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Community Wildfire Protection Plan

May 11, 2022













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Reading this document: Wildfire ignitions and fire behavior outputs are generated by the Colorado Wildfire Risk Assessment Portal application and have not been altered in any fashion. Due to the difficulty in "clipping" an exact perimeter, additional properties maybe included within the report. The full report can be found at:

https://pro.coloradoforestatlas.org/proreports/report 1155 20220124/COWRAP REPORT.pdf
Suggestions to outside agencies are intended to develop conversation and ultimately assist all property owners and managers in striving to develop solutions intended to lower the effects of a wildfire.

Executive Summary

The Mesa Antero CWPP is the result of a subdivision-wide fire protection planning effort that includes extensive field data, scientific analysis of the fire behavior potential of the area (based on fuels, topography, and historical weather conditions) and years of ongoing efforts by its property owners to prepare for a wildfire event. Detailed recommendations and suggestions for specific actions are included.

This document is the result of collaborative effort between the Colorado State Forest Service, Chaffee County Fire Protection District, San Isabel National Forest, Mesa Antero Property Owners Association, Mesa Antero Water Association and the Mesa Antero Architectural Control Committee. Zoom, Email, inperson meetings, and phone calls were used by the core group to compose the final document. A "kick-off" meeting with all county stakeholders invited, multiple MAPOA member meetings, individual stakeholder meetings and a final distribution of the draft document for comments were collection tools used by the author to gain collaboration.

It is important to note that this CWPP is a working document and will need to be updated every three to five years after significant recommendations have been accomplished, or after a major wildfire event or insect infestation occurs.

This CWPP should act as a detailed planning document attached to the Chaffee County Next Generation Community Wildfire Protection Plan dated February 4, 2020.

NOTE: when a major wildfire event takes place, due to the rural setting of this subdivision, firefighting forces will be challenged. Therefore, <u>it is imperative that all structures are built as fire-resistant as possible and that vegetation surrounding all homesites are fully mitigated. An emphasis on "stand alone" (expecting no suppression action to protect a structure) against a wildfire should be accepted.</u>

Definitions

CFC – Colorado Fire Camp (non-profit firefighting school located in Chaffee County)

CCFD – Chaffee County Fire District

CCOEM – Chaffee County Office of Emergency Management

CCSO – Chaffee County Sheriffs Office

CSFS – Colorado State Forest Service

DFPC - Colorado Division of Fire Prevention and Control

GIS – Geographic Information System

MA – Mesa Antero Subdivision

MAACC – Mesa Antero Architectural Control Committee

MAPOA – Mesa Antero Property Owners Association

MAWA – Mesa Antero Water Association

USFS - United States Forest Service

Goals and Objectives

This document has the following primary goals:

- 1. Enhance life safety for residents, visitors and responders.
- 2. Provide a comprehensive, scientifically based analysis of wildfire-related hazards and risks.
- 3. Support existing and future wildfire mitigation actions.

To accomplish these goals, the following objectives have been identified:

- 1. Establish an approximate level of risk (understanding the likelihood of a significant wildfire event in the area).
- 2. Provide an updated scientific analysis of the fire behavior potential.
- 3. Identify factors that could affect first responder safety and/or response.
- 4. Evaluate existing mitigation efforts in consideration with the updated fire behavior analysis.
- 5. Recommend specific actions needed to further reduce hazards to the Values to be Protected.

Subdivision Overview

Mesa Antero Subdivision was developed in the 1970s and has approximately 277 lots. Of the 277 lots, 213 currently have homes built on them and all of 277 have varying levels of wildfire risk. Mesa Antero Property Owners Association is a voluntary property owners association. 268 property owners were members in 2022, so MAPOA has very good community support.

Mesa Antero is a Wildland Urban Interface (WUI) community which is where structures and other human developments meet or intermingle with wildland vegetative fuels.

There are two primary paved entrances, one on the East and one on the North side of the subdivision. All roads within the subdivision are county owned and maintained. 90% are dirt/road base.

The subdivision covers approximately 1200 acres and is bordered by State Highway 285, public lands and private lands. The topography slopes from west to east downhill and is under 5% in grade overall, sitting between 8000' and 8750'. Predominantly Ponderosa Pine Forest is at the higher (west) elevation, and Pinon & Juniper are at the lower elevations. Both forest types are overgrown where recent thinning operations have not occurred. Open grasslands with light to medium brush cover are mixed throughout.

Browns Creek runs from the foot of Mt. Antero down to the Arkansas River. A riparian area borders the creek with somewhat dense Aspen, Willows and other riparian area plant species. Outside of the Browns Creek drainage, the topography is made up of flat "mesas" separated by medium steepness arroyo-type drainages. A large meadow of approximately 45 acres exists at the eastern entrance to the subdivision on State Highway 285, most of which is owned by Mesa Antero Property Owners Association.

Mesa Antero can have wildly swinging climatic events due to the proximity of the high peaks to the west. Summertime temperatures can reach 90 degrees, with very low relative humidity. Annual moisture amounts are between 6" to 16". Winds can be strong in the afternoon, coming from the south and west. Morning winds typically start from the east and gradually switch to the south and west as the day heats up. Typical diurnal mountain winds should be expected.

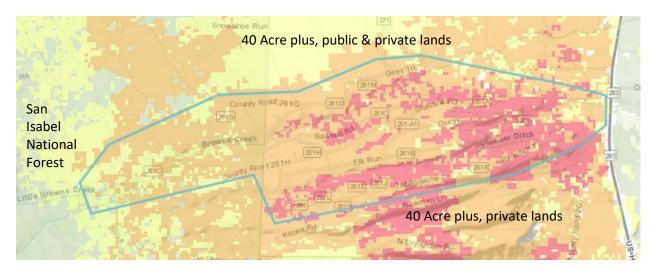
Lastly, it is typical for climatic/weather conditions to support a wildfire event most months of the year, primarily May through October.

Firewise USA Community Risk/Hazard Assessment: In April 2022, the CSFS completed the Firewise community risk/hazard assessment for Mesa Antero. A high rating was determined. Mesa Antero subdivision will be moving forward with the intent of becoming a Colorado Firewise community. The full report can be viewed at Mesaantero.org.

