking, the range of wind speeds per ranking, and a brief description of each condition. Communities and jurisdictions across the county are likely to experience similar extent impacts from windstorms.

182 FEMA. "Section 1: Understanding Hazards". Accessed December 2022. https://www.fema.gov/pdf/library/ism2_s1.pdf.
183 FEMA. "Section 1: Understanding Hazards". Accessed December 2022. https://www.fema.gov/pdf/library/ism2_s1.pdf.

Beaufort Wind Ranking

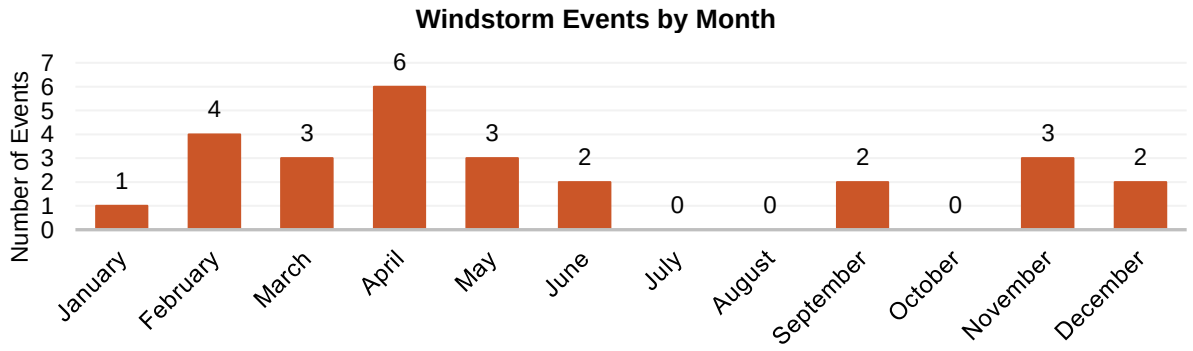
Beaufort Wind Force Ranking	Range of Wind	Conditions
0	<1 mph	Calm; smoke rises vertically
1	1-3 mph	Direction shown by smoke but not wind vanes
2	4-7 mph	Wind felt on face; leaves rustle; wind vanes move
3	8-12 mph	Leaves and small twigs in constant motion
4	13-18 mph	Raises dust and loose paper; small branches move
5	19-24 mph	Small trees in leaves begin to move
6	25-31 mph	Large branches in motion; umbrellas used with difficulty
7	32-38 mph	Whole trees in motion; inconvenience felt when walking against the wind
8	39-49 mph	Breaks twigs off a tree; generally, impedes progress
9	50-54 mph	Slight structural damage; chimney pots and slates removed
10	55-63 mph	Trees uprooted; considerable structural damages; improperly or mobile homes with no anchors overturned
11	64-72 mph	Widespread damages; very rarely experienced
12	72+ mph	Hurricane; devastation

Source: Storm Prediction Center[184]

Using the NCEI reported events, the most common damaging severe wind event in Ouray County is level 12 on the Beaufort Wind Ranking scale. The reported windstorm events ranged from 40 mph to 122 mph, with an average speed of 80 mph.[185] The extent of damage felt by windstorm events will vary depending on the severity of the event and the amount of infrastructure and development within a community or area.

Historical Occurrences

According to NCEI data, 25 windstorm events occurred in Ouray County between 1996 and March 2024. Windstorm events were responsible for $120,500 in property damage and $9,143 in crop damage. No injuries or fatalities were reported from these events.[186,187] As seen in the following figure, most windstorm events occur in the spring and late winter.



Source: NCEI, 1996-March 2024[188]

184 Storm Prediction Center: National Oceanic and Atmospheric Administration. 1805. "Beaufort Wind Scale". http://www.spc.noaa.gov/faq/tornado/beaufort.html.
185 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
186 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
187 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.
188 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

Event descriptions from NCEI for the events that caused the most damage are provided below.

- **11/29/2000 – High Wind:** Strong winds associated with a cold front passage destroyed a galvanized steel garage near Unaweep Pass and tore the shingles off a trailer home at another residence about five miles away. The garage measured 25 feet by 36 feet and was blown about 200 feet away, where trees stopped it. This event resulted in $10,000 of property damage.

- **5/28/2013 – Thunderstorm Wind:** A mobile home was rolled a few times and destroyed by severe thunderstorm outflow winds. A pole barn also lost part of its roof. There was an estimated $60,000 of damage from this event.
- **9/29/2019 – High Wind:** High winds led to a mature tree becoming uprooted. The tree fell on a nearby truck, broke the windshield, and smashed the front of the vehicle. $30,000 in damage resulted from this event.

Average Annual Losses

The average annual property damage estimate was determined based on the NCEI Storm Events Database since 1996. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. The average annual crop damage estimate was determined based on SHELDUS data from 1960-2021. Windstorm events are estimated to cause an average of $4,304 per year in property damage and $147 per year in crop damage.

Windstorm Losses

Hazard Type	# of Events[1]	Average # events per year	Total Property Loss[1]	Average Annual Property Loss	Total Crop Loss[2]	Average Annual Crop Loss
Windstorm	25	0.9	$120,500	$4,304	$9,143	$147

Source: 1 NCEI (1996-March 2024)[189], 2 SHELDUS (1960-2021)[190]

Historical Probability & Future Likelihood

Given the historical record of occurrence for windstorm events (17 out of 28 years with reported events), for this plan, the historical probability of windstorm occurrence is 61 percent.[191] Windstorm events may be more common than those presented here but have not been reported in past years. With the anticipated impacts of climate change and future development, the future likelihood of windstorms is very likely.

Historical Probability & Future Likelihood – Windstorms

Historical Probability	Climate Change Impact	Future Development Impact	Future Likelihood
61%	No Change In Frequency or Exposure	Increase in Exposure	**Very Likely**

189 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.
190 Arizona State University. 2021. "Spatial Hazard Events and Losses Database for the United States". https://sheldus.asu.edu/SHELDUS/.
191 National Centers for Environmental Information. March 2024. "Storm Events Database". https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=8%2CCOLORADO.

Climate Change

According to the Colorado Enhanced State Hazard Mitigation Plan 2023-2028, the future impacts of climate change on windstorms are not projected to impact location, extent, and frequency. However, it is unknown if the duration will change.[192]

Future Development

Any future development and population growth elevates the exposure of property and people to the impacts of windstorms. Future development should take steps to reduce potential damage from windstorms. Building codes for new structures can be strengthened, requiring increased rebar in foundations, enhanced nailing patterns for wall sheathing, Simpson Strong Ties and Straps, and anchors and tie-downs of mobile homes. Additionally, individuals can build to an optional Code Plus Standard, such as Fortified for Safer Living. Installing public shelters to protect residents caught outside or in vulnerable areas, such as mobile home parks, can increase the safety of residents in those areas.

Potential Impacts

Windstorms could significantly impact the people, community lifelines, local economy, and natural environment of Ouray County. Below is an overview of the potential impacts on those areas.

Human Impacts

- Increased risks of injury from flying debris and falling trees and the potential for accidents due to impaired visibility and road conditions.

Community Lifeline Impacts

- Safety and Security
  - Emergency services may be stretched thin responding to increased incidents, such as fallen trees or damaged structures.
- Food, Hydration, Shelter
  - Supply lines could impacted by road closures.
- Health and Medical
  - Power outages and increased calls from injuries due to flying debris and falling trees.
- Energy (Power and Fuel)
  - High winds can damage power lines and substations, leading to outages and disruptions in energy supply.
- Communications
  - Windstorms can damage communication towers and lines, disrupting communication networks and emergency coordination.

192 Colorado Division of Homeland Security & Emergency Management. December 2023. “Colorado Enhanced State Hazard Mitigation Plan”. https://drive.google.com/file/d/1MPL0Oiy-yZYDIMziTvYkR12s35FzG-G8/view.

- Transportation
    - Roads may be blocked by debris such as fallen trees, and bridges or other structures could be damaged, affecting travel and emergency response.

- Hazardous Materials
    - Hazardous materials are not likely to be impacted by windstorms.

- Water Systems
    - Power loss to water systems could temporarily impact water service.

Economic Impacts

- High winds can cause significant damage to homes, businesses, and infrastructure, leading to costly repairs.

- Businesses may face disruptions due to property damage and power outages, affecting local economies.

Environmental Impacts

- Windstorms could cause damage to trees.

Vulnerabilities

All current and future buildings and populations are at risk of windstorms in Ouray County. Wind can result in a variety of impacts on buildings and people, including:

- Torn-off roofs, shingles, and siding
- Downed trees and limbs
- Debris generation
- Injuries from debris
- Power loss

Some segments of the population are especially exposed to the indirect impacts of high-wind events, particularly the loss of electrical power. These populations include older adults or disabled, especially those with medical needs and treatments dependent on electricity. In terms of property losses caused by any high-wind hazard, the actual damage will depend on the building density and quality of construction in the impacted area. Buildings close to large trees or overhead power lines also risk suffering more extensive damage. Windstorm events also have the potential to damage above-ground infrastructure, such as power and communication lines. Down power and communications transmission lines, coupled with disruptions to transportation, create difficulties in reporting and responding to emergencies.

All of Ouray County's owned and identified community lifelines could be damaged by windstorms. However, damage is not likely to impact services for a prolonged period. Power loss to the buildings is the most probable impact. The communications tower, emergency operations center, courthouse, and courthouse annex all have backup generators. The 4-H event center and public health office do not, so they could temporarily lose services.

In addition to windstorm damage, wildfire conditions are exacerbated by high winds. In an area experiencing long-term drought, windstorms can become dust storms, leading to erosion and dust

issues. The following table provides a summary of windstorm vulnerabilities in the county. Participant-specific vulnerabilities can be found after the table.

County Windstorm Vulnerabilities

Sector	Vulnerability
People	-Those living in substandard housing -People outside during events -Elderly or those with medical needs and treatments dependent on electricity
Economic	-Damages to businesses and prolonged power outages can cause significant impacts on the local economy
Built Environment	-All building stock is at risk of significant damage. Roof and siding damage are most likely to occur
Community Lifelines	-Downed power lines and power outages -All above-ground infrastructure at risk of damages -Impassable roads due to debris blocking roadways -All community lifelines are at risk of damage -Loss of communication systems
Recreation	-Hiking and skiing may become more complex and dangerous

City of Ouray

Ouray has the same vulnerabilities as the rest of the county. The city's community lifelines could see minor damage from windstorms. Power loss is also possible; however, all three locations have a backup generator. Services provided by the lifelines are not anticipated to be impacted.

Town of Ridgway

The open landscapes around Ridgway can experience high winds, especially when weather fronts move through the region. This hazard would most likely impact San Miguel Power Association's ability to provide electricity to its customers. Power lines would likely be down in some areas, requiring extensive repairs and causing lengthy outages. The town's other community lifelines could see minor damage from windstorms. The Decker Community Room, Town Hall, and wastewater treatment plant do not have backup generators available, and services could be temporarily lost.

Dallas Park Cemetery District

Windstorms can cause downed trees and branches. This can damage buildings, headstones, and fences. Tall cottonwood trees are abundant in and surrounding the cemetery. Damage to structures, fences, or headstones from fallen trees would likely have a minimal impact on services.

Jurisdictions Ranking Windstorms as a Prioritized Hazard of Concern

The following lists jurisdictions and stakeholders that identified windstorms as a prioritized hazard of concern.

- Dallas Park Cemetery District

Appendix B: Planning Process Documentation

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Introduction

The following appendix provides documentation for the planning process discussed in *Section 4: Planning Process Summary*. This appendix includes information on public involvement and outreach, notified stakeholders, notified state agencies, notified neighboring jurisdictions, meeting invitation letters, meeting sign-in sheets, meeting worksheets, public review comments, and adoption resolutions that have been gathered.

Public Involvement and Outreach

Notified Stakeholder Groups

Organizations	Type
Blackthorn Custom Builders	Major Employer
Jas Designs LLC	Major Employer
Ouray Trail Group	Recreation Group
Ouray Ice Park	Recreation Group
Climbing Alliance	Recreation Group
U.S. Forest Service – Shannon Monahan	High Hazard Dam Owner
Jason Stroehlein	High Hazard Dam Owner
West Region Health Care Coalition	Health Organization
Montrose Regional Health	Health Organization
Mountain Rescue	Health Organization
Woman's Club Ouray County	Vulnerable Populations
Neighbor to Neighbor	Vulnerable Populations
Hispanic Affairs Project of Westen Colorado	Vulnerable Populations
Compañeros: Four Corners Immigrant Resource Center	Vulnerable Populations
Ute Mountain Ute Tribe	Vulnerable Populations
Ute Indian Tribe of the Uintah and Ouray Reservation	Vulnerable Populations
Southern Ute Tribe	Vulnerable Populations
Comfort Keepers	Vulnerable Populations
American Red Cross	Vulnerable Populations
Colorado Care Center	Nursing Home
San Juan Living Center	Nursing Home
Valley Manor Care Center	Nursing Home
Willow Tree Care Center	Nursing Home
San Miguel Power Association	Energy Company
Black Hills Energy	Energy Company
Tri-State Generation and Transmission	Energy Company
Coal Creek Hydro	Energy Company
Farm Service Center Office	Farm Service Agency
Colorado State Farm Service Agency	Farm Service Agency
Rapid Response	Faith-Based Organization
Ouray County Extension	Extension

Organizations	Type
Bureau of Land Management	Federal Agency
U.S. Forest Services	Federal Agency
Eagle Hill Ranch	Neighborhood Association
West Region Wildfire Council	Regional Agency
Uncompahgre Watershed Partnership	Conservation Agency
Trust for Land Restoration	Conservation Agency
Shavano Conservation District	Conservation Agency
Sierra Club: Western Slope Group	Conservation Agency
Spring Branch Forestry	Conservation Agency
Ouray Regional Recreation & Conservation Alliance	Conservation Agency
Ouray Water User Association	Conservation Agency
Great Old Broads for Wilderness	Conservation Agency
Colorado West Land Trust	Conservation Agency
Ridgway Ouray Community Council	Local Organization
Ouray County Historical Society	Historical Organization
Greta Design	Local Business
Ouray County Cattlemen's Association	Agriculture Organization

Notified State of Colorado Agencies

Notified State of Colorado Agencies		
Colorado Geological Survey	Colorado Water Conservation Board	Colorado Department of Transportation
Colorado State Forest Service	Colorado Office of Dam Safety	Colorado Climate Center
Colorado Resiliency Office	Colorado Division of Homeland Security and Emergency Management	Colorado Department of Public Safety
Colorado Parks and Wildlife	Colorado State Patrol	Colorado Department of Public Health & Environment

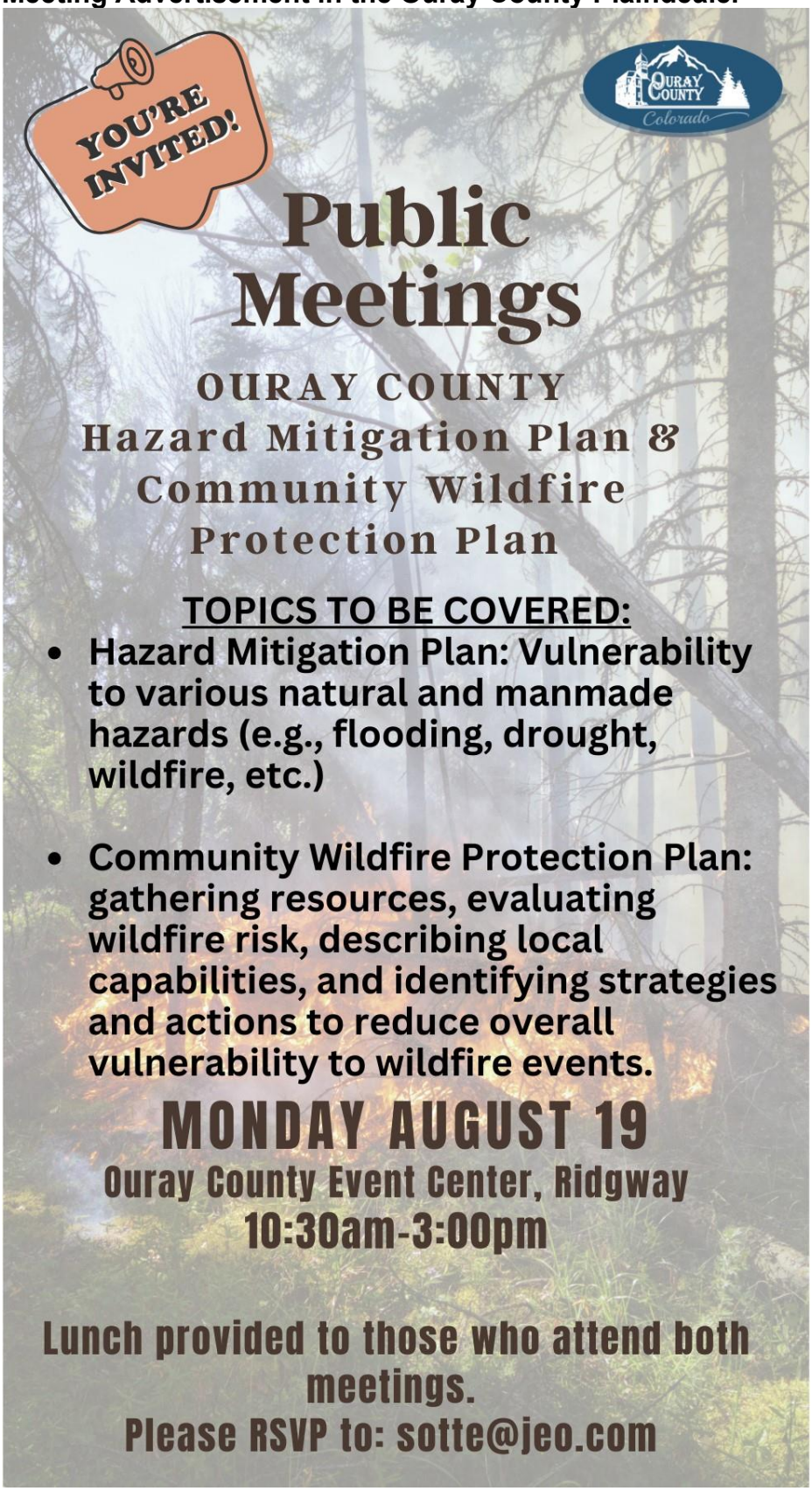
Notified Neighboring Jurisdictions

Notified Neighboring Jurisdictions		
Delta County	Gunnison County	Hinsdale County
Sanjuan County	San Miguel County	Montrose County
City of Montrose	Town of Telluride	Town of Olathe
City of Gunnison	Town of Lake City	Town of Silverton
Town of Paonia	Town of Nucla	Horsefly Volunteer Fire Department

Website & Newspaper

The county website (https://ouraycountyco.gov/) and Ouray County Plaindealer were used to communicate with the public, participating jurisdictions, and stakeholders about the plan update, meeting information, and other critical information.

Meeting Advertisement in the Ouray County Plaindealer



Public Survey

A public survey was used to gather information from the general public for the Hazard Mitigation Plan and Community Wildfire Protection Plan, which was going on simultaneously. The survey was online in English (https://bit.ly/OurayCoHazardsSurvey) and by hard copy. Every household in the county was mailed a postcard to fill out the survey, which was also advertised on the Ouray County Plaindealer. A copy of the mailed postcard, a hard copy version of the survey, and results from the survey can be found below.

Mailed Survey Postcard



OURAY COUNTY
541 4th St.
PO BOX C
Ouray, CO 81427

Why take the survey? Ouray County is currently in the process of updating both their hazard mitigation plan and their community wildfire protection plan. One of the key components of a hazard mitigation plan and a community wildfire protection plan is public input during the planning process. The planning team will be evaluating information on the hazards that impact each jurisdiction within Ouray County. Ouray County is seeking your input on the hazards being evaluated as well as your opinions on the types of activities that should be considered to reduce future impacts. Your answers will be considered as the plans are developed. Please take a few moments to complete this important survey. Thank you.

Public Survey

Ouray County Hazards Survey

Public Survey

Ouray County is currently in the process of updating both their hazard mitigation plan and their community wildfire protection plan. One of the key components of a hazard mitigation plan and a community wildfire protection plan is public input during the planning process. The planning team will be evaluating information on the hazards that impact each jurisdiction within Ouray County. Ouray County is seeking your input on the hazards being evaluated as well as your opinions on the types of activities that should be considered to reduce future impacts. Your answers will be considered as the plans are developed. Please take a few moments to answer the following questions.

---

1. Where is your primary residence?

   ☐ City of Ouray
   ☐ Town of Ridgway
   ☐ Colona
   ☐ Idlewild Estates
   ☐ Log Hill
   ☐ Park Estates
   ☐ Ponderosa Village
   ☐ Other Unincorporated Areas of Ouray County
   ☐ Other: (Please Specify) _____

---

2. What types of hazards have you experienced in your community? (Check all that apply)

☐ Avalanche	☐ Imminent Threat (i.e. Terrorism)
☐ Dam Failure	☐ Landslide/Rockfall
☐ Debris Flow	☐ Mass Casualty Events (i.e. Transportation Incidents)
☐ Drought	☐ Public Health Emergencies
☐ Earthquakes	☐ Severe Winter Storm
☐ Extreme Temperatures	☐ Wildfire
☐ Floods	☐ Windstorm
☐ Hazardous Materials Incident	

3. Please rank your level of concern regarding these hazard events occurring in your jurisdiction. Please rate each hazard as follows:

1 = No Concern, 2 = Some Concern, 3 = High Concern, 4 = Extreme Concern.

Avalanche		Imminent Threat (i.e. Terrorism)	
Dam Failure		Landslide/Rockfall	
Debris Flow		Lightning	
Drought		Mass Casualty Events (i.e. Transportation Incidents)	
Earthquakes		Public Health Emergencies	
Extreme Temperatures		Severe Winter Storm	
Floods		Wildfire	
Hazardous Materials Incident		Severe Wind	

4. What would you like to see the county, communities, and fire authorities do in the future to protect people, resources, and infrastructure from future hazard events? (Circle each option 1-5, 1 = Not Important, 5 = Very Important)

	1 (Not Important)	2	3	4	5 (Very Important)
Increase local fire funds to increase fire response capabilities	1	2	3	4	5
Provide financial assistance for private vegetation and fuels mitigation/removal	1	2	3	4	5
Remove hazardous fuels from public lands and roadways	1	2	3	4	5
Increase public education on hazards, risks, and household mitigation	1	2	3	4	5
Assist with home wildfire risk assessments	1	2	3	4	5
Backup generators at key facilities	1	2	3	4	5
Stormwater management – bank stabilization, drainage improvements, culverts	1	2	3	4	5
Landslide and rockfall mitigation	1	2	3	4	5
Expand early warning systems / emergency notification	1	2	3	4	5

5. Please indicate how important it is to protect the following from hazard events (Circle 1-5, 1 = Not Important, 5 = Very Important)

	1 (Not Important)	2	3	4	5 (Very Important)
Air Quality	1	2	3	4	5
Buildings	1	2	3	4	5
Cultural Areas	1	2	3	4	5
Emergency Response & Government Services	1	2	3	4	5
Forest Health	1	2	3	4	5
Historical Sites	1	2	3	4	5
Human Life	1	2	3	4	5
Infrastructure (communication, power, roadways, water)	1	2	3	4	5
Livestock	1	2	3	4	5
Recreation	1	2	3	4	5
Water Quality	1	2	3	4	5
Wildlife	1	2	3	4	5

6. Rank the level of concern that wildfire will impact you or the values that you care about.

☐ Lowest Concern
☐ Little Concern
☐ Some Concern
☐ Moderate Concern
☐ Highest Concern

7. In your opinion, how likely is it that a major wildfire will occur in Ouray County in the next 5 years?

☐ Very likely
☐ Likely
☐ Neither likely nor unlikely
☐ Unlikely
☐ Very unlikely

---

8. What measures have you taken to protect your home or property from wildfire? (Select all that apply)

☐ Built or retrofitted structure(s) with fire resistant materials
☐ Cleared litter/debris/vegetation/combustible materials from around your property
☐ Installed fire resistant landscaping
☐ Installed sprinkler system
☐ Contacted West Regional Wildfire Council about opportunities for fire mitigation funding
☐ None of the above
☐ Other: _____

---

9. What are the barriers you face when protecting your home or property from wildfire? (Select all that apply)

☐ Cost
☐ Time
☐ Knowledge of what to do
☐ HOA restrictions
☐ Local ordinances
☐ None of the above
☐ Other: _____

10. What factors/information would encourage you to reduce wildfire risks on your property? (Circle 1-5, 1 = Not Encouraging at all, 5 = Very Encouraging)

	1 (Not Encouraging at all)	2	3	4	5 (Very Encouraging)
List of recommended contractors that could be hired to do the work	1	2	3	4	5
Financial assistance	1	2	3	4	5
Help doing the physical work (thinning trees/removing debris)	1	2	3	4	5
Community events (ex. community cleanup day)	1	2	3	4	5
Assistance in removing cut vegetation or debris (ex. provided dumpsters or chippers)	1	2	3	4	5
Reduced homeowner insurance rates or access to homeowners' insurance	1	2	3	4	5
Information about recommended actions	1	2	3	4	5
Understanding the wildfire risk on my property	1	2	3	4	5

11. Do you support the following vegetation management techniques? (Yes or No)

Technique	Yes	No
Planned prescribed burns		
Burning of piled vegetation in winter		
Forest thinning		
Mulching of vegetation		
Mowing of grass and shrubs		

12. If you selected "No" to any of the vegetation management techniques in the question above, please explain why.

Optional Demographic Questions

13. What is your household income?
- ☐ <$25,000
- ☐ $25,000 - $49,999
- ☐ $50,000 - $74,999
- ☐ $75,000 - $99,999
- ☐ $100,000 or more
- ☐ Prefer not to say

14. Are you of Hispanic, Latino, or Spanish origin?
- ☐ Yes
- ☐ No
- ☐ Prefer not to say

15. Please select your race (Select all that apply)
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White / Caucasian
- ☐ Other: _____
- ☐ Prefer not to say

16. What is the highest level of school completed?
    - ☐ Less than high school
    - ☐ High school graduate
    - ☐ Some college or technical school
    - ☐ Bachelor's degree
    - ☐ Graduate degree
    - ☐ Prefer not to say

---

17. What is your age?
    - ☐ 18-24 years
    - ☐ 25-34 years
    - ☐ 35-44 years
    - ☐ 45-64 years
    - ☐ 65-84 years
    - ☐ 85 or older
    - ☐ Prefer not to say

---

18. What home insurance company do you use?

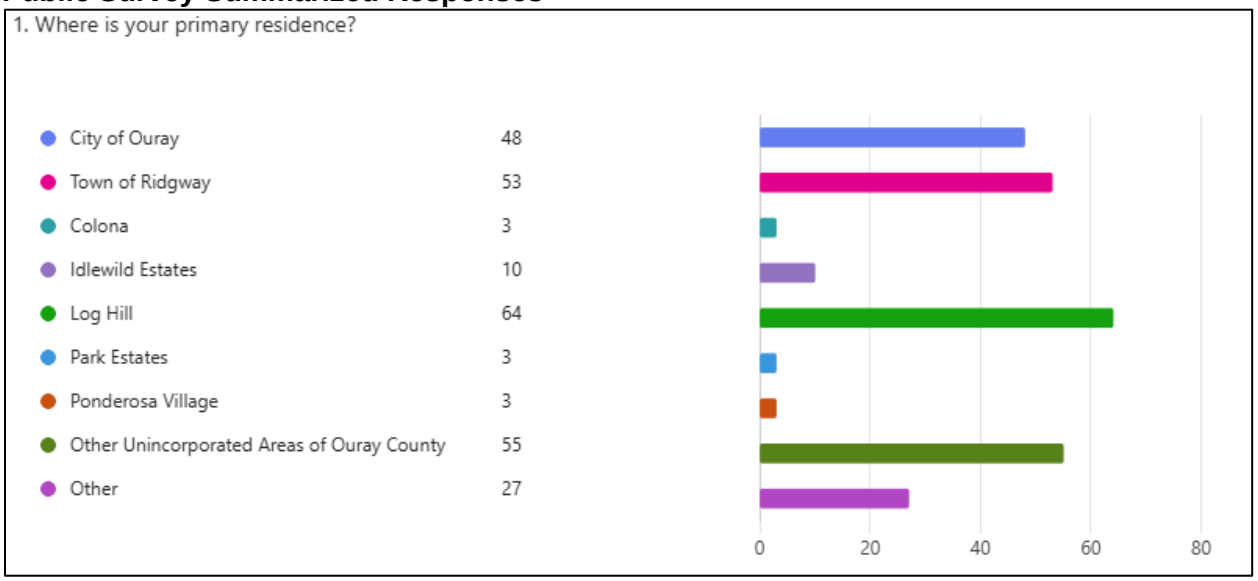
Thank you for your time! Completed surveys may be dropped off, mailed, or emailed to:

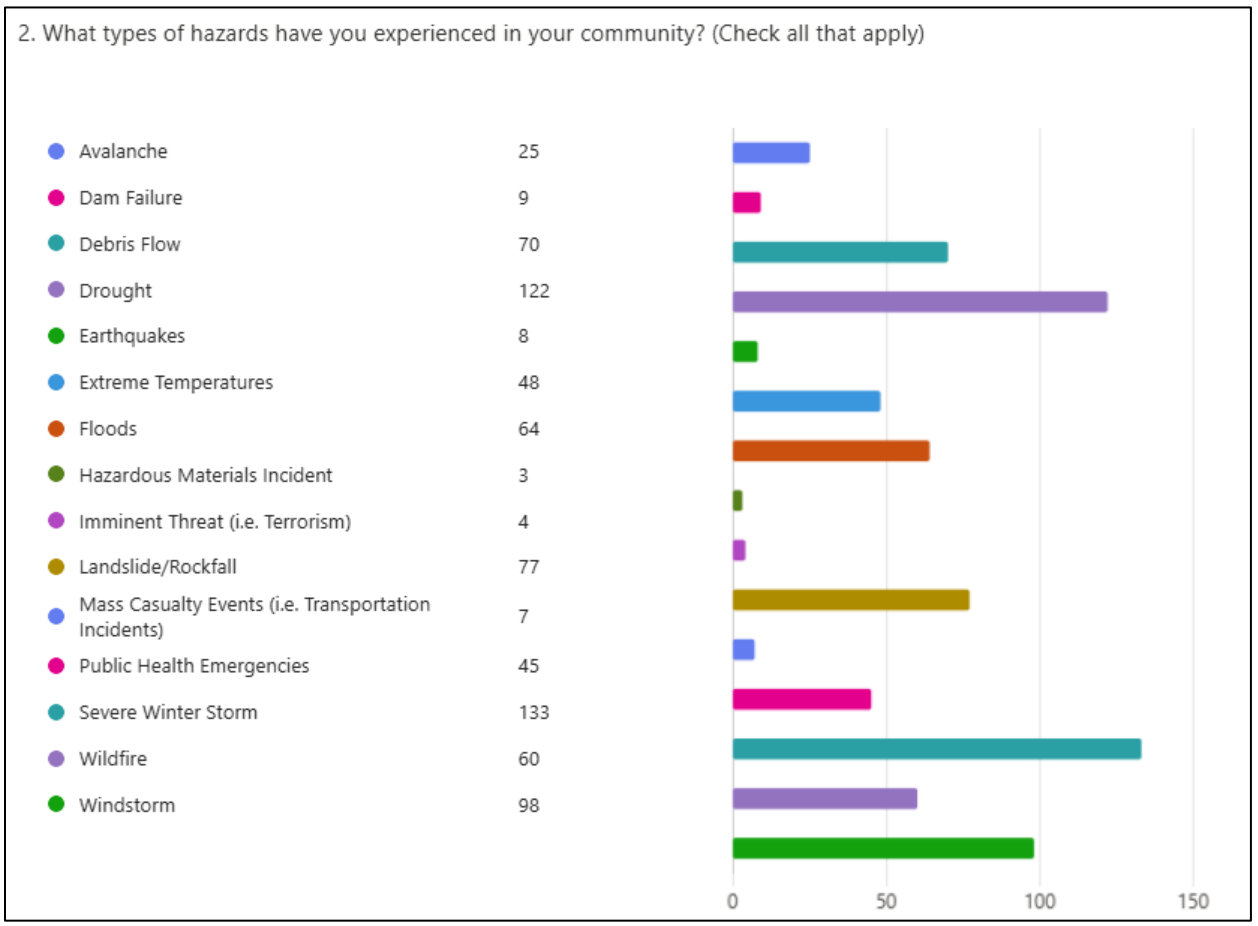
Ouray County Emergency Management
421 6th Ave
P.O. Box C
Ouray, CO 81427
gboyd@ourayco.gov

