

**DISPROPORTIONATELY IMPACTED COMMUNITIES MAP
ECMC RULE 304.b.(7).J.**

Two maps were prepared for ECMC Rule 304.b.(7).J. The 2024 CCR 0994-23-2 OGD is located within a Disproportionately Impacted Community and two Residential Building Units (RBU) exists within 2,000 feet of the CCR 0994-23-02 (CCR Pad) WPS. Three (3) additional RBUs exist between 2,001 feet and 2,300 feet.

The CCR 0994-23-02 well pad is located in Census Block Group 080770018001. The Census Block Group includes all of the eastern part of Mesa County, which is mostly rural and remote, consisting of large agriculture parcels and public lands. Environmental Justice Report for the area classifies the community report as a Socioeconomically Vulnerable Community.

Table 1. Environmental Justice Overview for Subject Block Group

Census Block Group	County	Community Type	Category	%
80770018001	Mesa County	Socioeconomically Vulnerable Community	Low-income Population	42.4
			People of Color Population	19%
			Limited English Proficiency Population	0%
			Housing Cost Burdened Population	22.4%
			CO EnviroScreen Percentile Score	19.31

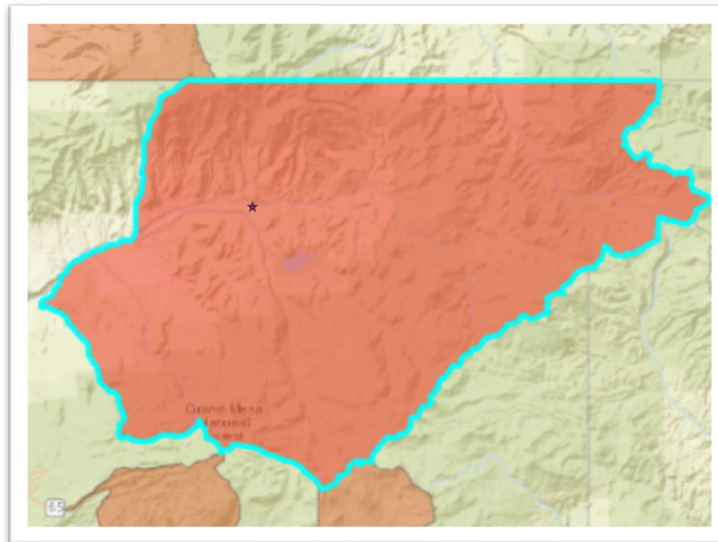
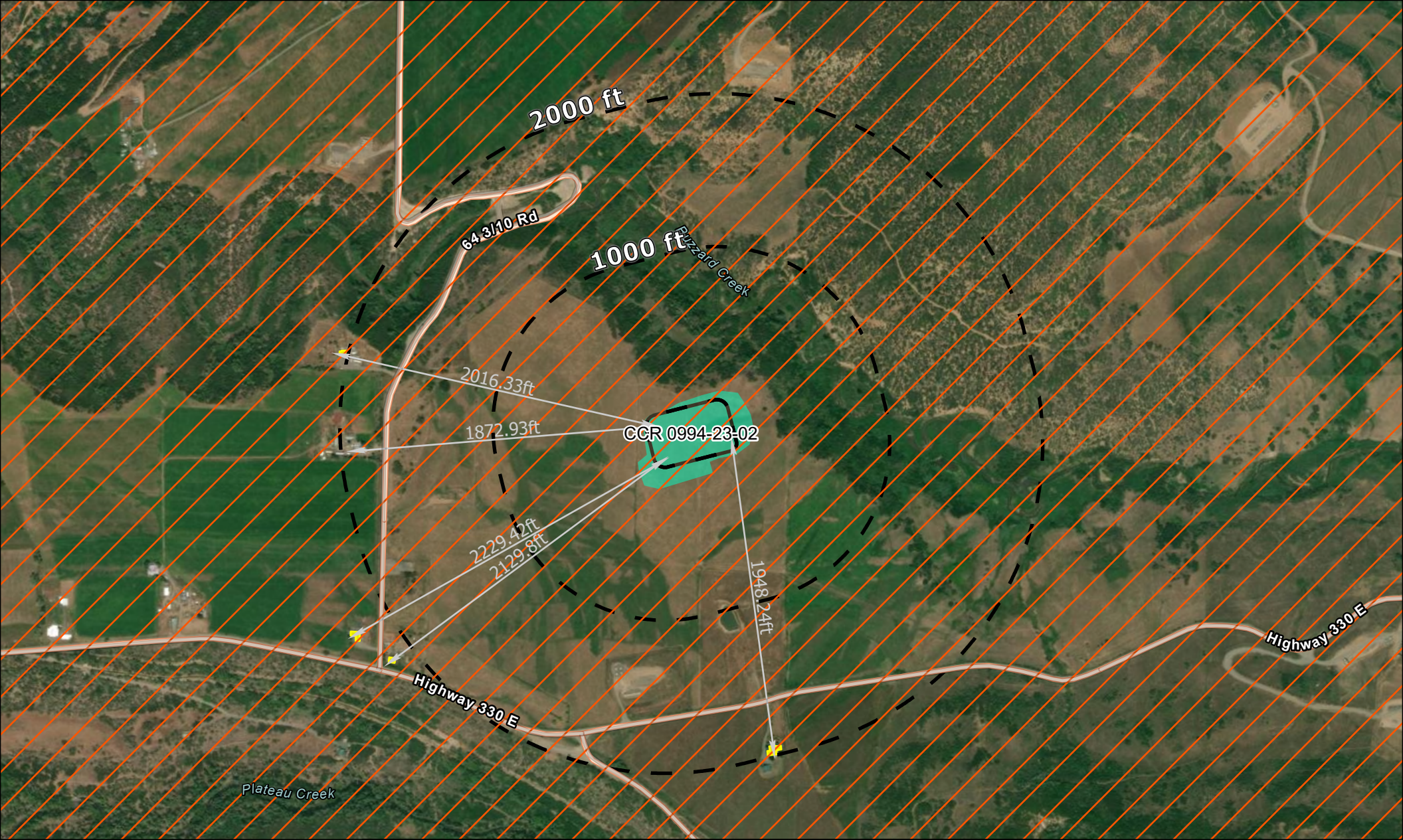
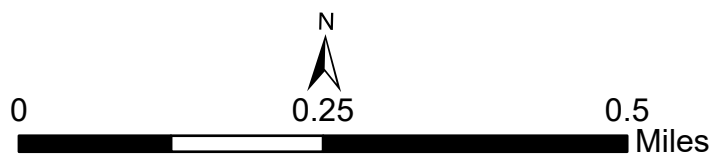


