

AGENDA
OURAY COUNTY PLANNING COMMISSION
REGULAR MEETING/ WORK SESSION

February 5th, 2019 5:00 – 7:00 pm
Meeting to be held at the Ouray County Land Use Office
111 Mall Road, Ridgway, Colorado

*If all agenda items are not covered in this time frame they may be continued until the next regular meeting. ***Times are approximate and subject to change***. If an item is finished early the Planning Commission will move directly to the next agenda item. If not a Public Hearing, public comment may or may not be taken during the meeting. Action may be taken at the conclusion of public hearings.*

A. Regular Meeting – 5:00 pm

1. Call to Order
2. Approval of Minutes from the January 22, 2019 PC Regular Meeting
3. New Business
4. Adjourn Regular Meeting

B. Work Session – Wildfire Mitigation

1. Planning Commission will hold a workshop to discuss the current draft of new construction regulations relating to Section 16 (Wildfire Mitigation) of the Ouray County Land Use Code
2. Adjourn Work Session

Copies of land use applications or workshop materials can be obtained at the Land Use Office at 111 Mall Road, Ridgway, CO; by calling 970.626.9775 or e-mailing mcastrodale@ouraycountyco.gov. Comments on the agenda items may be sent to Mark Castrodale, County Planner, PO Box 28, Ridgway, CO 81432

MINUTES
OURAY COUNTY PLANNING COMMISSION
REGULAR MEETING / WORKSESSION

January 22, 2019 5:00 – 7:15 pm
Meeting held at the
Land Use/Road & Bridge Offices, Conference Room
111 Mall Road Ridgway, Colorado

Attending

Commissioners: Boehnke, Miller, Parker, Williams, Wilson

PC Absent: Iuppenlatz, Snowbarger

Staff: Castrodale, Henderson

Guests: Gomez-WRWC, King-Plaindealer, Beckhardt, Cox, Errion, Parkison,
Thomas & Thomas, Wallis, Williams

Note: Minutes are “action only” format & are not intended to be a transcription of the hearing. Comments referenced may be abbreviated and/or paraphrased. If further detail is needed, you may request a recording of this meeting from the Ouray County Land Use Department.

A. Call to Order – Regular Meeting

1. Call to Order at 5:08 pm
 - i. Approval of minutes from the 01/02/19 meeting
 - ii. Motion by Parker to approve the minutes
 - iii. Seconded by Miller
2. Vote: 5-0 (Iuppenlatz, Snowbarger absent)
3. Discussion of New Business
 - i. Future Wildfire Mitigation Work Session schedule
 - ii. Future open house and/or town hall meeting(s)
4. Adjourned Regular Meeting at 5:10 pm

B. Call to Order – Work Session on Potential Revisions to Section 16 (Wildfire Mitigation) of the Ouray County Land Use Code

1. Introduction by Williams at 5:11 pm
2. Introduction and PowerPoint Presentation by Gomez
3. Discussion, comments, and questions from the Planning Commission/Staff/Guests
4. Adjourned Work Session at 7:15 pm

Submitted By:

Approved By:

Staff Member

PC Chair or Alternate

MEMO

TO: Planning Commission
FROM: Mark Castrodale
DATE: January 23, 2019
SUBJ: Feb. 5 Work Session - Wildfire

During the January 22nd special work session (*invite to builders and architects*) the Planning Commission was able to ask attendees what their interest, questions, concerns, comments were regarding the draft and the current process regarding wildfire mitigation.

There was a discussion with WRWC regarding what their role would be in the actual *implementation* of the regulations. There was also some discussion regarding what would be included in the fire mitigation "companion document" and what, if any, would be the County's responsibility with regard to documenting particular building products as meeting or not meeting the mandatory elements.

Based upon the feedback we received during the work session, we are suggesting discussion on the following topics during the 2/5 work session:

- **Fire Resistant Doors**
 - o Do we need better clarification? What works, what doesn't...
- **Decks & Fencing**
 - o Need better clarification on what we're trying to do in the point system.
- **Windows**
 - o We need some clarification here. Language unclear.
- **Siding Materials**
 - o Do we need a list of accepted materials?
 - o What do we need to confirm a new/proposed material is non-combustible?
- **Timing & WRWC Role**
 - o How do we best plug WRWC into the process?
 - Front end, back end, both?
 - o WRWC may not be able to attend final inspection due to timing.