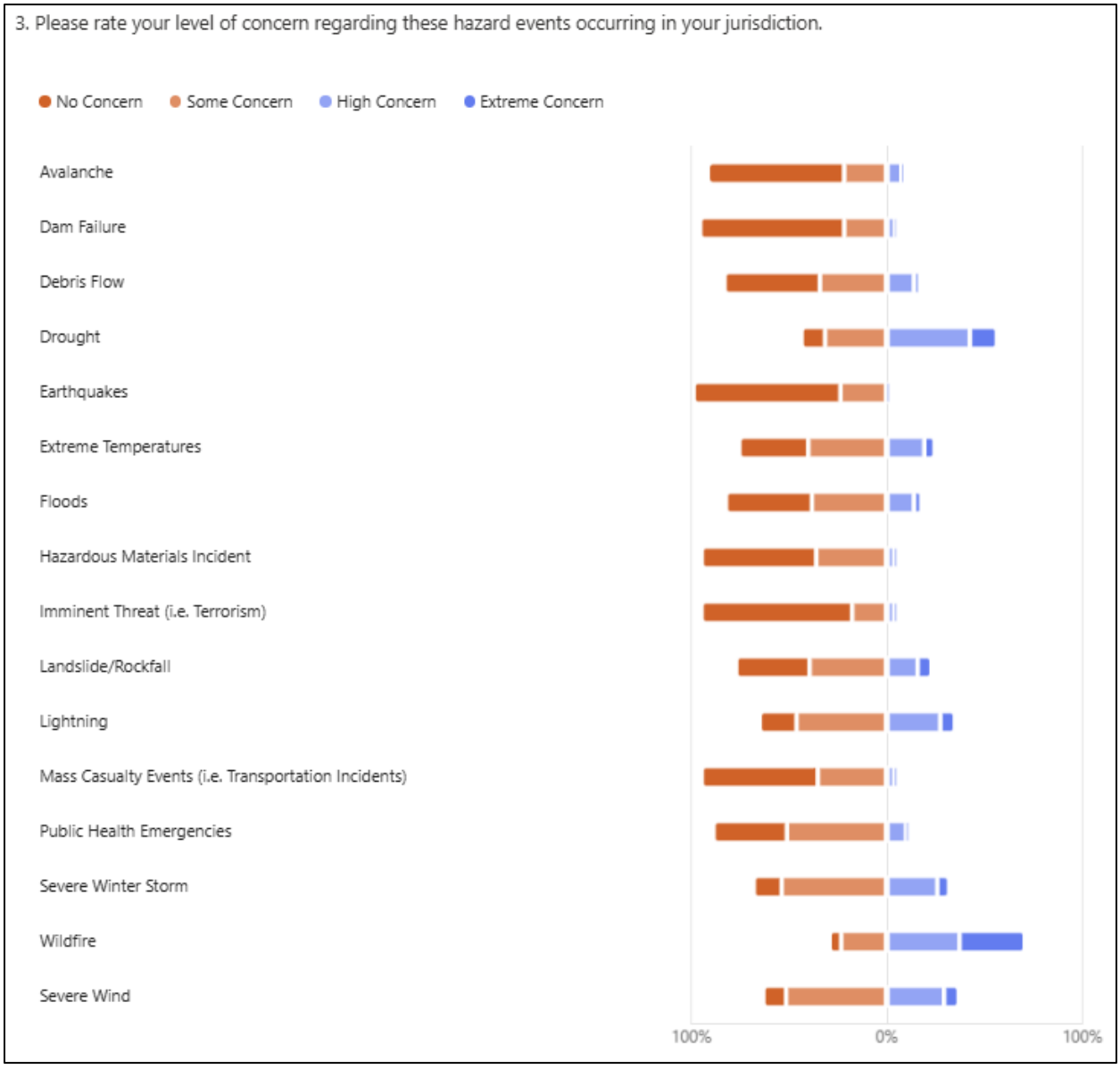
Or to:

JEO Consulting Group
Attn: Karl Dietrich
2000 Q Street, Ste 500
Lincoln, NE 68503
kdietrich@jeo.com

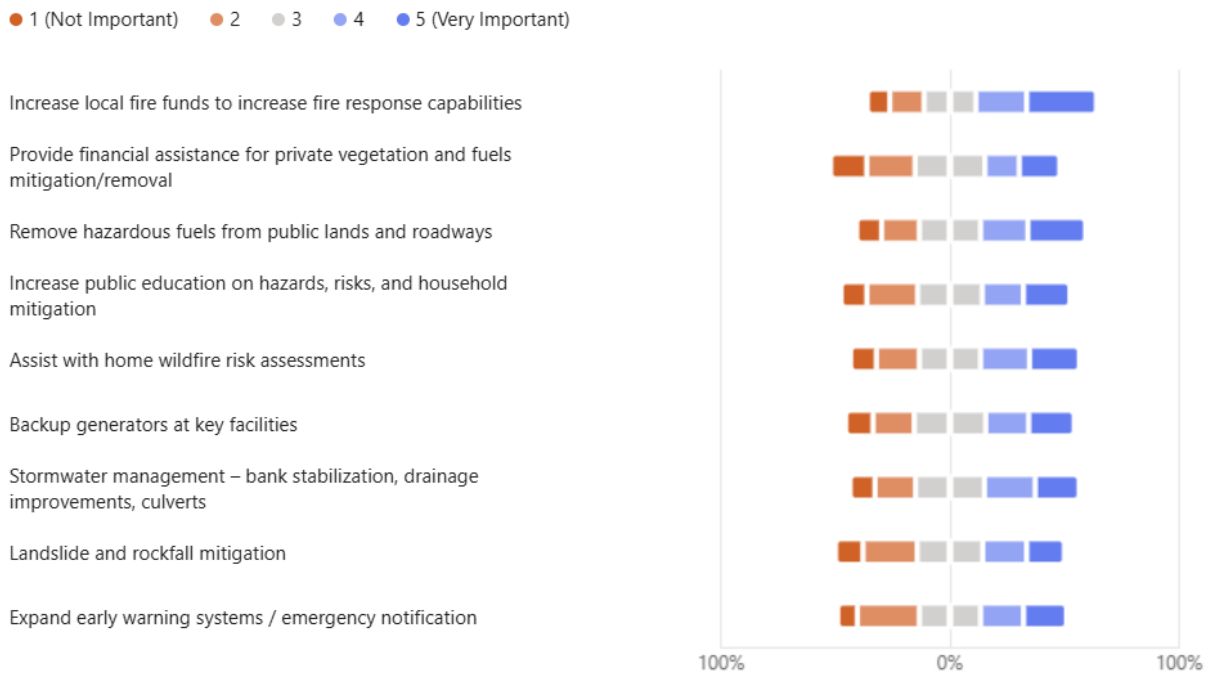
Public Survey Summarized Responses



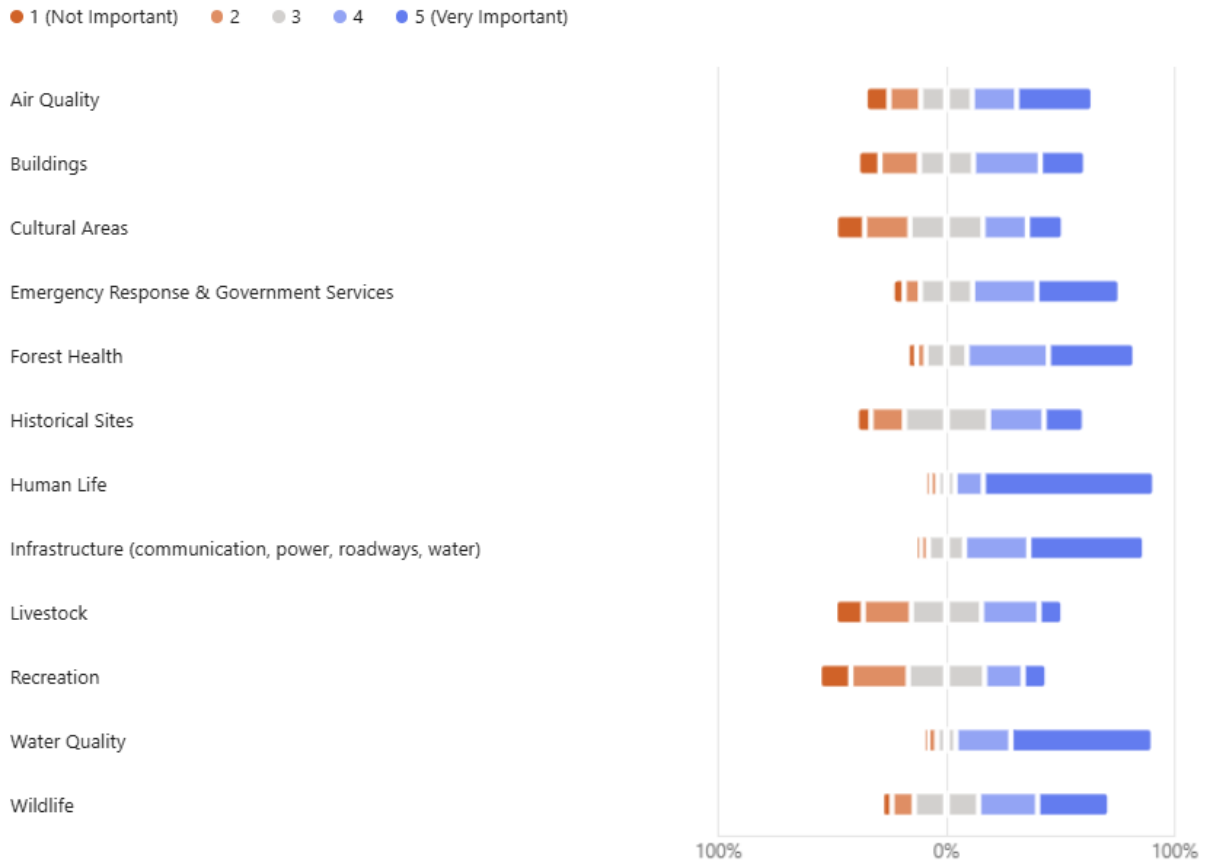



3. Please rate your level of concern regarding these hazard events occurring in your jurisdiction.
No Concern
Some Concern
High Concern
Extreme Concern
Avalanche
Dam Failure
Debris Flow
Drought
Earthquakes
Extreme Temperatures
Floods
Hazardous Materials Incident
Imminent Threat (i.e. Terrorism)
Landslide/Rockfall
Lightning
Mass Casualty Events (i.e. Transportation Incidents)
Public Health Emergencies
Severe Winter Storm
Wildfire
Severe Wind
100%
0%
100%

4. What would you like to see the county, communities, and fire authorities do in the future to protect people, resources, and infrastructure from future hazard events (1 = Not Important and 5 = Very Important)?

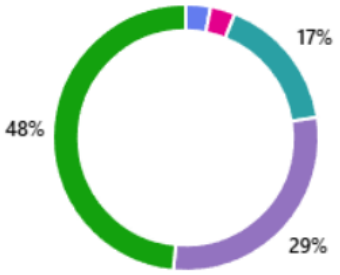


5. Please indicate how important it is to protect the following from hazard events (1 = Not Important and 5 = Very Important).



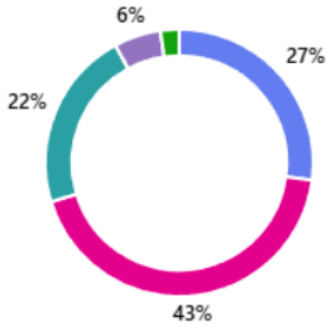
6. Rank the level of concern that wildfire will impact you or the values that you care about.

Lowest Concern	8
Little Concern	8
Some Concern	44
Moderate Concern	77
Highest Concern	129



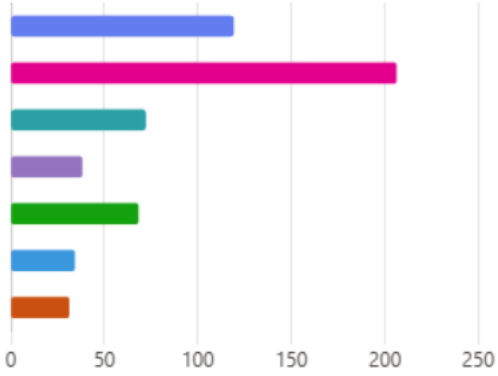
7. In your opinion, how likely is it that a major wildfire will occur in Ouray County in the next 5 years?

Very Likely	72
Likely	115
Neither likely nor unlikely	58
Unlikely	15
Very unlikely	6



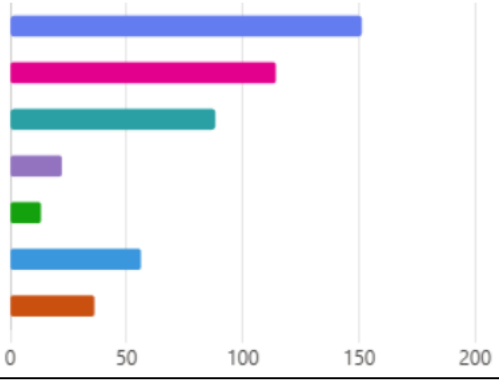
8. What measures have you taken to protect your home or property from wildfire? (Select all that apply)

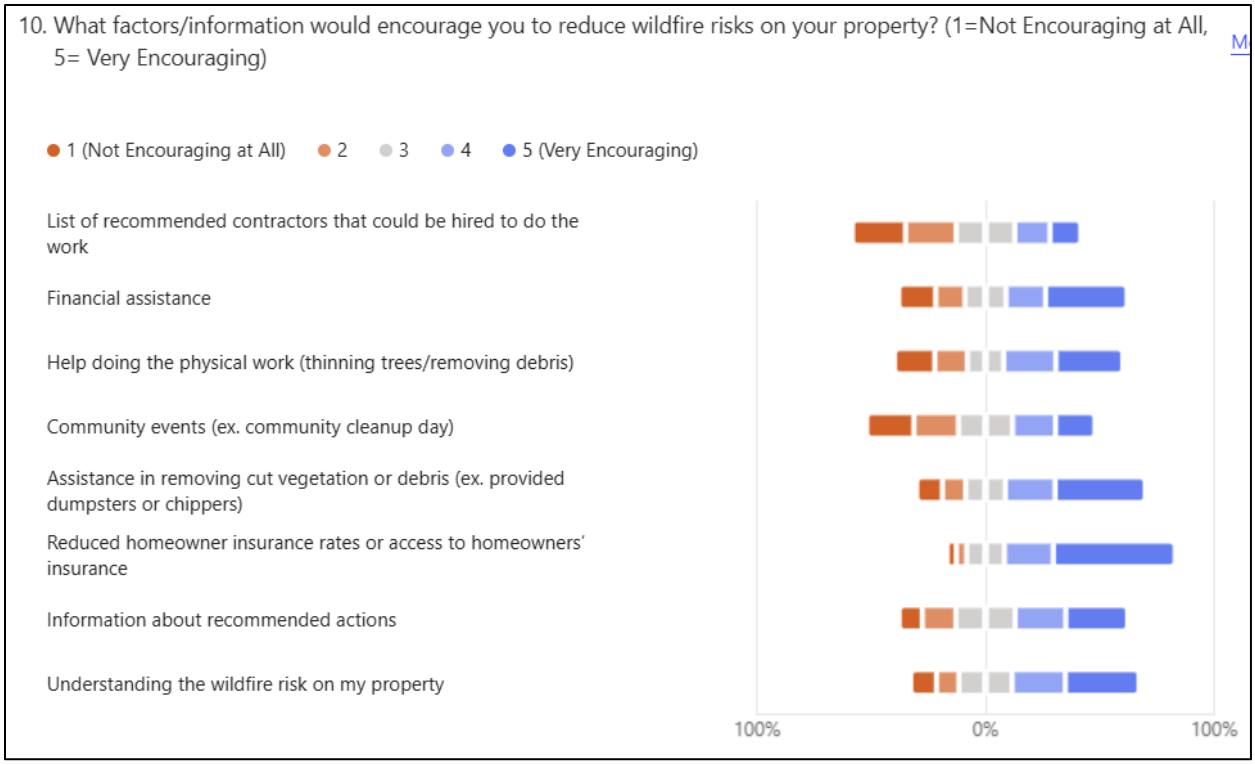
Built or retrofitted structure(s) with fire resistant materials	119
Cleared litter/debris/vegetation/combustible...	206
Installed fire resistant landscaping	72
Installed sprinkler system	38
Contacted West Regional Wildfire Council about opportunities for fire mitigation...	68
None of the above	34
Other	31

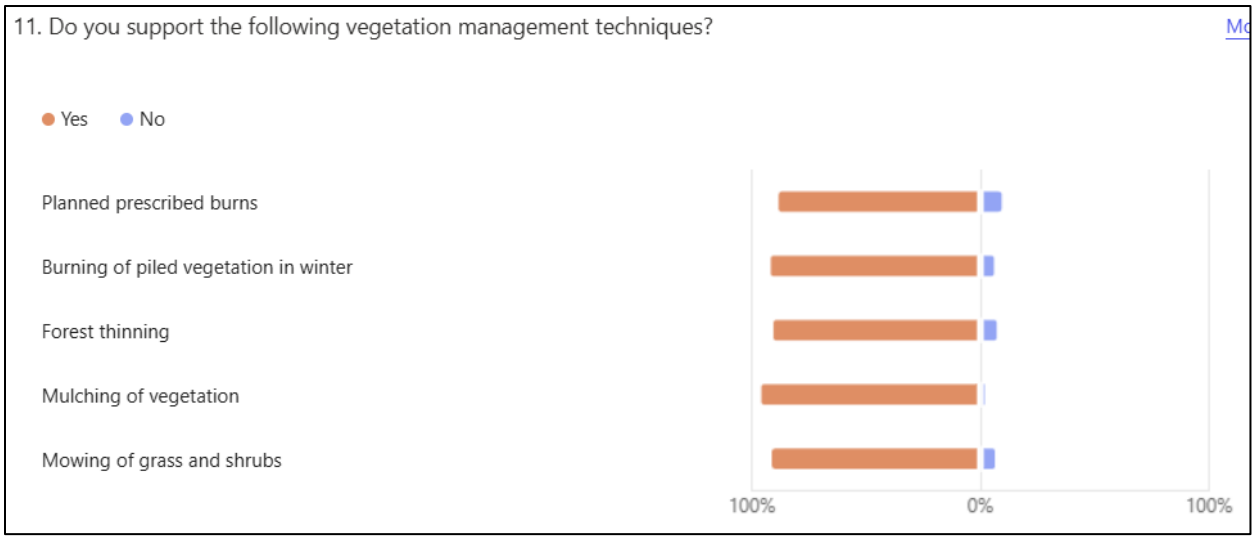


9. What are the barriers you face when protecting your home or property from wildfire? (Select all that apply)

Cost	151
Time	114
Knowledge of what to do	88
HOA restrictions	22
Local ordinances	13
None of the above	56
Other	36




10. What factors/information would encourage you to reduce wildfire risks on your property? (1=Not Encouraging at All, 5= Very Encouraging)
1 (Not Encouraging at All)
2
3
4
5 (Very Encouraging)
List of recommended contractors that could be hired to do the work
Financial assistance
Help doing the physical work (thinning trees/removing debris)
Community events (ex. community cleanup day)
Assistance in removing cut vegetation or debris (ex. provided dumpsters or chippers)
Reduced homeowner insurance rates or access to homeowners' insurance
Information about recommended actions
Understanding the wildfire risk on my property
100%
0%
100%


11. Do you support the following vegetation management techniques?
Yes
No
Planned prescribed burns
Burning of piled vegetation in winter
Forest thinning
Mulching of vegetation
Mowing of grass and shrubs
100%
0%
100%

12. If you selected "No" to any of the vegetation management techniques in the question above, please explain why. More details

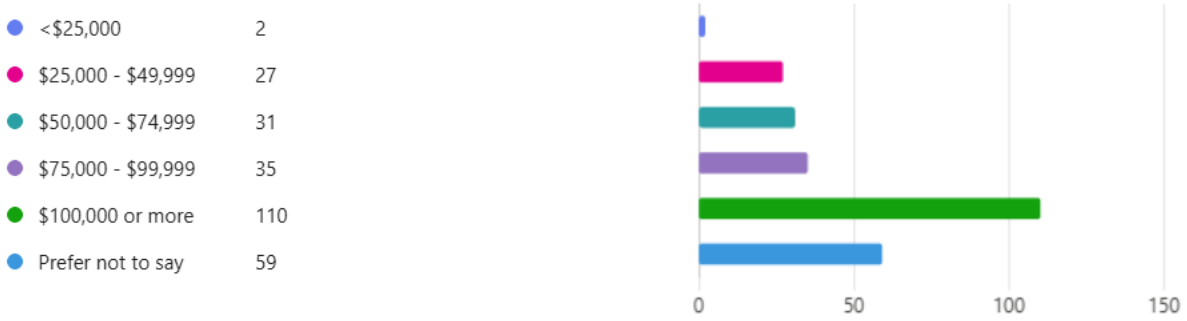
63
Responses

Latest Responses
"Prescribed burns are never watched and controlled properly"
...

23 respondents (37%) answered burning for this question.



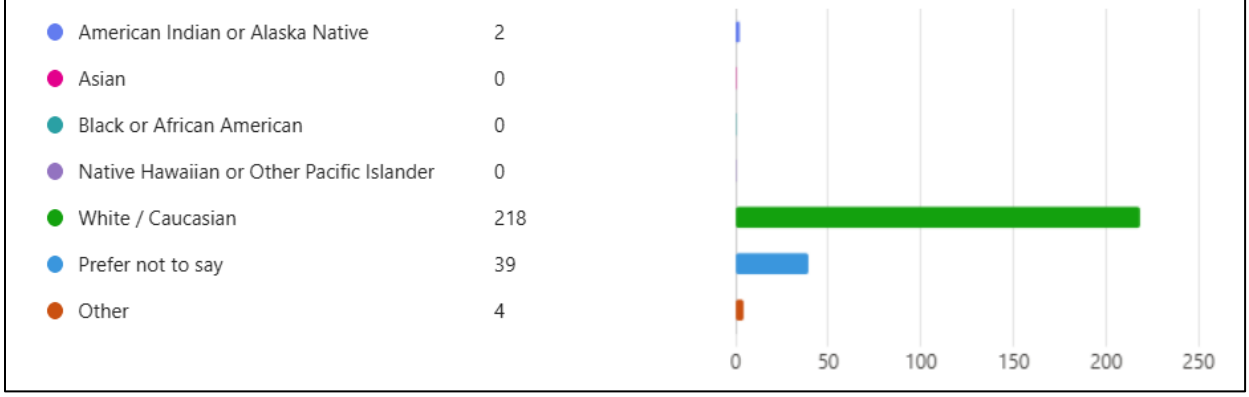
13. What is your household income?



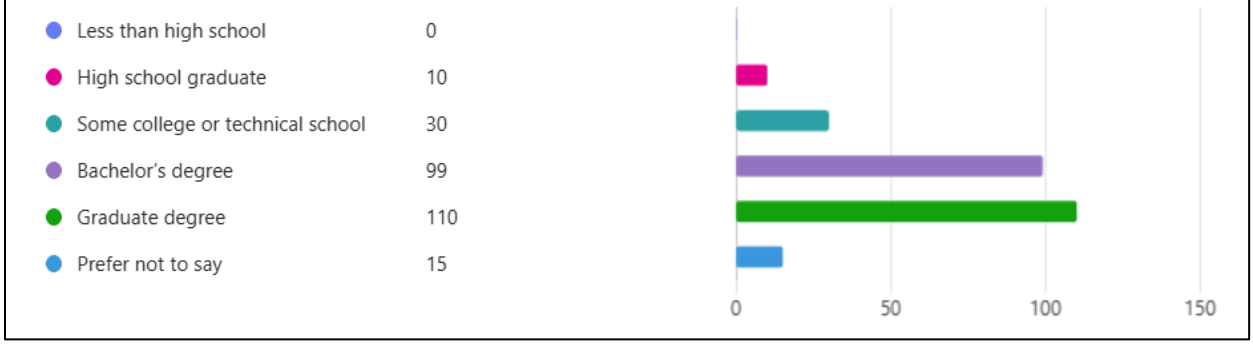
14. Are you of Hispanic, Latino, or Spanish origin?



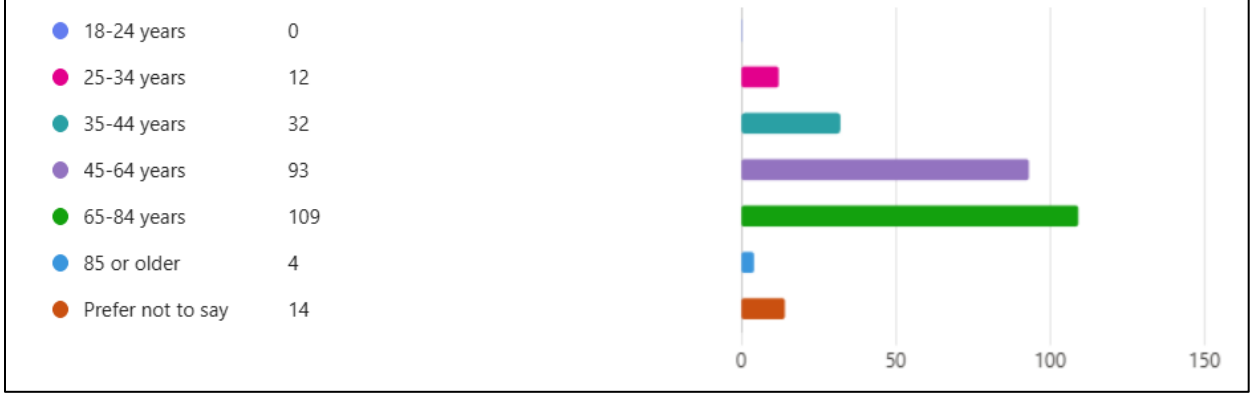
15. Please select your race:



16. What is the highest level of school completed?



17. What is your age?




18. What home insurance company do you use?
More details
226
Responses
Latest Responses
"State Farm"
"State Farm"
...
88 respondents (39%) answered State Farm for this question.
HOA insurance
property insurance
Western Farm
renters insurance
Modern Insurance
Insurance
home
Progressive
USAA
State Farm
Safeco
State Farn
Farm Bureau
Travelers
insurance with SafeCO
American Family
Liberty Mutual
American Insurance
insurance companies
Farmers Insurance

Round 1 Meeting Invitations

Participating Jurisdictions Meeting Invitation

On Monday, August 19th Ouray County Emergency Management will host two important meetings related to hazard mitigation, one to discuss the update of the County's Hazard Mitigation Plan (HMP) and the other to discuss the update of the County's Community Wildfire Protection Plan (CWPP).

An HMP is a community-driven, living document that assesses vulnerability to various natural and manmade hazards (e.g., flooding, drought, wildfire, etc.) and identifies mitigation strategies to reduce vulnerability to those hazards. Once a jurisdiction (county, community, school district, fire district) is part of an approved plan, they become eligible for up to a 75% cost share from the Federal Emergency Management Agency for a variety of projects listed in the plan. During this meeting, we will cover what an HMP is, roles in the planning process, and information that we will need from participants and stakeholders. The meeting will start at 10:30am and will last approximately 1.5 hours. It can be attended in-person or virtually.

Following a short break for lunch, there will be a CWPP meeting from 1:00pm – 3:00pm. This meeting can also be attended in person or virtually. The CWPP assists the county and local fire districts in gathering resources, evaluating wildfire risk, describing local capabilities, and identifying strategies and actions to reduce overall vulnerability to wildfire events. Fire districts who participate in the plan will be eligible to apply for federal and state cost-share funds for vegetative fuels reduction and other hazard mitigation strategies.

You may attend one or both meetings depending on your interest in being a part of one or both planning processes. Information about both meetings can be found below:

Hazard Mitigation Plan Meeting
Monday, August 19th at 10:30am to Noon
Location: Ouray County Event Center, 22739 US-550, Ridgway, CO 81432
Or join online at https://us02web.zoom.us/j/83317988218.

Community Wildfire Protection Plan Meeting
Monday, August 19th from 1:00pm – 3:00pm
Location: Ouray County Event Center, 22739 US-550, Ridgway, CO 81432
Or join online at https://us02web.zoom.us/j/83317988218.

Lunch will be provided for those that attend both meetings. Please RSVP by August 12th to Sam Otte (sotte@jeo.com). Please include which meetings you plan on attending so that we can get an accurate head count.

Stakeholders & Neighboring Jurisdictions Round 1 Meeting Invitation Letter

RE: Ouray County Hazard Mitigation Plan Round One Meeting

Dear Stakeholder,

On **Monday, August 19th** Ouray County Emergency Management will host two important meetings related to hazard mitigation, one to discuss the update of the County's Hazard Mitigation Plan (HMP) and the other to discuss the update of the County's Community Wildfire Protection Plan (CWPP). Ouray County has hired JEO Consulting Group to help facilitate those meetings and help lead the planning processes. **You are receiving this invitation because your jurisdiction or organization will either be a direct participant or a stakeholder for these plans.**

An HMP is a community-driven, living document that assesses vulnerability to various natural and manmade hazards (e.g., flooding, drought, wildfire, etc.) and identifies mitigation strategies to reduce vulnerability to those hazards. Once a jurisdiction (county, community, school district, fire district, or cemetery board) is part of an approved plan, they become eligible for up to a 75% cost share from the Federal Emergency Management Agency for a variety of projects listed in the plan. During this meeting, we will cover what an HMP is, roles in the planning process, and information that we will need from participants and stakeholders. **The meeting will start at 10:30am** and will last approximately 1.5 hours. It can be attended in-person or virtually.

Following a short break for lunch, there will be a **CWPP meeting from 1:00pm – 3:00pm**. This meeting can also be attended in person or virtually. The CWPP assists the county and local fire districts in gathering resources, evaluating wildfire risk, describing local capabilities, and identifying strategies and actions to reduce overall vulnerability to wildfire events. Fire districts who participate in the plan will be eligible to apply for federal and state cost-share funds for vegetative fuels reduction and other hazard mitigation strategies.

You may attend one or both meetings depending on your interest in being a part of one or both planning processes. Information about both meetings can be found below:

Hazard Mitigation Plan Meeting

Monday, August 19th at 10:30am to Noon at the Ouray County Event Center, 22739 US-550, Ridgway, CO 81432

Or join online at https://us02web.zoom.us/j/8331798821

Community Wildfire Protection Plan Meeting

Monday, August 19th from 1:00pm – 3:00pm at the Ouray County Event Center, 22739 US-550, Ridgway, CO 81432

Or join online at https://us02web.zoom.us/j/83317988218

Lunch will be provided for those that attend both meetings. **Please RSVP by August 12th** to Sam Otte (sotte@jeo.com). Please include which meetings you plan on attending so that we can get an accurate head count.

Sincerely,

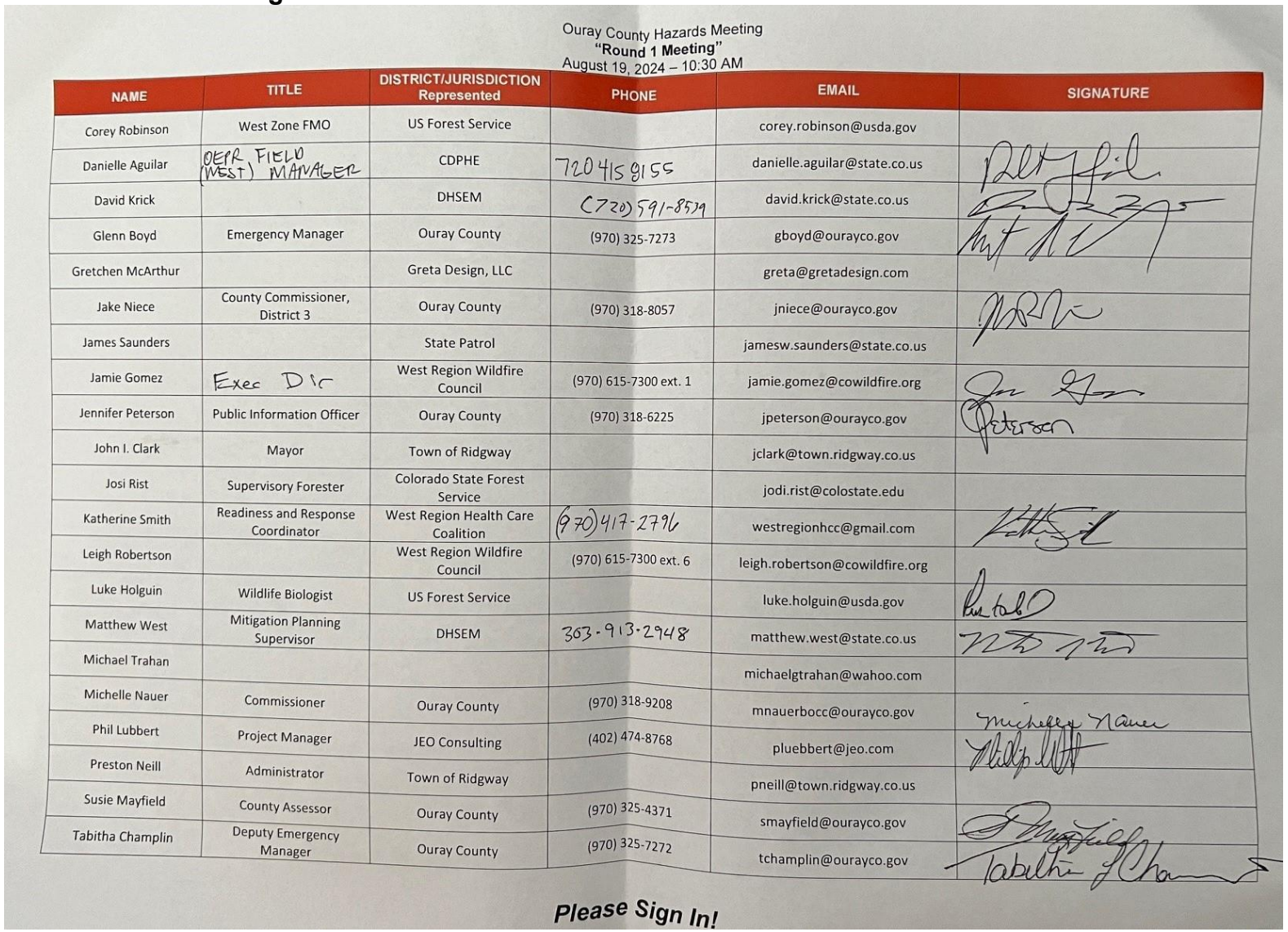


Karl Dietrich

Project Planner

Round 1 Sign-In Sheets

Round 1 In-Person Sign-In Sheets



Ouray County Hazards Meeting
"Round 1 Meeting"
August 19, 2024 – 10:30 AM

NAME	TITLE	DISTRICT/JURISDICTION Represented	PHONE	EMAIL	SIGNATURE
Corey Robinson	West Zone FMO	US Forest Service		corey.robinson@usda.gov	
Danielle Aguilar	OEPR FIELD (WEST) MANAGER	CDPHE	720 415 9155	danielle.aguilar@state.co.us	
David Krick		DHSEM	(720) 591-8579	david.krick@state.co.us	
Glenn Boyd	Emergency Manager	Ouray County	(970) 325-7273	gboyd@ourayco.gov	
Gretchen McArthur		Greta Design, LLC		greta@gretadesign.com	
Jake Niece	County Commissioner, District 3	Ouray County	(970) 318-8057	jniece@ourayco.gov	
James Saunders		State Patrol		jamesw.saunders@state.co.us	
Jamie Gomez	Exec Dir	West Region Wildfire Council	(970) 615-7300 ext. 1	jamie.gomez@cowildfire.org	
Jennifer Peterson	Public Information Officer	Ouray County	(970) 318-6225	jpeterson@ourayco.gov	
John I. Clark	Mayor	Town of Ridgway		jclark@town.ridgway.co.us	
Josi Rist	Supervisory Forester	Colorado State Forest Service		jodi.rist@colostate.edu	
Katherine Smith	Readiness and Response Coordinator	West Region Health Care Coalition	(970) 417-2796	westregionhcc@gmail.com	
Leigh Robertson		West Region Wildfire Council	(970) 615-7300 ext. 6	leigh.robertson@cowildfire.org	
Luke Holguin	Wildlife Biologist	US Forest Service		luke.holguin@usda.gov	
Matthew West	Mitigation Planning Supervisor	DHSEM	303-913-2948	matthew.west@state.co.us	
Michael Trahan				michaelgtrahan@wahoo.com	
Michelle Nauer	Commissioner	Ouray County	(970) 318-9208	mnauerbocc@ourayco.gov	
Phil Lubbert	Project Manager	JEO Consulting	(402) 474-8768	pluebbert@jeo.com	
Preston Neill	Administrator	Town of Ridgway		pneill@town.ridgway.co.us	
Susie Mayfield	County Assessor	Ouray County	(970) 325-4371	smayfield@ourayco.gov	
Tabitha Champlin	Deputy Emergency Manager	Ouray County	(970) 325-7272	tchamplin@ourayco.gov	

Please Sign In!