Observations and Recommendations linked to this Risk/Hazard Assessment are displayed in italics.

Current Risk Situation

The current risk situation is depicted in the graphic below. This was taken from the Colorado Wildfire Risk Assessment Summary Report (CO-WRAP), which was generated on February 5, 2022.



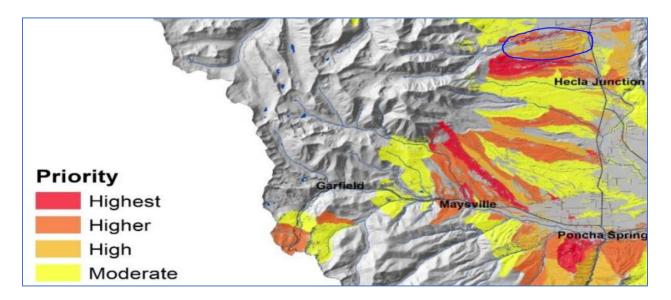
CO-WRAP Wildfire Risk Map

Values to be Protected (at Risk)

Mesa Antero property owners come from diverse backgrounds and from many states outside of Colorado. One common interest to all is the natural beauty which defines Mesa Antero and the surrounding area. The importance of protecting life, structures, personal property, immediate natural surroundings and the greater viewshed from the possible destructive forces of a wildfire are of primary concern to all.

Nearly 2.5 miles of Browns Creek runs through Mesa Antero. While the greater Arkansas watershed is not within the scope of this wildfire plan, the small portion that is within Mesa Antero does need to have protection granted to it. Additionally, a large meadow of approximately 45 acres exists at the eastern entrance to the subdivision on State Highway 285, and a seasonal aqueduct (which is privately owned) traverses the subdivision are other values to be protected.

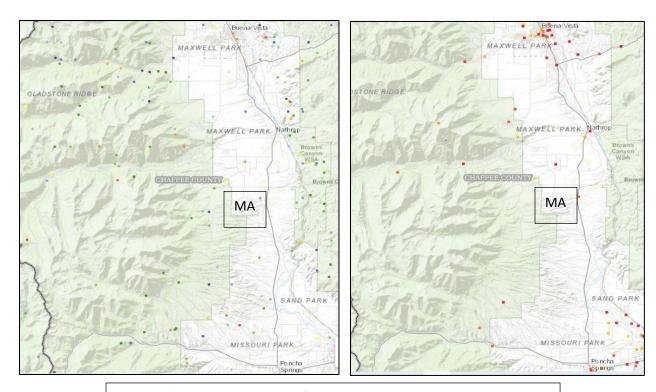
The 2020 Chaffee County Next Generation Community Wildfire Protection Plan rated Mesa Antero at a moderate risk (not to be directly compared to the Firewise Assessment as they use different inputs). The plan also states that Mesa Antero fuel treatments rank "High to Highest" for having the most impact in reducing the risk of wildfire to community assets. See graphic below.



Wildfire History

The two graphics below represent the wildfire ignitions on USFS lands, from 1992-2017 (left) and Private lands, from 2009-2017 (right). The dots represent fires of different sizes of which all are on the small side, none required a formal Incident Management Team to manage the fire.

Two additional fires of interest: A ½ acre fire within Mesa Antero the summer of 2018 which burned on vacant land in the Browns Creek riparian area off CR 261C (Sawmill Road). The Decker Fire in 2019 which burned in the southeast corner of the county along with acreage in Fremont and Saguache counties. It burned nearly 9,000 acres, required a Type I Incident Management Team, required multiple evacuations of residents and cost over \$22 million to control.



CSFS's 2017 Colorado Wildfire Risk Assessment Summary Report

County, State and Federal Fire Capabilities

Chaffee County Fire Protection District provides emergency services including wildfire suppression to the Mesa Antero Subdivision. CCFD is predominately a volunteer force, delivering service to the community within the 1,000 sq miles of Fire District, including the Town of Poncha Springs and Buena Vista. CCFD has 35 pieces of mobile equipment/apparatus allocated between six fire stations that are staffed by 40+ volunteer firefighters and six paid firefighters. Fire administration is in Buena Vista. Additional line chiefs and other senior officers are scattered throughout The District.

Wildfire education and support is provided to the residents through various programs. Home wildfire evaluations can be requested in which a full mitigation plan is formulated with the homeowner (the CSFS also provides these evaluations). Additionally, the district offers four mitigation trailers as an available resource to the residents of Chaffee County. The district provides these trailers at a low cost with the intention to make fire mitigation slightly easier. The trailers are 7.5 ft X 14 ft X 5 ft tall with a 14,000-pound capacity.

Station 2 is in Nathrop and is approximately 6.5 miles from the center of Mesa Antero. Adjacent to this station is the resident house, which allows for quick response for calls. Station 2 houses one Engine, a Water Tender, and a small Wildfire Engine.

Station 4 is in Poncha Springs and is approximately 14 miles from the center of Mesa Antero. This station is undergoing a remodel and expansion for resident and possible future full-time staffing. It houses an Engine, a Water Tender, a small Wildfire Engine, and other support equipment.

Stations 1 and 3 are in Buena Vista and are approximately 15 miles from the center of Mesa Antero. Collectively, they house two engines, two water tenders, two medium Wildfire Engines, two small Wildfire Engines and other support equipment.

The Salida / South Arkansas Fire Protection District provides aid to CCFD and are approximately 15 miles from the center of Mesa Antero. They have full-time staffing and a full complement of fire apparatus and equipment.

Colorado Division of Fire Prevention and Control (DFPC) currently has no resources in Chaffee County and does not appear to be actively engaged.

The Pike-San Isabel National Forest, Salida Ranger District provides aid to CCFD. The administrative office located in Salida is approximately 17 miles from the center of Mesa Antero. They provide full-time wildfire supervisor staff, part-time wildfire staffing, miscellaneous prevention staffing, a small Wildfire Engine and various wildfire crew configurations.