Updates were made to the point system draft based upon feedback from John Baskfield and the following documents are attached for review on 2/5:

- **Jamie Gomez / WRWC, presentation outline**
- **Revised point system draft**
- **Citation document**
- **PC 'draft' schedule, 2019 Q1 – Q3**

att.

Here is my general outline:

- **Introduction:** Provide a bit more information about myself and the West Region Wildfire Council (1 minute)
- **Wildfire:** The wildfire issue as it pertains to Ouray County (4 minutes)
- **Mitigation Works:** A quick primer on how it is possible, and why it is important, to build homes in wildfire ecosystems that are more adapted to wildfire through 'home hardening', defensible space and related measures based upon available science. (5 minutes)
- **Proposed Revision to New Construction:** A very quick run through of the proposed "Wildfire Vulnerability Rating System for New Construction" (5 minutes)
- 15 minutes total

All of this said - I think it would make a lot of sense to give a bit more context to the presentation, by introducing everyone to the work that we have embarked upon by providing the following context:

- **Current Status of Sec 16:** A reminder of how Section 16 currently exists and operates (maybe some print outs of the current code and current "Fire Rating System" for new construction) (4 minutes?)
- **Direction from the BOCC:** Review the entire code and provide recommended revisions to all or all or parts of the code.
- **Historic Timeline:** What has been done to date (2 minutes?)
- **Future Timeline:** What is next (3 minutes?)
- 10 minutes total

Version Date 2019-01-15

PROPOSED Ouray County Wildfire Vulnerability Rating System: NEW CONSTRUCTION



Site Address: _____

Parcel Number: _____ Owner Name: _____

Initial Assessment Date: _____ Initial Assessment Completed by: _____

Final Assessment Date: _____ Final Assessment Completed by: _____

The rating sheet has two category sections: (A) REQUIRED ELEMENTS and (B) SCORED ELEMENTS. Within (A) REQUIRED ELEMENTS, all elements must be marked as "Pass" in order to receive a building permit or certificate of occupancy. Additionally, within (B) SCORED ELEMENTS, a maximum number of five-hundred-eighty-nine (589) will be allowed for individual dwelling units at the time of the issuance of a Building Permit as well as at the time of the issuance of a Certificate of Occupancy. This rating sheet provides categories with which to calculate the point rating specific to your structure and land. No partial points are allowed.

This [PROPOSED] rating sheet is part of Section 16 "Wildfire Mitigation" of the Ouray Land Use Code. Please refer to the code for additional information about the entire wildfire mitigation code. The Rating System is divided into two categories: (A) REQUIRED ELEMENTS and (B) SCORED ELEMENTS. This wildfire vulnerability rating system is intended to encourage ignition resistant design, construction and landscaping practices in areas that have been identified as being susceptible to wildland fire. This wildfire vulnerability rating system does not affect Ouray County's enforcement of International Building Code (2006 edition) the International Residential Code (2006 edition), the International Mechanical Code (2006 edition) and the International Energy Conservation Code (2009 edition).

ID	Name	Required	At Building Permit	Prior to C.O.O.
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CATEGORY A: REQUIRED ELEMENTS

A1.0	Roofing - A description of the roof covering and construction assembly of the roof. Roofing has been shown to have the single most significant impact on the survivability of home during a wildfire.			
A1.1	Class A Roof Covering: The construction of the roof utilizes a roof covering material that has been tested to be a Class A material in accordance with UL 790 (ASTM E108). Some materials may rely on additional underlying materials to improve their fire ratings. Both "by assembly" and "stand-alone" materials are considered acceptable so long as the material has been installed in accordance with their listing and the manufacturers' installation instructions and that the full assembly has been constructed to ensure the Class A rating status has been achieved.	Must Meet Standard A1.1 to Pass	PASS	PASS
A1.2	Class B, C or Unrated Roof Covering: Any roof covering that does not meet the Class A roof covering standards in accordance with UL 790 (ASTM E108).		FAIL	FAIL