Ouray County Hazards Meeting
"Round 1 Meeting"
August 19, 2024 – 10:30 AM

NAME	TITLE	DISTRICT/JURISDICTION Represented	PHONE	EMAIL	SIGNATURE
Tamara Gulde	City Council	City of Ouray, Mountain Fever Gift	(562) 972-9680	tgulde@cityofouray.com	Tamara Gulde
Thomas Austin		Log Hill ~~Fire~~ Fire	970901 8282	toma67@aol.com	
Tod Lokey	Superintendent	Ouray School District	(970) 318-6896	tlokey@orayschool.org	
Lynn Padgett	County Commissioner	Ouray County	970 256 0834	lpadgett@ourayco.gov	
Chris Miller	Ridgway/Ouray Fire	Ouray County	970 318 0538	chief@RidgwayFire.org	
Jeremy Fox	Chief Operating Officer	SMPA	970.729-1547	jfox@smpa.com	
Kristin Kelley	PH Director	Ouray County	970-318-1714	KKelley@ouraycO.gov	
AUTUMN BAILEY	PIO City of Ouray	city of ouray	970.318.0788	ABailey@cityofouray	AMB
John Clark	Mayor	Town of Ridgway	970 417-8434	jclark@town.ridgway.co.us	
John Sturdevant	Coal Creek Hydro		970 708 3835	lanksta1@yahoo.com	

Please Sign In!

Round 1 Online Sign-In Sheet

Online-Chat Sign In

Preston Neill – Administrator, Town of Ridgway

Dolgio Nergui – IT Tech, Ouray County

Erin Stadelman – Fairgrounds Manager, Ouray County

Kara Rhoades – Ouray County

Bill Martindale – Chief, Log Hill Messa Fire Protection District

Tom Austin – Ex-Chief, Log Hill Messa Fire Protection District

Shannon Monahan – USFS, High Hazard Dam Owner

Mary Kay Wray – American Red Cross

Alex Shelley – Communications Executive, San Miguel Power Association

Darcy Weimer – San Miguel Power Association

Joe Duensing – CDPS

Mike Schltz – USFS

Curtis Hartenstine – Wildfire Mitigation Program Manager, Tri-State Generation and Transmission

Pete Slintak – Business Resiliency Manager, Tri-State Generation and Transmission

Round 1 Example Participant Profile with Questions

Community Profile

Town of Ridgway

Ouray County
Hazard Mitigation Plan 2025

Name(s): _____

Date: _____

Worksheets Due By: _____

Please answer the questions in red italics. Your responses are critical for completing this Community Profile.

Completed Community Profiles and other worksheets can be returned to JEO Consulting Group, Attn: Karl Dietrich, 2000 Q Street Ste 500, Lincoln, NE 68503 or kdietrich@jeo.com. If you have any questions, please call 402-742-7213.

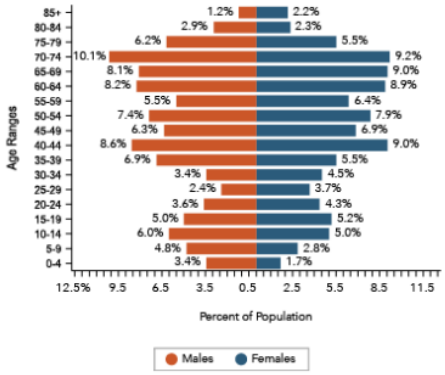
Community Fact Sheet

Community Summary Fact Sheet

Town of Ridgway, CO
Ouray County Hazard Mitigation Plan 2025

Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income
1,181	50.3	570	2.07	$924,342	$79,073

AGE PYRAMID

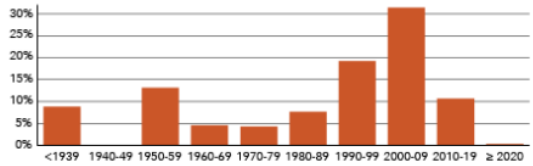


TOTAL POPULATION	
2024 Total Population (Estimate)	1,181
2020 Total Population (U.S. Census)	1,183
2010 Total Population (U.S. Census)	887
2000 Total Population (U.S. Census)	712

AT RISK POPULATIONS

Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level
149	335	11	15%

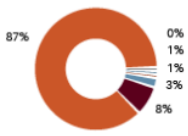
HOUSING: YEAR BUILT



EMPLOYMENT

Total Businesses	Unemployment Rate
153	2.5%

POPULATION BY RACE



- American Indian Population
- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- White Population

7% of the Total Population is Hispanic

HOUSING

Vacant Housing Units	Mobile Homes
81	12%

esri

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Ridgway Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting

Plan Maintenance

Information will be added for the Round 2 meeting.

Capability Assessment

The planning team assessed the Town of Ridgway's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

Please check the right column in the following table for your community. The table includes responses from the 2019 HMP. If there have been changes or updates, please cross out the answer and provide the updated answer. Fill in any missing information highlighted in red.

Ridgway Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	
	Floodplain Management Plan	Yes
	Stormwater Management Plan	Yes
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	
	Floodplain Ordinance	Yes
	Building Codes	Yes
	Water System Emergency Response Plan	
	Source Water Protection Plan	
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Growth Management Ordinance	No
	Hazard Specific Ordinances	Yes
	Erosion/Sediment Control Plan	Yes
	Flood Insurance Study	Yes
	Elevation Certificates	Yes

Section Seven | Town of Ridgway Community Profile

Capability/Planning Mechanism		Yes/No
	BCEGS Rating	Yes
	Other (if any)	-
Administrative & Technical Capability	Planning Commission	
	Planner/Engineer (Land Development)	Yes
	Planner/Engineer/Scientist (Natural Hazards)	Yes
	Resilience Planner	Yes
	Transportation Planner	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Engineering (Construction)	Yes
	Emergency Manager	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	
	Site Plan Review Requirements	Yes
	Other (if any)	-
Fiscal Capability	1- & 6-Year Plan	No
	Applied for Grants in the Past	
	Awarded a Grant in the Past	
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	No
	Gas/Electric/Water/Sewer Service Fees	Yes
	Stormwater Service Fees	
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Withheld Spending in Hazard-Prone Areas	No
	Other (if any)	
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	
	Natural Disaster or Safety Related School Programs	
	StormReady Certification	No
	Firewise Communities Certification	No

Capability/Planning Mechanism		Yes/No
	Tree City USA	No
	Other (if any)	Newsletter, Email, Listserv, Social Media
Warning Systems / Services	General	Yes
	Flood	Yes
	Wildfire	Yes
	Tornado	No
	Geological Hazards	Yes
	Other (if any)	

Please rate your jurisdiction's overall capability in the following ways (Limited, Moderate, or High)

Ridgway Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	
Staff/Expertise to Implement Projects	
Public Support to Implement Projects	
Time to Devote to Hazard Mitigation	
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	

What vulnerable populations exist in your community and where are they located?

National Flood Insurance Program (NFIP)

Ridgway NFIP Information

NFIP Overview	
Date of NFIP Participation:	09/27/1985
Floodplain Administrator:	Yes
Is Floodplain Administrator a Certified Floodplain Manager?	
Is Floodplain Management an Auxiliary Function?	
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	$0
Total NFIP Coverage ($):	$0
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	$0
Number of Repetitive Loss Structures:	
Number of Severe Repetitive Loss Structures:	
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) located in the 100-year and 500-year floodplains at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following tables.

Data to be included at Round 2 Meeting.

Ridgway Parcel Improvements and Value in the 100-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain

Source: County Assessor, 2024

Ridgway Parcel Improvements and Value in the 500-Year Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain

Source: County Assessor, 2024

Plans and Studies

Please fill out the plan integration worksheet to add this information.

Future Development Trends

What has changed over the past five years? (For example: new housing or businesses? Demolished buildings? New roads or areas of improvement?) Where did these changes take place?

Were any new structures developed in the floodplain or other hazardous areas? (For example, near chemical sites, the Wildland-Urban Interface, rockfall areas?) If so, what types of structures and where were they developed?

Where any of the new structures mitigated for certain hazards? If yes, what was done?

Are any new housing developments or new businesses/industry planned in the near future? Where? Are they going to be located in the floodplain or other hazardous areas?

Does your community have a future land use map? If yes, please provide a copy.

Community Lifelines

As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communications; Transportation; Hazardous Materials; and Water Systems.



In the table below, please identify community lifelines for your community. Community lifelines can include vital buildings, key water system infrastructure, key energy infrastructure, key communication infrastructure, key transportation routes, health and medical facilities, shelters, and hazardous materials. Please list the address and if the location has a backup generator.

Ridgway Community Lifelines

Name	Address or Intersection	Generator (Y/N)

Name	Address or Intersection	Generator (Y/N)

Ridgway Community Lifelines Map

Map will be added before the Round 2 Meetings

Hazard Prioritization and Mitigation Strategy

The Ouray County Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Ridgway which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the Town of Ridgway. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

The following hazards are evaluated in the Hazard Mitigation Plan. From this list, please circle 2-4 hazards which your community is most concerned about and/or pursuing mitigation efforts for.

Avalanche
Dam Failure
Debris Flow
Drought
Earthquakes
Extreme Temperatures
Flooding
Hazardous Materials Incident
Imminent Threat
Landslide/Rockfall
Lightning
Mass Casualty Events
Public Health Emergencies
Severe Winter Storm
Wildfire
Windstorm
Other: _____

As part of hazard prioritization, please provide some detail for each of the hazards you identified as to why they are of top concern, including past event descriptions, impacts to vulnerable populations, injuries, fatalities, property/crop damages, and current or future mitigation efforts.

Hazard #1: _____

Describe past events which have impacted your community. Please include the date of event, any property damages, or repairs that were required.

Why was this hazard selected as a top concern for the community? What specific vulnerabilities does the community have to this hazard?

Have you completed any projects to reduce your risk to this hazard?

What projects are needed in the future to reduce risk to your community?

Hazard #2: _____

Describe past events which have impacted your community. Please include the date of event, any property damages, or repairs that were required.

Why was this hazard selected as a top concern for the community? What specific vulnerabilities does the community have to this hazard?

Have you completed any projects to reduce your risk to this hazard?

DRAFT

What projects are needed in the future to reduce risk to your community?

Hazard #3: _____

Describe past events which have impacted your community. Please include the date of event, any property damages, or repairs that were required.

Why was this hazard selected as a top concern for the community? What specific vulnerabilities does the community have to this hazard?

Have you completed any projects to reduce your risk to this hazard?

What projects are needed in the future to reduce risk to your community?

Hazard #4: _____

Describe past events which have impacted your community. Please include the date of event, any property damages, or repairs that were required.

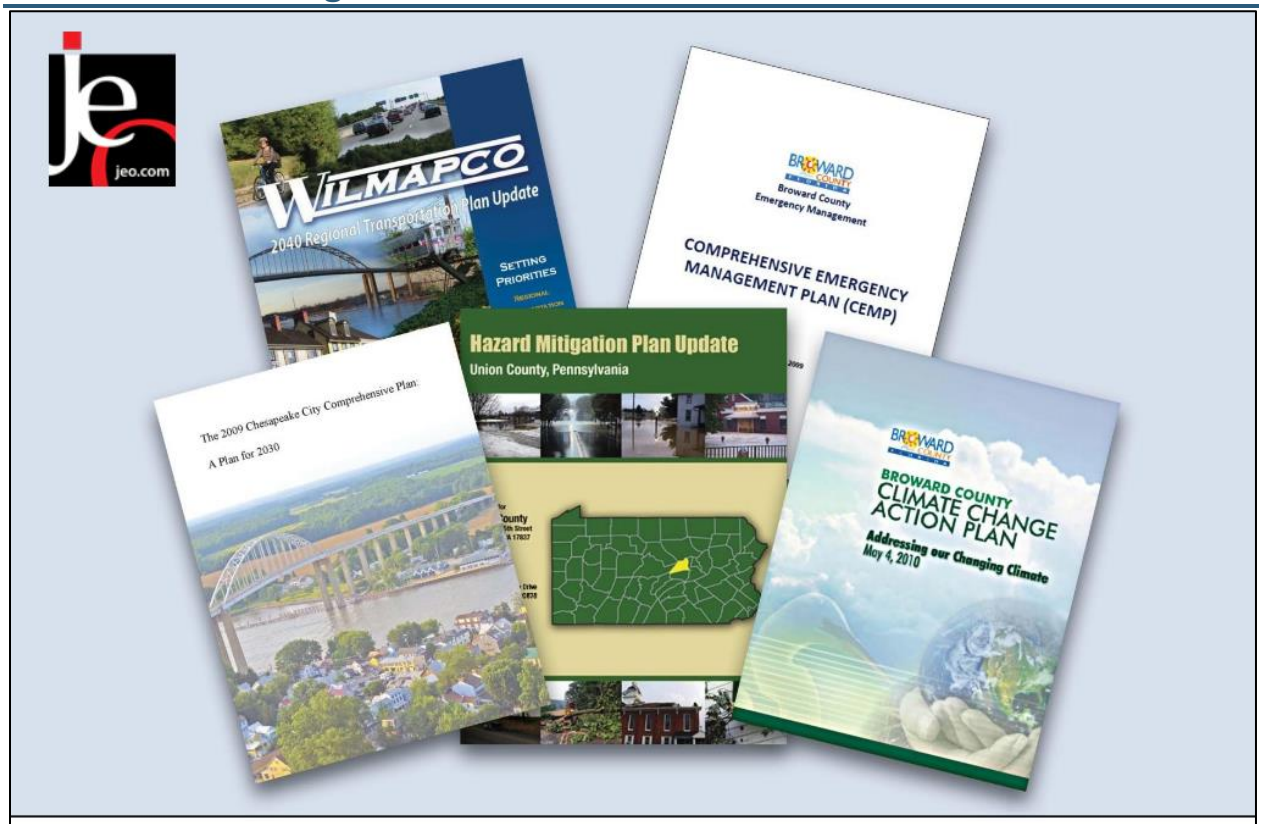
Why was this hazard selected as a top concern for the community? What specific vulnerabilities does the community have to this hazard?

Have you completed any projects to reduce your risk to this hazard?

What projects are needed in the future to reduce risk to your community?

DRAFT

Round 1 Plan Integration Worksheet



Ouray County

Hazard Mitigation Plan

Plan Integration Worksheet

JEO CONSULTING GROUP
AUGUST 2024

Name(s):_____

Jurisdiction:_____

1

INTRODUCTION

Thank you for participating in the Ouray County Hazard Mitigation Plan.

The Hazard Mitigation Plan determines vulnerabilities to natural and human-caused hazards in your jurisdiction, then identifies mitigation projects to reduce or eliminate those vulnerabilities. An approved HMP is a requirement of the Federal Emergency Management Agency (FEMA) for jurisdictions to become eligible for Hazard Mitigation Assistance grants.

FEMA encourages jurisdictions to integrate their hazard mitigation plan with other planning mechanisms, such as their building codes, comprehensive plans, zoning ordinances, etc. to ensure that plans across a jurisdiction are consistent and reflect overall goals.

This worksheet will identify the ways that other plans in your jurisdiction are, or could be, aligned with hazard mitigation principles. The information you provide will be used to develop the plan integration section of your jurisdictional profile.

Please complete these worksheets and return them to JEO Consulting Group by Friday Sept 13, 2024.

Email: kdietrich@jeo.com

Phone: 402-742-7213

Mail: JEO Consulting Group
Attn: Karl Dietrich
2000 Q Street Suite 500
Lincoln, NE 68503

2

STEP 1

Please complete the following table.

Which of these plans/ordinances does your jurisdiction have?

Plan/Ordinance	Yes/No	Year of most recent update
Comprehensive Plan		
Zoning Ordinance		
Subdivision Regulations		
Floodplain Regulations/Ordinance		
Building Code		
Capital Improvements Plan		
Source Water Protection Plan		
Water System Emergency Response Plan		
Community Wildfire Protection Plan		
Drought Ordinance / Drought Management Plan		
Hazard Specific Ordinances		
Erosion/Sediment Control Plan		
Other:		
Other:		

For any additional plans your community has, e.g. Evacuation Plan, Stormwater Management Plan, etc., please send JEO a copy.

STEP 2

For the plans/ordinances which your community has, please complete the relevant pages in this worksheet. **You do not have to complete the sections for plans/ordinances which your community does not have.**

3

COMPREHENSIVE PLAN

Does the comprehensive plan discuss natural hazards? ☐ Yes ☐ No

If yes, which hazards are discussed and what is discussed?

Does your comprehensive plan:

Direct development away from the floodplain: ☐ Yes ☐ No ☐ In future update

Encourage elevation of structures located in the floodplain: ☐ Yes ☐ No ☐ In future update

Has the hazard mitigation plan been integrated with the comprehensive plan? If yes, how?

Is there a plan or timeline to update your comprehensive plan? ☐ Yes ☐ No

If yes, explain the plan or timeline.

BUILDING CODE

If the building codes are based on the International Building Codes, what year/version is in effect? Have any amendments to the Code been made? If yes, please describe.

How is enforcement of the building code done?

Has the hazard mitigation plan been integrated with the building code? If yes, how?

4

ZONING ORDINANCE / FLOODPLAIN ORDINANCE / SUBDIVISION REGULATIONS

Is there a plan or timeline to update your Zoning Ordinance / Floodplain Ordinance / Subdivision Regulations?

☐ Yes ☐ No

If yes, explain the plan or timeline.

Do the Zoning Ordinance / Floodplain Regulations / Subdivision Regulations:

Restrict Development in hazard prone areas?	☐ Yes ☐ No ☐ In future update
Prohibit development within the floodplain?	☐ Yes ☐ No ☐ In future update
Discourage development in the floodplain?	☐ Yes ☐ No ☐ In future update
Limit population density in the floodplain?	☐ Yes ☐ No ☐ In future update
Require **more** than one foot of elevation above Base Flood Elevation in the floodplain?	☐ Yes ☐ No ☐ In future update
Consider wildfire and the wildland urban interface?	☐ Yes ☐ No ☐ In future update
Include the ability to implement water restrictions?	☐ Yes ☐ No ☐ In future update
Do the plans discuss other natural hazards?	☐ Yes ☐ No ☐ In future update

If yes, which hazards are discussed and what is discussed?

Has the hazard mitigation plan been integrated into these planning documents? If yes, how?

DROUGHT ORDINANCE / DROUGHT MANAGEMENT PLAN / SOURCE WATER PROTECTION PLAN / WATER SYSTEM EMERGENCY RESPONSE PLAN / EROSION OR SEDIMENT CONTROL PLAN

Please provide an electronic copy or a link of the plan(s) to JEO.

5

CAPITAL IMPROVEMENT PLAN

Is there a plan or timeline to update your Capital Improvement Plan? ☐ Yes ☐ No

If yes, explain the plan or timeline.

Does the Capital Improvement Plan include:

Stormwater projects?	☐ Yes ☐ No ☐ In future update
Upsizing of culverts and drainage structures?	☐ Yes ☐ No ☐ In future update
Radio Communication Upgrades?	☐ Yes ☐ No ☐ In future update
Widening roadways that would improve evacuations?	☐ Yes ☐ No ☐ In future update
Bridge improvements?	☐ Yes ☐ No ☐ In future update
Upsizing water distribution pipes?	☐ Yes ☐ No ☐ In future update
Installing water meters for residential structures?	☐ Yes ☐ No ☐ In future update
Updating electrical distribution system?	☐ Yes ☐ No ☐ In future update
Burying powerlines?	☐ Yes ☐ No ☐ In future update
Installing emergency generators in critical facilities?	☐ Yes ☐ No ☐ In future update
Emergency Operations Center / Emergency Coordination Center Construction/Upgrades	☐ Yes ☐ No ☐ In future update
Constructing a new fire hall?	☐ Yes ☐ No ☐ In future update
Constructing a new police headquarters?	☐ Yes ☐ No ☐ In future update
Constructing a new public works facility?	☐ Yes ☐ No ☐ In future update
Constructing/Upgrade 911 Communication Center?	☐ Yes ☐ No ☐ In future update
Constructing a community storm shelter?	☐ Yes ☐ No ☐ In future update
Constructing a new water treatment facility?	☐ Yes ☐ No ☐ In future update

Has the hazard mitigation plan been integrated with the capital improvement plan? If yes, how?

6

HAZARD SPECIFIC ORDINANCES

What hazards are discussed in these ordinances?

Please provide an electronic copy or a link to the ordinances.

7

Round 1 Stakeholder Worksheet

Ouray County
2025 Hazard Mitigation Plan
Stakeholdher Hazard Prioritization

Organization_____ **Name(s)** _____

As part of the Ouray County Hazard Mitigation Plan, the following hazards are evaluated at the county level. Stakeholders are encouraged to participate in this planning process by identifying top hazards of concern which may impact their organization or community they are a part of. Furthermore, your input to the planning process ensures identified mitigation efforts are appropriate and consistent with the communities you work with or the populations you serve and represent. Top hazards of concern may include those which have produced significant damage to facilities, power outages, injuries or fatalities, or a lack of adequate resources, etc.

From the list below, please identify your top hazards of concern (3 to 5 hazards).

- Avalanche
- Dam Failure
- Drought
- Debris Flow
- Earthquakes
- Extreme Temperatures
- Flooding
- Hazardous Materials Incident
- Imminent Threat
- Landslide
- Lightning
- Mass Casualty Events
- Public Health Emergencies
- Severe Winter Storm
- Wildfire
- Windstorm

Which of the above hazards are of top concern?

1. _____
2. _____
3. _____
4. _____
5. _____

Ouray County Hazard Mitigation Plan | 2025 *1*

As part of the hazard prioritization, please provide some detail for each of the hazards you identified as to why they are of top concern, including past event descriptions, impacts to vulnerable populations, injuries, fatalities, property/crop damages, and current or future mitigation efforts.

Hazard #1: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Ouray County Hazard Mitigation Plan | 2025 *2*

Hazard #2: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Hazard #3: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Hazard #4: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Hazard #5: _____

- Describe past events which have impacted your agency or organization. Please include the date of event, any property damages, or repairs that were required.

- What are your top concerns for this hazard? (e.g., injuries or fatalities, blocked transportation routes, crop damages, impacts on vulnerable populations, disruption of services, etc.)

- Have you completed any projects to reduce your risk to this hazard?

- What projects are <u>needed in the future</u> to reduce risk to the community or your organization?

Round 2 Meeting Invitation

Meeting Invitation Email

Ouray County HMP and CWPP Meetings - December 16th



Phil Luebbert
To Phil Luebbert
Cc Glenn Boyd; Karl Dietrich; Tabitha Champlin

Reply | Reply All | Forward

Wed 11/13/2024 5:51 PM

Ouray County Hazard Mitigation and Community Wildfire Protection Plan Meetings.ics
12 KB

Good afternoon,

On Monday December 16th Ouray County Emergency Management will host two important meetings related to the County's Hazard Mitigation Plan (HMP) and the Community Wildfire Protection Plan (CWPP). Attached you will find a calendar invitation. We hope you are able to attend and provide your valuable input! This will be the second meeting for the HMP and the third meeting for the CWPP.

As a reminder, is a community-driven, living document that assesses vulnerability to various natural and manmade hazards (e.g., flooding, drought, wildfire, etc.) and identifies mitigation strategies to reduce vulnerability to those hazards. Once a jurisdiction (county, community, school district, fire district, or cemetery board) is part of an approved plan, they become eligible for grants with a 75% cost share from the Federal Emergency Management Agency to implement projects identified in the plan. During this meeting, we will review community risk and vulnerabilities, discuss hazard mitigation funding opportunities, and identify mitigation actions. The meeting will start at 10:30am and will last approximately 1.5 hours. It can be attended in-person or virtually.

Following a short break for lunch, there will be a CWPP meeting from 1:00pm – 3:00pm. This meeting can also be attended in person or virtually. The CWPP assists the county and local fire districts in gathering resources, evaluating wildfire risk, describing local capabilities, and identifying strategies and actions to reduce overall vulnerability to wildfire events. Fire districts who participate in the plan will be eligible to apply for federal and state cost-share funds for vegetative fuels reduction and other hazard mitigation strategies. At this meeting, we will further discuss the definition of the wildland urban interface (WUI), view how identified assets and resources overlap with risk, and discuss potential projects or actions to address wildfire risk.

You may attend one or both meetings depending on your interest in being a part of one or both planning processes. Information about both meetings can be found below:

Hazard Mitigation Plan Meeting
Monday, December 16th at 10:30am to Noon
Location: Ouray County Event Center, 22739 US-550, Ridgway, CO 81432
Or join online at https://us02web.zoom.us/j/87647362221.

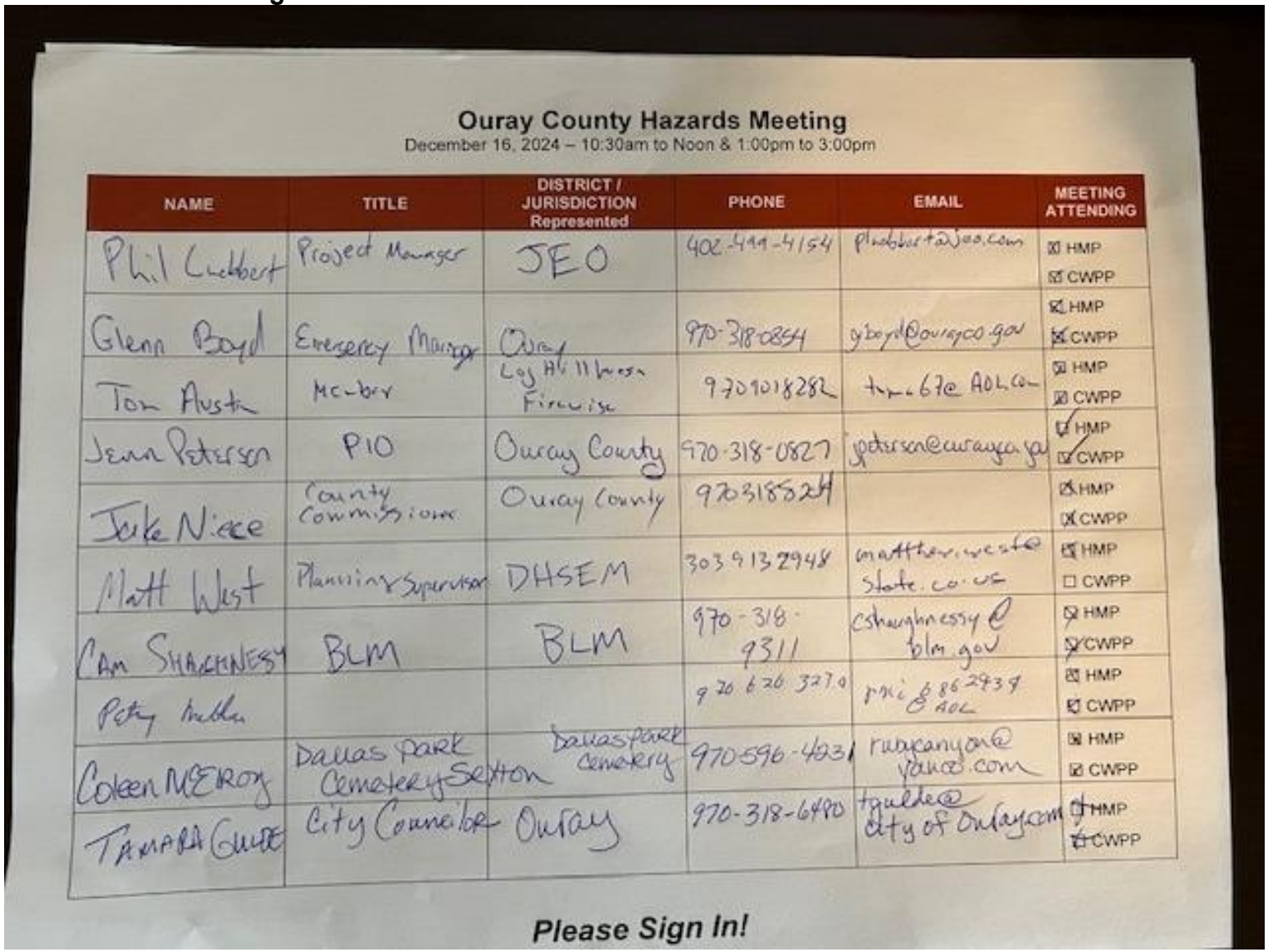
Community Wildfire Protection Plan Meeting
Monday, December 16th from 1:00pm – 3:00pm
Location: Ouray County Event Center, 22739 US-550, Ridgway, CO 81432
Or join online at https://us02web.zoom.us/j/87647362221.

Lunch will be provided for those that attend both meetings. Please RSVP by December 9th to Sam Otte (sotte@jeo.com). Please include which meetings you plan on attending so that we can get an accurate head count.

We look forward to seeing you at the meetings!