RECOMMENDATIONS

- 1. Reduction of Structural Ignitability
- 2. Evacuation and Public Information
- 3. Chaffee County Fire District
- 4. Firefighting Water Sources
- 5. Vegetation Fuel Treatments
- 6. Evacuation/Travel Route Roadside Thinning Projects
- 7. Surrounding Areas of Interest to Mesa Antero

The Action Items / Projects listed below are in order of importance. If an opportunity arises to accomplish a lower priority, then effort should be taken.

Reduction of Structure Ignitability

COMMUNITY PREPAREDNESS: CURRENT EFFORTS

MAPOA supports wildfire preparation efforts in a variety of ways:

- Mesa Antero supports a working relationship with the CSFS and Chaffee County Fire District
 who, separately and together, provide homesite evaluations, defensible space and forest health
 recommendations.
- MAPOA sponsors annual vegetation slash haul-off days which utilizes the CCFD slash trailer program. These events utilize volunteer efforts by the subdivision residents.
- Mesa Antero used the Chaffee Chips slash removal program the first year it was available (2020) and welcomes future opportunities.
- Official Fire Danger Rating signs have been erected at both entrances. The rating is coordinated with other county signs and determined by the USFS year-round.
- MAPOA maintains a website which includes wildfire preparedness information.
- MAPOA has a current system (website contact directory and Email address groups) in which to send wildfire preparedness and emergency notification information to the residents.
- Two information kiosks are located at the mailbox cluster, hard copies of wildfire preparedness
 information and advertisements of upcoming events are posted here. Additionally, "sandwich
 board" advertisement boards are also used to notify residents of upcoming events. These are
 placed in different locations of the subdivision.
- A "Fire Prevention Group" of volunteers has been assembled to better manage the subdivisions wildfire preparation activities.

SUBDIVISION ACTION PLAN – Encourage and assist, current and future efforts by residents to address structural ignitability on their properties. Prepare the subdivision for a wildfire event by addressing current and future needs by engaging with MAPOA and MAACC.

RESPONSIBLE GROUP/S: MAPOA Board & Fire Prevention Group (FPG)

PRIORITIES: The "Action Items" are listed in order of current importance. As projects stall, wait for decisions or funding, lower-level projects may become more appropriate at a given time.

Action Item #1: Adopt a subdivision level "Open Burning" policy.

Who will lead? MAPOA Board

An escaped human-caused fire is highly possible and has been responsible for fires in the past. Currently, each filing has or has not addressed open burning. Consider the following as a starting point for this discussion.

- Campfires are permitted during periods of LOW and MODERATE fire danger as determined by
 the signage located near the entrances to Mesa Antero. Additionally, campfires are allowed only
 in a permanent ring or fire grate, 4 feet in diameter maximum, surrounded by an additional 6
 feet cleared of all flammable material, and having an available water supply and hand tools on
 site. Chaffee County fire restrictions apply, and the Chaffee County Sheriff Communication
 Center (719-539-2596) must be called and informed. The campfire is required to be supervised
 by an adult at all times and fully extinguished and cold before left unattended.
- During any season, if the fire danger rating is high or above and no Chaffee County fire restrictions are in place, no outdoor grill or heating source may be used that does not have an immediate heat shut-off. Charcoal grills and wood smokers would not be permitted.
- Mitigation slash burning is permitted during the winter season only, December March. All
 county requirements must be followed. Contact the Chaffee County Fire District for information
 ,719-395-6545.
- Chainsaws, lawn mowers and weed eaters must have a functioning spark arrestor and be
 refueled on a non-flammable surface. Work should occur during the moist & cool morning
 hours. If work needs to continue later, hand tools, a working fire extinguisher of at least a
 2A10BC rating and a cellphone for emergency calls should be available in the work area.
 Vehicles should park on the road/driveway or in an area void of flammable ground litter.
 Contractors must be made aware of these requirements by the resident.
- Outdoor activities that produce heat (welding, grinding, drilling, etc.) should take place in an
 area cleared of flammable ground litter, have a working fire extinguisher of at least a 2A10BC
 rating and be constantly supervised.
- Grass mowing should occur during the moist & cool morning hours. If mowing needs to
 continue, hand tools, a working fire extinguisher of at least a 2A10BC rating and a cellphone for
 emergency calls should be available in the work area. Contractors must be made aware of these
 requirements by the resident.

Action Item #2: Continue wildfire and emergency preparedness information outreach via the MAPOA website.

Who will lead? MAPOA website custodian and FPG

Increase the capacity of the website to allow for additional publications. Continue to post wildfire and emergency preparedness publications on the Mesa Antero website. As directed by the FPG, periodically revise, update and seek out new publications as they become available. Assist residents as needed in attaining hard copies. Provide hard copies of key publications at the mailbox kiosk.

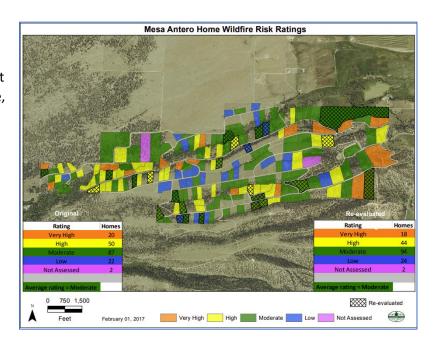
Action Item #3: Ongoing methods to keep property owners engaged in Wildfire Mitigation. **Who will lead?** FPG

Advertise fire prevention activities on the existing bulletin boards and sandwich boards. Purchase additional, more durable (four-season) sandwich boards (or determine alternative) for fire prevention activities and to highlight mitigated properties. Create alternate ways of advertising that a property has been mitigated, template after successful programs such as Boulder County and Colorado Springs.

Action Item #4: Increase the desire by residents to have an updated "Home Wildfire Risk Assessment" performed.

Who will lead? FPG

Utilize the 2017 CSFS Home Wildfire Risk Rating information map, MAPOA-sponsored events and other avenues to drive interest in home assessments. For example, Email the map with information as to its origin, purpose and reason why it's being shared now. Ask residents to locate their home on the map and consider a reevaluation. The re-evaluation can be conducted by the CSFS or CCFD at no cost to the resident. Include additional details as needed. Consider further outreach of this information at community events; i.e., summer picnics, annual business meeting, etc.