A2.0	Exterior Cladding & Siding: A description of the materials and construction assembly of the exterior cladding and siding of the home and its resistance to ignition from embers, as well as radiant and convective heat.			
A2.1	Ignition Resistant Siding: The building will feature exterior cladding and siding that are constructed of ignition-resistant materials. Ignition resistant materials include, but are not limited to: heavy timber log construction that is 6" in diameter or greater; fiber-cement board, 3 stage stucco, masonry, brick, manufactured stone, etc. Rating assessor will determine, using best professional judgement, degree to which a proposed material and proposed assembly is justifiably considered "ignition resistant" to meet this standard.	Must meet Standard A2.1 OR A2.2 to Pass	PASS	PASS
A2.2	Combustible Siding WITH Ember Mitigation AND Defensible Space: The building will feature combustible (non-ignition resistant) exterior cladding and siding, however measures have been taken to ensure that the base of exterior walls, (where the walls meet the ground, decks or any other horizontal surfaces), as well as junctures between exterior walls and rooflines (e.g. dormers, complex roof features, etc.) and other structural projections, etc. have no less than 6 inches of a non-combustible material (e.g. metal flashing, skirting, concrete foundation, etc.) to reduce the likelihood of ignition from embers AND the property meets the standard for B1.1 (no less than 100') for defensible space to mitigate the risk of ignition from radiant and convective heat sources. If the property owner cannot meet the 100 feet of defensible space criteria they may elect to utilize "Ignition Resistant Siding" (A2.1).		PASS	PASS
A2.3	Combustible (Non-Ignition Resistant) Siding: The building has exterior siding or cladding that does not meet standard A2.1 or does not otherwise meet standard A2.2.		FAIL	FAIL
A3.0	Vents: A description of all vents, including but not limited to attic, soffit and gable vents. Any vent that connects the outside of the structure with the inside of the structure is covered under this element unless the vent emanates from a combustion chamber (e.g. stove, fireplace).			
A3.1	Ember Resistant Screening: Vents are screened with 1/8" screening, an acceptable louvered venting system (as is common for dryer vents) and/or a similar screening system that has been specifically designed to prevent the intrusion of embers.	Must meet Standard A3.1 to Pass	PASS	PASS
A3.2	Non-Ember Resistant Screening / No Screening: One or more location(s) on the structure, that connects the outside of the structure with the inside of the structure, either (a) does have any screening or (b) insufficient screening such that it does not meet Standard A3.1.		FAIL	FAIL
A4.0	Chimneys and Other Heating Appliances: Approved spark arresters should be installed on all wood burning appliances.			
A4.1	Approved Spark Arrester Installed: Approved spark arrester or cap is properly installed on the chimney.	Must meet Standard A4.1 to Pass	PASS	PASS
A4.2	Lack of Approved Spark Arrester: Missing, not properly installed or not meeting Standard A4.1		FAIL	FAIL

A5.0	Building Perimeter Hardened Zone: This standard is applicable to the ground level area directly adjacent the building perimeter extending out to 5 feet. The building perimeter includes any attachments, such as combustible decks, combustible fences, attached outbuildings, etc.			
A5.1	5 Foot Hardened Zone: Hardened zone extends out 5 feet from the building perimeter. A hardened zone is void of all combustible fuels including grasses, vegetation, landscape mulch, combustible building materials, etc. The hardened zone must be covered so as to prevent eventual growth of grasses/weeds. A weed barrier fabric and rock/gravel are recommended.	Must have 5'+ hardened zone to pass	PASS	PASS
A5.2	Lack of 5 Foot Hardened Zone: Area within 5 feet of the building perimeter (including attachments) does not meet the standard as defined in A5.1		FAIL	FAIL
A6.0	Exterior Doors: A description of all exterior doors. Doors represent a vulnerable point for fire intrusion.			
A6.1	Fire Resistant Doors: Exterior doors are non-combustible or solid core not less than 1 3/4-inches thick. Windows within doors, and glazed doors, are tempered safety glass or multi-layered glazed panels. Rating assessor will determine, using best professional judgement, degree to which a proposed material and proposed assembly is justifiably considered "ignition resistant" to meet this standard.	Yes or No	PASS	PASS
A6.2	Non-Fire Resistant Doors: One or more exterior doors do not meet Standard A6.1.		FAIL	FAIL
A7.0	Private Road & Driveway Emergency Vehicle Access: Private roads and driveways should conform to Ouray County Land Use Code Section 15 "Ouray County Road Standards", and specifically, the standards outlined in Ouray Land Use Code Section 15 "Ouray County Road Standards", subsection 15.2 X "Driveways". <u>EXCEPTION: Homes, driveways, or portions of driveways, located on mining claims above 9480-feet in elevation may be exempt from the "Driveways" standard. Please refer to Section 24 "High Alpine Development Regulations" for more information and applicability.</u>			
A7.1	Driving surface at least twelve feet (12') wide.	Must meet all standards to pass	PASS / FAIL	PASS / FAIL
	Interior radii shall be at least thirty-two feet (32')*		PASS / FAIL	PASS / FAIL
	Driveway Opening at least sixteen feet (16') wide		PASS / FAIL	PASS / FAIL
	Grades do not exceed twelve percent (12%)		PASS / FAIL	PASS / FAIL
	Adequate sight distance, angle of approach, crowing/cross sloping, adequate drainage meet County standards.		PASS / FAIL	PASS / FAIL
A8.0	Addressing: The address sign shall adhere to Ouray County Land Use Code Section 8.9 and Resolution No. 2017-048 which sets the new standard for address signs in Ouray County.			