Round 2 Sign-In Sheets

Round 2 In-Person Sign-In Sheets

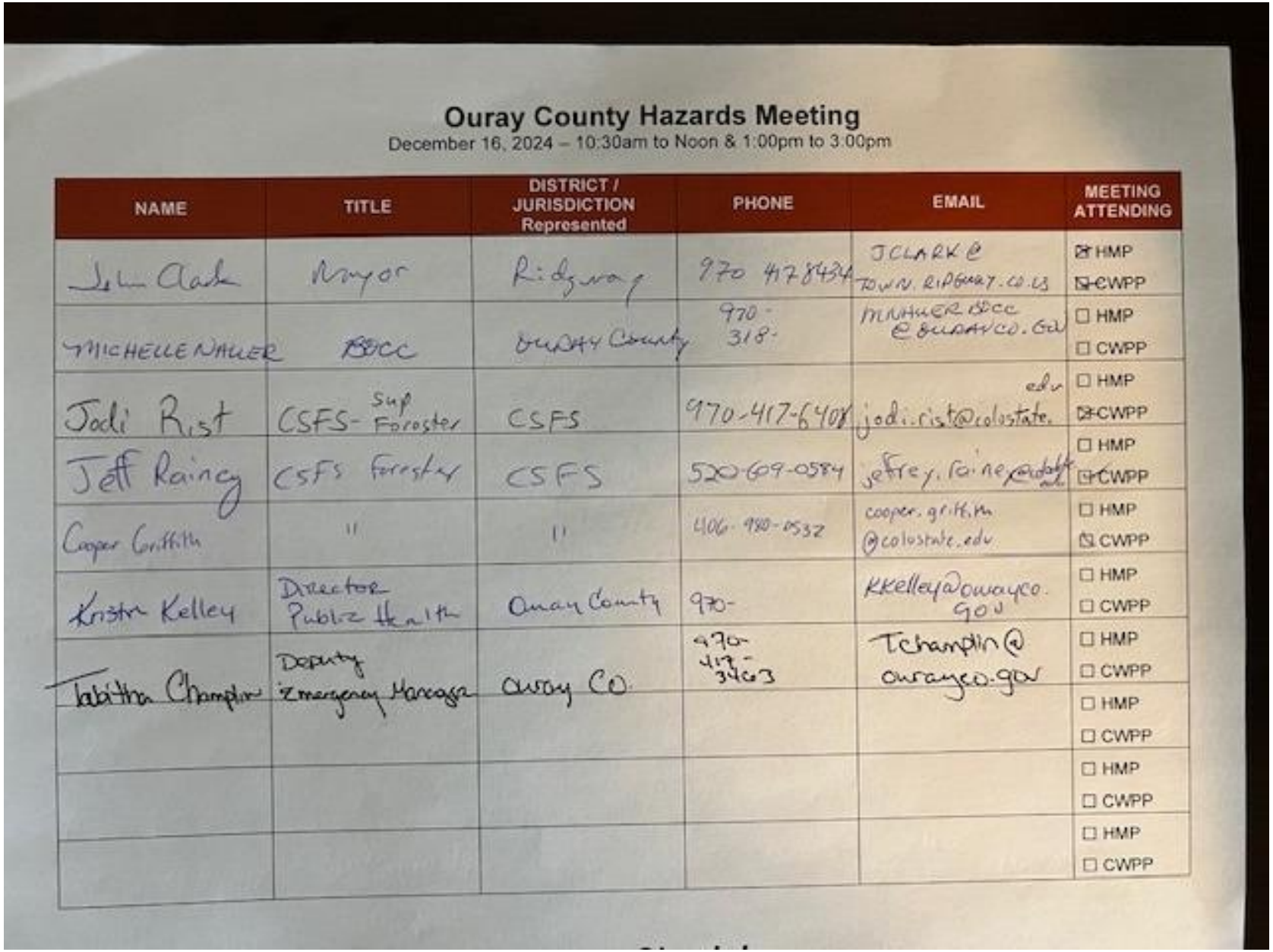


Ouray County Hazards Meeting

December 16, 2024 – 10:30am to Noon & 1:00pm to 3:00pm

NAME	TITLE	DISTRICT / JURISDICTION Represented	PHONE	EMAIL	MEETING ATTENDING
Phil Luebbert	Project Manager	JEO	402-499-4154	pluebbert@jeo.com	☒ HMP ☒ CWPP
Glenn Boyd	Emergency Manager	Ouray	970-318-0854	gboyd@ourayco.gov	☒ HMP ☒ CWPP
Tom Austin	Member	Log Hill Mesa Fire Dist	9709018282	tma67@AOL.com	☒ HMP ☒ CWPP
Jenn Peterson	PIO	Ouray County	970-318-0827	jpeterson@ourayco.gov	☒ HMP ☒ CWPP
Joke Nieke	County Commissioner	Ouray County	9703185294		☒ HMP ☒ CWPP
Matt West	Planning Supervisor	DHSEM	3039132948	matthew.west@state.co.us	☒ HMP ☐ CWPP
Cam Shaughnessy	BLM	BLM	970-318-9311	cshaughnessy@blm.gov	☒ HMP ☒ CWPP
Patty Miller			970 626 3270	pmi6862939@AOL	☒ HMP ☒ CWPP
Coleen McElroy	Dallas Park Cemetery Sexton	Dallas Park Cemetery	970-596-4931	rubycanyon@yahoo.com	☒ HMP ☒ CWPP
Tamara Gulde	City Councilor	Ouray	970-318-6480	tgulde@cityofouray.com	☐ HMP ☒ CWPP

Please Sign In!



Ouray County Hazards Meeting

December 16, 2024 – 10:30am to Noon & 1:00pm to 3:00pm

NAME	TITLE	DISTRICT / JURISDICTION Represented	PHONE	EMAIL	MEETING ATTENDING
John Clark	Mayor	Ridgway	970 417 8434	JCLARK@TOWN.RIDGWAY.CO.US	☒ HMP ☒ CWPP
MICHELLE NAHLER	BOCC	Ouray County	970-318-	MNAHLER@OCC@OURAYCO.GOV	☐ HMP ☐ CWPP
Jodi Rist	CSFS- Sup Forester	CSFS	970-417-6408	jodi.rist@colostate.edu	☐ HMP ☒ CWPP
Jeff Rainey	CSFS Forester	CSFS	520-609-0584	jeffrey.rainey@colostate.edu	☐ HMP ☒ CWPP
Cooper Griffith	"	"	406-980-0532	cooper.griffith@colostate.edu	☐ HMP ☒ CWPP
Krista Kelley	Director Public Health	Ouray County	970-	KKelley@ourayco.gov	☐ HMP ☐ CWPP
Tabitha Champlin	Deputy Emergency Manager	Ouray CO.	970-417-3403	Tchamplin@ourayco.gov	☐ HMP ☐ CWPP
					☐ HMP ☐ CWPP
					☐ HMP ☐ CWPP
					☐ HMP ☐ CWPP

Round 2 Online Sign-In Sheet

Round 2 Meeting Online-Chat Sign In

Karl Dietrich – JEO

Cody Russell – USFS

Erin Stadelman – Ouray County Fairgrounds

Zach Lyon – USFS

Curtis Hartenstine – Tri State G & T

Aaron Johnson – WRWC

Danny Duda – WRWC

Bill Martindale – Log Hill Fire

Christy Williams – Ouray County Road and Bridge

Preston Neil – Town of Ridgway

Connie Hunt – Ouray County

Glenn Boyd – Ouray County EM

Jenn Peterson - Ouray County PIO

John Clark – Town of Ridgway Mayor

Michelle Nauer – Ouray County Commissioner

Justin Perry – Ouray County Sheriff

Tamara Gulde – City of Ouray Councilor

Tod Lokey – Ouray School District Superintendent

Lynn Padgett – Ouray County Commissioner

Round 2 Example Participant Profile with Questions

Community Profile

Town of Ridgway

Ouray County
Hazard Mitigation Plan 2025

Name(s): _____

Date: _____

Worksheets Due By: _____

Please answer the questions in red italics. Your responses are critical for completing this Community Profile.

Completed Community Profiles and other worksheets can be returned to JEO Consulting Group, Attn: Karl Dietrich, 2000 Q Street Ste 500, Lincoln, NE 68503 or kdietrich@jeo.com. If you have any questions, please call 402-742-7213.

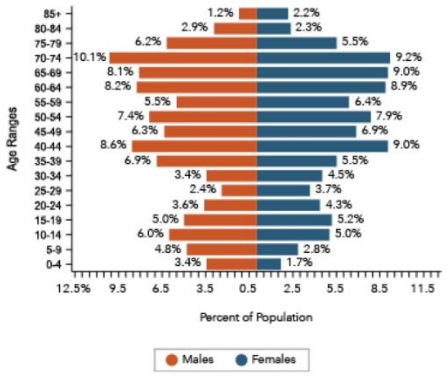
Community Fact Sheet

Community Summary Fact Sheet

Town of Ridgway, CO
Ouray County Hazard Mitigation Plan 2025

1,181	50.3	570	2.07	$924,342	$79,073
Total Population	Median Age	Total Households	Average Household Size	Median Home Value	Median Household Income

AGE PYRAMID

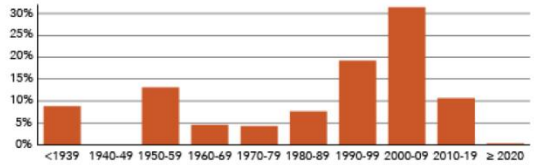


TOTAL POPULATION	
2024 Total Population (Estimate)	1,181
2020 Total Population (U.S. Census)	1,183
2010 Total Population (U.S. Census)	887
2000 Total Population (U.S. Census)	712

AT RISK POPULATIONS

149	335	11	15%
Households With Disability	Population 65+	Households Without Vehicle	Households Below the Poverty Level

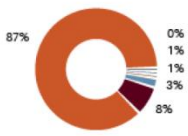
HOUSING: YEAR BUILT



EMPLOYMENT

153	2.5%
Total Businesses	Unemployment Rate

POPULATION BY RACE



- American Indian Population
- Black Population
- Asian Population
- Other Race Population
- Population of 2+ Races
- White Population

7% of the Total Population is Hispanic

HOUSING

81	12%
Vacant Housing Units	Mobile Homes

esri THE SCIENCE OF WHERE

Source: Esri, U.S. Census, Esri-Data Axle, ACS. Esri forecasts for 2024, 2020, 2010, 2000, 2018-2022.

Local Planning Team

Ridgway Local Planning Team

Name	Title	Jurisdiction	Round 1 Meeting	Round 2 Meeting
John Clark	Mayor	Town of Ridgway	Attended	
Preston Neill	Administrator	Town of Ridgway	Attended, Materials Development	
Shane Schmalz	Town Marshal	Town of Ridgway	Materials Development	
Steven Schroeder	Public Works Maintenance Operator II	Town of Ridgway	Materials Development	

Plan Maintenance

Hazard Mitigation Plans are living documents and should be updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside planning document updates, before the Hazard Mitigation Assistance Grants cycle begins, and/or prior to other funding opportunity cycles beginning.

For your jurisdiction, what positions are responsible for reviewing and updating the profile outside of the five-year update?

Position: _____

Position: _____

Position: _____

Please indicate how frequently your jurisdiction intends to review/revise the profile. (circle one)

Every 6 months ***Annually*** ***Bi-annually***

How will your jurisdiction notify and involve the public in the plan review and revision? (For example, social media, website updates, letters to all residents, board/council meetings, etc.)

Capability Assessment

The planning team assessed the Town of Ridgway's hazard mitigation capabilities by reviewing planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and education and outreach capabilities.

DRAFT

Section Seven | Town of Ridgway Community Profile

Ridgway Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Stormwater Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	Water System Emergency Response Plan	No
	Source Water Protection Plan	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No
	Community Wildfire Protection Plan	Yes
	Growth Management Ordinance	No
	Hazard Specific Ordinances	Yes
	Erosion/Sediment Control Plan	No
	Flood Insurance Study	Yes
	Elevation Certificates	Yes
	BCEGS Rating	Yes
	Other (if any)	Regional Climate Action Plan, Upper Uncompahgre Basin Water Supply Protection and Enhancement Report
Administrative & Technical Capability	Planning Commission	Yes
	Planner/Engineer (Land Development)	Yes
	Planner/Engineer/Scientist (Natural Hazards)	Yes
	Resilience Planner	Yes
	Transportation Planner	Yes
	Floodplain Administrator	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Engineering (Construction)	Yes
	Emergency Manager	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	No
	Site Plan Review Requirements	Yes
	Other (if any)	-
Fiscal	1- & 6-Year Plan	Yes

Capability/Planning Mechanism		Yes/No
Capability	Applied for Grants in the Past	No
	Awarded a Grant in the Past	No
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	No
	Gas/Electric/Water/Sewer Service Fees	Yes
	Stormwater Service Fees	No
	Development Impact Fees	Yes
	General Obligation Revenue or Special Tax Bonds	Yes
	Withheld Spending in Hazard-Prone Areas	No
	Other (if any)	-
Education & Outreach Capability	Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.	Yes
	Ongoing Public Education or Information Program (e.g., Responsible Water Use, Fire Safety, Household Preparedness, Environmental Education)	Yes
	Natural Disaster or Safety Related School Programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	Newsletter, Email, Listserv, Social Media
Warning Systems / Services	General	Yes
	Flood	Yes
	Wildfire	Yes
	Tornado	No
	Geological Hazards	Yes
	Other (if any)	Protective Communications

Ridgway Overall Capability

Capability	Limited/Moderate/High
Financial Resources to Implement Mitigation Projects	Limited
Staff/Expertise to Implement Projects	Moderate
Public Support to Implement Projects	Moderate
Time to Devote to Hazard Mitigation	Limited
Ability to Expand and Improve the Identified Capabilities to Achieve Mitigation	Limited

Is the town able to increase any of its capabilities in the near future? If yes, which capabilities and how will they be increased?

National Flood Insurance Program (NFIP)

Ridgway NFIP Information

NFIP Overview	
Date of NFIP Participation:	09/27/1985
Floodplain Administrator:	Yes
Is Floodplain Administrator a Certified Floodplain Manager?	No
Is Floodplain Management an Auxiliary Function?	No
Number of NFIP Policies In-Force:	0
Total NFIP Premium ($):	$0
Total NFIP Coverage ($):	$0
Number of Claims Paid Out:	0
Total Amount of Claims Paid Out ($:)	$0
Number of Repetitive Loss Structures:	0
Number of Severe Repetitive Loss Structures:	0
Is the Community Currently Suspended from the NFIP?	No
Any Outstanding Compliance Issues?	No
FIRMs Digital or Paper?	Digital
Located in a RISK Map Area?	No

Buildings and Valuation in the Floodplain

The planning team acquired GIS parcel data from the County Assessor and Microsoft building footprint data to analyze the location, number, and value of buildings located in the 100-year and 500-year floodplains. A summary of the results of this analysis is provided in the following tables.

Ridgway Buildings and Value in the 100-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
542	$402,872,240	3	$1,643,900	0.5%

Source: County Assessor, 2024; Microsoft, 2024

Ridgway Buildings and Value in the 500-Year Floodplain

Number of Buildings	Total Building Value	Number of Buildings in Floodplain	Value of Buildings in Floodplain	Percentage of Buildings in Floodplain
542	$402,872,240	1	$721,480	0.2%

Source: County Assessor, 2024; Microsoft, 2024

Plans and Studies

The Town of Ridgway has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the town updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the update.

Building Code (2019) and Floodplain Regulations (2023)

The building regulations set standards for constructed buildings and structures. The town has adopted the 2018 International Building Code. Enforcement is handled by the Building Inspector/Building Official. The floodplain management regulations outline uses and construction standards within the 100-year floodplain and help to restrict development in the floodplain. The hazard mitigation plan has not been integrated with these documents beyond what is typically required by the 2018 International Building Code.

Capital Improvements Plan (2024)

The capital improvements plan outlines projects the city would like to pursue and provides a planning schedule and financing options. Projects include improving stormwater and drainage, upsizing water distribution lines, installing water meters, updating the electrical system, constructing a new water treatment facility, and installing backup generators at community lifelines. The capital improvements plan is updated each budget cycle. Hazard mitigation, resiliency, and anticipated climate change impacts the decision-making process, and related projects are included in the plan each year. Applicable projects in the capital improvements plan are included in this hazard mitigation plan.

Community Wildfire Protection Plan (2025)

The Town of Ridgway is part of the Ouray County Community Wildfire Protection Plan (CWPP). The CWPP is a strategic plan that identifies specific wildland fire risks facing communities and fire authorities in the county and provides prioritized mitigation projects and activities designed to reduce those risks. Also included in the CWPP is a plan to address watershed risk from wildfires. The plan identifies values to protect, their risk to wildfire, and areas where vegetation treatments are likely to occur in the future. Applicable projects identified the CWPP are included in the hazard mitigation plan.

Master Plan (2019)

The master plan is designed to guide the future actions and growth of the town. Hazard mitigation planning is referenced several times throughout the document and the Ouray County Hazard Mitigation Plan is also referenced. Under Community Value 5 “Well-Managed Growth”, Goal 3 calls for proactively mitigating natural and human-made hazards. Policies related to that include preventing development in high-risk areas (floodplains, steep slopes), managing stormwater on site, participating in the hazard mitigation plan and community wildfire protection plan, promoting awareness on emergency response protocols and mitigation, siting infrastructure to avoid exposure to hazards, and considering hazard mitigation in town planning and decision making. The comprehensive plan is updated every five to seven years to ensure that it continues to meet the community’s vision and goals for the future.

Emergency Operations Plan (2021)

The Town of Ridgway is part of the Ouray County Emergency Operations Plan. The plan provides an outline of general guidelines on how the county manages operations related to the five phases of emergency management. It outlines the day-to-day management of incidents along with major emergencies and disasters. Topics covered in the plan include emergency management operations; assignment of roles and responsibilities; emergency support functions; direction, control, and coordination; information collection and dissemination; communications; administration; finance; and logistics. Because this is a response plan, the hazard mitigation plan has not been integrated into it.

San Miguel and Ouray County Regional Climate Action Plan (2021)

The Town of Ridgway is part of the San Miguel and Ouray County Regional Climate Action Plan. This climate action plan acts as a regional roadmap for reducing greenhouse gas emissions and creating a sustainable, thriving future. The plan creates a timeline for high priority, ongoing, mid- and long-term actions. Topics covered in this plan include energy supply, building energy use, transportation and aviation, water and material use, food, water, and land. The hazard mitigation plan is referenced in this document.

Upper Uncompahgre Basin Water Supply Protection and Enhancement Report (2016)

This report assesses the existing and future water needs of agricultural, domestic, municipal, industrial, recreational, and environmental water uses, as well as options for stabilizing and augmenting existing and future water uses within the Upper Uncompahgre River Basin in Ouray County. It includes a basin description, water rights and administration, water demands and shortages, and potential augmentation supplies and combinations. The hazard mitigation plan has not been integrated with this report.

Water Conservation and Management Plan (2018)

Ridgway's Water Conservation and Management Plan outlines the stages, triggers, and action items related to drought and water conservation. The town has six stages with triggers related to drought status and water demand exceeding system capacity. Also included in the plan are enforcement provisions. The hazard mitigation plan has not been integrated with the Water Conservation and Management Plan.

Water Supply Assessment (2022)

The water supply assessment looked at the town's existing and future water demands, then evaluated the current water supply system to meet those demands and identify any deficiencies. It includes a review of water system demands, water availability, water supply strategies, and recommendations. The assessment found that in all high growth scenarios, the potable 2050 treated water demand could be fully met. The hazard mitigation plan has not been integrated into this assessment.

Zoning Regulations (2023) and Subdivision Regulations (2023)

The Town of Ridgway's zoning regulations and subdivision regulations are included in the town's Land Use Regulations in the Code of Ordinances. These documents outline where and how development should occur in the future. They restrict development in hazard prone areas, limit population density in the floodplain, promote drought tolerant landscaping, limit infrastructure on steep slopes, and limit development in wildfire and geological hazard areas. The hazard mitigation plan has not been integrated into these documents.

Future Development Trends

A significant amount of residential development has taken place in Ridgway over the past five years. As part of these developments, various public infrastructure, including utilities and roads, have been constructed. One of the developments, the Riverfront Village PUD is in the process of being constructed directly adjacent to the Uncompahgre River. There are 38 residential units and four commercial units being constructed as part of that project. The Riverfront Village project was reviewed against all town standards and regulations, including the standards of the Uncompahgre River Overlay District (UROD). Part of the intent of the UROD is to utilize design and development techniques that avoid, minimize and mitigate impacts to the natural environment; and ensure aesthetic and ecologic qualities of the river corridor continue to be a community asset.

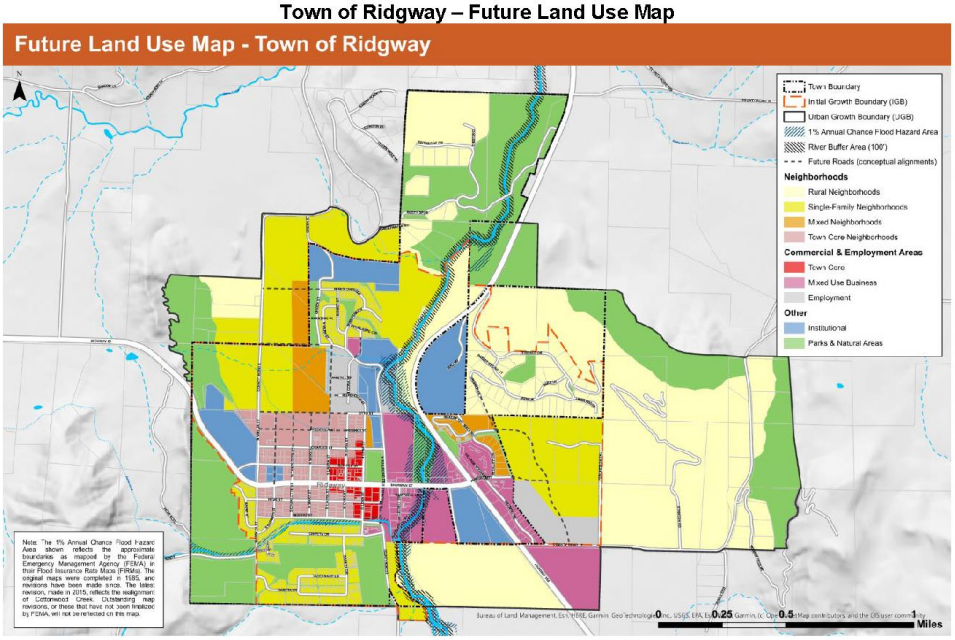
In the near future, several parcels and potential units associated with the Preserve PUD will be developed. This development will be near the Uncompahgre River and will be reviewed to meet the standards of the UROD. The map below shows the future land use map for the Town of Ridgway.

The new housing that has been built increases the county's risk and vulnerability to drought, earthquake, extreme temperatures, severe winter storms, and windstorms because there are more buildings that could be impacted. As mentioned above, the two PUDs may have an increased risk of flooding but have been mitigated to minimize risk and vulnerability. No other current or planned developments will be in known hazardous areas.

Since 2000, the Town of Ridgway has gained approximately 470 people which is a 39.7% increase in population. Increasing populations are associated with more robust hazard mitigation and emergency planning requirements for development. Growing populations can also increase tax revenues, allowing communities to pursue additional mitigation projects. Approximately 28% of the population is age 65 or older. This likely increases risk and vulnerability to all hazards as the elderly are more vulnerable to hazards than other groups. These elderly populations are spread throughout the community in many neighborhoods. The minority population in the town is around 13%. Minorities may face increased vulnerability as they tend to have access to fewer financial and systemic resources that would enable them to implement hazard mitigation projects and to respond and recover from hazard events.

Where (general area) has any other new housing been built?

Town of Ridgway – Future Land Use Map



Community Lifelines

As listed in the following table, each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The FEMA lifeline categories include Safety and Security; Food, Hydration, and Shelter; Health and Medical; Energy; Communications; Transportation; Hazardous Materials; and Water Systems.



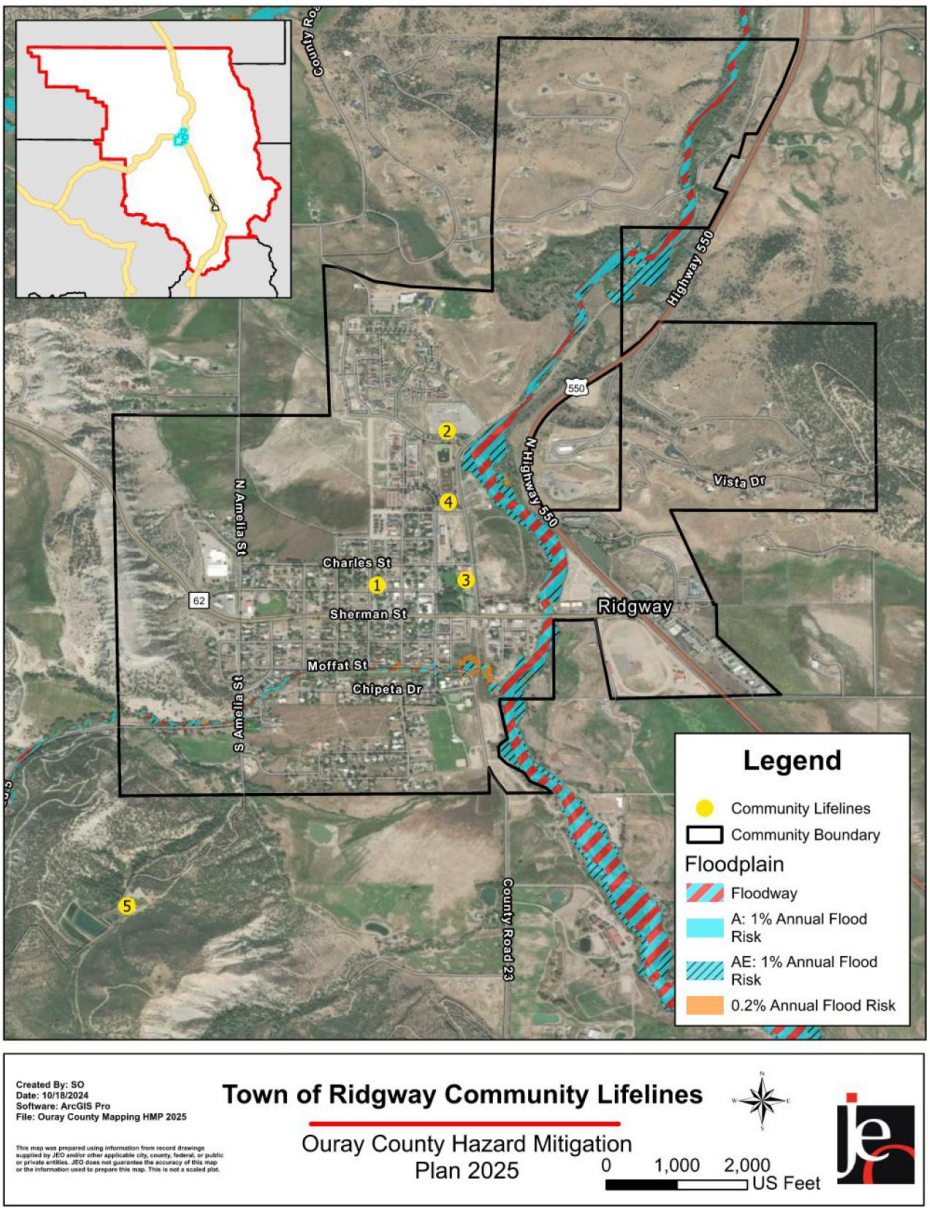
Ridgway Community Lifelines

CL Number	Name	Community Lifeline Type	Generator	Floodplain
1	Decker Community Room	Safety and Security	No	No
2	San Miguel Power Association	Energy	Yes	No
3	Town Hall	Safety and Security	No	No
4	Wastewater Treatment Plant	Water Systems	No	No
5	Water Treatment Plant	Water Systems	Yes	No

DRAFT

Section Seven | Town of Ridgway Community Profile

Ridgway Community Lifelines Map



Hazard Prioritization and Mitigation Strategy

The Ouray County Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. During the planning process, the local planning team prioritized specific hazards of top concern for Ridgway which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the prioritized hazards identified by the Town of Ridgway. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Five* and *Appendix A*.

Debris Flow

Summer rain events have become much more intense than they have been in the past. Typically, these rain events are short but powerful and can carry a significant amount of debris. On August 12, 2024, a significant rain event impacted the town's Beaver Creek diversion infrastructure. The event filled the Ridgway Ditch with a mud slurry from bank to bank to the top of the ditch for hundreds of feet. As a result, the town has been unable to divert water from Beaver Creek, the community's primary water source. A similar amount of mud, rocks, and gravel impacted the Grizzly Diversion Trough. Ridgeway is in the process of removing the debris, making repairs, and identifying ways to further repair and enhance the infrastructure.

With climate change likely increasing the frequency and intensity of rainstorms, the amount of debris included with flood events will increase. This increase in debris is likely to impact the floodplain, community infrastructure, and properties in the floodplain. The Town of Ridgway is currently in the process of identifying a water diversion alternative that will be more resilient against future flooding and debris flow events. The local planning team would also like to better secure and protect town-owned infrastructure against flooding and debris flows.

Are there any other pieces of infrastructure or locations that are more at risk from debris flows?

Drought

Hotter temperatures and reduced snowpack, which provides water to the community, are the biggest concerns related to drought. Ridgway is a very water conscious community because of how high they are in the watershed and proximity and reliance on the snowpack. Past drought events and enactment of water restrictions seem to heighten concerns of local residents. Ridgway has a Water Conservation and Management Plan with six stages and triggers related to drought status and water demand exceeding system capacity.

The town has also put into place a Growing Water Smart Action Plan aimed at establishing goals and outcomes to improve watershed health and water resiliency. A few projects from the plan have already started to be implemented to help reduce overall water usage. One of those projects was the Harwell Park Turf Replacement Pilot Project. Many more projects are still needed to help establish a more reliable water supply and reduce residential, commercial, and town water usage.

DRAFT

When has the community most recently had to enact water restrictions? What were some of the other impacts seen during this time?

Please send JEO a copy of the Growing Water Smart Action Plan.

Please provide a brief description of the town's water system.

Flooding

In recent years, summer rain events have become much more intense than in the past. These events have been short but powerful and have caused flood damage to several properties located on the west side of town. On August 12, 2024, a significant flood event impacted the town's Beaver Creek diversion infrastructure. As a result, the town has been unable to divert water from Beaver Creek, the community's primary water source, into the Ridgway Ditch. Most of the mapped floodplain is located on the east side of the community along the Uncompahgre River. However, much of Ridgway was built on a relatively flat area, making natural drainage insufficient. This causes flooding of homes and buildings not located in a mapped floodplain.

The primary concern related to flooding is rain causing heavy flows along Cottonwood Creek down the Uncompahgre River. Due to climate change, the local planning team expects these storms to become more frequent and powerful. If that happens, it could impact the floodplain, and a number of properties may become damaged from floods. Installation of storm drains downtown has alleviated much of the flooding concerns downtown. However, there are still undersized culverts throughout the community. To help better understand the risks of flooding, Ridgway participated in the Flood Insurance Study and Risk Mapping, Assessment, and Planning Project that took place in 2022 and 2023. In the future the community would like to better secure various town-owned infrastructure and improve stormwater infrastructure around town.

Wildfire

The last major wildfires in the county were the Cow Creek Fire in the fall of 2019 and the Simms Mesa Fire in 2022. Ridgway was not directly impacted by either other than poor air quality. Ridgway is concerned about the town's location in the wildland-urban interface. There is a general feeling that it's not a matter of if a wildfire will occur, but rather when a large wildfire will majorly impact the county and community. In general, the areas around Ridgway have an increased wildfire due to higher a burn probability and a high density of structures in the WUI.

On town owned property, wildfire mitigation work takes place each year. Actions are usually on the ground treatments and tree pruning aimed at reducing the chance of a wildfire causing damage. Many residents also undertake wildfire mitigation work on their properties each year. Additional tree mitigation work is needed in the future, both on public and private properties. Enhanced education about the benefits of wildfire mitigation would also help increase private work that is done.

Are there specific areas or locations of concern for wildfire, either in or near town?

Completed Mitigation and Strategic Actions

Action	Develop CWPP
Description & Location	Develop CWPP for other remaining designated WUI areas for extreme and very high communities.
Hazard(s) Addressed	Wildfire
Status	The Ouray County CWPP was completed in 2025.

Review Mitigation and Strategic Actions

Please review the following mitigation and strategic actions identified in the previous HMP, make any changes needed, and fill in missing information. Mark if each action has been completed, kept, or should be removed and describe the current status of the action.

Note: FEMA now requires that every hazard identified in the plan must have at least one mitigation action that addresses it.

Action	Backup Compressor			
Description & Location	Back up compressor for water plant.			
Hazard(s) Addressed	Earthquake, Extreme Temperatures, Imminent Threat, Severe Winter Storm, Wildfire, Windstorm			
Estimated Cost	$5,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Section Seven | Town of Ridgway Community Profile

Action	Backup Generators			
Description & Location	Backup generator for water plant and sewer. Portable generator for chlorine metering pump at water plant.			
Hazard(s) Addressed	Earthquake, Extreme Temperatures, Imminent Threat, Severe Winter Storm, Wildfire, Windstorm			
Estimated Cost	$160,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Code Updates – Landslide/Rockfall			
Description & Location	Define "steep slopes" in the development code and develop regulations that detail the conditions and performance standards under which such development may be evaluated.			
Hazard(s) Addressed	Landslide/Rockfall			
Estimated Cost	$5,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Continuity of Operations Plan & Emergency Management Plan			
Description & Location	Develop and maintain a local emergency response and management plan, as well as a plan for the continuation of government operations during and following an emergency event.			
Hazard(s) Addressed	All Hazards			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Data Backup			
Description & Location	Develop capability for off-site backup of critical data.			
Hazard(s) Addressed	Imminent Threat, Severe Winter Storm, Windstorm			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

DRAFT

Section Seven | Town of Ridgway Community Profile

Action	Defensible Space			
Description & Location	Encourage residents to construct defensible space around homes through promotion of Firewise techniques.			
Hazard(s) Addressed	Wildfire			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Drainage Improvements			
Description & Location	Town-wide storm water drainage improvements.			
Hazard(s) Addressed	Flooding			
Estimated Cost	$1,500,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Early Warning Systems			
Description & Location	Improve and expand early warning systems to detect hazardous precipitation events and potential flooding.			
Hazard(s) Addressed	Flooding			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Floodplain Map Update			
Description & Location	Work with FEMA and Ouray County to maintain up-to-date maps of the 100-year floodplain and floodway along all waterways flowing through Ridgway.			
Hazard(s) Addressed	Flooding			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Section Seven | Town of Ridgway Community Profile

Action	Implement Projects Identified in Ouray County CWPP			
Description & Location	Implement fuels treatment projects in areas identified in the Ouray County CWPP.			
Hazard(s) Addressed	Debris Flow, Drought, Flooding, Wildfire			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Increased Water Storage			
Description & Location	Increase water storage east of the Uncompahgre River.			
Hazard(s) Addressed	Drought			
Estimated Cost	$750,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Infrastructure Redundancies			
Description & Location	Continue to evaluate Town infrastructure and critical facilities to determine what values are at risk from hazards. Identify opportunities to introduce redundancies into infrastructure systems.			
Hazard(s) Addressed	All Hazards			
Estimated Cost	$20,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Mental Health Support			
Description & Location	Explore opportunities for mental health support and outreach.			
Hazard(s) Addressed	Mass Casualty Event, Public Health Emergencies			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Section Seven | Town of Ridgway Community Profile

Action	Public Education			
Description & Location	Produce multi-hazard education. Education of citizens about flood insurance and clear water vs. sediment/mudflow. *What specific education items need to be done?*			
Hazard(s) Addressed	All Hazards			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Preservation of Open Space and Natural Resources			
Description & Location	Prioritize the conservation and preservation of community valued natural resources such as environmentally sensitive areas, view and wildlife corridors, riparian areas and wetlands, river corridor, natural filtration and storm water drainage areas.			
Hazard(s) Addressed	Flooding, Hazardous Materials Incident			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Radon Mitigation			
Description & Location	Share radon mitigation information with the building community by disseminating information via training and electronic media.			
Hazard(s) Addressed	Public Health Emergencies			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Source Water Protection			
Description & Location	Work with Ouray County to regulate uses or activities allowed within or adjacent to the town's Source Water Protection Area to reduce the risk of pollution or other contaminants entering the town's water supply and ensure the town has access as needed.			
Hazard(s) Addressed	Debris Flow, Drought, Flooding, Hazardous Materials Incident, Landslides/Rockfall			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Section Seven | Town of Ridgway Community Profile

Action	Stormwater Management Plan			
Description & Location	Develop a stormwater management plan for the Town of Ridgway.			
Hazard(s) Addressed	Debris Flow, Flooding			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project? The Town is currently working with consultants to complete this task. Project is scheduled to be done by end of year 2019.			