NOTE: These ratings are 5 years old. The subdivision will need to be reevaluated in the future. Currently at 213 homes, this will be a major undertaking to be done correctly; i.e., actual on-site visits with the homeowner.

Action Item #5: Encourage residents to "harden their structures" by promoting Firewise building materials and techniques.

Recommended in the Firewise USA Assessment.

Who will lead? FPG

Using the information from a resident's Home Wildfire Risk Assessment, provide direction to resources that will help to perform the hardening recommendations. The resources can be by publications, local contractors and other residents that have had the same work done.



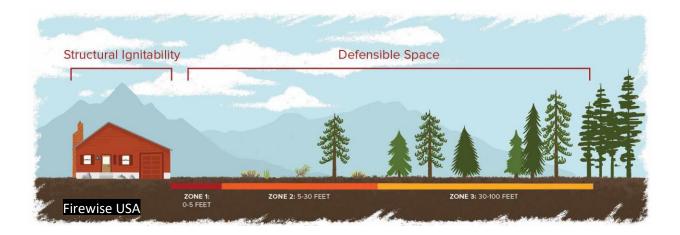
Firewise USA

Action Item #6: Promote Defensible Space Projects

Recommended in the Firewise USA Assessment. This is a primary annual requirement of a certified Firewise Community.

Who will lead? FPG

- A. Using the information from a resident's Home Wildfire Risk Assessment, assist them as needed to find qualified contractors or volunteers to perform the recommended work. Slash would be disposed thru normal MAPOA sponsored events, CCFD trailer or volunteer trailers.
- B. To further promote defensible space projects, locate four "cut to standard" properties in MA. Produce durable signs for each site, post, and promote via email. Possible sites: SB Park (riparian), lower CR 261 (Tabeguache) ponderosa thinning, mailbox area (PJ), and CR 261C (Sawmill).
- C. If there is a very high slash disposal demand by residents, consider contracting a trailer to perform "curbside" pickup with the cost shared by the participating residents. Consider volunteers to help load.
- D. Contact and encourage Chaffee Chips to add Mesa Antero to the current year's program and advocate that they expand to include additional subdivisions per year.



Action Item #7: Continue to encourage residents to display "county" promoted address signs. *Recommended in the Firewise USA Assessment.*

Who will lead? MAPOA Filing Reps

Continue to encourage reflective address signs which are openly displayed on noncombustible posts. Consider preparing a neighborhood list to submit to CCFD for address sign production to be paid for by homeowners. Assist homeowners as needed to mount the signs to non-combustible posts. Some homes that share driveways will need signs at both the home and driveway.

Action Item #8: Update MAPOA-owned road signs. These are the wood signs with the secondary street "naming" scheme.

Recommended in the Firewise USA Assessment.

Who will lead? MAPOA Board

Currently, there exists a dual road-naming scheme. The official county road numbers made of metal and reflective (which is tied to the 911 and commerce delivery systems) AND the MAPOA-owned wooden road name signs, which do appear on various road-mapping apps. Replacement of the MAPOA road signs should be phased in over the next two years. They must be non-combustible and reflective for better visibility at night or in smoky conditions.

Action Item #9: Wildfire mitigation of MAPOA properties **Who will lead?** FPG & volunteer custodians

- Stew Brown Park should continue with the clean-up/mitigation work that has occurred over the past years. Be sure to cut to standard so the work can be displayed as a Wildfire Mitigation demonstration site for property owners to view.
 - Emergency procedures should be created with details on what to do if a wildfire occurs during park usage. 911 notification, evacuation and fire suppression procedures should be posted on-site so they can be referenced by the person/s in charge. Additionally, two multi-purpose fire extinguishers with a minimum rating of 3A40BC should be kept onsite in plain view and immediately accessible. Handtools must be available as well.
- Front 38 parcel.
 - Mitigate to CSFS standards along the west boundary (CR 261K (Panorama Dr.) to act as a
 fire break and facilitate egress. The current proposed roadside thinning supported by
 grant funding have a gap in this area that needs to be addressed.
 - Mitigate to CSFS standards along the east boundary where it abuts the State Highway
 285 commercial area to act as a fire break.
 - Show good stewardship of the Front 38. Assist CSFS in identifying actions to maintain forest health and determine wildfire risk.

Action Item #10: Real-time viewing of the surrounding areas of Mesa Antero to give property owners better situational awareness.

Who will lead? FPG and MAPOA website custodian

Webcam(s) positioned in the neighborhood which can be viewed on the website.

Action Item #11: Create visual aids to help property owners better understand a potential wildfire event that could affect Mesa Antero. Include evacuation, home hardening and defensible space information. **Who will lead? FPG**

Present at annual meetings the status of wildfire preparation, fuel reduction, and roadside thinning projects, and highlight our coordination with public agencies. Utilize visual aids and handouts if appropriate.

RESPONSIBLE GROUP: MAACC (Mesa Antero Architectural Control Committee)

The Mesa Antero Architectural Control Committee (MAACC) was established by the covenants of Mesa Antero property owners and is staffed by elected volunteers. The Committee, as required by the covenants, serves the property owners through review and approval of the plans for any new home and certain exterior construction. This includes garages, outbuildings, decks, walls/fences and entrance features. Remodeling that increases the footprint of the house, roof treatment or the color of an exterior wall also requires review and approval.

Ultimately, a structure's building materials and building techniques will determine its ability to withstand a wildfire event. Therefore, the following recommendations are encouraged.

Several points are recommended in the Firewise USA Assessment.

Action Item #1: Increase the visibility of Firewise construction information. Update the website and place Firewise information higher up on the page to emphasis its importance. Consider shorter more concise publications such as. https://chico.ca.us/sites/main/files/file-attachments/firewise-construction.pdf?1577086183

Action Item #2: Encourage interior residential sprinkler systems in new home construction and significant remodels. Provide current information on these systems.

Action Item #3: Redesign the building application forms to include suggested Firewise building details such as building site location, building design and materials. Use a checklist format if applicable.