Figure 1. Obtained from Environmental Justice Report of Census Block 080770018001



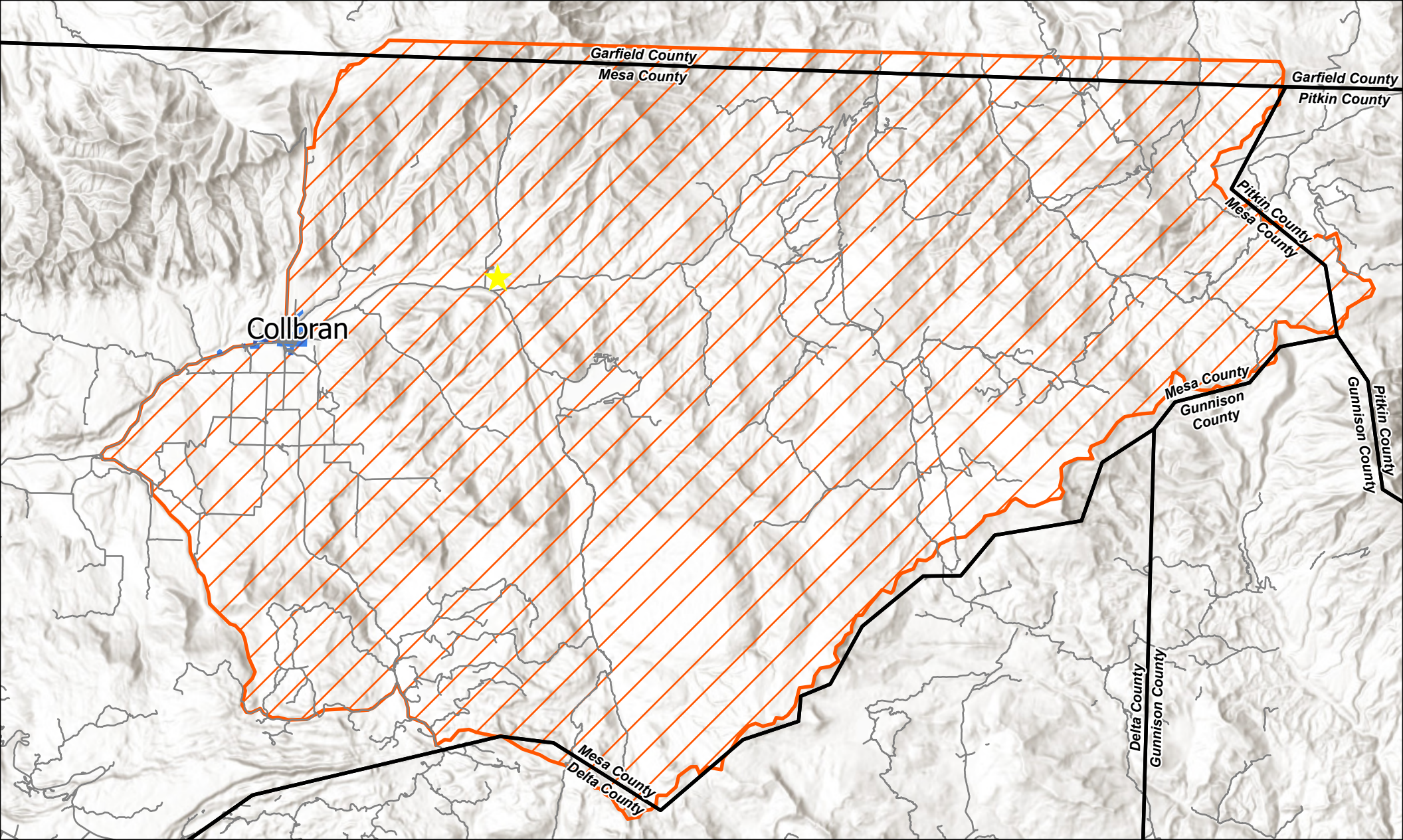
- ← Distance RBU to Pad
- Residential Building Units
- ▭ Disproportionately Impacted Communities
- ┌ ┐ CCR 0994 23-02 Buffers
- Pads**
- ▭ CCR 0994-23-02
- CCR 0994-23-02 Disturbance

Cultural Features	Distance from the Working Pad Surface	Building Unit Counts (within 2,000ft of the working pad surface)
Residential Building Unit	1948' SE ; 1872' SW	2
High Occupancy Building	5,280' SW	0
School Facilities	5,280' SW	0



ECMC
Disproportionately Impacted Communities

ECMC Rule 304.b.(7).J.
 CCR 0994-23-02 Pad
 NWNE, SECTION 23,
 T9S, R94W, 6th P.M.
 MESA COUNTY, CO



★ Site Location

Socioeconomically Vulnerable Community

Low-Income population above 40% | Census Block Group 080770018001



ECMC Disproportionately Impacted Communities

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 CCR 0994-23-02 Pad
 NWNE, SECTION 23,
 T9S, R94W, 6th P.M.
 MESA COUNTY, CO



Applicant Information

Company Name: Laramie Energy LLC

Facility Name: CCR 0994-23-02 Well Pad

Plant AIRS ID Number:

Permit Type:

Permit Number:

Facility location used for generating the report: 39.26798 , -107.8474

Environmental Justice Summary

Mesa County

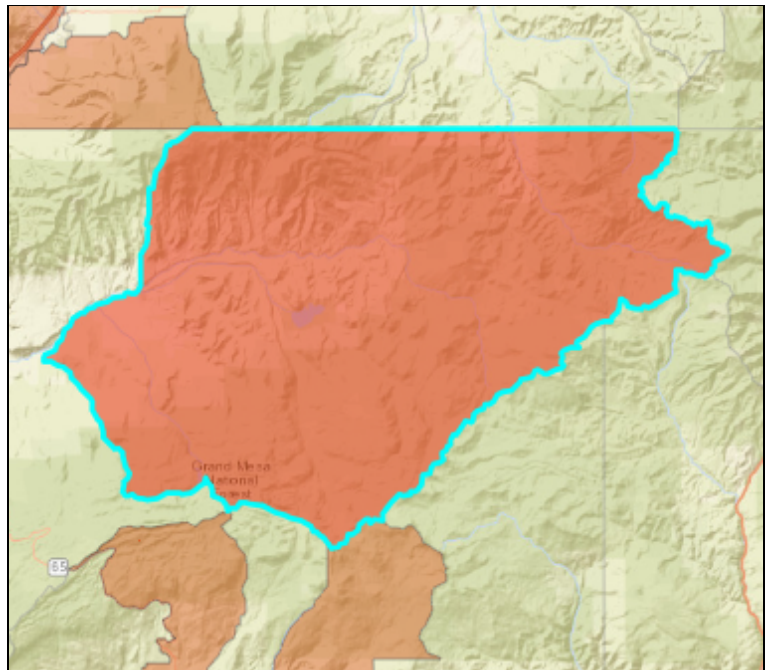
Census Block Group 080770018001

Air Quality Reg. 3 Disproportionately Impacted (DI) Community

Yes

Air Quality Reg. 3 Community Type

Socioeconomically Vulnerable Community



Low-income Population	42.4%
People of Color Population	19%
Limited English Proficiency Population	0%
Housing Cost Burdened Population	22.4%
CO EnviroScreen Percentile Score	19.31

Environmental Justice Overview

Environmental Exposures Percentile Score **3.79**

The environmental exposures score represents a community's exposure to certain environmental risks relative to the rest of the state. The score ranges from 0 to 100, with higher scores indicating higher burden. The environmental exposures score does not cover all pollutants; it is the average of data on diesel particulate matter, traffic proximity, ozone, PM 2.5, air toxics, other air pollutants, lead exposure risk, drinking water violations, and noise.

Environmental Effects Percentile Score **11.69**

The environmental effects score represents how many hazardous or toxic sites are in a community relative to the rest of the state. The score ranges from 0 to 100, with a higher score indicating higher burden. The score is the average of data on proximity to mining, oil and gas operations, impaired surface waters, wastewater discharge facilities, Superfund sites, facilities that use hazardous chemicals, and facilities that generate, treat, store, or dispose of hazardous wastes.

Climate Vulnerability Percentile Score **70.75**

The climate burden score represents a community’s risk of drought, flood, extreme heat, and wildfire compared to the rest of the state. The score ranges from 0 to 100, the higher the score, the higher the burden.

Sensitive Populations Percentile Score **29.5**

The sensitive populations score captures how at risk a community is to environmental exposures and climate impacts as it relates to health. For example, air pollution has stronger impacts on older and younger people, and people with chronic conditions such as asthma. The score ranges from 0 to 100, with a higher score being worse. The score is calculated using data on asthma hospitalization rate, cancer prevalence, diabetes prevalence, heart disease prevalence, life expectancy, low birth weight rate, mental health, population over 65, and population under 5.

Demographics Percentile Score **59.48**

The demographics score represents a community’s social and economic vulnerabilities. The score ranges from 0 to 100, with a higher number representing a higher vulnerability. It is calculated using data on people living with disabilities, housing cost burden, educational attainment, limited English proficiency, income, and race and ethnicity.