Action	Stream Improvements			
Description & Location	Rollans Park - Restoration project, in-stream improvements.			
Hazard(s) Addressed	Flooding			
Estimated Cost	$400,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Surge/Lightning Protection			
Description & Location	Water plant surge and lightning protection.			
Hazard(s) Addressed	Lightning			
Estimated Cost	$7,500			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Water Conservation			
Description & Location	Research and explore water conservation opportunities in follow up to the 2018 adoption of the Water Management and Conservation Plan and water rate increases. Codify regulations as appropriate.			
Hazard(s) Addressed	Drought			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Section Seven | Town of Ridgway Community Profile

Action	Water Conservation Plan			
Description & Location	Water conservation plan / basin protection implementation.			
Hazard(s) Addressed	Drought			
Estimated Cost	$25,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Water Crossing			
Description & Location	Construct a 2nd river crossing for water system.			
Hazard(s) Addressed	Debris Flow, Drought, Earthquake, Flooding, Imminent Threat, Landslides/Rockfall			
Estimated Cost	$100,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Water Plant Security			
Description & Location	Fencing for water treatment plant.			
Hazard(s) Addressed	Imminent Threat			
Estimated Cost	$30,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Water Supply Code			
Description & Location	Review and update the town code's regulations regarding adequate water supply for new development.			
Hazard(s) Addressed	Drought			
Estimated Cost	$10,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Section Seven | Town of Ridgway Community Profile

Action	Water Supply Contingency Plan			
Description & Location	Maintain a contingency plan in case of an emergency that threatens or disrupts the community water supply.			
Hazard(s) Addressed	Drought			
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Action	Water Supply Redundancy			
Description & Location	Identify and secure a secondary interconnection for any interruption in the town's water supply.			
Hazard(s) Addressed	Drought			
Estimated Cost	$58,000			
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Lead Agency				
Update (circle one)	Completed	Keep	Remove	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Status	What is the current status of this project?			

Removed Mitigation and Strategic Actions

Action	NFIP Continuation
Description & Location	Continue to implement sound floodplain management practices as communities participating in the National Flood Insurance Program.
Hazard(s) Addressed	Flooding
Status	Removed as this is not a true mitigation action. The county and communities will continue to participate in the NFIP.

New Mitigation and Strategic Actions

Please Identify any new mitigation actions your jurisdiction is interested in pursuing or interested in applying for grant funding. Complete the table(s) below. Please fill out all rows. For examples of mitigation actions, review the provided FEMA Handbook (https://www.fema.gov/sites/default/files/2020-06/fema-mitigation-ideas_02-13-2013.pdf) or reach out to a JEO Project Contact.

Action	New Water Treatment Facility			
Description & Location				
Hazard(s) Addressed				
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Lead Agency				
Status				

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Section Seven | Town of Ridgway Community Profile

Action	Municipal Irrigation Upgrades			
Description & Location				
Hazard(s) Addressed				
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Lead Agency				
Status				

Action	Residential Turf Replacement Program			
Description & Location				
Hazard(s) Addressed				
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Lead Agency				
Status				

Action				
Description & Location				
Hazard(s) Addressed				
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Lead Agency				
Status				

Action				
Description & Location				
Hazard(s) Addressed				
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Lead Agency				
Status				

Section Seven | Town of Ridgway Community Profile

Action				
Description & Location				
Hazard(s) Addressed				
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Lead Agency				
Status				

Action				
Description & Location				
Hazard(s) Addressed				
Estimated Cost				
Local Funding				
Timeline	1 Year	2-5 Years	5+ Years	Ongoing
Priority	High	Medium	Low	
Do you have the capability to implement this project at this time?	Yes	No	If no, why?	
Lead Agency				
Status				

Round 2 NFIP Worksheet

NATIONAL FLOOD INSURANCE PROGRAM

National Flood Insurance Program (NFIP) Worksheet

OURAY COUNTY HAZARD MITIGATION PLAN 2025

JEO CONSULTING GROUP
DECEMBER 2024

Name(s):_____

Jurisdiction:_____

Please return this worksheet to JEO Consulting Group by Monday January 17, 2025. It can be emailed to Karl Dietrich at kdietrich@jeo.com or mailed to JEO Consulting Group, Attn: Karl Dietrich, 2000 Q Street Suite 500, Lincoln, NE 68503.

1

NFIP QUESTIONS

Is your Floodplain Administrator a Certified Floodplain Manager? ☐ Yes ☐ No

Does your Floodplain Administrator have duties other than floodplain management? ☐ Yes ☐ No

Does your community plan to continue involvement with the NFIP in the future?

Please explain your community's floodplain permitting process.

How does your community enforce local floodplain regulations and ensure compliance?

Do your floodplain regulations exceed FEMA or State of Colorado Requirements? If yes, in what ways?

What digital tools (FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your Floodplain Administrator use?

How does your community identify substantially damaged structures after a flood event?

How does your community identify substantially improved structures?

2

What are the barriers (if any) to running your NFIP program effectively?

Describe any areas of flood risk in your community that have limited NFIP Policy Coverage. Why do they have limited coverage?

How does your community educate property owners or other stakeholders about the importance of flood insurance?

How are Letters of Map Change tracked and compiled?

3

Round 2 Hazard Vulnerability Worksheet

Town of Ridgway Hazard Vulnerability and Impacts

This worksheet will help the county meet new FEMA requirements for the Hazard Mitigation Plan. Below are the community lifelines you identified during the first-round meeting. Some of the questions below will ask about these lifelines. For this exercise, you will be asked to identify vulnerabilities and potential impacts for every hazard in the plan as they pertain to your community. Please provide as much information as possible. Even if it seems obvious it is better to have more information than not enough. The FEMA reviewers may not know much about your community so think about what you would say to someone who may not have ever been to your community.

Town of Ridgway Community Lifelines

CL Number	Name	Community Lifeline Type
1	Decker Community Room	Safety and Security
2	San Miguel Power Association	Energy
3	Town Hall	Safety and Security
4	Wastewater Treatment Plant	Water Systems
5	Water Treatment Plant	Water Systems

AVALANCHE

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Ouray County Hazard Mitigation Plan | 2025 1

Dam Failure

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Debris Flow

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

DROUGHT

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

EARTHQUAKE

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Extreme Temperatures

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Flooding

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Hazardous Materials Incident

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Imminent Threat

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

LANDSLIDES/ROCKFALL

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

MASS CASUALTY EVENTS

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Public Health Emergencies

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Severe Winter Storms

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

WILDFIRE

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

WINDSTORM

What specific vulnerabilities does your community have to this hazard (i.e. areas where occurrences are more frequent, areas where impacts might be higher, vulnerable populations, events that increase vulnerability, etc.)?

Would your community lifelines be impacted by this hazard? If yes, which ones and what would be the likely impacts?

If this hazard were to occur in or near the community, what would be the likely impacts?

Public Review Notification Email

Sample Adoption Resolution.pdf
30 KB

Hi Everyone,

The Public Review Period for the Ouray Hazard Mitigation Plan has begun, and the current draft is available for review online. This draft includes the latest revisions following the second round of meetings. You may review the draft plan at the project Google Drive: https://drive.google.com/drive/folders/1vre_lz54j-4NO-57UV3UoTcMIxOdgTGR?usp=sharing.

The plan is available for comments and revisions from Monday, March 3, to Friday, March 28, 2025. At the end of the Public Review Period, the completed plan will be submitted to the Colorado Division of Homeland Security and Emergency Management (DHSEM) and the Federal Emergency Management Agency (FEMA) for final approval. This is your last opportunity to review the plan and submit any requested changes or corrections to JEO before its submission to DHSEM and FEMA.

Please carefully review this draft with your local planning team and verify that the information therein is accurate to the best of your knowledge. Please inform JEO as soon as possible should you desire any changes. To request changes, you can mark up a section, scan it, and email it to kdietrich@jeo.com. If JEO does not receive changes from you by Friday, March 28, we will assume that your jurisdiction has reviewed the plan and approves it as written.

At this time, participating jurisdictions may also adopt the plan locally. Adoption would apply to the eventual FEMA-approved version of the plan. I've attached an example resolution you may use or adapt to fit your local needs.

After local adoption and FEMA plan approval, your jurisdiction will become eligible for FEMA project grant funding to assist with implementing actions in this plan. The adopted resolution must be returned to JEO Consulting Group for submittal to DHSEM and FEMA. Send a copy of the signed, adopted resolution to JEO Consulting Group via email at kdietrich@jeo.com or mail to:

JEO Consulting Group, Inc.
Attn: Karl Dietrich
2000 Q Street, Suite 500
Lincoln, Nebraska 68503

Thank you for helping us provide your jurisdiction with an accurate and comprehensive hazard mitigation plan. If you have any questions, please let me know!

Karl Dietrich, AICP | *Planner*

o: 402.742.7213 | e: kdietrich@jeo.com
JEO Consulting Group | 2000 Q St Ste 500 | Lincoln, NE 68503

jeo.com

Public Review Comments Received

Participating jurisdictions, stakeholders, and State of Colorado Departments could provide comments and changes to the hazard mitigation plan during the Public Review Period, which lasted from March 3, 2025, to March 28, 2025. Comments could be supplied to the Ouray County Planning Team via email or phone. Comments were only received from the West Region Wildfire Council. These comments added additional information to the wildfire risk assessment profile and participants wildfire related mitigation actions.

Adoption Resolution Template

RESOLUTION NUMBER _____

WHEREAS, the Federal Disaster Mitigation Act of 2000 was signed in to law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring jurisdictions to adopt a hazard mitigation action plan to be eligible for pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, a Multi-Jurisdictional Hazard Mitigation Plan was prepared by Ouray County, CO, with assistance from JEO Consulting Group, Inc.

WHEREAS, the purpose of the mitigation plan was to lessen the effects of disasters by increasing the disaster resistance of the county and participating jurisdictions located within the planning area by identifying the hazards that affect _____ and prioritize mitigation actions and strategies to reduce potential loss of life and property damage from those hazards, and

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of _____ in the form of a resolution and further requesting approval of the plan at the Federal Level; and

NOW, THEREFORE, the governing body of _____ does herewith adopt the most recent and FEMA approved version of the Ouray County Hazard Mitigation Plan 2025 in its entirety; and

PASSED AND APPROVED this _____ day of _____, 2025.

_____
President of the Board

ATTEST:

_____
Clerk

Dallas Park Cemetery District Adoption Resolution

Resolution No. 2025-002

A RESOLUTION OF THE DALLAS PARK CEMETERY DISTRICT ("DISTRICT") REGARDING THE MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

WHEREAS, the Federal Disaster Mitigation Act of 200 was signed into law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring jurisdicitions to adopt a hazard mitigation action plan to be eligible for pre-disaster federal funding for mitigation purposes; and,

WHEREAS, a Multi-Jurisdicitional Hazard Mitiation Plan was prepared by Ouray County, CO with assistance from JEO Consulting Group, Inc.; and,

WHEREAS, the purpose of the mitigation plan was the lessen the effects of disasters by increasing the disaster resistance of the County and participating jurisdicitions within the planning area by identifying the hazards that affect the Dallas Park Cemetery District and prioritize mitigation actions and strategies to reduce potential loss of life and property damage from those hazards; and,

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of Dallas Park Cemetery District in the form of a resolution and further requesting approval of the plan at the Federal Level.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE DISTRICT does herewith adopt the most recent and FEMA approved version of the Ouray County Hazard Mitigation Plan 2025 in its entirety.

Adopted this 20th day of March, 2025.

ATTEST:

Hannah Hollenbeck
District Bookkeeper

DALLAS PARK CEMETERY DISTRICT:

Steve Duce, Chair

Storme Lowery

John Robinson

Resolution 2025-002 • Page 1 of 1

Appendix C: Planning Area Profile

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Introduction

The following appendix provides a deeper look at Ouray County and community characteristics that may not have been discussed thoroughly in *Section Three: Planning Area Overview*. This profile will highlight demographics, at-risk populations, economics, employment, and housing for Ouray County and local communities. Special jurisdictions such as fire districts and cemetery districts are not discussed in this appendix as information for demographic, housing, employment, and economic data is not available for these entities.

Location and Geography

Located in the mountains of southwest Colorado, Ouray County is known as the "Switzerland of America". The county's terrain ranges from the San Juan Mountains in the south through the fertile Uncompahgre River Valley to rolling foothills and mesa lands in the north. It is a land of steep gorges, towering peaks, tumbling waterfalls, high mesas, and green pastures. Elevation ranges from 6,257 feet to 14,150 feet above sea level. Montrose County borders it to the north and northwest, San Miguel County to the west, San Juan County to the south, Hinsdale County to the southeast, and Gunnison County to the northeast. Ouray County also has two school districts, three fire protection districts, and two cemetery districts.

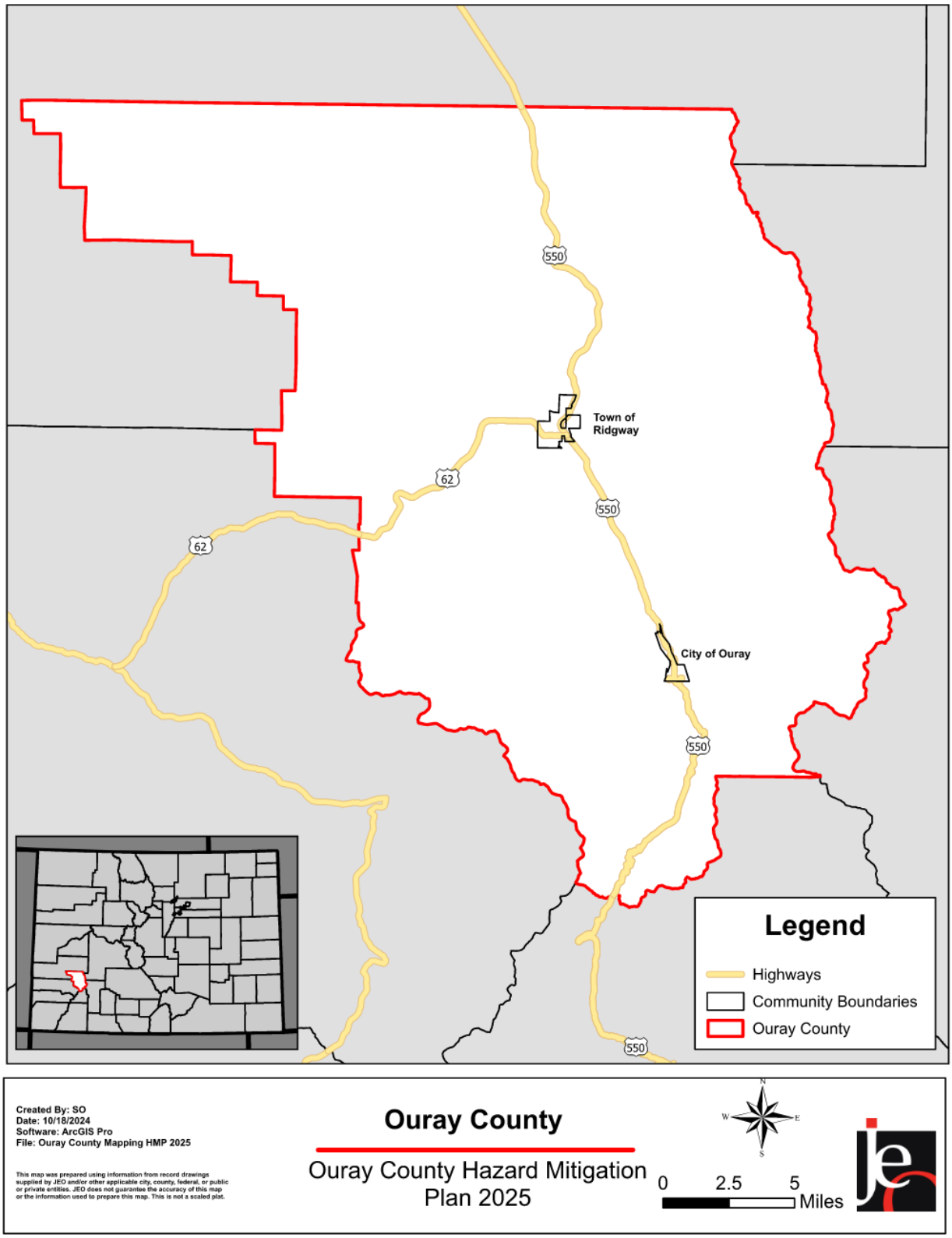
Ouray County encompasses 542 square miles (0.6 square miles are water) and includes two incorporated municipalities:

- The City of Ouray is located at an elevation of 7,687 feet and has a total area of 0.9 square miles, all of it land.
- The Town of Ridgway is located at an elevation of 6,962 feet and has a total area of 1.9 square miles, all of which is land.

The Uncompahgre River flows northwesterly through the county. Other significant waterways include Red Mountain Creek, Ralston Creek, Bear Creek, Canyon Creek, Oak Creek, Portland Creek, Cascade Creek, Skyrocket Creek, Bridalveil Creek, Corbett Creek, Dexter Creek, Cutler Creek, Coal Creek, Cottonwood Creek, Dallas Creek, Cow Creek, Billy Creek, Crystal Lake, Lake Lenore, Black Lake, and Ridgway Reservoir. The climate in the river basin is semiarid, but rainfall and temperatures vary widely with elevation. Average annual precipitation ranges from 13 inches in the Colona-Ridgway area to 40 inches in the mountains. Approximately 30 to 40% of the precipitation is snowfall. Vegetation in the area consists of piñon, juniper, sagebrush, oak brush, and ponderosa pine, with dense spruce/fir forests in the Alpine Zone. Major transportation routes include U.S. Highway 550 and State Highway 62. The figure below shows Ouray County, incorporated communities, major transportation routes, major waterways, and locations within the state.

Additionally, Ouray County has a substantial amount of federally owned public land. Notably, the Uncompahgre National Forest covers large swaths of the southern portions of the county, surrounding the City of Ouray, and portions of the northwest and northeast sections of the County. The Mt. Sneffels Wilderness Area is located in the county's southwest corner, contained in the Uncompahgre National Forest. Bureau of Land Management (BLM) lands can also be found throughout the central and northern portions of the county.

Ouray County Planning Area



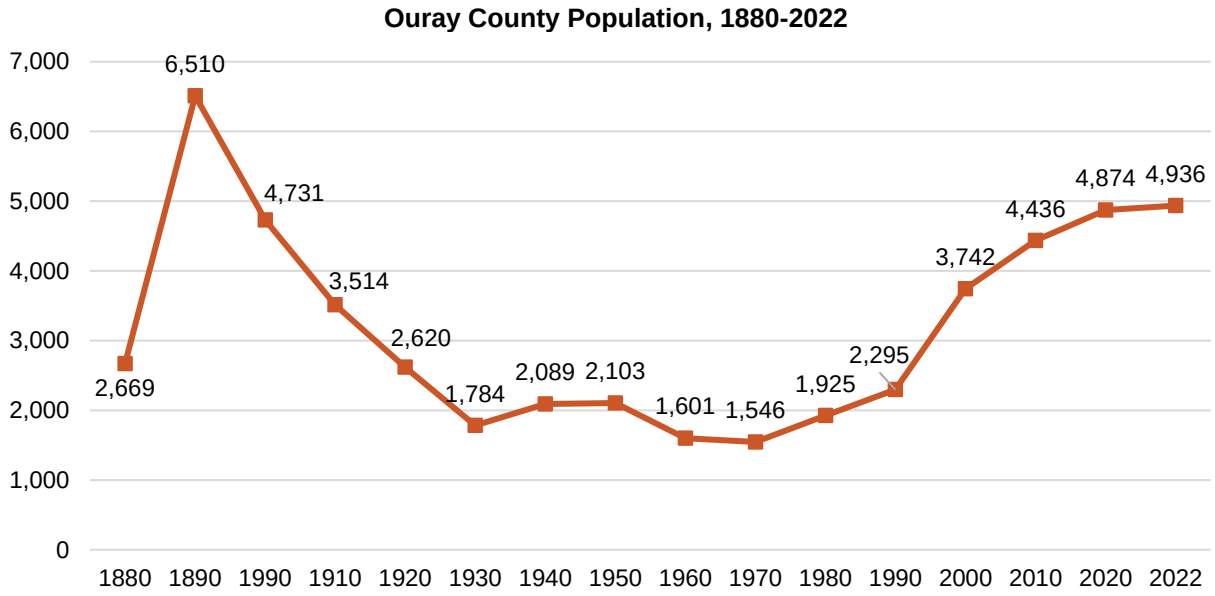
Demographics

The U.S. Census Bureau collects specific demographic information for the county and communities. The estimated population of Eagle County is 4,936.[1] The table below gives the county and incorporated communities' population over time.

Population Over Time

Jurisdiction	1950	1960	1970	1980	1990	2000	2010	2020	2022*
City of Ouray	1,089	785	741	684	644	813	1,000	898	1,007
Town of Ridgway	209	254	262	369	423	713	924	1,183	1,093
Ouray County	**2,103**	**1,601**	**1,546**	**1,925**	**2,295**	**3,742**	**4,436**	**4,874**	**4,936**

**ACS Estimate*
Source: U.S. Census Bureau[2,3]



Source: U.S. Census Bureau[4,5]

Community and regional vulnerability are impacted by growing or declining populations. Communities growing quickly may lack resources to provide services for all community members in a reasonable timeframe, including snow removal, emergency storm shelters, repairs to damaged infrastructure, or even tracking the location of vulnerable populations. Communities experiencing population decline may be more vulnerable to hazards due to vacant and/or dilapidated structures, an inability to maintain critical infrastructure properly, and higher unemployment levels. Communities need to monitor their population changes and ensure that potential issues are incorporated into hazard mitigation plans and other planning mechanisms. Ouray County has grown rapidly since 1990, more than doubling the population. Ridgway and the county's unincorporated areas have seen consistent growth recently, while the population of the City of Ouray has held somewhat steady since 2010.

1 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.
2 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.
3 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.
4 United States Census Bureau. "2020 Census Bureau Decennial Census: P1: Race." https://data.census.gov/.
5 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.

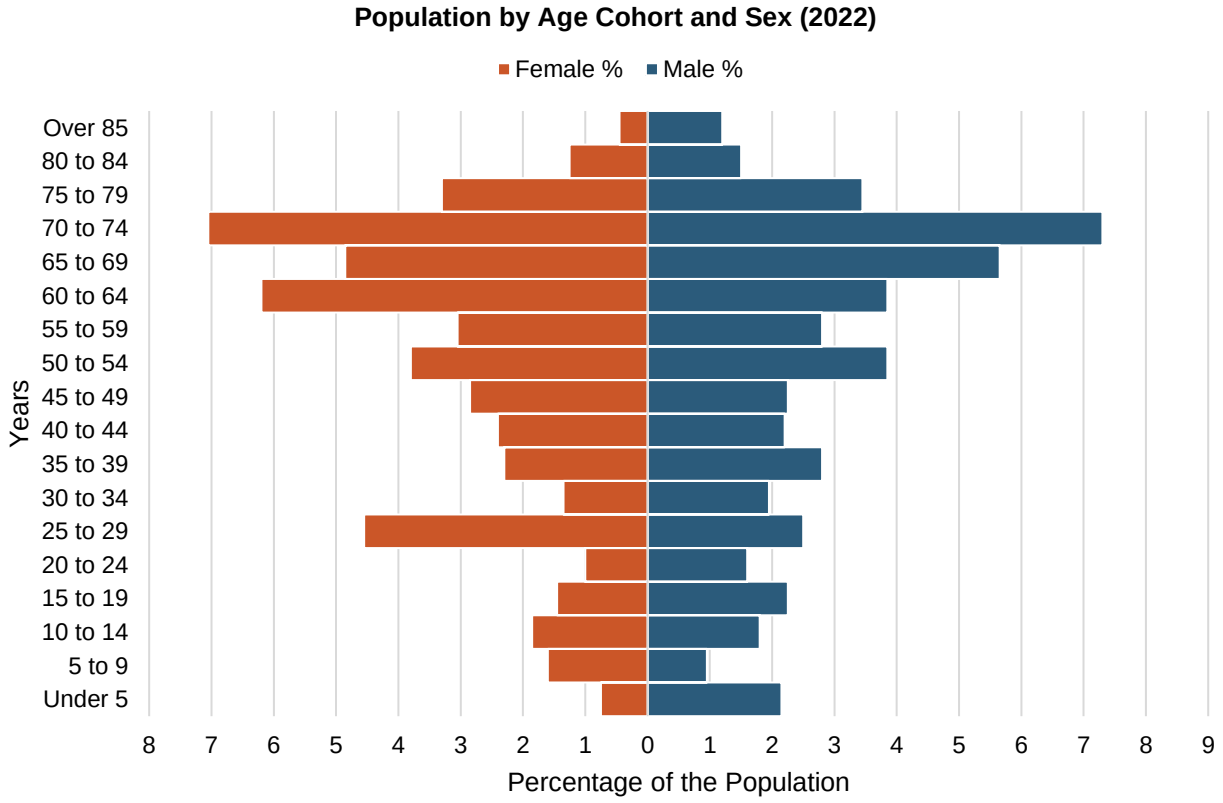
At-risk Populations

Certain populations may have increased vulnerability due to difficulty with medical issues, extremes in age, and communication issues due to language barriers. However, outliers may be considered when discussing potentially at-risk populations.

- Outward appearance does not necessarily mark a person as at-risk.
- A hazard event will, in many cases, impact at-risk populations differently.

The National Response Framework defines at-risk populations as "…populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to maintaining independence, communication, transportation, supervision, and medical care."[6]

Dependent children under 20 years old are one of the most vulnerable populations to disasters.[7] Most people in this age group cannot access independent financial resources and transportation. They lack the practical knowledge necessary to respond appropriately during a disaster. Despite this vulnerability, children are generally overlooked in disaster planning because the presence of a caretaker is assumed. As seen below, approximately 13% of Ouray County's population is younger than 20. While this is a smaller age cohort than others in the county, children are still a key vulnerable group to address in the planning process.



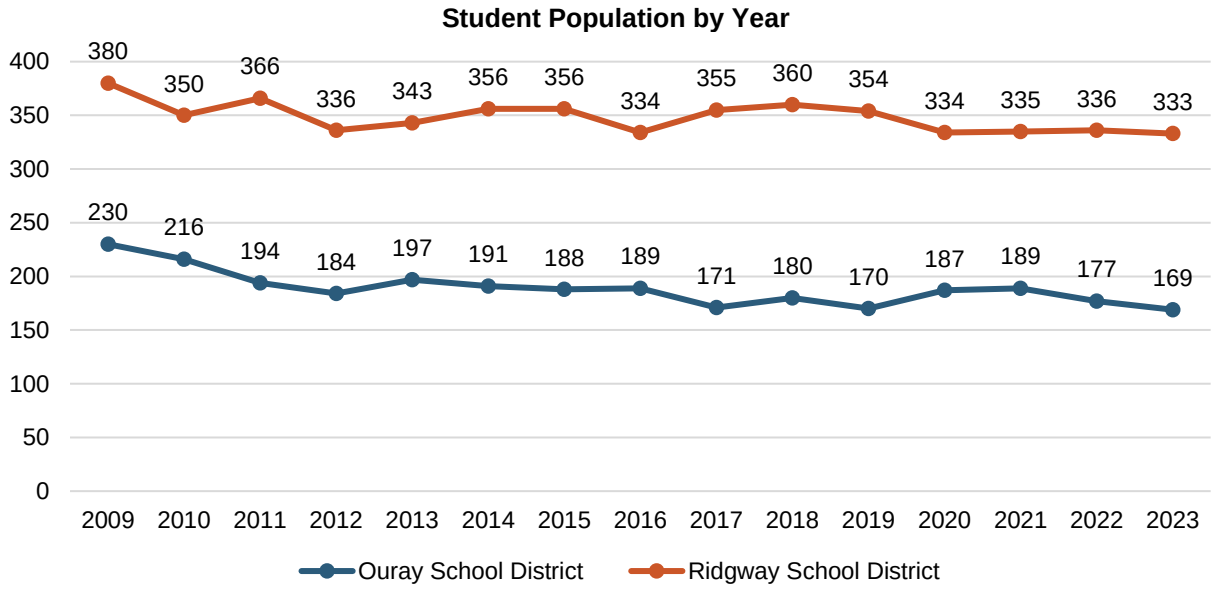
Source: U.S. Census Bureau[8]

6 United States Department of Homeland Security. October 2019. "National Response Framework Third Edition." https://www.fema.gov/media-library/assets/documents/117791.

7 Flanagan, Gregory, Hallisey, Heitgerd, & Lewis. 2011. "A Social Vulnerability Index for Disaster Management." Journal of Homeland Security and Emergency Management, 8(11): Article 3.

8 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.

Schools house many children and adults within the county during the daytime hours of weekdays and during special events on evenings and weekends. The county has two public school districts: the Ouray School District and the Ridgway School District. The table below lists the student population by year.



Source: Colorado Department of Education[9]

According to the Colorado Department of Education, 28.5% of students receive free or reduced-priced school meals. This is lower than the state average of 45.7%. Additionally, 15.3% of students are in the Special Education Program and 1.8% are English language learners. These students may be more vulnerable during a hazardous event than the rest of the student population.

Student Statistics, 2023-2024

	Ouray School District	Ridgway School District R-2	State of Colorado
Free/Reduced Priced Meals	33.7%	25.8%	45.7%
English Language Learners	5.3%	0%	13.0%
Special Education Students	17.2%	14.4%	12.9%

Source: Colorado Department of Education[10,11]

Like minors, seniors (age 65 and greater) are often more significantly impacted by hazards and temperature extremes. During prolonged heat waves or periods of extreme cold, seniors may lack resources to address hazard conditions effectively and, as a result, may incur injury or potentially death. Prolonged power outages (either standalone events or as the result of other contributing factors) can have significant impacts on any citizen relying on medical devices. One study conducted by the Center for Injury Research and Policy found that increases in vulnerability related to severe winter storms (with significant snow accumulations) begin at age 55.[12] The study

9 Colorado Department of Education. 2023. "PK-12 Membership Trend by District." https://www.cde.state.co.us/cdereval/pupilcurrent.
10 Colorado Department of Education. 2023. "PK-12 Free and Reduced Lunch Eligibility by District" https://www.cde.state.co.us/cdereval/pupilcurrent.
11 Colorado Department of Education. 2023. "Instructional Program by District" https://www.cde.state.co.us/cdereval/pupilcurrent.
12 Center for Injury Research and Policy. January 2011. "Snow Shoveling Safety." http://www.nationwidechildrens.org/cirp-snow-shoveling.

found that, on average, there are 11,500 injuries and 100 deaths annually related to snow removal. Men over 55 are 4.25 times more likely to experience cardiac events during snow removal. Looking at the age cohort breakdown and median age of Ouray County, most of the population is between 60 and 75. This high percentage of aging individuals increases the county's vulnerability to all hazards.

Median Age in 2010 & 2022

Jurisdiction	2010 Median Age	2022 Median Age
City of Ouray	42.6	50.3
Town of Ridgway	38.6	48.0
Ouray County	46.2	56.8

Source: U.S. Census Bureau[13],[14]

While the elderly populations are typically located in higher concentrations at care facilities, no care facilities (hospitals, health clinics, assisted living, care homes) are located in Ouray County.[15] The closest facilities are located to the north in the City of Montrose. This does add additional vulnerabilities for the general population. For any medical care, residents and visitors must travel outside the county, which increases the difficulty of getting treatment and the amount of time without treatment.