Action Item #4: Consider adding to the application forms <u>OR</u> create an additional form that details "Defensible Space" recommendations for Zones 1 & 2. Use the CSFS publication "The Home Ignition Zone" Guide (released in 2021), pages 8 & 9. https://mesaantero.org/html/pdf/Wildfire-Reducing-Your-Risk.pdf

Action Item #5: Strongly encourage reflective address signs which are openly displayed on noncombustible posts at the time of construction and permanently. The signs are available from the CCFD for a nominal fee or include in the application review fee.

Action Item #6: Migrate over from the MAPOA web page all documents pertaining to Wildfire Preparedness. This will help to ensure a more thorough dissemination of this information.

Action Item #7: Whenever possible, encourage the Chaffee County Planning and Zoning Department to adopt Firewise building practices. Additional regulatory changes are detailed in the Chaffee County CWPP 2020, page 51 & 52.

Evacuation and Public Information

Currently, MAPOA works with the residents in a variety of ways to help them prepare for an emergency evacuation. Email reminders to sign up and maintain their Everbridge accounts, pointedly written documents specific to a Mesa Antero Evacuation, as well as other national publications available on the website. Additionally, there have been discussions with Chaffee County OEM on further refining MAPOA's process, such as defining an "evacuation polygon" within the Everbridge system and addressing the procedure that Sherriff Office deputies will use to determine a home has been contacted or evacuated.

Everbridge is an automated program used by CCSO to alert residents about emergencies and other important community news by signing up for our Emergency Alert Program. This system enables them to provide critical information quickly in a variety of situations, such as wildfires, severe weather, unexpected road closures, missing persons and evacuations of buildings or neighborhoods. Residents will receive time-sensitive messages wherever specified, such as home, mobile or business phones, email address, text messages and more. See http://chaffeesheriff.org/fire-restrictions/ for details.

SUBDIVISION ACTION PLAN – Continue to improve current and future efforts by residents to further refine emergency evacuation procedures.

RESPONSIBLE GROUP: MAPOA Board & Fire Prevention Group (FPG)

Action Item #1: Promote fire evacuation readiness. Recommended in the Firewise USA Assessment.

Who will lead? MAPOA President Email, initially crafted by FPG

Communicate via Email when the Fire Danger Rating changes. Reference the "Wildfire Danger Rating" actions document (located on the MAPOA website) and emphasize preparations based on that fire danger rating.

Action Item #2: Sustain and increase the number of property owners to sign up for Everbridge emergency notifications.

Who will lead? FPG

- Explore new ways of assisting property owners with the initial sign-up process.
 - Provide a volunteer at MAPOA events to help property owners sign up with Everbridge.
 - Further research the offer from OEM to hold a "Preparedness Fair" for the subdivision.
 Invite Mesa Antero Estates residents also.
 - Consider setting up a tent and table sign-up area at the mailbox cluster to drive interest and sign-up. Advertise as needed.

Action Item #3: Identify residents who may need assistance in an evacuation. **Who will lead?** MAPOA Filing Reps & FPG

Ask the Filing Reps to contact their respective residents to investigate who might need assistance during an evacuation due to a physical handicap, no transportation or other reason. This project will develop as it goes along. The information will be shared with the CCSO & OEM. Future processes will need to be developed specially to protect sensitive personal data; i.e., the fact that someone is in this kind of need.

Action Item #4: Design, fund and install Exit Route signage. **Who will lead?** FPG and MAPOA Road Coordinator

- Determine where Exit Route signage needs to be placed. Kiowa Road & FR 272B should be included.
- Design the sign with regards to easily readable font, color and exact words to be used. Consult OEM to see if something has been developed at the county level.
- Determine cost and apply for funding. If a few key signs will work for the short term, consider funding through MAPOA.
- Determine the best way to place them. Will they bolt to existing county road signs? Or will they need a separate post?
- Design an advertising campaign for residents so they know about them.

Action Item #5: Missing county road number and no outlet/dead end signage. **Who will lead?** FPG and MAPOA Road Coordinator

- County road number signage is incomplete at some intersections. All roadway number designators need to be present at all intersections. Determine which intersections and present to the Chaffee County Road department.
- Dead end/no outlet signs are missing from some roads. Determine which ones are missing and present to the Chaffee County Road department.

Action Item #6: Define "Shelter in Place" procedures and present to the subdivision. Incorporate into a presentation to the property owners at the annual business meeting and for email distribution.

Action Item #7: The Chaffee County re-entry plan for Mesa Antero needs to be added to the MA documents, specifically, that MA residents will need to report to the reunification center to show proper identification to re-enter the subdivision among other details. Contact OEM to obtain the full document.

Chaffee County OEM

Everbridge/IPAWS message templates: Emergency messaging must be well thought out and templates crafted in advance. Consider testing with the Mesa Antero polygon.

Traffic Control: Evacuating vehicles will need to be directed which way to go at the CR 261 & Highway 285 intersection.

Re-Entry Plan: Keep residents updated on when they can "Re-Enter" the subdivision and what procedures they need to follow.

 Evacuees will be directed to go to the re-unification center to be credentialed. (Deputies cannot be responsible for verifying residency - evacuees can get this done at reunification center prior to coming back to MA).

Chaffee County Fire District

SUGGESTIONS:

Coordination: Excellent coordination between agencies will greatly increase the safety and effectiveness during fire suppression and enhance interagency firefighting efficiencies.