A8.1	Address Sign Visible & Meets Standard: All new address signs installed in the unincorporated portions of Ouray County shall conform to the current standard for address signs as set forth by the Board of County Commissioners.	Must meet Ouray County Address Sign Standard to Pass	PASS / FAIL	PASS / FAIL
A8.2	Address Sign Not Visible OR Does Not Meet Standard: The address sign does not meet the standard for address signs as set forth by the Board of County Commissioners.		FAIL	FAIL
A9.0	Gutter System: A description of the gutter system, including gutters, downspouts and gutter caps, including their materials and construction assembly. Regardless of the installed gutter system, regular maintenance of gutters, to clear them of any accumulated combustible materials, is highly recommended. To reduce maintenance, installation of a gutter cap may recommended.			
A9.1	Non-Combustible Gutter System: Gutters are made out of non-combustible material AND gutters are installed such that the leading edge of the roof is finished with a metal drip edge so that no wood sheathing is exposed. The drip edge extends in to the gutter. If no gutter system is installed, use this score.	Meets standards	PASS	PASS
A9.2	Wildfire Vulnerable Gutter System: Gutters do not meet the standard as described in A9.1.	Does not meet standards	FAIL	FAIL

CATEGORY B: SCORED ELEMENTS

ID	Name	Points	Building Permit	Prior to Cert. of Occupancy
DEFENSIBLE SPACE ELEMENTS				
B1.0	Defensible Space: A description of the current and/or planned extent and quality of defensible space around the proposed structure AND emergency access roads/driveways on the property. Please refer to "Protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones" (CSFS 2012-1) - OR current and relevant replacement of this document - for additional information and standards related to the creation of Defensible Space. Apply same score if current conditions do not exist but a detailed Wildfire Mitigation Defensible Plan has been submitted and demonstrates intention to develop defensible space to these standards. <u>Note that "defensible space" does not mean clearcutting or complete removal of vegetation.</u>			
B1.1	Full Zone 1 (0-30 ft) and Full Zone 2 (30-100 ft): No less than 100 feet of adequate D-Space in all directions around the home.	0		
B1.2	Full Zone 1 (0-30 ft) But Not Full Zone 2 (30-100 ft): No less than 30 feet of adequate D-Space in all directions around the home.	100		
B1.3	Not Full Zone 1 (0-30 ft): Less than 30 feet of adequate D-Space in all directions around the home.	300		
BUILDING SITE ELEMENTS				
B2.0	Slope (Percent/Degrees): A measurement of the slope of the property as it relates to the location of the home. The slope measurement is taken by creating a 300 foot straight-line transect with the center of the home in the middle of the transect and the two ends of the transect are at the highest and lowest elevations possible.			
B2.1	<20% / <11.31°: Measured slope is less than 20%	0		
B2.2	20-45% / 11.31°-24.23°: Measured slope is between 20.0 and 45%	60		
B2.3	>45% / >24.33°: Measured slope is greater than 45%	120		
B3.0	Proximity to High Wildfire Risk Topographic Feature : A measurement of the distance of the edge of the building (including attached decks) to the start of a topographic feature, designated as a "High Wildfire Risk Topographic Feature" (HWRTF). HWRTF's contribute to increased wildfire behavior severity. Examples of HWRTF's includes gullies, canyons, ravines and ridge tops. The rating assessor will utilize existing data and best professional judgement to determine existence and proximal location of HWRTF.			
B3.1	> 150' away: Building footprint greater than 150 feet from HWRTF	0		
B3.2	50 - 150' away: Building footprint is between 50 feet and 150 feet from HWRTF.	70		
B3.3	<50' away: Building footprint is less than 150' feet from HWRTF.	140		