Residents who speak English as a second language may struggle with various issues before, during, and after hazard events. General vulnerabilities revolve around an inability to effectively communicate with others or comprehend materials aimed at notification and/or education of hazard events. When presented with a hazardous situation, all community members must be able to receive, decipher, and act on relevant information. An inability to understand warnings and notifications may prevent non-native English speakers from acting promptly. Ouray County has a much lower percentage of individuals who speak English as a second language (5.8%) than the rest of the state (16.2%). Ouray County uses Ouray County Alerts to send out emergency notifications. These notifications are sent out in English and Spanish and are on the same message.

English as a Second Language

Jurisdiction	Percent That Speaks English as a Second Language
City of Ouray	5.8%
Town of Ridgway	3.1%
Ouray County	5.8%
State of Colorado	16.2%

Source: U.S. Census Bureau[16]

Racial minorities may also face increased vulnerability as they tend to have access to fewer financial and systemic resources that would enable them to implement hazard mitigation projects and to respond and recover from hazard events, including residence in standard housing and possession of financial stability. The tables on the next page show the racial composition of Ouray County and the percentage of the non-white population.

13 United States Census Bureau. "2010 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.
14 United States Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/.
15 Colorado Department of Public Health and Environment. 2024. "Regulated Health Facilities". https://cdphe.colorado.gov/find-and-compare-facilities.
16 United States Census Bureau. "2022 Census Bureau American Community Survey: S1601: Language Spoken at Home." https://data.census.gov/.

County Racial Composition Trends

Race	2010 Number	2010 % of Total	2022 Number	2022 % of Total	% Change
White, Not Hispanic	4,277	96.4%	4,522	91.6%	-4.8%
Black	7	0.2%	105	2.1%	1.9%
American Indian and Alaskan Native	17	0.4%	9	0.2%	-0.2%
Asian	25	0.6%	15	0.3%	-0.3%
Native Hawaiian and Other Pacific Islanders	5	0.1%	0	0%	-0.1%
Other Races	45	1.0%	40	0.8%	-0.2%
Two or More Races	60	1.4%	245	5.0%	3.6%
Total Population	4,436	-	4,936	-	-

Source: U.S. Census Bureau[17,18]

Minority Populations

Jurisdiction	Percentage of the Population that is Non-White
City of Ouray	12.6%
Town of Ridgway	8.2%
Ouray County	8.4%

Source: U.S. Census Bureau[19]

Housing

The U.S. Census Bureau provides information on housing units and potential vulnerability indicators, as described in the following discussion. Of the occupied housing units in Ouray County, over 23 percent are renter-occupied. Renter-occupied housing units often do not receive many updates and retrofits needed to make them resilient to disaster impacts. Communities may consider enacting landlord outreach programs to educate property owners about the threats in their area and what they can do to help reduce the vulnerability of tenants in their housing units.

Owner and Renter Occupied Housing

Jurisdiction	Owner Occupied Housing Units	Renter Occupied Housing Units
City of Ouray	339 (73.4%)	123 (26.6%)
Town of Ridgway	306 (53.2%)	269 (46.8%)
Ouray County	1,864 (76.6%)	571 (23.4%)

Source: U.S. Census Bureau[20]

Unoccupied homes may not be maintained as well as occupied housing, thus adding to their vulnerability. During disaster events like windstorms, these structures may fail and result in debris, impacting other structures and people, resulting in injuries or fatalities and higher damage totals. While Ouray County has a high percentage of vacant homes at nearly 30%, this is likely due to the increasing number of second homes and short-term vacation rentals.[21] These homes are

17 United States Census Bureau. "2010 Census Redistricting Data (Public Law 94-171): P1: Race." https://data.census.gov.
18 United States Census Bureau. "2022 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates." https://data.census.gov/.
19 United States Census Bureau. "2022 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates." https://data.census.gov/.
20 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.
21 Teitz, Liz. Ouray County Plaindealer. November 17, 2021. "Census shows more than 40% of Ouray homes vacant". https://www.rmpbs.org/blogs/news/census-shows-more-than-40-of-ouray-homes-vacant.

typically well maintained; however, this high number of tourists increases vulnerability as they may not be aware of the risks in the area.

Occupied and Vacant Housing

Jurisdiction	Occupied Housing Units	Vacant Housing Units
City of Ouray	462 (57.5%)	342 (42.5%)
Town of Ridgway	575 (87.7%)	81 (12.3%)
Ouray County	2,435 (70.6%)	1,013 (29.4%)

Source: U.S. Census Bureau[22]

The selected characteristics examined in the table below include lack of complete plumbing facilities, lack of kitchen facilities, broadband internet subscription, housing units that are mobile homes, and housing units with no vehicles. All of these characteristics increase housing and population vulnerability to hazards.

Selected Housing Characteristic Vulnerabilities

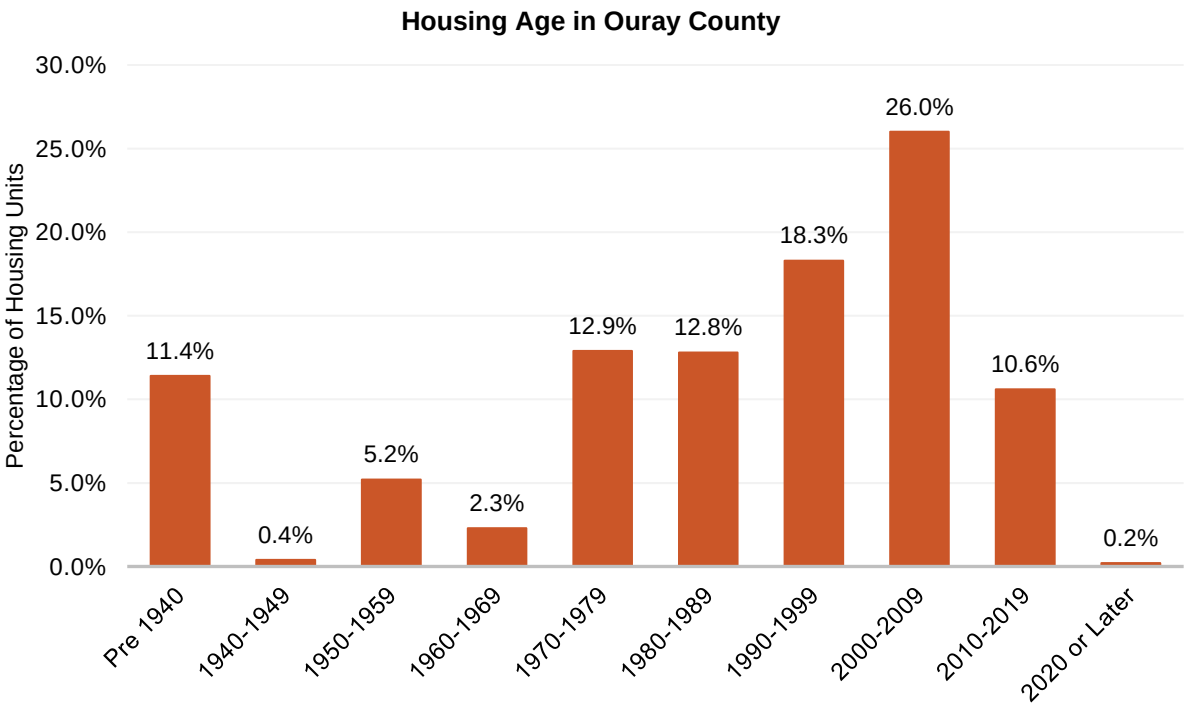
Jurisdiction	Lacking Complete Plumbing Facilities	Lacking Complete Kitchen Facilities	Broadband Internet Subscription	No Vehicles Available	Mobile Homes
City of Ouray	0%	0%	85.7%	6.9%	8.3%
Town of Ridgway	0%	0%	88.7%	1.9%	11.9%
Ouray County	0%	0%	87.7%	1.8%	7.0%

Source: U.S. Census Bureau[23,24]

Approximately seven percent of housing units in the county are mobile homes. The Town of Ridgway has the highest rate of mobile homes in its housing stock at 11.9 percent. Mobile homes have a higher risk of sustaining damage during windstorms and severe winter storms. Mobile homes either not anchored or anchored incorrectly can be overturned by 60 mph winds. Approximately 1.8 percent of all housing units in the county do not have a vehicle available. Households without vehicles may have difficulty evacuating during a wildfire event and a reduced ability to access resources in times of need.

As seen in the figure on the next page, most homes within Ouray County were built after 1970, with 26% of homes built between 2000-2009. Housing age can indicate risk, as structures constructed before the development of state building codes and before the identification of flood-prone areas in the 1970s and 1980s may be more vulnerable. Residents living in these homes may be at higher risk of the impacts from floods, windstorms, and severe winter storms.

22 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.
23 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/.
24 United States Census Bureau. "2022 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States." https://data.census.gov/.



Source: U.S. Census Bureau[25]

Homes Built Before 1970

Jurisdiction	Percentage of Homes Built Before 1970
City of Ouray	38.5%
Town of Ridgway	26.5%
Ouray County	19.3%

Source: U.S. Census Bureau[26]

Housing Crisis

Ouray County is a highly desirable area to visit and live in, with scenic views and abundant recreation opportunities. Additionally, building new housing is extremely difficult due to the dramatic elevation changes. This has caused a housing shortage and the cost of housing to increase dramatically. The lack of available and affordable workforce housing has left local workers with few options, leading to employee shortages at local businesses. Those working in Ouray County often have to commute into the county from other communities.[27]

Employment and Economics

The U.S. Census Bureau provides information related to employment and economic indicators. Low-income and unemployed populations may lack resources to prepare for, respond to, or recover from hazard events. Residents with limited financial resources might struggle to prioritize implementing mitigation measures over more immediate needs. Further, residents with limited economic resources are more likely to live in older, more vulnerable structures. Residents below the poverty line will be more vulnerable to all hazards within Ouray County. The table on the next page shows that nearly five percent of the population lives below the poverty line, the median

25 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics". https://data.census.gov/.
26 United States Census Bureau. "2022 Census Bureau American Community Survey: DP04: Selected Housing Characteristics". https://data.census.gov/.
27 Teitz, Liz. Ouray County Plaindealer. November 17, 2021. "Census shows more than 40% of Ouray homes vacant". https://www.rmpbs.org/blogs/news/census-shows-more-than-40-of-ouray-homes-vacant.

household income is $78,750, and the unemployment rate is slightly over four percent. The Town of Ridgway has much higher poverty and unemployment rates than the rest of the county. More vulnerable populations are likely to live in that community.

Vulnerable Employment and Economic Characteristics

Jurisdiction	Percent of People Living Below the Poverty Line	Median Household Income	Unemployment Rate
City Ouray	4.5%	$68,750	4.5%
Town of Ridgway	12.3%	$82,903	10.1%
Ouray County	4.8%	$78,750	4.2%

Source: U.S Census Bureau[28]

Social Vulnerability

FEMA's National Risk Index is a mapping tool that analyzes a community's risk to natural hazards from 0 (lowest possible value) to 100 (highest possible value). The overall risk for Eagle County is Very Low (4.77).[29]

- **Social Vulnerability:** Social groups in Eagle County have a Very Low (2.74) susceptibility to adverse impacts of natural hazards compared to the rest of the U.S.

- **Community Resilience:** Communities in Eagle County have a Relatively Moderate (51.53) ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions compared to the rest of the U.S.

Rural Capacity Index

The Rural Capacity Index developed by Headwaters Economics evaluates rural communities and counties nationwide for local capacity. The index is based on 12 variables that relate to community capacity. There are four general categories of capacity: local government staff and expertise, institutional capacity, economic opportunity, and education and engagement. Jurisdictions lacking local capacity often have the greatest need for infrastructure investments—mainly rural areas. Based on those variables, the Rural Capacity Index gives an overall capacity rating of low, medium, or high. The following table lists the components and scores for Ouray County and each community.

Rural Capacity Index

Components of Index	Ouray	Ridgway	Ouray County
County is Metropolitan?	No	No	No
Has a Head of Planning?	Yes	Yes	Yes
Government Job Gain/Loss Per 1,000 People	1	1	1
Has a College or University?	No	No	No
Drive to a City with >50,000 People (min)	60-120	60-120	60-120
Population Change (2010 to 2022):	126	164	617
Income Stability Score (0 to 100):	14	14	44
Families Below Poverty Level:	0%	5%	1%
Households with Broadband:	86%	89%	88%
People without Health Insurance:	25%	25%	15%

28 United States Census Bureau. “2022 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” https://data.census.gov/.

29 Federal Emergency Management Agency. 2023. “National Risk Index”. https://hazards.fema.gov/nri/map.

Components of Index	Ouray	Ridgway	Ouray County
Voter Turnout:	98%	98%	98%
Adults with Higher Education:	54%	51%	50%
Overall Capacity	**Medium**	**Medium**	**Low**

Source: Headwaters Economics[30]

State and Federal Areas

The following provides important state and federal areas within Eagle County.

National Protected Areas

- Uncomprahgre National Forest
- Mount Sneffels Wilderness Area
- Big Blue Wilderness Area
- Yankee Boy Basin

State Protected Areas

- Ridgway State Park

Trails

- Bear Creek National Recreation Trail

Scenic Byways

- Alpine Loop National Scenic Back Country Byway
- San Juan Skyway National Scenic Byway
- Million Dollar Highway

Historical Sites

According to the National Register of Historic Places by the National Park Service, four historic sites are located in Ouray County. None of the sites are in the 100-year floodplain.

Historical Sites

Site Name	Date Listed	Nearest Community	Floodplain (Y/N)
Beaumont Hotel	10/30/1973	Ouray	No
Jackson, George, House	1/11/1996	Ridgway	No
Ouray City Hall and Walsh Library	4/16/1975	Ouray	No
Ouray Historic District	10/6/1983	Ouray	No

Source: National Park Service[31]

30 Headwaters Economics. October 2024. "Rural Capacity Map". https://headwaterseconomics.org/equity/rural-capacity-map/.
31 National Park Service. September 2024. "National Register of Historic Places NPGallery Database". https://npgallery.nps.gov/NRHP.

Appendix D: Mitigation Strategy

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Mitigation and Strategic Actions Project Matrix..... 2

Mitigation and Strategic Actions Project Matrix

During public meetings, each participant was asked to review mitigation and strategic actions listed in the 2020 hazard mitigation plan and identify new potential actions, if needed, to reduce the effects of the hazards discussed in this plan. Selected projects varied per jurisdiction depending upon the significance of each hazard present. The information listed in the following tables is a compilation of new and ongoing mitigation and strategic actions identified by participating jurisdictions. Completed and removed mitigation actions can be found in respective jurisdictional profiles.

Mitigation Actions Matrix

Mitigation Actions	Ouray County	City of Ouray	Town of Ridgway	Dallas Park Cemetery District
Avalanche Risk Reduction	X	X		
Backup Generators			X	
Building & Infrastructure Hardening		X		
Cascade Rock/Debris Removal		X		
Cemetery Closure Plan				X
Code Updates - Landslide/Rockfall			X	
Community Analysis – Mass Casualty Events		X		
Comprehensive Public Health Emergency Response Plan		X		
Continuity of Operations Plans	X			
Cross Training for Snowplow Drivers		X		
Data Backup	X			
Defensible Space	X		X	
Drainage Improvements	X		X	X
Early Warning Systems	X	X	X	
Extreme Temperature Centers and Education		X		
Facility Hardening	X			
Fiber Improvements	X			
Flood Workshops	X			
Floodplain Regulation Improvements		X		
Flume Improvements		X		
Forest Management Program		X		
Geothermal Line Upgrades		X		
Hardening Facilities		X		
Hazardous Fuels Reduction	X			
Hazardous Materials Incident Capacty Building		X		
Hazardous Materials Partnership	X			
Hazard Shelter Site Improvements	X			

Mitigation Actions	Ouray County	City of Ouray	Town of Ridgway	Dallas Park Cemetery District
Hazmat Training	X			
Implement Projects Identified in Ouray County CWPP	X	X	X	
Improve GIS Capabilities	X			
Improve Public Health Capabilities	X			
Improve Wildfire Regulations	X			
Increased Water Storage			X	
Infrastructure Redundancies			X	
Insurance Industry Partnership	X			
Landslide/Rockfall Code Improvements		X		
Lightning Education		X		
Mental Health Support			X	
NIMS Training	X			
Oak Creek Supply Line		X		
Public Education	X		X	
Radio/Cell Site Mitigation	X			
Radon Mitigation			X	
Redundant Water Supply		X		
Ridgway Reservoir Debris	X			
Roadway Safety Improvements	X			
Rockfall Scaling	X			
Skyrocket Rock/Debris Removal		X		
Source Water Protection			X	
Stream Improvements			X	
Subdivision Wildfire Requirements	X			
Surge/Lightning Protection			X	
Tree Trimming and Removal				X
Upgrade Wireless Communications	X			
Warning Messages	X			
Water Conservation			X	
Water Conservation Plan			X	
Water Conservation Standards		X		
Water Crossing			X	
Water Storage Study	X			
Water Supply Code			X	
Water Supply Contingency Plan			X	
Weehawken Spring Transmission Line Repair/Replacement		X		

Mitigation Actions	Ouray County	City of Ouray	Town of Ridgway	Dallas Park Cemetery District
Wildfire Fuels Reduction				X

Appendix E: Hazard Mitigation Project Funding Guidebook

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Overview

The guidebook intends to provide initial guidance on hazard mitigation project funding opportunities and where to find more grant information. The information included is consistent with established processes for hazard mitigation planning. However, it is important to note the following regarding the context of this guidebook relative to the overall planning process.

Project identification includes identifying all options to address planning objectives; at this stage, all options are viable. At times, the best option may be to work with other stakeholders in the community to design solutions that are in line with community values while reducing risk (e.g., a bike path or ball field that can double as a retention area, or the preservation of an animal habitat that also serves as a natural buffer). These solutions can often be funded innovatively, including solutions that increase local industry and revenue. For information on the broad range of mitigation project types and how projects have been implemented in communities nationwide, please refer to FEMA's Mitigation Best Practices webpage at https://www.fema.gov/mitigation-best-practices-portfolio.

It should be noted that the grant programs listed in this guidebook are not the only ones that could support hazard mitigation project implementation. Additionally, many of these programs depend on yearly funding allocations, resulting in fluctuations in the amount available. However, at this point, it is more important to be aware of the potential for various avenues of support for a broad array of project types. As needs and potential hazard mitigation project options are identified, more information can be gathered on the range of programs that might be utilized. It will be more efficient to start with project options and then follow up with the identification of potential matches, working with the full range of available programs and agencies as part of a comprehensive project evaluation process.

While participation in a hazard mitigation plan is required for a jurisdiction to be eligible for FEMA funds, it is not the only funding source available for mitigation actions. Depending on the type of mitigation project being pursued, FEMA funding is not always the best option, so it is increasingly important to look for other opportunities. Opportunities for funding and technical assistance exist in various federal, state, and local agencies. Non-governmental funding opportunities are available at the regional or local level with private sector businesses, private foundations, and other non-governmental organizations. To fully map out the range of local and state options, it is necessary to undertake a detailed stakeholder analysis – something which has not been done at this time. The following contains an overview of key federal and state programs that may include opportunities for hazard mitigation project funding and additional information on suggested alternative funding routes.

Federal Funding Resources

Information about federal hazard mitigation project funding opportunities is organized by the agency administering the grant. Under each agency heading, applicable grant programs are listed with a description of the grant and, when available, information on typical funds available, eligibility, examples of past projects funded, and any additional relevant information. Agencies covered in this guidebook include:

- Federal Emergency Management Agency
- National Fish and Wildlife Foundation
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation – WaterSMART
- U.S. Department of Agriculture
- U.S. Department of Agriculture Rural Development Funding
- U.S. Department of Energy
- U.S. Department of Housing and Urban Development
- U.S. Economic Development Administration
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Forest Service

Note: This is not a complete list of all federal funding opportunities. These grant programs have been chosen for their applicability to popular mitigation actions. The websites and reference materials used to provide this information are as current as possible; however, it is important to note that funding programs are dynamic and subject to frequent changes. While it is helpful to be familiar with the current information, engaging the federal agencies in a dialog as soon as possible is equally important.

FEMA also has a Recovery and Resilience Resource Library to help navigate the numerous programs available in pre-disaster recovery planning or in the wake of a disaster. Resources can be searched by keyword or filtered by eligibility, topic, intended beneficiary, or resource type. The Recovery and Resilience Resource Library can be found here: https://www.fema.gov/emergency-managers/practitioners/recovery-resilience-resource-library.

Federal Emergency Management Agency (FEMA)

	Fire Management Assistance Grant Program
Description	The Fire Management Assistance Grant Program is available to states, local, and tribal governments to mitigate, manage, and control fires on publicly or privately owned forests or grasslands that threaten such destruction as would constitute a major disaster.
Funds Available	The individual fire cost threshold is based on total eligible costs for the declared fire. The individual fire cost threshold for a state is greater than $100,000 or five percent times the statewide per capita indicator, multiplied by the state population (the statewide per capita indicator is adjusted annually for inflation [e.g., the FY21 indicator is $1.55]).
Eligibility	Eligible applicants are entities legally responsible for the firefighting activities for which reimbursement is being requested, including states, local governments, and tribal governments.
Examples	Eligible firefighting costs may include expenses for field camps, repair and replacement tools, mobilization and demobilization activities, equipment use, materials, and supplies.
Additional Information	https://www.fema.gov/assistance/public/fire-management-assistance

	Flood Mitigation Assistance Program
Description	The Flood Mitigation Assistance Program is a competitive program that provides funding for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. Projects must be cost-effective, located in a participating NFIP community in good standing, align with the current hazard mitigation plan, and meet all environmental and historic preservation requirements.
Funds Available	For Fiscal Year 2023, FEMA announced the selection of 197 supplications totaling a record of nearly $715 million in available federal cost share for the grant cycle.
Eligibility	States, territories, and federally recognized tribes are eligible. Local governments are considered sub-applicants and must apply to the State, territory, or tribe.
Examples	Projects include project scoping, technical assistance, community flood mitigation projects, individual structure/property-level flood mitigation projects, and management costs.
Additional Information	Cost share is required for all sub-applications funded by the Flood Mitigation Assistance program. Generally, the cost share for this program is 75% federal and 25% non-federal. Contributions of cash, third-party in-kind services, materials, or any combination thereof may be accepted as part of the non-federal cost share. More information can be found at https://www.fema.gov/grants/mitigation/floods

	Hazard Mitigation Grant Program
Description	FEMA's Hazard Mitigation Grant Program provides funding to state, local, tribal, and territorial governments so they can develop hazard mitigation plans and rebuild in a way that reduces or mitigates future disaster losses in their communities. Funding is available when authorized under a Presidential major disaster declaration and in areas of the state requested by the Governor. Federally recognized tribes may also submit a request for a Presidential major disaster declaration within their impacted areas. All state, local, tribal, and territorial governments must develop and adopt hazard mitigation plans to receive funding for their hazard mitigation projects.
Funds Available	The amount of funding is based on the estimated total or aggregate cost of disaster assistance: Up to 15% of the first $2 billion; Up to 10% for amounts between $2 billion and $10 billion; Up to 7.5% for amounts between $10 billion and $35.333 billion; States with enhanced mitigation plans: Up to 20%, not to exceed $35.333 billion.
Eligibility	Project eligibility under the Hazard Mitigation Grant Program can be limited by the State as part of the Hazard Mitigation Grant Program Administrative Plan developed post-disaster. For example, funding may only be made available for projects that are related to the type of disaster, i.e., the Hazard Mitigation Grant Program related to a significant flood disaster declaration may only be designated for flood mitigation projects like acquisitions of repetitively flooded properties.
Examples	Retrofitting existing buildings to make them less susceptible to damage from a variety of natural hazards. Purchasing hazard-prone property to remove people and structures from harm's way. Drainage improvement projects to reduce the potential for flood damage. Eligible project types do not have to coincide with the type of disaster declaration, as the state decides funding prioritization accordingly.
Additional Information	In this program, private homeowners and businesses cannot apply for a grant. However, a local community or other public entity may apply for funding on their behalf. Generally, the cost share is 75% federal and 25% non-federal funding. The 25% can come from any non-federal source, such as the state or local government, an individual, private contributions, Increased Cost of Compliance funds from a flood insurance policy, or Small Business Administration loans. Additional information can be found at: https://www.fema.gov/grants/mitigation/hazard-mitigation/before-you-apply.

	Hazard Mitigation Grant Program-Post Fire
Description	This program provides funding to help communities implement hazard mitigation measures focused on reducing the risk of harm from wildfire. It provides hazard mitigation grant funding to state, local, tribal, and territorial governments in areas receiving a Fire Management Assistance Grant declaration. The Fire Management Assistance Grant Program requires a Disaster Declaration, and funding amounts are determined by FEMA based on an annual national aggregate calculation of the past 10 year's Fire Management Assistance Grant Program declarations.
Funds Available	Funds available each year are based on an average of historical Fire Management Assistance Grant declarations from the past 10 years. The total funding available for each Fire Management Assistance Grant Program declaration in Fiscal Year 2022 was $786,552 for applicants with hazard mitigation plans and $1,048,736 for those with an enhanced hazard mitigation plan. Multiple event funding will be aggregated into one grant under the first declaration.
Eligibility	Eligible projects include defensible space initiatives, ignition-resistant construction, hazardous fuels reduction, erosion control measures, slope failure prevention measures, and flash flooding prevention measures.
Examples	Defensible space, reducing hazardous fuels, removing standing burned trees, ignition-resistant construction, installing warning signs, strengthening or hardening water systems that were burned and caused contamination, reseeding ground cover, planting grass to prevent noxious weeds, erosion barriers on slopes, modifying/remove culverts, drainage dips, and emergency spillways.
Additional Information	The application period opens with the state or territory's first Fire Management Assistance Grant Program declaration of the fiscal year and closes six months after the end of that fiscal year. Application extensions may be requested. https://www.fema.gov/grants/mitigation/post-fire.

	Pre-Disaster Mitigation
Description	The Pre-Disaster Mitigation grant program makes federal funds available to state, local, tribal, and territorial governments to plan for and implement sustainable, cost-effective measures. These mitigation efforts are designed to reduce the risk to individuals and property from future natural hazards while also reducing reliance on federal funding for future disasters.
Funds Available	On March 23, 2024, FEMA published a Notice of Funding Opportunity for the FY24 Pre-Disaster Mitigation grant program. The total amount of funds that are being made available to 110 congressionally directed projects will be $190,568,289. Applicants may request up to an additional 10% of project costs for management and administration of the program from a separate pool of funds.
Eligibility	Only states, territories, or federally recognized tribal governments identified by Congress in the Consolidated Appropriations Act and enumerated in the accompanying Joint Explanatory Statement for Division F are identified in this Notice of Funding Opportunity and are eligible to apply. All applicants and sub-applicants must have a FEMA-approved Hazard Mitigation Plan by the application deadline.
Examples	Storm Shelters, Wildfire Prevention Projects, Bridge Rehabilitation, Drainage Improvements, Water Storage Tanks, Flood Mitigation Planning Projects, Evacuation Centers, and more.
Additional Information	https://www.fema.gov/grants/mitigation/pre-disaster

	Recovery and Resilience Resource Library
Description	FEMA developed a library to navigate the numerous programs available to the United States and its territories to help recover from a disaster. The tool helps users find and research federal disaster recovery resources that would be beneficial to pre-disaster recovery planning or in the wake of a disaster.
Funds Available	Varies
Eligibility	Resources are intended for state, local, territorial, and tribal governments, nonprofits, businesses, healthcare institutions, schools, individuals, and households.
Examples	Evidence-based or evidence-informed interventions to strengthen rural and urban communities.
Additional Information	https://www.fema.gov/emergency-managers/practitioners/recovery-resilience-resource-library

	State and Local Cybersecurity Grant Program
Description	Funding to help states, local governments, rural areas, and territories address cybersecurity risks and cybersecurity threats to information systems.
Funds Available	In FY 2024, $279.9 million is available under the State and Local Cybersecurity Grant Program. Varying amounts of funding have been allocated over the past few years due to the Infrastructure Investment and Jobs Act. According to the Cost-Share Requirements, the recipient contribution can be cash (hard match) or third-party in-kind (soft match).
Eligibility	All U.S. states and territories are eligible to apply. The designated State Administrative Agency for each state and territory is the only entity eligible to apply for SLCGP funding.
Examples	Planning, equipment, exercises, management & administration, organization, and training.
Additional Information	Each state and territory will receive a funding allocation as determined by the statutory formula: • Allocations for states and territories include a base funding level as defined for each entity: 1% for each state, the District of Columbia, and Puerto Rico. • State allocations include additional funds based on a combination of state population and rural population totals. • 80% of total state allocations must support local entities, while 25% of the total state allocations must support rural entities; these amounts may overlap. • https://www.fema.gov/grants/preparedness/state-local-cybersecurity-grant-program.