- Consider expanding the automatic aid response area for wildland fires from Salida Fire
 Department/South Arkansas Fire Protection District north of the current Hecla Junction limit.
- Considering that local personnel and equipment are also dispatched for national fires, a collaborative "drawdown" policy among local, state and federal agencies may be needed to ensure appropriate response is available considering current local conditions.
- Develop a plan to share staffing on local engines and tenders for local incidents.
- Request a higher amount of DFPC involvement in Chaffee County. Encourage development of a local/state type 2 hand crew or fire suppression module to be stationed in the Upper Arkansas Valley to make up for the repositioning of the Buena Vista SWIFT inmate firefighting hand crew.
- Clarify permissions and pre-plan emergency access for firefighting vehicles to U.S. Forest Service lands across private property. There are numerous potential access points off Kiowa Road, CR 261 (Tabeguache), CR261A (Shavano) and CR 261C (Sawmill) roads that would offer quicker initial attack on new fire starts and smoke investigations.
- Improve capacity for pre-positioning aerial firefighting assets at the Buena Vista & Salida airports during periods of high fire danger; i.e., helicopter and single-engine airtanker (SEAT) base/refill capability.
- Ensure that the High Transmission Powerlines are identified and on the appropriate maps and databases with regards to aerial hazards that exist within Mesa Antero.
- Provide the Salida Ranger District with the Colorado State Forest Service hazard rating map data
 in a format more usable by the Pike-San Isabel National Forest GIS specialist, an issue revealed
 during the Decker Fire.
- Ensure county response maps are updated and made available to other agencies and counties both before and during emergencies.
- Create more detailed maps for use in "Higher Risk Communities." Have all maps created as "Geo-Referenced" PDFs for use on smartphones, tablets and laptops in the field, showing firefighter safety zones and helicopter medevac sites as well.
- Consider storing response maps mentioned above on the district website. A QR code can be
 created that allows for smartphones and tablets to "scan" the image which allows for quick
 access to the website. Other response information can be stored and retrieved in this fashion,
 such as communication plans, emergency contact phone numbers, written emergency
 guidelines, etc.

Response Capability: Maintain and improve response capability.

- Recruit residents of Mesa Antero to become volunteer firefighters (none currently do).
- Consider locating a fire station on the 2 acres donated by the family of Herb Smyth to Chaffee County Fire Protection District (located at the northeast corner of the intersection of Highway 285 & Highway 291) for the purpose of improved response capability
- Ensure sufficient staffing is retained in the district while supporting out-of-area fire responses.

Investigate the feasibility of adding a Compressed Air Foam System (CAFS) apparatus to the
fleet. For structural firefighting, in a minimum manning scenario, CAFS has been proven to
provide sufficient fire knockdown capability while using less water than traditional means. This
tactic can be effective at holding a fire in check until sufficient forces arrive to mount an interior
firefighting attack.

Training: Maintain and improve quality training opportunities.

- Organize and facilitate a wildfire interface training exercise within Mesa Antero and encourage multi-agency participation.
- Provide firefighter training for Chaffee County Road & Bridge personnel for heavy equipment operators & transport drivers.
- Encourage personnel to participate in prescribed fire opportunities. With advance notice, more volunteer firefighters may be able to attend.
- When aviation assets are pre-positioned, take the opportunity to familiarize firefighters with their procedures by arranging for demonstrations and tours.
- If not done currently, consider getting selected individuals qualified as Helicopter Crewmembers. They will be able to familiarize other firefighters on Helitak operations.

Firefighter Safety & Readiness: Maintain and improve safety & readiness

- Consider developing a system that has fire engine crews deploy from the stations into a "patrol status." Pre-determine patrol areas that keep them within their first due areas so 911 response is not compromised.
- When Federal "severity" resources are deployed to Chaffee County, ensure their quantity and typing is known to all personnel.
- If not done currently, consider scheduling additional volunteer staffing during periods of increased county visitation; i.e., music festivals, river events, etc.
- Provide minimum wildland Personal Protective Equipment (PPE) for all career and volunteer firefighters. (See NFPA Standard 19773 for requirements).
- Ensure that the current fire operations personnel rehabilitation system is sufficient. At a minimum, the district should have drinking water and MRE's (meals ready to eat) to support their personnel for 24-48 hours.

Firefighting Water Sources

Water Supply: Currently, CCFD primarily uses water tender apparatus to transport water to a fire within Mesa Antero. There is also a 20K cistern located north on CR 270 approximately 1.5 miles.

The Mesa Antero Water Association (MAWA) provides drinking water to homes in Filings 3 and 4 of Mesa Antero. There are 6 wet fire hydrants, the flow of these varies depending on location. CCFD has tested all hydrants and has recorded the flow rates. Two underground storage tanks supply the system and hold approximately 32,000 gallons, the tanks are filled by a series of wells which produce approximately 50 GPM. The system would not be able to supply an extended fire attack scenario.

Follow up on the suggestions below directed to the Mesa Antero Water Association. A map with wet hydrant locations, dry hydrant locations and a helicopter dip site are shown below.

Action Item for CCFD: Possible helicopter bucket water source. (CCFD should make this contact)

CCFD personnel should contact the resident at 12770 CR 261C (Sawmill) to inquire about the use of their pond for helicopter bucket work. Size, depth, aerial hazards and permissions will need to be discussed. If the property owner is in favor of its usage, contact the USFS or DFPC for their approval as the dip site is approximately 400 feet from the Xcel high transmission power lines.

Mesa Antero Water Association (MAWA)

Action Item #1: Ensure the ability of wildfire resources to acquire water for firefighting purposes.

- Exercise all six wet hydrants annually, preferably in May before fire season.
- Verify the wet hydrant outlet thread type is compatible with CCFD apparatus. If not, consider purchasing adapters.
- Ensure hydrants are visible and marked.
- Browns Creek has two dry hydrant locations which currently are inoperative.
 - The dry hydrant locations can serve as apparatus or portable pump draft locations. Ensure the readiness of the area as needed and secure the area from public vehicle parking.
 - Discuss with CCFD, the need/desire for a third official draft site located at CR 261D (Deer Trail) adjacent to Stew Brown Park.
- As future upgrades are made to the water system, investigate the ability to increase the flow of the hydrants.



Action Item #2: Create defensible space around all MAWA-owned infrastructure.

- Perform fuels reduction around all power source locations. Consult the Fire Prevention Group for guidance as needed.
- Ensure storage shed has proper defensible space.
- Evaluate the solar power array for defensible space. Contact the installation contractor for recommendations from the manufacture.

Water Source Map



Vegetation Fuel Treatments

Reducing vegetation is one of the most effective ways to reduce the risk of catastrophic wildfire. In order of priority, vegetation in Mesa Antero should be treated as follows:

- 1. Around homes. For example, in the form of defensible space and linking defensible space to adjoining property and roadside or other landscape projects. See the Reduction of Structural Ignitability section for more details.
- 2. Along evacuation and travel routes. Recommended in the Firewise USA Assessment.
- 3. Around critical infrastructure: For example, such as MAWA-owned power pedestals and solar arrays as described in the Firefighting Water Source section.
- 4. In the creation of future landscape fuel breaks. The goal of these firebreaks is to utilize the road system and fuel breaks to "compartmentalize" the subdivision to add in fire suppression.