B4.0	Forest & Fuel Density (aka "Background Fuels"): An estimate measurement of the approximate fuel density (only species that contribute as wildfire fuel) within/beyond Zone 3 (regardless of property boundary). For this purpose, Zone 3 is defined as starting 100 feet away from the structure and ending at 500 away from the structure, in all directions. Emphasis and weight should be placed on forest and fuel locations most likely to impact fire behavior approaching the house.			
B4.1	Light: Predominately grasses and herbaceous plants. Woody fuels, if existing, are sparse and highly isolated	0		
B4.2	Moderate: Well spaced and isolated trees and shrubs mixed with grasses and herbaceous plants. Isolated is defined as a greater than 10 foot (>10') average spacing between edges of crowns (outer most branches of a tree/shrub).	60		
B4.3	Heavy: Trees and shrubs are the predominant cover type and are dense in nature. Dense is defined as less than 10 foot (<10') average spacing between edges of crowns (outer most branches of tree/shrub).	120		

ARCHITECTURAL DESIGN & CONSTRUCTION ELEMENTS

B5.0	Decks and Fencing: A description of the construction materials, design and assembly of the fencing and decks that are attached to the residential occupancy.			
B5.1	<p>Ignition Resistant Decking & Fencing: (a) decking will be composed of a material that meets the standard for being non-combustible, fire-retardant treated lumber or ignition resistant as defined by Standard ASTM E84; and (b) wood that does not meet this standard, if used, is only a part of the structural support components (sub frame, joists, support posts, rails, etc.) of the deck; and (c) wood joists are covered with a metal cap or similar covering (foil-faced bitumen tape is also recommended) to reduce ember ignitions on exposed joists between deck boards; and (d) gaps between decking boards are 1/4" or more (narrower gaps have been shown to increase fire spread); and (e) joists are spaced at not less than 24 inch intervals; and (f) the decking is not elevated above ground level or, if it is elevated above ground level, it is completely enclosed such that neither convective nor radiant heat can penetrate the deck from the bottom up OR if full enclosure is not feasible the property meets the requirements of 100 feet of defensible space as defined in B1.1; and (g) bottom of deck enclosure (if applicable), where it meets grade, meets ignition resistant standards as described in A2.1; and (h) fences, (if present, attached to home are composed of a combustible material), will feature at least 5 feet of non-combustible fencing where the fence attaches to the structure to reduce the likelihood of the fence carrying fire to structure.</p>	0		
B5.2	<p>Decking Material Does Not Meet Standard ASTM E84: The proposed or built deck conforms with B5.1 in every way (subsections b-g) <u>except</u> subsection (a) related to the decking material. In this case, the proposed or built deck does not utilize a material that meets the Standard ASTM E84.</p>	90		
B5.3	<p>Non-Ignition Resistant Decking & Fencing: Any attached deck or attached fencing does not completely and entirely conform with B5.1 or 5.2.</p>	180		
B6.0	Eaves, Overhangs and Structural Projections: A description of any portion of the attached structure where projections or overhangs are part of the design element. These areas are vulnerable to heat and ember collection.			
B6.1	<p>Ignition Resistant Projections: All eaves are soffitted and all eaves, overhangs and structural projections are composed of or enclosed by ignition resistant materials (as described in element "Exterior Cladding and Siding" - Section A.2).</p>	0		
B6.2	<p>Ignition Vulnerable Projections: One or more eaves has an open-eave construction design OR one or more eaves, overhangs or structural projections does not otherwise conform with B6.1.</p>	80		