	Safeguarding Tomorrow through Ongoing Risk Mitigation Revolving Loan Fund
Description	The purpose of the Safeguarding Tomorrow Revolving Loan Fund (RLF) program is to establish revolving loan funds that provide hazard mitigation assistance for local governments to reduce risks from natural hazards and disasters. The Safeguarding Tomorrow RLF program complements and supplements FEMA's Hazard Mitigation Assistance grant portfolio to support mitigation projects at the local government level and increase the nation's resilience to natural hazards and climate change. These low-interest loans will allow jurisdictions to reduce vulnerability to natural disasters, foster greater community resilience, and reduce disaster suffering.
Funds Available	On Jan. 14, 2025, FEMA released a funding opportunity, making available $178 million through fiscal year (FY) 2025 Safeguarding Tomorrow Revolving Loan Fund (RLF) program Notice of Funding Opportunity (NOFO) – the largest value available in a single fiscal year via the program. This grant cycle builds upon the previous two years of funding that released $200 million. Entities can apply on a rolling basis through the end of FY 2025 (Sept. 30, 2025).
Eligibility	Eligible entities are States, federally recognized tribes that received a major disaster declaration, Territories, and the District of Columbia. State entities must enroll in this program for it to be an option for local public entities.
Examples	This is an opportunity to prioritize low-impact development, wildland-urban interface management, conservation areas, and the reconnection of floodplain and open space projects. Funding can be utilized to build code adoption and enforcement. Allowable uses include Mitigation Activities, Non-Federal Cost-Share, Local Government Technical Assistance, and Entity Administrative Costs.
Additional Information	https://www.fema.gov/grants/mitigation/storm-rlf

National Fish and Wildlife Foundation

	America the Beautiful Challenge
Description	The America the Beautiful Challenge seeks to advance conservation and restoration projects that are consistent with the principles outlined in the Conserving and Restoring America the Beautiful report and that focus on at least one of the following core areas of need: • Conserving and restoring rivers, coasts, wetlands, and watersheds • Conserving and restoring forests, grasslands, and other important ecosystems that serve as carbon sinks • Connecting and reconnecting wildlife corridors, large landscapes, watersheds, and seascapes • Improving ecosystem and community resilience to coastal flooding, drought, and other climate-related threats • Expanding access to the outdoors, particularly in underserved communities Applicants are encouraged to develop large landscape scale and/or cross-jurisdictional projects that advance existing conservation plans or are informed by Indigenous Traditional Knowledge.
Funds Available	Approximate Annual Funding Amount: • (1) Implementation Grants: awards range from $1-5 million, and landscape-scale restoration requests over $5 million will be considered on a case-by-case basis. • (2) Planning Grants: awards range from $200,000 to $2 million and are contingent upon awards from DOI. • (3) Sentinel Landscape Grants: awards will range from $250,000 to $1.5 million and are contingent upon awards by DOD. • (4) National Forest Grants: awards will range from $250,000 to $1.5 million and are contingent upon awards by the US Forest Service. • (5) Private Forests, Rangeland, and Farmland Grants: awards will range from $200,000 to $500,000 and are contingent upon awards by NRCS.
Eligibility	State government agencies, Indian Tribes, nonprofit 501(c) organizations, local governments, municipal governments, and educational institutions.
Examples	Implementation grants, planning grants, sentinel landscape grants, national forest grants, and private forests, rangeland, and farmland grants.
Additional Information	https://www.nfwf.org/programs/america-beautiful-challenge?activeTab=tab-2 https://fundingnaturebasedsolutions.nwf.org/programs/nfwf-america-the-beautiful-challenge/

	Five Star and Urban Water Restoration Grant Program
Description	The Five Star and Urban Waters Restoration grant program seeks to develop community capacity to sustain local natural resources for future generations by providing modest financial assistance to diverse local partnerships focused on improving water quality, watersheds, and the species and habitats they support.
Funds Available	Approximately $2,500,000 was available in 2025 nationwide for projects meeting program priorities. There is one round of full proposals annually for this program, and the 2025 Request for Proposals ended on January 30, 2025. Awards can range from $20,000 to $50,000, with an average size of $35,000 and about 50 grants awarded per year.
Eligibility	Nonprofit 501(c) organizations, state government agencies, local governments, municipal governments, Tribal Governments and Organizations, and educational institutions.
Examples	Projects include a variety of ecological improvements along with targeted community outreach, education, and stewardship. Ecological improvements may include one or more of the following: wetland, riparian, forest, and coastal habitat restoration; wildlife conservation; community tree canopy enhancement; water quality monitoring; and green infrastructure best management practices for managing runoff.
Additional Information	https://www.nfwf.org/programs/five-star-and-urban-waters-restoration-grant-program?activeTab=tab-1 https://www.nfwf.org/programs/five-star-and-urban-waters-restoration-grant-program/five-star-and-urban-waters

U.S. Army Corps of Engineers

	Planning Assistance to States
Description	Provides assistance in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. Typical studies only include a planning level of detail, not design for project construction. The program can encompass many types of studies dealing with water resource issues. The Planning Assistance to States program has two types of efforts-comprehensive plans and technical assistance: Comprehensive Plans and Technical Assistance. Comprehensive Plan Assistance includes planning for the development, utilization, and conservation of the water and related resources of drainage basins, watersheds, or ecosystems located within the boundaries of that State, including plans to comprehensively address water resources challenges such as the state water plan. Comprehensive plans can extend across state boundaries provided both States agree. Technical Assistance provided through the Planning Assistance to States program includes support of planning efforts related to the management of state water resources, including the provision and integration of hydrologic, economic, or environmental data and analysis in support of the State's water resources management and related land resources development plans identified in the state water plan or other water resources management related state planning documents, such as state hazard mitigation, preparedness, response, and recovery plans and plans associated with changing hydrologic conditions, climate change, long-term sustainability, and resilience.
Funds Available	Comprehensive planning activities through the Planning Assistance to States program are cost-shared (50 percent) with the study partner, and voluntarily contributed funds in excess of cost share may be provided by the non-Federal partner. The non-federal cost share for the preparation of a state comprehensive water resources plan may be provided by funds or through the provision of services, materials, supplies, or other in-kind services. Technical assistance activities through the Planning Assistance to States program are cost-shared (50 percent) with the study partner, and voluntarily contributed funds in excess of cost share may be provided by the non-Federal partner. The cost-share for technical assistance must be provided by funds (not in-kind).
Eligibility	States, local governments, other non-Federal entities, and eligible Native American Indian tribes.
Examples	Studies in recent years have included water supply/demand, water conservation, water quality, environmental/conservation, wetlands evaluation/restoration, dam safety/failure, flood damage reduction, coastal zone protection, and harbor planning.
Additional Information	https://www.nae.usace.army.mil/missions/public-services/planning-assistance-to-states/

U.S. Bureau of Reclamation – WaterSMART

	Small Scale Water Efficiency Projects
Description	Funding for small-scale on-the-ground water management projects that conserve, better manage, or otherwise increase efficient use of water supplies. Projects supported by an existing water management and conservation plan, System Optimization Review, or other planning effort led by the applicant are prioritized.
Funds Available	Applicants may request up to $100,000 in federal funding, with a non-federal cost-share of 50% or more of total project costs for projects with total project costs of no more than $225,000. As of November 21, 2024, the U.S. Bureau of Reclamation announced $3.3 million in WaterSMART Small-Scale Water Efficiency grants for 26 projects in 2024.
Eligibility	Eligible applicants for all WaterSMART Grants funding opportunities include states; tribes; irrigation districts; water districts; state, regional, or local authorities, whose members include one or more organizations with water or power delivery authority; other organizations with water or power delivery authority; and nonprofit conservation organizations that are acting in partnership with and with the agreement of an entity previously described. To be eligible, applicants must be located in the Western United States or U.S. Territories. Entities located in Alaska and Hawaii are also eligible to apply.
Examples	Examples of projects include canal lining/piping, municipal metering, irrigation flow measurement, supervisory control and data acquisition and automation, landscape irrigation measures, high-efficiency indoor appliances and fixtures, and commercial cooling systems.
Additional Information	https://www.usbr.gov/watersmart/swep/index.html

	Water Marketing Strategy Grants
Description	Financial assistance for the development of water marketing strategies to facilitate water markets as a tool for helping willing buyers and sellers meet water demands efficiently in times of shortage and prevent water conflicts.
Funds Available	Program funding is allocated through a competitive process. Applicants may request federal funding up to $400,000 for projects to be completed within three years with a non-federal cost share of 50% or more of the total project cost.
Eligibility	Eligible applicants for all WaterSMART Grants funding opportunities include states; tribes; irrigation districts; water districts; state, regional, or local authorities, whose members include one or more organizations with water or power delivery authority; other organizations with water or power delivery authority; and nonprofit conservation organizations that are acting in partnership with and with the agreement of an entity previously described. To be eligible, applicants must be located in the Western United States or U.S. Territories. Entities located in Alaska and Hawaii are also eligible to apply.
Examples	Funding awarded under Water Marketing Strategy Grants can be used for outreach and partnership building, planning activities (e.g., hydrologic, economic, legal, and other types of analysis), pilot activities, and developing a "water marketing strategy" document.
Additional Information	https://www.usbr.gov/watersmart/watermarketing/index.html

	Water and Energy Efficiency Grants
Description	Focuses on projects that result in quantifiable and sustained water savings, including canal lining and piping projects, municipal metering projects, and Supervisory Control and Data Acquisition and automation projects.
Funds Available	Applicants may request federal funding: (I) up to $500,000 for projects to be completed within two years, (II) up to $2 million for projects to be completed within three years, and (III) up to $5 million for projects to be completed within three years, with a non-Federal cost share of 50% or more of the total project cost. No more than $5,000,000 in total WaterSMART Water and Energy Efficiency Grants funds will be awarded to any single applicant under this Funding Opportunity per fiscal year.
Eligibility	Eligible applicants for all WaterSMART Grants funding opportunities include states; tribes; irrigation districts; water districts; state, regional, or local authorities, whose members include one or more organizations with water or power delivery authority; other organizations with water or power delivery authority; and nonprofit conservation organizations that are acting in partnership with and with the agreement of an entity previously described. To be eligible, applicants must be located in the Western United States or U.S. Territories. Entities located in Alaska and Hawaii are also eligible to apply.
Examples	Projects conserve and use water more efficiently, increase the production of hydropower, mitigate conflict risk in areas at a high risk of future water conflict, and accomplish other benefits that contribute to water supply reliability in the western United States.
Additional Information	https://www.usbr.gov/watersmart/weeg/faq.html

U.S. Department of Agriculture

	Conservation Innovation Grants
Description	A competitive program that supports the development of new tools, approaches, practices, and technologies to further natural resource conservation on private lands. Through creative problem-solving and innovation, Conservation Innovation Grants partners work to address our nation's water quality, air quality, soil health, and wildlife habitat challenges, all while improving agricultural operations. Public and private grantees develop the tools, technologies, and strategies to support next-generation conservation efforts on working lands and develop market-based solutions to resource challenges.
Funds Available	Applications made a Conservation Innovation Grants funding notice is announced each year. Funds for single- or multi-year projects, not to exceed three years, are awarded through a nationwide competitive grants process. Grantees must match the Conservation Innovation Grant's investment at least one-to-one.
Eligibility	The natural resource concerns eligible for funding through Conservation Innovation Grants are identified in the funding announcement and may change annually to focus on new and emerging, high-priority natural resource concerns. National and State Conservation Innovation Grants – all non-Federal entities and individuals are eligible to apply. All Conservation Innovation Grants projects must involve EQIP-eligible producers.
Examples	Projects may be watershed-based, regional, multi-state, or nationwide in scope.
Additional Information	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/

	Emergency Watershed Protection Program
Description	The Emergency Watershed Program offers technical and financial assistance to help local communities relieve imminent threats to life and property caused by floods, fires, windstorms, and other natural disasters that impair a watershed. The Emergency Watershed Protection Program does not require a disaster declaration by federal or state government officials for program assistance to begin.
Funds Available	The Natural Resources Conservation Service may provide technical assistance as services and/or funds to plan, design, and contract the emergency measures, subject to an agreement between the Natural Resources Conservation Service and the Sponsor. Installation/Construction costs are not to exceed 75% or 90% for limited resource areas. Engineering/Technical Assistance is not to exceed 100%. No funds are available for real property rights.
Eligibility	Project criteria require the project to protect from flooding or soil erosion, reduce threats to life and property, restore the hydraulic capacity to the natural environment, and be economically and environmentally defensible. Eligible local sponsors for recovery projects include cities, counties, towns, conservation districts, or any federally recognized Native American tribe or tribal organization.
Examples	Removal of debris from stream channels, road culverts, and bridges; reshaping and protection of eroded streambanks; correction of damaged or destroyed drainage facilities; establishing vegetative cover on critically eroding lands; repair of levees and structures; repair of certain conservation practices; and purchase of floodplain easements.
Additional Information	https://www.nrcs.usda.gov/programs-initiatives/ewp-emergency-watershed-protection

	Small Business Innovation Research
Description	The Small Business Innovation Research and Small Business Technology Transfer programs at the U.S. Department of Agriculture offer competitively awarded grants to qualified small businesses to support high-quality research related to important scientific problems and opportunities in agriculture that could lead to significant public benefits. This program has two phases: Phase I is open to any small business concern that meets the Small Business Innovation Research and Small Business Technology Transfer program eligibility requirements, and Phase II is open only to previous Phase I awardees.
Funds Available	Funds are offered across 10 topic areas, including Forests and Related Resources, Plant Production and Protection-Biology, Animal Production and Protection, Conservation of Natural Resources, Food Science and Nutrition, Rural and Community Development, Aquaculture, Biofuels and Biobased Products, Small and Mid-size Farms, and Plant Production and Protection-Engineering.
Eligibility	The Small Business Innovation Research and Small Business Technology Transfer programs do not make loans and do not award grants to help a business get established. The program seeks to stimulate technological innovation in the private sector, strengthen the role of small businesses in meeting federal research and development needs, increase private sector commercialization of innovations derived from U.S. Department of Agriculture-supported research and development efforts, and foster and encourage participation by women-owned and socially and economically disadvantaged small business firms in technological innovations.
Examples	Salary and wages for company employees, associated fringe benefits, materials and supplies, and a number of other direct costs needed to conduct the proposed research and development.
Additional Information	https://www.nifa.usda.gov/grants/programs/small-business-innovation-research-technology-transfer-programs-sbirsttr

	Watershed Rehabilitation Program
Description	The Watershed Rehabilitation Program helps project sponsors rehabilitate aging dams that are reaching the end of their design life and/or no longer meet federal or state standards. The Natural Resources Conservation Service provides technical and financial assistance to local project sponsors to rehabilitate aging dams that protect lives, property, and infrastructure.
Funds Available	Across the Nation, watershed rehabilitation projects provide over $2.2 billion in reduced flooding and erosion damage while improving wildlife habitat, recreation, water quality, and supply for an estimated 47 million people. Costs associated with additional or new water supply storage purposes added to the rehabilitation project may be cost-shared with watershed rehabilitation funds. Eligible project costs are covered by 65% Federal/35% Local of total eligible project cost, not to exceed 100% of actual construction cost. No more than 100% of the engineering/Technical Assistance will be covered.
Eligibility	Eligible projects are dams that were originally constructed through a Natural Resources Conservation Service Watershed Program, no longer meet current safety and performance standards, including dams past their evaluated life, and have current operation and maintenance.
Examples	*Information not available*
Additional Information	https://www.nrcs.usda.gov/programs-initiatives/watershed-rehabilitation

U.S. Department of Agriculture Rural Development Funding

	Community Facilities Loans and Grants
Description	This program provides affordable funding to develop essential community facilities in rural areas. An essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area and does not include private, commercial, or business undertakings.
Funds Available	*Information not available*
Eligibility	Eligible for areas 20,000 or less in population. Applicants are municipalities, nonprofits, special purpose districts, and federally recognized Indian tribes. Eligible borrowers include public bodies, community-based nonprofit corporations, and federally recognized tribes.
Examples	Funds can be used to purchase, construct, and/or improve essential community facilities, purchase equipment, and pay related project expenses.
Additional Information	https://www.rd.usda.gov/programs-services/community-facilities/community-facilities-direct-loan-grant-program/co

	Community Facility Rural Community Development Initiative Grants
Description	Community Facility Rural Community Development Initiative grants are awarded to help nonprofit housing and community development organizations, low-income rural communities, and federally recognized tribes support housing, community facilities, and community and economic development projects in rural areas. Funds may be used to improve housing, community facilities, and community and economic development projects in rural areas.
Funds Available	Grants are awarded with a minimum amount of $50,000 and a maximum of $250,000. Funds are limited and are awarded through a competitive process. Matching fund requirements are equal to the amount of the grant, but in-kind contributions cannot be used as matching funds. Partnerships with other federal, state, local, private, and nonprofit entities are encouraged.
Eligibility	Open to public bodies, nonprofit organizations, and qualified private organizations. Rural and rural areas other than a city or town with a population of greater than 50,000 people and the urbanized area contiguous and adjacent to such city or town.
Examples	Community Facility Rural Community Development Initiative grants may be used for but are not limited to training sub-grantees and providing technical assistance to sub-grantees on strategic plan developments, accessing alternative funding sources, board training, developing successful childcare facilities, creating training tools, and effective fundraising techniques.
Additional Information	https://www.rd.usda.gov/programs-services/community-facilities/rural-community-development-initiative-grants#overview

	Community Facility Technical Assistance and Training Grant
Description	Provide associations with Technical Assistance and/or training with respect to essential community facilities programs. Technical assistance and/or training will help identify and plan for community facility needs in the area. Once those needs have been identified, the Grantee can assist in identifying public and private resources to finance those identified community facility needs.
Funds Available	The maximum grant award is $150,000. Grant funds are limited and are awarded through a competitive process. Matching funds are not required, in-kind contributions cannot be used as matching funds, and partnerships with other entities are encouraged.
Eligibility	Open to public bodies, nonprofit organizations, and federally recognized tribes. Rural areas, including cities, villages, townships, towns, and Federally Recognized Tribal Lands outside the boundaries of a city of 20,000 or more.
Examples	Webster County purchased a new ambulance and equipment with Rural Development funds (and other sources), and South Sioux City was able to build a new fire station with funding from the U.S. Department of Agriculture Rural Development (and other sources).
Additional Information	https://www.rd.usda.gov/programs-services/community-facilities/community-facilities-technical-assistance-and-training-grant#overview

	Emergency Community Water Assistance Grants
Description	This program helps eligible communities prepare for or recover from an emergency that threatens the availability of safe, reliable drinking water. A federal disaster declaration is not required, and this grant covers events such as drought or flood, earthquake, tornado or hurricane, disease outbreak, chemical spill, leak, seepage, or other disasters.
Funds Available	Up to $150,000 for water transmission line projects. Water Source grants up to $1,000,000.
Eligibility	Primarily for residential purposes, and they are eligible for 10,000 or fewer population areas. Applicants are municipalities, special purpose districts, nonprofits, and Recognized Indian Tribes. Applications are accepted year-round online through the Rural Development Apply or through the local rural development office.
Examples	Construction of waterline extensions, repair breaks or leaks in existing water distribution lines, and address related maintenance necessary to replenish the water supply. Water Source Grants are to construct a water source, intake, or treatment facility.
Additional Information	https://www.rd.usda.gov/programs-services/water-environmental-programs/emergency-community-water-assistance-grants/co

U.S. Department of Energy

	Grid Innovation Program
Description	This program provides support for projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability. Projects selected under this program will include interregional transmission projects, investments that accelerate the interconnection of clean energy generation, and utilization of distribution grid assets to provide backup power and reduce transmission requirements. Innovative approaches can range from the use of advanced technologies to innovative partnerships to the deployment of projects identified by innovative planning processes.
Funds Available	The Grid Innovation Program will invest up to $5 billion ($1 billion/year for Fiscal Years 2022-2026) in innovation and new approaches to transmission, distribution, storage, and regional resilience. The first funding cycle will include both FY22 and FY23, up to $2 billion. Projects are subject to a 50% cost share minimum.
Eligibility	Eligible entities include a state, a combination of 2 or more states, an Indian Tribe, a unit of local government, or a public utility commission.
Examples	Transmission, storage, and distribution infrastructure to enhance grid resilience and reliability.
Additional Information	https://www.energy.gov/gdo/grid-innovation-program

	Grid Resilience Utility and Industry Grants
Description	Grants provide funding to support activities that will modernize the electric grid to reduce impacts from extreme weather and natural disasters. This grant program will fund comprehensive transformational transmission and distribution technology solutions that will mitigate weather hazards across a region or within a community that can cause a disruption to the power system. Grants awarded under the program will fund transmission and distribution technology projects that seek to address hazards within a region or a community that can disrupt the power system, such as wildfires, floods, or hurricanes.
Funds Available	Funding of $2.5 Billion over five years from FY 22-26 with $500 million available per year. Funding is capped at the amount the eligible entity has spent in the previous three years on hardening efforts. There is a 100% cost match for this program. The program includes a small utility set aside for those entities selling no more than 4 million MWh of electricity per year.
Eligibility	This funding opportunity is available to electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, and fuel suppliers.
Examples	Infrastructure upgrades to strengthen and modernize the power grid against natural disasters that are exacerbated by the climate crisis.
Additional Information	https://www.energy.gov/gdo/grid-resilience-utility-and-industry-grants

	Smart Grid Grants
Description	Smart Grid Grants are designed to increase the flexibility, efficiency, and reliability of the electric power system, with a particular focus on increasing the capacity of the transmission system, preventing faults that may lead to wildfires or other system disturbances, integrating renewable energy at the transmission and distribution levels, and facilitating the integration of increasing electrified vehicles, buildings, and other grid-edge devices. Smart grid technologies funded and deployed at scale through this program must demonstrate a pathway to wider market adoption.
Funds Available	The Smart Grid Grant program will invest up to $3 billion ($600 million/year for Fiscal Years 2022-2026) in grid resilience technologies and solutions. The first funding cycle will include both FY22 and FY23, up to $1.2 billion. Recipients must provide a cost share of at least 50% of the grant.
Eligibility	This program is open to domestic entities, including institutions of higher education, for-profit entities, nonprofit entities, state and local governmental entities, and tribal nations.
Examples	Grid-enhancing technologies such as dynamic line rating, flow control devices, advanced conductors, and network topology optimization to improve system efficiency and reliability. Investments in optical ground wire, dark fiber, operational fiber, and wireless broadband communications networks.
Additional Information	https://www.energy.gov/gdo/grid-innovation-program

U.S. Department of Housing and Urban Development

	Community Development Block Grants
Description	Provides annual grants on a formula basis to states, cities, and counties to develop viable urban communities by providing decent housing and a suitable living environment and by expanding economic opportunities, principally for low- and moderate-income persons.
Funds Available	The U.S. Department of Housing and Urban Development determines the amount of each entitlement grantee's annual funding allocation by a statutory dual formula that uses several objective measures of community needs, including the extent of poverty and population.
Eligibility	Eligible grantees include principal cities of Metropolitan Statistical Areas, Other metropolitan cities with populations of at least 50,000, qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities), States, and insular areas. Eligibility for participation as an entitlement community is based on population data provided by Census. Each activity must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevent or eliminate slums or blight, or address community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community for which other funding is not available.
Examples	Community Development Block Grant funds may be used for activities which include, but are not limited to, acquisition of real property; relocation and demolition; rehabilitation of residential and non-residential structures; construction of public facilities and improvements, such as water and sewer facilities, streets, neighborhood centers, and the conversion of school buildings for eligible purposes; public services, within certain limits; activities relating to energy conservation and renewable energy resources; provision of assistance to profit-motivated businesses to carry out economic development and job creation/retention activities.
Additional Information	U.S. Department of Housing and Urban Development does not provide Community Development Block Grant assistance directly to individuals, businesses, nonprofit organizations, or other non-governmental entities. https://www.hud.gov/program_offices/comm_planning/cdbg

	Community Development Block Grant Disaster Recovery Assistance
Description	The Community Development Block Grant Program has Disaster Recovery grants to rebuild the affected areas and provide crucial seed money to start the recovery process. These flexible grants help cities, counties, and States recover from Presidentially declared disasters, especially in low-income areas, subject to the availability of supplemental appropriations. Since Community Development Block Grant Disaster Recovery assistance may fund a broad range of recovery activities, the U.S. Department of Housing and Urban Development can help communities and neighborhoods that otherwise might not recover due to limited resources.
Funds Available	Varies according to the state plan outlined by the state department of economic development.
Eligibility	Community Development Block Grant Disaster Recovery funds are provided to the most impacted and distressed areas for Disaster Relief, Long-Term Recovery, Restoration of Infrastructure, Housing, and Economic Revitalization. U.S. Department of Housing and Urban Development will notify eligible States, cities, and counties if they are eligible to receive Community Development Block Grant Disaster Recovery grants. Those who receive grant money include state agencies, nonprofit organizations, economic development agencies, citizens, and businesses.
Examples	Funding can be provided to cover unmet needs, such as local cost-share funding from public assistance projects or hazard mitigation grant projects.
Additional Information	https://www.hud.gov/program_offices/comm_planning/cdbg-dr

	Neighborhood Stabilization Program
Description	The Neighborhood Stabilization Program was established to provide emergency assistance to stabilize communities with high rates of abandoned and foreclosed homes and to assist households whose annual incomes are up to 120 percent of the area median income. Neighborhood Stabilization Program funds were used for activities that included establishing financing mechanisms for the purchase and redevelopment of foreclosed homes and residential properties; purchasing and rehabilitating homes and residential properties abandoned or foreclosed; establishing land banks for foreclosed homes; demolishing blighted structures; redeveloping demolished or vacant properties.
Funds Available	$4 billion nationwide
Eligibility	States, certain local governments, and other organizations.
Examples	The NSP provides grants to every state, certain local communities, and other organizations to purchase foreclosed or abandoned homes and to rehabilitate, resell, or redevelop these homes in order to stabilize neighborhoods and stem the decline of the house values of neighboring homes.
Additional Information	https://www.hud.gov/program_offices/comm_planning/nsp

U.S. Economic Development Administration

	Public Works and Economic Adjustment Assistance
Description	Economic Adjustment Assistance provides funding to help plan, build, innovate, and put people into quality jobs in hundreds of communities across the nation. The Economic Adjustment Assistance program is the U.S. Economic Development Administration's most flexible program, and grants made under this program will help hundreds of communities across the nation plan, build, innovate, and put people back to work through construction or non-construction projects designed to meet local needs.
Funds Available	Total Program Funding of $500 Million with an award ceiling of $10 Million and a floor of $100,000.
Eligibility	A wide range of technical, planning, workforce development, entrepreneurship, and public works and infrastructure projects are eligible for funding under this program. Eligible applicants for U.S. Economic Development Administration's Economic Adjustment Assistance program include a(n): District Organization of a U.S. Economic Development Administration -designated Economic Development District; Indian Tribe or a consortium of Indian Tribes; State, county, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions; Institution of higher education or a consortium of institutions of higher education; Public or private nonprofit organization or association acting in cooperation with officials of a political subdivision of a State. Individuals or for-profit entities are not eligible.
Examples	Public infrastructure related to economic development.
Additional Information	As part of the $300 million Coal Communities Commitment, the U.S. Economic Development Administration will allocate at least $200 million of the Economic Adjustment Assistance funding to support coal communities. https://www.eda.gov/funding/programs/economic-adjustment-assistance.

U.S. Environmental Protection Agency

	Clean Waters Act Section 319 Grants
Description	Clean Water Act Section 319(h) funds are provided only to designated state and tribal agencies to implement their approved nonpoint source management programs. State and tribal nonpoint source programs include a variety of components, including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and regulatory programs.
Funds Available	Each year, the U.S. Environmental Protection Agency awards Section 319(h) funds to states in accordance with a state-by-state allocation formula that the U.S. Environmental Protection Agency has developed in consultation with the states. Grant totals in the past have increased from $155.9 million in 2013 to $178 million in 2022.
Eligibility	*Information not available*
Examples	*Information not available*
Additional Information	https://www.epa.gov/sites/default/files/2015-09/documents/319-guidelines-fy14.pdf

	Environmental Justice Collaborative Problem-Solving
Description	This cooperative agreement program provides financial assistance to eligible organizations working on or planning to work on projects to address local environmental and/or public health issues in their communities. The program assists recipients in building collaborative partnerships with other stakeholders to develop solutions that will significantly address environmental and/or public health issue(s) at the local level. Selected applicants or recipients must use the U.S. Environmental Protection Agency's Environmental Justice Collaborative Problem Solving Model as part of their projects.
Funds Available	In 2023, the EPA selected 98 EJCPS awardees to receive a total of $43.8 million in Inflation Reduction Act (IRA) funding for community-based nonprofit organizations to help underserved and overburdened communities across the country. Awardees will receive up to $500,000 in grant funding. Twenty-three projects will take place in rural areas, and 60 will address climate change, disaster resiliency, and/or emergency preparedness.
Eligibility	Eligible entities include incorporated nonprofit organizations, U.S. Territories, Tribal government, either federally or state-recognized, tribal organizations, and freely associated states.
Examples	Types of projects the EJCPS program has funded in the past and would be eligible to be funded under this competition with CAA 138 IRA funding include, but are not limited to, the following: • Air quality & Asthma • Water quality and sampling • Food access to reduce vehicle travel and fuel emissions • Stormwater issues and green infrastructure • Lead contamination • Pesticides and other toxic substances • Healthy homes • Illegal dumping • Emergency preparedness and disaster resiliency • Environmental job training • Youth Development Relating to Environmental Justice
Additional Information	https://www.epa.gov/environmentaljustice/environmental-justice-collaborative-problem-solving-cooperative-agreement-5

	Urban Waters Small Grants
Description	The mission of this program is to help residents and their organizations, particularly those in underserved communities, restore their urban waters in ways that also benefit community and economic revitalization. The program recognizes that healthy and accessible urban waters can help grow local businesses and enhance educational, recreational, social, and employment opportunities in nearby communities. Projects should meet the following four objectives: address local water quality issues related to urban runoff pollution, provide additional community benefits, actively engage underserved communities, and foster partnership.
Funds Available	Urban Waters Small Grants are completed and awarded every two years with individual award amounts of up to $60,000.
Eligibility	Eligible applicants include States, local governments, Indian Tribes, public and private universities and colleges, public or private nonprofit institutions/organizations, intertribal consortia, and interstate agencies.
Examples	An example of a past grant awarded was the Urban Waters and South Platte Watershed from the Headwaters to the Denver Metropolitan Area.
Additional Information	https://www.epa.gov/urbanwaterspartners/urban-waters-small-grants

	Water Infrastructure Finance and Innovation Act of 2014
Description	The Water Infrastructure Finance and Innovation Act program provides long-term, low-cost supplemental loans for regionally and nationally significant water and wastewater infrastructure projects. Borrowers benefit from a single fixed interest rate that is equal to the U.S. Treasury rate of similar maturity, an interest rate that is not impacted by the borrower's credit or loan structure, and custom long-term repayment schedules with options to defer payment for up to five years.
Funds Available	$20 million minimum project size for large communities, $5 million minimum for small communities of 25,000 or less. The Water Infrastructure Finance and Innovation Act can fund a maximum of 49% of eligible project costs.
Eligibility	Eligible borrowers are 1) local, state, tribal, and federal government entities; 2) Partnerships and joint ventures; 3) Corporations and trusts; 4) Clean Water and Drinking Water State Revolving Fund programs.
Examples	Wastewater conveyance and treatment projects. Drinking water treatment and distribution projects. Enhanced energy efficiency projects at drinking water and wastewater facilities.
Additional Information	Total federal assistance may not exceed 80% of a project's eligible costs. https://www.epa.gov/wifia/what-wifia

U.S. Fish and Wildlife Services

	North American Wetlands Conservation Standard and Small Grant
Description	A competitive matching grants program that supports public-private partnerships carrying out projects in the United States that further the goals of the North American Wetlands Conservation Act. These projects must involve long-term protection, restoration, and/or enhancement of wetlands and associated upland habitats for the benefit of all wetlands-associated migratory birds.
Funds Available	U.S. Small Grants may not exceed $100,000 and require a 1-to-1 ratio match for the awarded grant amount. The US Standard Grant is for grants larger than $100,000 and requires a 1-to-1 match ratio.
Eligibility	U.S. Small Grants proposals are due in October, or they will be considered an early submission for the next fiscal year. The US Standard Grant has two deadlines for proposals, one in February and one in July. Proposals submitted after July are considered ineligible unless clearly marked as an early submission for the next Fiscal Year.
Examples	Acquisition of land for the purposes of wetlands conservation, wetland restoration projects, wetland enhancement projects, wetland establishment, or other direct long-term wetland conservation work.
Additional Information	https://www.fws.gov/sites/default/files/documents/north-american-wetlands-conservation-act-us-eligibility-criteria_0.pdf

U.S. Forest Service

	Forestry Legacy Program
Description	Focuses on private forest land that is faced with threats of conversion to non-forest land by urbanization and residential development. Providing economic incentives to landowners to keep forests as forests encourages sustainable forest management and supports strong markets for forest products. Landowners participate in the Forest Legacy Program by selling property outright or retaining ownership and selling only a portion of the property's development rights; state agencies or another government unit hold both. The use of a conservation easement allows land to remain in private ownership while ensuring that its environmental values are retained. The program is funded by the Land and Water Conservation Fund, which invests a small percentage of federal offshore drilling fees towards the conservation of important land, water, and recreation areas for all Americans.
Funds Available	Previous year funds for Fiscal Year 2023 totaled $188,000,000 across 34 projects.
Eligibility	Private Lands
Examples	Funded projects from 2023 in Colorado include the Higher Ground Headwaters Project and Silver Mountain Habitat Connections Project.
Additional Information	https://www.fs.usda.gov/managing-land/private-land/forest-legacy/program

State of Colorado Funding Resources

In addition to federal grants, there are several state agencies and programs with potential applicability to supporting funding and implementation of mitigation projects. The Colorado Division of Homeland Security and Emergency Management administers many federal hazard mitigation grant programs at the state level. These agencies will also likely be important in earlier stages of the hazard mitigation planning process by providing current hazard and risk assessment data.

The Colorado Department of Local Affairs has put together a Local Community Funding Guide (https://lookerstudio.google.com/u/0/reporting/6bf90675-163a-4c84-9eb8-eef9779be136/page/T7j0C)[1] to help local jurisdictions easily navigate various state and federal funding types. This guide can be filtered by category, award type, agency, program, type of funding, and eligibility.

Like federal grant programs, many of these programs depend on yearly funding allocations, which results in fluctuations in their availability. While it is helpful to be familiar with the current information, engaging state agencies in a dialog as soon as possible is equally important.

Alternative Funding Resources

In recent years, states and communities have sought and developed innovative funding sources as alternatives to traditional government grant programs. These funding sources fall into three main categories: Local Funding Options, Public-Private Partnerships, and Private Foundations. These funding sources will be necessary for current and future hazard mitigation planning efforts for several reasons, including:

- Difficulty receiving pre-disaster mitigation grants and assistance programs at the federal and state levels.

- Opportunities to fund projects that might not qualify or align with traditional grant and assistance programs. Funding programs seek solutions that reduce the risk for a particular threshold (i.e., 100-year flood) and meet absolute cost-benefit criteria that the agencies themselves must adhere to. Therefore, these programs cannot support efforts that may help most of the time but don't meet these thresholds.

Local Funding Options

Local funding options are just what they sound like: using local funds for local mitigation projects. Local funds are also needed as non-federal shares or matching funds for federal grant programs, but they can also be used independently to fund various project types. Local funding options include the following:

Capital Improvement Programs

Ongoing civic improvements can include prioritized hazard mitigation projects, or mitigation can be included as one aspect of a larger project. For example, improving the hydraulic capacity of a culvert or bridge to prevent upstream flooding while undertaking periodic replacements for end-

1 Colorado Department of Local Affairs. 2024. “Local Community Funding Guide”. https://lookerstudio.google.com/u/0/reporting/6bf90675-163a-4c84-9eb8-eef9779be136/page/T7j0C.

of-service considerations is one example. Another example is replacing windows in a school with shatter-resistant glass as part of an overall renovation. Capital improvement programs are generally funded with local tax revenues and municipal bonds.

Permits, Fees, and Developer Contributions
Communities can establish fees, earmark a portion of existing permit and fee structures, and/or establish requirements for developer contributions for new developments in hazard-prone areas that can then be used to fund local mitigation projects. The proceeds can be accumulated in what is often referred to as a Mitigation Trust Fund, and its uses are typically tied to specific project types or relationships with projects already identified in specific plans or documents such as a hazard mitigation plan.

Force Account / In-Kind Services
Although there is a cost associated with the activities of public employees, a wide range of activities can be undertaken by local government staff and officials as well as interested parties on their behalf that would yield significant benefits. An example is public outreach and education for individual property owners, businesses, and institutions to reduce risk through inexpensive or essential activities. In-kind services include tapping into available education resources, promoting individual action, etc.

Property Owners
The property owner can be asked to contribute to a project benefiting their property. Property owners can become better aware of their risks and options through the hazard identification and risk assessment process. Owners who recognize they have a real flood problem may be willing to pay some of the cost. In recent years, property owners have voluntarily agreed to pay the non-federal share (up to 25 percent of the total project cost) for FEMA hazard mitigation plan grants in some states. Sometimes, the owners have paid even higher percentages of the price. In addition, after a flood, owners may have cash from insurance claims or disaster assistance that they will be using to repair their homes and properties. By including the right floodproofing and mitigation project components in the repairs, the property's resilience to future flooding may be improved. Having property owners contribute to the project can help stretch available local funds and give the property owner an enhanced stake in the project's outcome and incentive to ensure the property is adequately maintained.

Individual Participation
Although mitigation is ultimately intended to benefit individuals, hazard mitigation plans often neglect to integrate the participation of potential beneficiaries into the process. The involvement of individuals, including small business owners, is essential to ensure the resulting hazard mitigation plan reflects community needs and priorities. Still, it also allows the local or Ouray County Planning Team to identify measures and options individuals can take to reduce their own risk at a cost they can afford.