One-mile radius with satellite imagery for facility: CCR 0994-23-02 Well Pad

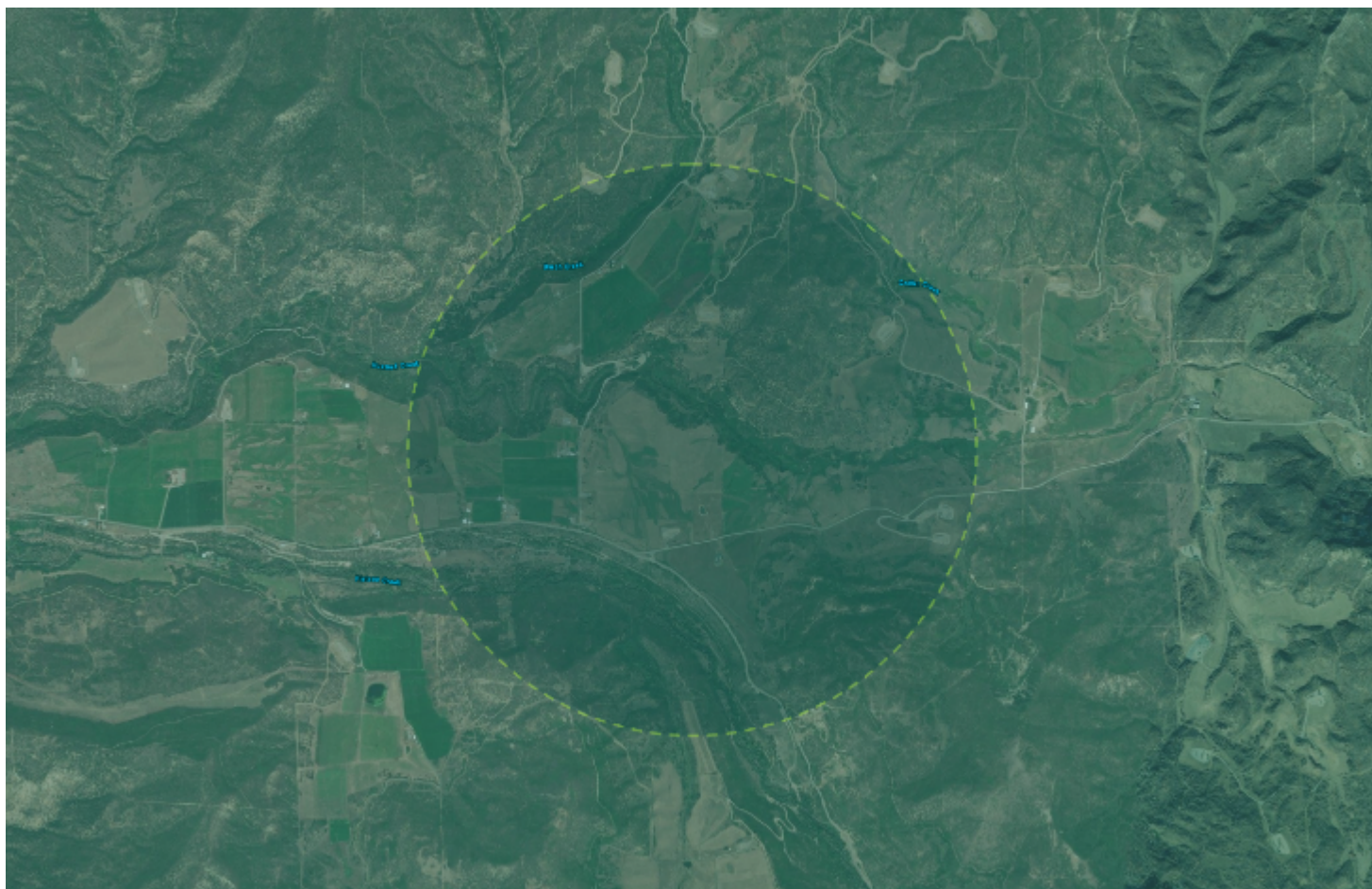
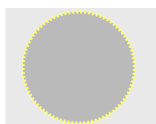


Image above notes a one-mile radius from the location in the center of the circle.



One-mile radius around location used to generate report

An aerial or satellite image of the facility, including a one-mile radius of the surrounding area, is a required component for the Environmental Justice Summary.

This image was generated from the Environmental Justice Report Tool for Air Quality Regulation 3 using the ESRI World imagery basemap. The map features Maxar imagery at 0.3m resolution for select metropolitan areas around the world and 0.5m resolution across the United States. In addition to commercial sources, the World Imagery map features high-resolution aerial photography contributed by the GIS User Community. This imagery ranges from 0.3m to 0.03m resolution (down to ~1:280 in select communities).