EVACUATION/TRAVEL ROUTE Roadside Thinning Projects

Chaffee County Fire District and the Colorado State Forest Service have approached MAPOA with several roadside hazardous vegetation thinning projects to aid in emergency public evacuation and wildfire suppression operations.

Currently work has started on Unit 2 and is being cut by Colorado Fire Camp as demonstration site. CSFS has applied for grant funding for the remainder of the project. There are additional sections of roadways that will need to be included and are described below.

CSFS Mesa Antero Roadside Thinning (formulated December 2021)

Unit 1: Forest type – pinon/juniper on east end moving into ponderosa pine with pinon/juniper understory and token Douglas-fir to the west. Work to be completed: Where only pinon/juniper, remove trees to create 20' of crown spacing between retained single trees and 25'-30' of crown spacing surrounding clumps of 3-7 retained trees. In ponderosa pine/Douglas-fir areas, remove pinon/juniper understory within 20' of retained ponderosa pine/Douglas fir driplines. Additionally, remove suppressed ponderosa pines/Douglas firs, especially those demonstrating phototropic lean. Finally, remove ponderosa pines/Douglas fir to break up canopy connectivity.

Unit 2: (In Progress) Forest type – ponderosa pine with pinon/juniper understory. Token Douglas firs present. Work to be completed: Remove pinon/juniper understory within 20' of retained ponderosa pine/Douglas fir driplines. Additionally, remove suppressed ponderosa pines/Douglas firs, especially those demonstrating phototropic lean. Finally, remove ponderosa pines/Douglas fir to break up canopy connectivity.

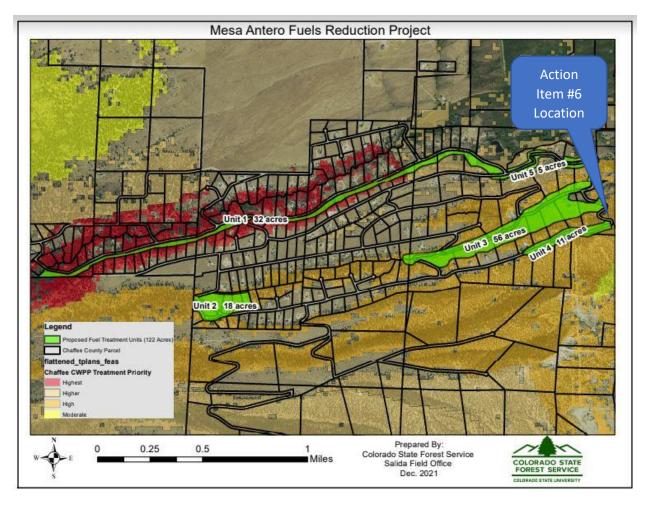
Unit 3: Forest type – mostly pinon/juniper with some ponderosa pine pockets on north-facing slope. Work to be completed: Where only pinon/juniper, remove trees to create 20' of crown spacing between retained single trees and 25'-30' of crown spacing surrounding clumps of 3-7 retained trees. In ponderosa pine areas, remove pinon/juniper understory within 20' of retained ponderosa pine driplines. Additionally, remove suppressed ponderosa pines, especially those demonstrating phototropic lean.

Unit 4: Forest type – pinon/juniper. Work to be completed: Remove trees to create 20' of crown spacing between retained single trees and 25'-30' of crown spacing surrounding clumps of 3-7 retained trees.

Unit 5: Forest type - mostly pinon/juniper with some ponderosa pine pockets on north-facing slope. Work to be completed: Where only pinon/juniper, remove trees to create 20' of crown spacing between retained single trees and 25'-30' of crown spacing surrounding clumps of 3-7 retained trees. In ponderosa pine areas, remove pinon/juniper understory within 20' of retained ponderosa pine driplines. Additionally, remove suppressed ponderosa pines, especially those demonstrating phototropic lean.

*The CSFS foresees this work being completed by hand crews as there is little opportunity for implementing equipment, based on terrain/proximity to homes. Slash will be removed and chipped on site - TBD. Firewood size material may be left on site for landowner/community use.

Action Item #6: County Road 261K (Panorama Dr); Connect this section to CSFS-funded thinning operation of Units 3 & 4. Pinon/juniper Work to be completed: Remove trees to create 20' of crown spacing between retained single trees and 25'-30' of crown spacing surrounding clumps of 3-7 retained trees.



Surrounding Areas of Interest to Mesa Antero

Mesa Antero Estates

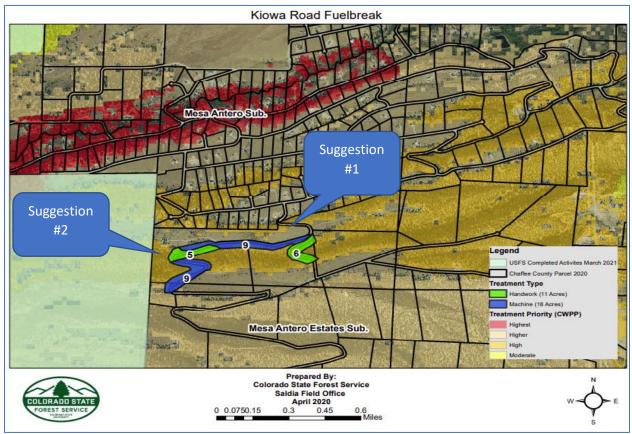
Currently, CCFD/CFC and CSFS are engaged in fuel=reduction projects at the planning and implementation levels. Most of the work is being done on Coyote Road. See graphic below.

Suggestion #1: Connect Mesa Antero to the Kiowa Road Fuelbreak project and other landscape projects. Currently, work is being performed on these projects. Efforts should be made to include other Kiowa Road residents in this area into these projects. The road goes through vegetated areas that need "Roadside Thinning" to allow for safer travel of residents and first responders. The best value of these projects is that they connect together and connect defensible space efforts around the structures.