Public-Private Partnerships

Developing a public-private partnership is a phrase used frequently in a wide range of government programs, especially in hazard mitigation. Participation of private sector organizations in solving their hazard risk situations can be a low-cost and effective method. It also encompasses finding opportunities for public and private sector partners to share costs equitably for larger projects requiring substantial funds. Private sector businesses and organizations have their cost-benefit calculations to perform, but joint efforts may make the balance sheets work for both sides.

Private Foundations

Cultivating relationships with local, regional, or even national foundations with interests or missions consistent with hazard mitigation, community sustainability, climate change adaptation, and other related topics can yield successful results regarding funding and other means of support. The Colorado Watershed Assembly has created a private funding opportunity link for watershed-specific projects: https://www.coloradowater.org/funding-opportunities.[2]

There are many local foundations around the State of Colorado, many of which fund programs that can be utilized for components of hazard mitigation projects. Many of these foundations only support nonprofit organizations, so the applicability of these funds to projects depends upon the partners involved.

2 Colorado Watershed Assembly. 2025. “Funding Opportunities Links”. https://www.coloradowater.org/funding-opportunities.

Appendix F: Guide to Review and Update the Hazard Mitigation Plan

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Overview

Each participating jurisdiction in the hazard mitigation plan will monitor, evaluate, and update the plan during its five-year lifespan. During the planning process, participants identified the position(s) responsible for plan maintenance, the frequency of review, and how the public will be involved. This appendix will help guide the review and update process.

Profile Review Tracking

Date Reviewed	By Whom	Summary of Changes

Evaluate Your Local Planning Team

When reviewing the plan, the local planning team should reassess its composition and ask the following questions:

Have staffing changes warrant inviting different members to the local planning team?

Yes ☐ No ☐

Comments/Proposed Action:

Are there organizations or people that have been invaluable to the planning process or to project implementation that should be represented on the planning team?

Yes ☐ No ☐

Comments/Proposed Action:

Are there any representatives of essential departments/organizations who have not fully participated in the planning and implementing actions? Can someone from that department/organization commit to the planning team?

Yes ☐ No ☐

Comments/Proposed Action:

Are there ways to include the public better? Yes ☐ No ☐

Comments/Proposed Action:

Revisit Hazard Prioritization

During the planning process, your jurisdiction was asked to prioritize hazards of top concern. When reviewing your profile, the local planning team should look at the hazards identified along with the associated write-up to ensure the information is still accurate. The table below will help track any changes to your hazard prioritization.

Steps	Questions	Yes	No	Comments
Prioritized Hazards	Have your prioritized hazards changed?			If yes, which hazards should be added/removed?
Hazard Write-Ups	Have any new events taken place?			
Hazard Write-Ups	Are there new high-risk populations, buildings, or infrastructure?			
Hazard Write-Ups	Do any of the write-ups need to be changed?			

Evaluating Mitigation Projects

Updating and evaluating the mitigation projects identified in your profile is essential in the review process. For each mitigation action identified, the lead agency identified on each action can provide an update by filling out the information listed below.

Project Name:

Does the project description need to be updated? Yes ☐ No ☐

Does the estimated cost need to be updated? Yes ☐ No ☐

Does the timeline need to be updated? Yes ☐ No ☐

Does the priority level need to be updated? Yes ☐ No ☐

Does the lead agency need to be changed? Yes ☐ No ☐

Was the project implemented?

If yes: What were the results?

If no:

- Why not?

- Was there political support for the actions/projects? Yes ☐ No ☐
- Were enough funds available? Yes ☐ No ☐
- Was new information discovered about the risks or community that made implementation difficult or no longer sensible? Yes ☐ No ☐
- Were sufficient resources (for example, staff and technical assistance) available? Yes ☐ No ☐
- Is this project still needed? Yes ☐ No ☐

Identify New Mitigation Projects

When reviewing your jurisdictional profile, you may determine that new mitigation actions are needed based on changes to hazard prioritization, local capabilities, or risk.

Are there new mitigation projects that need to be added to the plan? Yes ☐ No ☐

If yes, fill out a table for each new mitigation action.

Mitigation Action Name			
Description			
Hazard(s) Addressed			
Estimated Cost			
Local Funding			
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency			
Status			

Mitigation Action Name			
Description			
Hazard(s) Addressed			
Estimated Cost			
Local Funding			
Timeline	1 Year	2-5 Years	5+ Years
Priority	High	Medium	Low
Lead Agency			
Status			

Plan Updates

Most profile updates do not need to be sent to the Colorado Division of Homeland Security and Emergency Management or FEMA. Changes to the local planning team, hazard prioritization, or updates to current mitigation actions can be tracked internally until the next full plan update.

However, if you add a new mitigation action, it must be sent to the Colorado Division of Homeland Security and Emergency Management to potentially be eligible for FEMA hazard mitigation grant funding. The template letter below can be used when notifying the Colorado Division of Homeland Security and Emergency Management of an added mitigation action. Before sending the letter, inform the project sponsor so that the plan document can also be updated.

[Date]

Colorado Division of Homeland Security and Emergency Management
Emergency Management Office
9195 E Mineral Ave Suite 200
Centennial, CO 80112

To Whom It May Concern:
The [your jurisdiction] requests the following mitigation action be added to the [hazard mitigation plan name]. This action will be added to *[location of your profile (section and profile title)]*, page [#], and is attached.

[Fill Out Table]

Mitigation Action Name	
Description	
Hazard(s) Addressed	
Estimated Cost	
Local Funding	
Timeline	
Priority	
Lead Agency	
Status	

For questions, I can be reached by email at [email address] or by phone at [phone number].

Sincerely,

[Name]
[Title]
[Jurisdiction]

CITY OF OURAY COLORADO

P.O. Box 468
320 6th Avenue
Ouray, CO 81427
(970) 325-7211

FIRST ADDENDUM TO EMPLOYMENT AGREEMENT

This First Addendum to Employment Agreement, dated December 16th, 2024, is made and entered into this 18th day of August 2025, by and between the **CITY OF OURAY**, a Colorado home rule municipality (City) and **MICHELLE METTEER**, (Employee or City Administrator)

WHEREAS, the City and Employee entered an employment agreement on December 16, 2024, and now desires to enter this First Addendum.

WHEREAS, after a review of City Administrator's performance and consideration of her achievements over the past six (6) months, and upon setting future goals for the year of 2025/2026. Council desires to continue to employ City Administrator and City Administrator desires to continue employment with the City under the terms and conditions set forth herein and the remaining terms of the Employment Contract.

NOW THEREFORE, in consideration of the following mutual covenants and conditions the parties agree as follows:

1. Paragraph 4 (Compensation) of the Employment Contract, the first sentence is repealed and replaced as follows:

   The City Administrator shall receive an increase to her base salary of $165,000 of 6% effective on February 1, 2026.

2. Paragraph 8 (Performance Evaluation) is repealed and replaced as follows:

   City Administrator's performance shall be reviewed and evaluated on an annual basis on or before November 15, 2026, and annually on that date thereafter. Following such review, the City may, at the sole discretion of the City Council, increase said salary and/or other benefits of the city administrator in such amounts and to such extent as the City Council may determine that it is desirable to do so on the basis of a review of performance of the City Administrator

3. All other terms of the Employment Agreement dated December 16, 2024, are hereby restated herein and of full force and effect.

IN WITNESS WHEREOF, the parties have caused this Employment Agreement to be signed and executed on the day and the first year above written.

DRAFT

CITY OF OURAY,

By:_____
Ethan Funk

Attest:

By: _____
Melissa M. Drake, City Clerk

CITY ADMINISTRATOR

By: _____
Michelle Metteer

DRAFT

Ouray City Administrator 2025 Performance Review

Summary

This performance review was conducted by a group effort of the Ouray City Council on August 11, 2025. The evaluation period is February of 2025 through August of 2025. This final performance review consists of the following:

This performance review is based upon:

1. Thirty (30) questions within the following topics: strategic leadership, community engagement, organizational management, fiscal management, communication, and interpersonal relationships.
2. Seven (7) over-all and topic summery ratings.
3. review future development standards based upon three (3) categories: identifying achievements beyond Council's expectations, identify areas of improvement going forward, and areas where additional training would be beneficial.
4. Establish 2025/2026 goals and expectations.

The following Ouray City Council members participated in the review:

1. Ethan Funk
2. Micheal Underwood
3. Peggy Lindsey
4. Josh Smith
5. Tamara Gulde

- Denotes additional comment from City Council

Strategic Leadership Section

1. Willing to take risks when needed and manage failure appropriately.

Select only one.

- ■ Does Well
- ☐ On Track
- ☐ Needs Improvement
- ☐ Don't Know

2. Facilitates implementation of City Council strategic priorities and policy decisions in a timely and responsive manner.

Select only one.

- ☐ Does Well
- ■ On Track
- ☐ Needs Improvement
- ☐ Don't Know

3. Ability to work through issues with a data-informed, long-term view, while also responding to more immediate issues when needed.

Select only one.

- ■ Does Well *needs more time
- ☐ On Track
- ☐ Needs Improvement
- ☐ Don't Know

4. Anticipates and positions the organization to address and respond to future events and circumstances.

Select only one.

- ☐ Does Well
- ■ On Track *needs more time
- ☐ Needs Improvement
- ☐ Don't Know

5. Creates opportunities for the City through articles, speaking opportunities, leveraging grant funding, hosting workshops/meetings, applying and receiving awards/recognition, etc.

Select only one.

- ☐ Does Well
- ☐ On Track
- ☐ Needs Improvement
- ■ Don't Know *needs more time

A. Overall rating of performance in Strategic Leadership.

Select only one.

- ☐ 4 - Exceeds Expectations
- ■ 3
- ☐ 2
- ☐ 1 - Needs Improvement

Community Engagement Section

6. Respects and promotes active resident participation in local government.
   Select only one.
   - ■ Does Well
   - ☐ On Track
   - ☐ Needs Improvement (explain):
   - ☐ Don't Know

7. Demonstrates an appreciation for the unique culture of the community.
   Select only one.
   - ■ Does Well
   - ☐ On Track
   - ☐ Needs Improvement (explain):
   - ☐ Don't Know

8. Provides timely responses to questions from the public.
   Select only one.
   - ☐ Does Well
   - ■ On Track *needs more time
   - ☐ Needs Improvement (explain):
   - ☐ Don't Know

9. Is visible in the community through attendance of events and supporting City Council at regional meetings.
   Select only one.
   - ☐ Does Well
   - ■ On Track
   - ☐ Needs Improvement (explain):
   - ☐ Don't Know

B. Overall rating of performance in Community Engagement.
   - ☐ 4 - Exceeds Expectations
   - ■ 3
   - ☐ 2
   - ☐ 1 - Needs Improvement

Organizational Management Section

10. manages the organization and delegates responsibilities appropriately.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

11. Fosters the right talent to serve the community now and in the future.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

12. Mentors staff and supports employees' professional development.
    Select only one.
    - ☐ Does Well
    - ■ On Track *needs more time
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

13. Expects high performance and continuous improvement and holds staff accountable.
    Select only one.
    - ☐ Does Well
    - ■ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

14. Models ethical behavior and holds others accountable for ethical behavior.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

15. Handles employee failures professionally and with an awareness of personality types when addressing the problem.
    Select only one.
    - ☐ Does Well
    - ■ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

16. Copes well with high pressure and emergency situations.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

C. Overall rating of performance in Organizational Management.
- ☐ 4 - Exceeds Expectations
- ■ 3
- ☐ 2
- ☐ 1 - Needs Improvement

Fiscal Management Section

17. Demonstrates strong financial stewardship, ensuring progress of the Council's strategic priorities and outcomes. This includes providing effective financial recommendations to Council.

Select only one.

- ☐ Does Well
- ■ On Track **no budget process yet though
- ☐ Needs Improvement (explain):
- ☐ Don't Know

18. Manages the allocation of financial resources and opportunities to leverage City funds through local, state, and federal grant funds.

Select only one.

- ☐ Does Well
- ■ On Track *pay attention to funding opportunities
- ☐ Needs Improvement (explain):
- ☐ Don't Know

19. Ensures actions and decisions reflect the appropriate level of responsibility for financial planning and accountability.

Select only one.

- ☐ Does Well
- ☐ On Track
- ☐ Needs Improvement (explain):
- ■ Don't Know *need more time

20. Advises the City Council on the overall financial health of the City to include both short-term and long-term impacts of financial decisions.

Select only one.

- ☐ Does Well
- ■ On Track *Department changes need to stabalize
- ☐ Needs Improvement (explain):
- ☐ Don't Know

D. Overall rating of performance in Fiscal Management.

- ☐ 4 - Exceeds Expectations
- ■ 3
- ☐ 2
- ☐ 1 - Needs Improvement

Communication Section

21. Maintains professional, impartial and effective working relationship with the Mayor and City Council.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

22. Keeps all Council members informed in a timely and proactive manner per council protocol.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

23. Conveys information effectively and matches presentation styles to different audiences.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

24. Professional written communication is clear, understandable, and timely.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

25. Remains open-minded and willing to entertain others' ideas in an effort to work toward consensus building.
    Select only one.
    - ■ Does Well
    - ☐ On Track
    - ☐ Needs Improvement (explain):
    - ☐ Don't Know

E. Overall rating of performance in Communication.
- ■ 4 - Exceeds Expectations
- ☐ 3
- ☐ 2
- ☐ 1 - Needs Improvement

Interpersonal Relationships Section

26. Maintains presence, style, and demeanor suitable for position.

Select only one.

- ■ Does Well
- ☐ On Track
- ☐ Needs Improvement (explain):
- ☐ Don't Know

27. Active listener and seeks to gather information and facts before forming an opinion or taking action on an issue.

Select only one.

- ■ Does Well
- ☐ On Track
- ☐ Needs Improvement (explain):
- ☐ Don't Know

28. Strives to meet individuals where they are, demonstrating appropriate levels of empathy and concern.

Select only one.

- ■ Does Well
- ☐ On Track
- ☐ Needs Improvement (explain):
- ☐ Don't Know

29. Demonstrates the ability to work in harmony with others, minimizing conflict, fostering a “common good will” within the organization in external relationships, with the public, and with other government representatives and interest groups.

Select only one.

- ■ Does Well
- ☐ On Track
- ☐ Needs Improvement (explain):
- ☐ Don't Know

30. Takes responsibility for his/her actions and the actions of employees where appropriate.

Select only one.

- ■ Does Well
- ☐ On Track
- ☐ Needs Improvement (explain):
- ☐ Don't Know

F. Overall rating of performance in Interpersonal Relationships.

- ■ 4 - Exceeds Expectations
- ☐ 3
- ☐ 2
- ☐ 1 - Needs Improvement

Over-all Summery Section

G. Do you believe the City is in a better position today as a result of the city administrator's leadership?

Select only one.

■ Yes, here are some of the highlights of how the city administrator has improved our position:

1. Handling police department hiring
2. Providing stable leadership
3. Excellent communication skills on matters such as the WWTP, OX2/OX6, Crystal Reservoir, Building purchase,
4. Managing the press
5. Implemented re-organization of City Staff

☐ No, here is why:

II. DEVELOPMENT

I. Develop 2025/2026 targets/goals that the Council expects the City Administrator to achieve.

1. Address employee burnout
2. Continue to develop fire mitigation plan and funding
3. Develop strong police, finance and community development departments
4. Develop a police station development plan and identify funding sources
5. Continue to develop affordable housing efforts and funding opportunities

II. List additional management targets that the Council feels were achieved by the Administrator, which were beyond the City Council's expectations.

See Section G above.

III. What areas of the City Administrator's management style do the Council feel that City Staff would recommend need improvement?

City Council has heard positive feedback from staff as to City Administrator's management style

IV. In what areas do the Council feel the City Administrator needs additional training?

1. Time management
2. Encourage vacation time
3. Locate one or more mentors

320 6th Avenue
PO Box 468
Ouray, Colorado 81427

970.325.7211
Fax 970.325.7212
www.cityofouray.com

EMPLOYMENT AGREEMENT

This Employment Agreement is made and entered into this 16th day of December 2024 by and between the **CITY OF OURAY**, a Colorado home rule municipality (City) and **MICHELLE METTEER**, (Employee or City Administrator)

WHEREAS, pursuant to the City of Ouray Home Rule Charter, §5.1, City Council desires to appoint and employ the services of Employee for the office of City Administrator of the City of Ouray, Colorado;

WHEREAS, the City and Employee desire to provide for certain benefits, establish certain conditions of employment and set working conditions in this Agreement;

WHEREAS, Employee desires to accept the appointment to the office of City Administrator and be employed under the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the following mutual covenants and conditions the parties agree as follows:

1. Duties. The City herein hires Employee to the office of City Administrator and Employee agrees to perform the functions and duties of the office as specified in City of Ouray Home Rule Charter, § 5.1 and the 2017 job description, both of which are attached hereto as Exhibit A. The City Administrator agrees to perform any other legally permissible and proper duties and functions as the City Council of the City shall from time-to-time assign the City Administrator. Employee shall abide by and uphold the laws set forth in the City Charter, the City of Ouray Municipal Code, Colorado state law, federal law, and any other applicable laws, ordinances, or regulations of the City or State of Colorado, that may be applicable.

2. Term. The City Administrator is an EMPLOYEE AT WILL. Nothing in this Employment Agreement shall prevent, limit, or otherwise interfere with the right of the City Council to terminate the services of the City Administrator at any time or with the right of the City Administrator to resign at any time from the position upon thirty (30) days prior written notice, subject only to the provisions as set forth in Paragraph 5 (Termination and Severance Pay)below.

3. Start Date. Employment as City Administrator shall begin no later than March 1, 2025, and Employee shall move to any location within Ouray County for a period of one year and thereafter reside within the City limits no later than March 1, 2026.

4. Compensation. The City Administrator shall receive an annual base salary of One Hundred Sixty-Five Thousand ($165,000.00), payable at the same time as other employees of the City. The City Administrator shall receive any COLA increases, the same as other City employees. The process for any increase in annual salary is set forth in Paragraph 8 (Performance Evaluation) below.

5. Termination and Severance Pay. The City Administrator may be terminated by the City Council at any time, with or without cause. It is understood that in the event the City Administrator is terminated for cause, or because of a conviction of any illegal act involving personal gain to the City Administrator, or because of a conviction of any felonious act or due to any act of moral turpitude or dishonesty, the City shall have no obligation to pay any severance pay.

6. Severance Pay. In the event of the termination of the City Administrator by the City Council for any reason other than those set forth in paragraph 5, including but not limited to non-appropriation of funds pursuant to Paragraph 23, the City Administrator shall be entitled to receive three (3) months' severance pay, which shall not include any benefits. This severance pay shall be for the three (3) months immediately following the City Administrator's last working day and shall be paid in one lump sum.

7. Voluntary Resignation. In the event the City Administrator resigns, the City Administrator shall not be entitled to any severance pay or to any other benefit provided under this Employment Agreement.

8. Performance Evaluation. The City Council shall, six (6) months from Start Date, or as soon thereafter as convenient, review and evaluate the performance of the City Administrator. Thereafter, the City Administrator's performance shall be reviewed and evaluated on an annual basis on the anniversary date of the first evaluation, or as soon thereafter as convenient. Following such review, the City may, at the sole discretion of the City Council, increase said salary and/or other benefits of the City Administrator in such amounts and to such extent as the City Council may determine that it is desirable to do so on the basis of a review of performance of the City Administrator.

9. Criteria for First Review. The first review and evaluation shall be based upon the criteria set forth in Exhibit A. Thereafter reviews and evaluations shall be in accordance with any criteria jointly developed by the parties.

10. Cell Phone. The City shall provide the City Administrator with a cell phone for use in the performance of duties.

11. Vacation and Sick Time. The City Administrator shall receive and accrue sick leave time and vacation leave time during the term of employment at the same rate as

applicable to other City employees. The City Administrator will begin employment with 40 hours of vacation leave time and will accrue vacation leave time beginning at the rate of a one (1) year employee as identified in the City's Personnel Handbook. Upon termination of employment with the City, the City Administrator shall be paid for accrued paid time off in the same manner as provided for other City Employees by the City Personnel Policies and related policies.

12. Holidays. The City Administrator shall receive paid holidays during the term of employment the same as applicable to other regular City employees.

13. Insurance. The City Administrator shall be entitled to receive the same health, dental, disability, life, and other insurance coverage as set forth under the terms of the group insurance coverages provided by the City to all employees. The City Administrator must meet the terms and conditions required by the individual carriers to receive said coverage.

14. Retirement. The City pays an amount equal to three percent (3%) of the City Administrator's base salary into the Colorado County Officials and Employees Retirement Association (CCOERA), matching the three percent (3%) contribution made by the City Administrator (such three percent contribution of the City Administrator being mandatory). No contribution shall be made by the City if no contribution is made by the City Administrator.

15. Other Terms and Conditions of Employment. The City Council shall fix such other terms and conditions of employment, as it may determine from time to time, relating to the performance of the City Administrator, provided such terms and conditions are not inconsistent with the provisions of this Employment Agreement, the Colorado State Statutes, the Charter of the City or the Municipal Code of the City.

16. Personnel Regulations. Except as otherwise provided herein, the City Administrator is subject to the provisions contained in the City's Personnel Regulations and entitled to all other benefits according to a full-time employee, as that term is defined in the Personnel Regulations.

17. Exempt Employee. The City Administrator shall receive no compensatory time for performing the duties hereunder as her position is a key one and exempt. It is recognized that the Employee is expected to devote substantial time outside normal office hours and more than forty (40) hours per week to City business.

18. Dues and Subscriptions. The City agrees to budget and pay for reasonable professional dues and subscriptions of the City Administrator necessary for his participation in national, regional, state, and local associations and organizations necessary and desirable for continued professional participation, growth, and advancement, and which are for the good of the City. The City also agrees to budget and pay for necessary travel expenses for the City Administrator to adequately pursue official and other functions for the City. By way of example, such functions include, but are not limited to, meetings and conferences of the Colorado Municipal League.

19. Rental Assistance. At the request of the City Administrator, the City shall provide the City Administrator with rental assistance during the initial twelve (12) months of employment of $1,000.00 per month, reimbursable and payable to the City Administrator upon satisfactory proof of expenditure.

20. Housing Loan.

A. Loan. At the request of the City Administrator, the City shall provide to the City Administrator a housing loan. The housing loan shall be in the amount of up to Two Hundred and Fifty Thousand Dollars ($250,000.00) to be used as a down payment on a purchase of real property within the limits of the City. City Administrator shall not be entitled to rental assistance if a loan is approved. Once a loan is approved the City agrees that City Administrator may refinance a first mortgage to obtain a better interest rate and the City will subordinate to the new loan. If the City Administrator should desire to sell one real property and purchase another within City limits, the money owed to the City pursuant to the promissory note at the time of the sale (less any loan money that has been forgiven pursuant to sub-part C (Repayment of Loan) below) shall be placed in escrow with the title company upon the sale of the first home. Such amount of principal and interest held in escrow shall be due and payable in full to the City by the City Administrator if not used to purchase another real property within six months.

B. City's Lien. Should the City Administrator accept a housing loan from the City, the City shall have, and is hereby granted, a lien against the residence purchased by the City Administrator (Residence) to secure payment of any amounts due to the City pursuant to this Employment Agreement (City's Lien). The City's Lien shall be superior to all other liens and encumbrances except the following: (i) real property ad valorem taxes and special assessment liens duly imposed by any Colorado governmental or political subdivision or special taxing district; (ii) liens given superior priority by operation of law; and (ii) the lien of any First Mortgage against the Residence. For purposes of this Employment Agreement, "First Mortgage" means a deed of trust or mortgage which is recorded senior to any other deeds of trust or liens against the Residence to secure a loan used to purchase the Residence made by a mortgagee. The City shall have the right to file and record in the land records of Ouray County such notices and other information necessary to constitute record notice and perfection of the City's Lien. Upon perfection of the City's Lien, the City shall have all the rights that a mortgage holder may have against the Residence, including, without limitation, the right to judicially foreclose upon the Residence. The City shall be entitled to file such notices and other information necessary to preserve its rights, as a lienor, to cure and redeem in foreclosure of the Residence, as provided by C.R.S. § 38-38-101, et seq., and any other applicable law.

C. Repayment of Loan. The housing loan shall be repaid by the City Administrator to the City as follows:

i. Twenty percent (20%) of the principal amount of the loan shall be forgiven following the initial five (5) full years of employment with the City as the City

Administrator.

ii. An additional Twenty percent (20%) of the principal amount of the loan shall be forgiven each full year of employment following the initial five (5) full years of employment, so that the entire housing loan shall be forgiven, in accordance with this schedule, following ten (10) full years of employment with the City as the City Administrator.

iii. In the event the City Administrator's employment with the City is terminated, for any reason, prior to achieving ten (10) full years of employment with the City, then the amount of the housing loan not forgiven pursuant to the terms of sub-parts i and ii, above, shall become due and payable by the City Administrator to the City, with interest at prime rate on the date of the purchase of the real property, per annum, on the total amount due (the amount of the housing loan not forgiven) from the date the housing loan was paid by the City until payment in full is made by the City Administrator to the City. Such amount of principal and interest shall be due and payable in full by the City Administrator within six (6) months of such termination of employment.

iv. The City Administrator shall execute all documents necessary to document the housing loan as set forth herein, including, but not limited to, a promissory note and deed of trust. Said loan and deed of trust may be subordinated by the City to a single first mortgage, at the request of the City Administrator.

21. Moving Expenses. The City Administrator shall be reimbursed, or the City may pay directly, up to the sum of Four Thousand Dollars ($4,000.00) for expenses incurred by the City Administrator in moving a domicile in conjunction with employment with the City. Said expenses shall include the costs of packing, moving, unpacking, storage, and insurance costs, and will be reimbursed upon satisfactory proof of expenditure so long as Employee commences work on or before March 1, 2025.

22. Constitutionality. The parties hereto do not intend this Employment Agreement to be a multiple fiscal year financial obligation within the meaning of Article X, Paragraph 20 of the Colorado Constitution, and this Employment Agreement shall be interpreted so as to avoid any such meaning.

23. Compliance with Article X, Paragraph 20 of the Colorado Constitution. It is the intent of the City and the City Administrator to comply with the provisions of Article X, Paragraph 20 of the Constitution of the State of Colorado, including subparagraph 4(b). Therefore, the parties agree that this Employment Agreement is subject to an annual appropriation by the City Council and that the failure to make such appropriation, unless such action is the result of a termination for cause pursuant to Paragraph 5 (Termination and Severance Pay) hereof, will be deemed a termination without cause. The parties further agree and acknowledge that the City has established an adequate present cash reserve pledged irrevocable and held for future payments, if required, in an amount sufficient to pay any severance compensation required under Paragraph 6 (Severance Pay) of this Employment Agreement. To the extent additional amounts are required to fund any

potential increase in such severance compensation in any future year, the failure to appropriate such additional reserve shall also be deemed a termination without cause.

24. Limitations on Professional Activities. The City Administrator shall not engage in any non-City Administrator employment activities for compensation without the express written consent of the City Council. It is the intent of the parties that this Employment Agreement is for full-time employment. Participation in professional organizations and voluntary programs are encouraged provided they are consistent with the responsibilities of the City Administrator.

25. Indemnification. The City Administrator shall be defended and indemnified in any action undertaken in his official capacity pursuant to all insurance coverage maintained by the City and pursuant to the terms of the Colorado Governmental Immunity Act. The City Administrator shall, however, not be indemnified for any act or omission that is willful and wanton as those terms are defined in the Colorado Governmental Immunity Act.

26. Entire Agreement. This Employment Agreement contains the entire agreement of the parties, and may be amended, waived, changed, modified, extended or rescinded only by a writing signed by the party against whom any such amendment, waiver, change, modification, extension or rescission is sought. In addition, this Employment Agreement shall be binding upon and inure to the benefit of the heirs, representatives, and assigns of the City Administrator.

27. Agreement Severable. If any provision or portion of this Employment Agreement is held to be unconstitutional, invalid, or unenforceable, the remainder of this Employment Agreement shall be deemed severable and shall remain in full force and effect.

28. Governing Law. This Employment Agreement shall be governed by and construed in accordance with the laws of the State of Colorado. For the resolution of any dispute arising hereunder, venue shall be in the Courts of the County of Ouray, State of Colorado.

IN WITNESS WHEREOF, the parties have caused this Employment Agreement to be signed and executed on the day and the first year above written.

CITY OF OURAY

By: _____
Ethan Funk, Mayor

CITY ADMINISTRATOR

By: _____
Michelle Metteer

Attest:

By: _____
Melissa M. Drake, City Clerk

NDM Nathan Dumm Mayer Attorneys at Law

SHAREHOLDERS
J. ANDREW NATHAN
MICHAEL R. LANCTO
BERNARD WOESSNER
MARNI NATHAN KLOSTER
TIMOTHY R. FIENE
NICHOLAS C. POPPE
EMILY M. MILLER

ASSOCIATES
DANIEL A. JACOBS
TIMOTHY M. WALSH
ASHTON BERNE
JEFFREY E. MILLER
CAITLIN L. GEMMILL

August 13, 2025

Carol A. Viner, Esq.
Viner Law
cviner@cvinerlaw.com

Re: City of Ouray – Dispute re Waste Water Treatment Plant

Dear Ms. Viner:

This letter will confirm the retention of Nathan Dumm & Mayer, P.C. ("NDM") on behalf of your firm, Viner Law ("Firm"), and its client, the City of Ouray ("Client"). The basis of our retention will be to evaluate potential construction defect claims arising from with issues with the operation of the Ouray Waste Water Treatment Plant, and, if requested by the Firm, to represent the Client in the CDARA notice of claim process and/or formal dispute resolution. This correspondence is intended to formalize that relationship and shall form our Retention Agreement.

NDM's charges will be based on hourly time rates and disbursements. It is anticipated that Partners and Shareholders Michael R. Lancto and Emily M. Miller will be the primary attorneys. NDM reserves the right to assign more than one lawyer to any matter, and to use paralegals and law clerks when appropriate to lower legal costs. Billing rates are as follows:

Partners/Shareholder - $300.00

Associates - $260.00

Paralegals - $170.00

Law Clerks - $170.00

NDM customarily charges for non-court costs and expenses, including those associated with large photocopying jobs, postage and computer aided legal research, as well as travel and other out-of-pocket expenses. We will use our discretion in determining what costs are reasonably necessary to provide legal services on behalf of the Client. These types of costs may also include duplication of documents, filing fees, service of process, depositions and the like. Unusual expenses will only be incurred after prior approval by the Client.

Bills for legal services will be submitted monthly or, depending on the nature and magnitude of the services, we may bill more frequently. Each bill will also include the total amount billed to date. Please let us know if you have a preference regarding billing frequency.

If the Client does not comply with the terms of this agreement, it is agreed that NDM shall have the right to withdraw. In that unlikely case, the Client will not object to our withdrawal as counsel and will execute such documents as may be necessary to facilitate NDM's withdrawal.

At the conclusion of our engagement, NDM will retain any hard copy files for 60 days, at which time the Firm may retrieve the file, or the file may be disposed of at the discretion of NDM. NDM reserves the right to maintain its file in electronic format.

If the Firm is in agreement with the terms set forth above, please execute one original of this agreement and return it to us via email or regular mail.

We look forward to working with the Firm on this matter.

Sincerely,

/s/ Emily M. Miller

Michael R. Lancto
Emily M. Miller

AGREED:

_____
Ethan Funk, Mayor

ATTEST:

_____
Melissa M. Drake, City Clerk

CITY OF OURAY COLORADO

P.O. Box 468
320 6th Avenue
Ouray, CO 81427
(970) 325-7211

August 13, 2025

Jose Trujillo
Colorado Department of
Local Affairs/Division of Housing
Denver, CO

RE: Prop 123 NOFA for Scattered-Site Homeownership

Dear Mr. Trujillo:

I am writing to recommend Rural Homes for the Prop 123 Scattered-Site Homeownership NOFA program. As the mayor or Ouray, Colorado, I have worked closely with Rural Homes on the successful Waterview Homes project in our community.

The Waterview project showcased Rural Homes' commitment to 1) partnering with the City, 2) constructing high-quality homes, 3) speed in development, and 4) innovation. The Waterview home development delivered high-quality, affordable townhomes project meeting our community's needs for workforce housing. Rural Homes was and remains locally engaged, ensuring the project aligned with Ouray's vision and values.

Rural Homes, under Paul Major's leadership, demonstrated integrity, reliability, and professionalism. Paul's commitment to ethical practices and community welfare was evident throughout the Waterview project. His transparent approach earned our community's trust, and his dedication to delivering on promises solidified his reputation. Rural Homes would be a great partner with DOLA/DOH to provide workforce housing. Their holistic, non-profit approach to development prioritizes the community's needs and sustainability. The team's expertise will ensure a successful project that aligns with each community's vision for growth.

Rural Homes' past success with the Waterview neighborhood and their commitment to community and quality make them a great partner for each community development needs.

Please feel welcome to reach out to me if you have any questions or need further information.

Sincerely,

Ethan Funk
Mayor
Ouray, Colorado

Future Agenda Items/Work Sessions

- Dark Sky Ordinance – September
- Fees and Fine Schedule/Enforcement – Budget Season
- Bed & Breakfast Discussion – wait for Community Development Director
- Ouray Recreational Buildings & Facilities 501(c)(3) Work Session
- Landlord Water and Sewer Credit Program – Oct 6, 2025
- Long term Ice Park planning; City Fund Management & Operational Costs - TbD
- Ordinance for no bikes on Riverwalk Trail – TbD
- Work Session; Via Ferrata – Feb 2026