For more information, visit: [World Imagery](https://www.esri.com/en-us/world-imagery)

Pollution and Climate Indicators

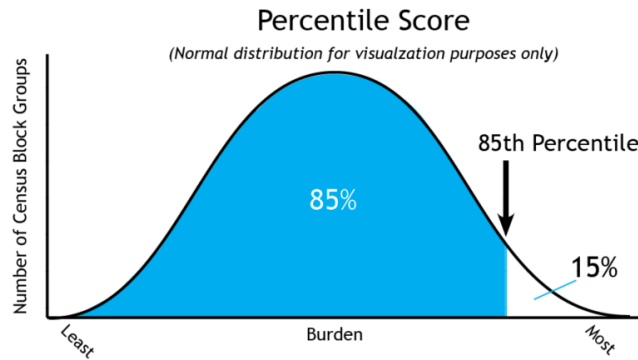
Indicator	Original Unit of Measure	Percentile
Air Toxics Emissions	distance weighted measure of estimated air toxics emissions	99.66
Diesel Particulate Matter	micrograms per cubic meter	4.26
Drinking Water Regulations	population weighted duration (in weeks) of resolved and unresolved health based violations from active community public water systems	5.38
Fine Particle Pollution (PM 2.5)	micrograms per cubic meter	5.78
Impaired Streams and Rivers	average impairment and assessment status of streams	93.91
Lead Exposure Risk	percentage of housing units built before 1960, as an indicator of potential exposure to lead	72.06
Noise	decibels A	1.53
Other Air Pollutants	distance weighted measure of estimated other air pollutant emissions	97.82
Ozone	parts per billion	64.72
Proximity to Hazardous Waste Facilities	distance weighted count of hazardous waste facilities within 5 km	10.02
Proximity to Mining Locations	distance weighted measure of the total number of active coal, hard rock, and construction materials mining permits	93.88
Proximity to National Priorities List Sites	distance weighted count of proposed or listed NPL sites with 5 km	5.78
Proximity to Oil and Gas	distance weighted measure of the total number of active oil and gas locations	99.35
Proximity to Risk Management Plan Sites	distance weighted count of RMP facilities within 5 km	97.59
Traffic Proximity and Volume	amount of vehicular traffic nearby, and distance from roads	0
Wastewater Discharge Indicator	toxic chemical concentrations in stream segments per km	4.31
Drought	sum of weekly total percent of an area experiencing a severe, extreme, or exceptional drought	96.15
Extreme Heat Days	average number of high heat days between May and September from 2016 to 2020	19.08
Floodplains	percentage of each geographic area where there is at least a one percent chance of flooding annually	69.17
Wildfire Risk	mean wildfire hazard potential within each geographic area as determined by the US Forest Service, 2021	92.67

Health and Social Indicators

Indicator	Original Unit of Measure	Percentile
Asthma Hospitalization Rate	rate of hospitalization per 100,000 people	4.74
Cancer Prevalence	percent of adults	81.19
Diabetes Prevalence	percent of adults	76.03
Heart Disease in Adults	percent of adults	83.45
Life Expectancy	years	9.48
Low Birth Weight	percent of singleton births	19.96
Mental Health Indicator	percent of adults	83.09
Population over 64 years of age	percent of total population	50.51
Population under 5 years of age	percent of total population	17.72
Disability	percent of total population	69.27
Housing Cost Burdened	percent of total population	28.4
Less Than High School Education	percent of total population	56.6
Linguistic Isolation	percent of total population	54.42
Low Income	percent of total population	79.35
People of Color	percent of total population	38.51

Understanding the Data

The values shown in the Pollution and Climate Indicator and Health and Social Indicator tables are percentiles. Percentiles are a way to see how one area compares to other areas in Colorado. Percentile values range from 0 - 100. A higher score indicates higher burden. Specifically, the percentile tells you the percentage of places in Colorado that have a lower score than the selected location. For example, an area with 85 percentile score for the noise indicator, ranks in the top 15% of areas impacted by noise in Colorado. That means that 85% of the other Census Block Groups in Colorado have a lower score for noise impacts.