Suggestion #2: Place signage to display the preferred evacuation travel route. A minimum of two signs should be placed to ensure vehicles follow the correct exit route - one at 272B & Kiowa Road and another at 261 (Tabeguache) & Kiowa Road.

Suggestion #3: Landscape Fuel Reduction Projects in the subdivision's boundary area. Utilize computer-based fire behavior modeling along with ground truthing to locate these fuel reduction projects. Wherever possible, connect these projects to individual home defensible space and/or roadside thinning projects. The CSFS and CCFD will use their expertise to ensure proper placement. These projects exist in both subdivisions.

Suggestion #4: Ensure Wildfire information is shared between the subdivisions. As projects take shape within Mesa Antero and Mesa Antero Estates, we will want to share that information.



San Isabel National Forest

In 2001, the forest implemented the Westside Project, which consisted of thinning and prescribed burning of the area south of Browns Creek Trailhead north to Eddy Creek. This project's east boundary is the Mesa Antero Subdivision.

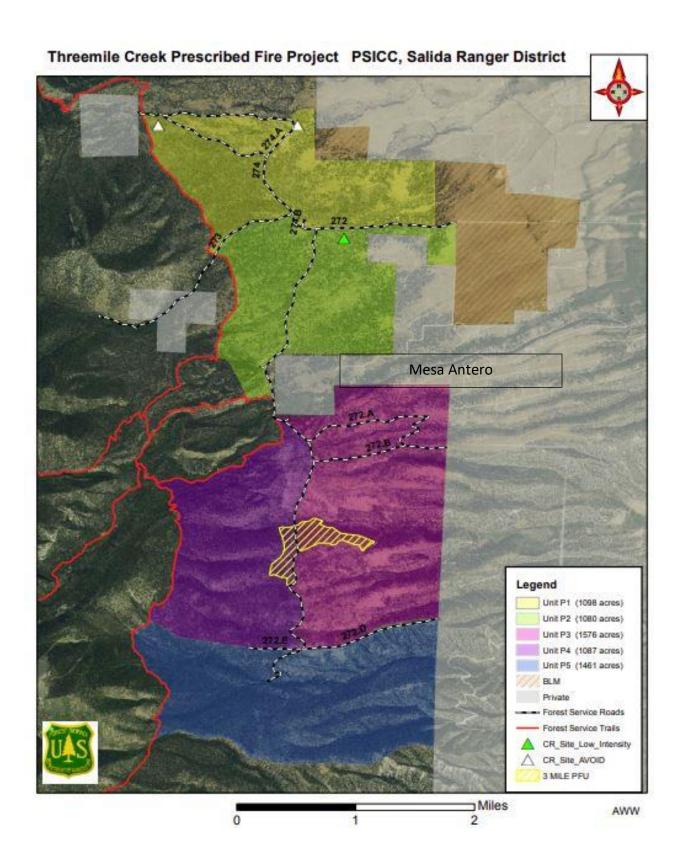
Currently, maintenance burning could begin as soon as this coming fall, 2022, but will more likely begin the following year. There is some cutting involved with the new project which began in 2021. Additionally, the forest is seeking input to update their travel and dispersed camping plans.

Suggestion #1: Increase "Fire Danger Level" signage. Currently, no specific signs exist. A full-size sign should be placed at the FR 270 entrance in full view and as a single-purpose sign.

Suggestion #2: During periods of "very high and extreme fire danger," consider limiting access to the areas beyond the new gate south of the Browns Creek trailhead, which would potentially lower the risk of a late-detected, human-caused start, and lessen the evacuation time of that area.

Suggestion #3: Consider limiting vehicle access to the forest roads 272A & 272B. Dispersed camping, vehicles, OHV and shooters present the potential of a wildfire ignition. Additionally, these areas present lengthy travel times for law enforcement officers to effectively patrol. These roads could be limited to non-motorized use (similarly to other closed 272 road spurs to the south) with signage and barriers.

Suggestion #4: Regarding the upcoming dispersed camping plan, consider only equipping campfire enclosures in the campsites which are on the west and north sides of the forest roads. With winds predominantly from the west and south, this would help to limit fire spread from an escaped campfire.



State Highway 285 Commercial Area

A gas station and other commercial establishments represent a potential human-caused wildfire to spread onto the "Front 38" parcel. Recommendations for the Front 38 are contained in the Reducing Structural Ignitability section.

Additionally, a true firebreak should be considered to break the continuity of the surface

vegetation along the east property line. This firebreak could be created by scraping the surface down to mineral soil at a width of two times the height of the grass/brush. The pinon/junipers should be limbed 30 feet inside of that dirt barrier to CSFS specifications. Ground truthing will need to be completed to determine feasibility.



Large Acreage Parcels West and North of Mesa Antero

These parcels have varying levels of hazardous vegetation buildup as reflected on the CO-WRAP findings. No suggestions are made as of this writing.

Approved CWPP

PROPERTY OWNERS ASSOCIATION

The Colorado State Forest Service will only accept CWPPs that contain the signatures of all core group members, including local fire department(s), local government(s), and the CSFS Supervisory Forester or his/her representative. Please note that CSFS personnel are *not* permitted to sign plans that do not clearly meet CWPP minimum standards.

After an approved CWPP has been submitted to the CSFS State Office, it will be posted on the CSFS website unless otherwise instructed.

Signatory Page

This report is a collaborative effort between various entities. The representatives listed below compromise the core decision-making team responsible for this report and mutually agree on the plan's content.

Mary Gontero, President, Mesa Antero Property Owners Association (MAPOA) Many Gontero, Property Owners Association (MAPOA) Mesce Antero Property Owners Association, (MAPOA) LOCAL GOVERNMENT REPRESENTATIVE Greg Felt, Chaffee County Commissioner LOCAL FIRE DEPARTMENT REPRESENTATIVE AND OFFICE Robert Bertrang Fire Chief, Chaffee County Fire Protection District STATE AGENCY REPRESENTATIVE Adam Moore, Supervisory Forester, Alamosa Field Office, Colorado State Forest Service Digitally signed by Adam Moore Date: 2022:05:12:08:14:10-06:00 FEDERAL LAND MANAGEMENT AGENCY Chris Naccarato, Fire Management Officer, Salida Ranger District, USFS

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