The data in the report comes from Colorado EnviroScreen version 1.0. Developed in 2022 by CDPHE and Colorado State University, EnviroScreen maps the overlap of environmental exposures and effects, climate vulnerability, sensitive populations, and demographics to better understand environmental injustice and environmental health risks in Colorado. For more detailed information on the data sources used in Colorado EnviroScreen Version 1.0 see the [technical documentation](#).

On the first page of the report, red text highlights if values for a census block group meet or exceed the criteria for definition of Disproportionately Impacted Community for Air Quality Regulation 3. On subsequent pages of the report, red text highlights indicators in the top percentiles for Colorado that may warrant additional consideration during the permitting process. The Environmental Justice Report is not intended to show individual health risk or exposure.

In the Environmental Justice Summary on the first page, values shown in red indicate a census block group that meets or exceeds the following criteria to qualify as a Disproportionately Impacted (DI) Community for Air Quality Reg 3:

- Over 40% of households are low-income (meaning they are at or below 200% of the federal poverty level),
- Over 40% of the population identify as people of color,
- Over 50% of households are housing-cost burdened (meaning they spend more than 30% of household income on housing costs), or
- Over 20% of the population is linguistically isolated (meaning no adults in a household speak English well).

A census block group that meets or exceeds any of these percentages is labeled as a Socioeconomically Vulnerable Community (SVC).

The CO EnviroScreen Percentile Score, which is also found on the first page of the Environmental Justice Report, is written in red if it is above the 80th percentile. A census block group with a CO EnviroScreen Score above the 80th percentile is labeled as a Cumulatively Impacted Community (CIC).

In other sections of the Environmental Justice Report, including the Environmental Justice Overview, Pollution and Climate Indicators, and Health and Social Indicators sections, indicator and component scores over the 80th percentile

are also highlighted in red. The 80th percentile threshold is used in most cases to flag census block groups that have indicators and groups of indicators (components) that are in the top 20% of census block groups in Colorado. These indicators and components are flagged because they may warrant further review in the permitting process by the permit applicant and/or the Division staff reviewing the permit.

For most indicators, the indicator is highlighted in red if it is above the 80th percentile to indicate that the census block group where the facility is located faces higher risks based on that indicator compared to other Colorado communities. However, less than 20% of census block groups in Colorado have oil and gas facilities or mining locations. Accordingly, all census block groups in Colorado score above the 80th percentile for proximity to these two types of facilities because even having zero facilities puts a community in the top 20%. Accordingly, the Environmental Justice Report highlights a census block group in red if it is above the 85th percentile for mining facilities and above the 90th percentile for oil and gas facilities. This ensures that only census block groups with a greater number of facilities than the statewide average of zero are highlighted on the EJ Report.

Colorado EnviroScreen does:

- Show which areas in Colorado are more likely to have higher environmental health injustices.
- Identify areas in Colorado where government agencies can prioritize resources and work to reduce pollution and other sources of environmental injustice.
- Provide information to empower communities to advocate to improve public health and the environment.
- Identify areas that meet the updated definition of “Disproportionately Impacted Community” under House Bill 23-1233 adopted a definition that applies to all state agencies, including CDPHE.
- Identify areas where the Air Quality Regulation (Reg.) Number 3, which governs permitting in disproportionately impacted communities, applies.
- Identify areas that meet the prior definition of “Disproportionately Impacted Community” under the Colorado Environmental Justice Act (HB21-1266).

Colorado EnviroScreen does not:

- Define a healthy or unhealthy environment.
- Establish causal associations between environmental risks and health.
- Define all areas that may be affected by environmental injustice or specific environmental risks.
- Provide information about an individual person’s health status or environment.
- Take all environmental exposures into account.
- Tell us about smaller areas within a census block group that may be more vulnerable to environmental exposures than other areas.
- Provide information about non-human health or ecosystem risks.

Additional Resources

[Frequently Asked Questions: Environmental Justice Report Tool for Air Quality Regulation 3](#)

[Air Pollution Control Division's Small Business Assistance Program](#)

[CDPHE Environmental Justice Program](#)

[Colorado EnviroScreen Version 1.0 Reports, Guides, and Resources Folder](#)