B7.0	Windows: A description of all exterior windows. Windows are vulnerable to fire intrusion through window frame failure (primarily due to heat exposure) and glazing (glass surface) failure.			
B7.1	Preferred Exterior Windows: (a) all exterior windows are multi-paned (or double paned) <u>AND</u> tempered; and (b) all exterior window frames are composed of ignition resistant or non-combustible materials.	0		
B7.2	Less Preferred Exterior Windows: (a) all exterior windows are multi-paned (or double-paned) <u>BUT NOT</u> composed of tempered glass; (b) and all frames are composed of ignition resistant or non-combustible materials	70		
B7.3	Fire Vulnerable Exterior Windows: Windows do not conform with B7.1 or B7.2	140		

EMERGENCY ACCESS ELEMENTS

B8.0	Driveway Clearances: In addition to Required Element A7.0 "Driveways", this is a description of the driveway's horizontal and vertical clearances which allow for unimpeded emergency response vehicular access. Typical impediments to safe horizontal and vertical access include trees, branches, shrubs, gateways, archways, etc. The horizontal clearance does not require that additional road base material be laid down, instead this is solely looking at the ability for emergency vehicles to access the site.			
Horizontal Clearance	Greater than 24 feet of horizontal clearance has been achieved.	0		
	Less than 24 feet of horizontal clearance as been achieved however an area along the driveway provides a "pullout" for emergency vehicles. The "pullout" provides at least 24 feet of horizontal clearance (as measured with the driveway and the pullout combined) and is at least 35 feet in length so that two emergency vehicles can pass one another along the driveway.	0		
	Less than 24 feet but greater than 20 feet of horizontal clearance	40		
	Less than 20 feet of horizontal clearance	80		
Vertical Clearance	Greater than 13.5 feet of vertical clearance	0		
	Less than 13.5 feet of vertical clearance	30		
OTHER CONSIDERATIONS - NO SCORE - EDUCATIONAL PURPOSES ONLY				
B9.0	Near Home Combustibles: A description of other combustible materials, vulnerable to ignition, within the Home Ignition Zone (HIZ). The emphasis for combustibles is within Zone 1, or zero to thirty feet from the structure. ANY material that is combustible should be considered. Common combustible materials include (but are not limited to): propane tanks, firewood, woody debris (dead and down sticks, branches, etc.), pine/fir needles, leaves, patio furniture, ornamental wreaths, decorative displays, etc.			
B9.1	Combustible materials are not within 30 feet of any structures.	No applicable score.		
B9.2	Combustible material are within 10-30 feet of the structure.			
B9.3	Combustible material within 10 feet of the structure.			
		Max Points	Site Inspection	Prior to Cert. of Occupancy
Totals		589	0	0
		589 or below	Passing Score	
		590 or Above	Failing Score	

To: Ouray Land Use Planning Commission

From: West Region Wildfire Council

Version Date: Jan 8 2019

Re: Resource citations related to WRWC’s recommended revisions to the current “Fire Rating System for New Construction” of Section 16: Wildfire Mitigation of the Ouray Land Use Code.

Name (ID)	Document Title / Resource Description	Link
Roofing (A1.0)	FEMA Homebuilder’s Guide To Construction in Wildfire Zones – Roofs	https://www.fema.gov/media-library-data/20130726-1651-20490-4552/fema_p_737_fs_5.pdf
Roofing (A1.0)	ASTM E108 Youtube Video – Published by Palmex Thatch	https://www.youtube.com/watch?v=Lgzo6icnX5s
Roofing (A1.0)	IBHS/NFPA Wildfire Research Fact Sheet – Roofing Materials	https://www.nfpa.org/-/media/Files/Firewise/Fact-sheets/FirewiseFactSheetsRoofingMaterials.ashx?la=en&hash=4203AC72952C6295E302A6571981D9F1286E2793
Exterior Cladding & Siding (A2.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Exterior Walls	https://www.fema.gov/media-library-data/20130726-1652-20490-4620/fema_p_737_fs_7.pdf
Exterior Cladding & Siding (A2.0)	IBHS Wildfire Demonstration (see the “Exposure to Radiant Heat” section)	https://disastersafety.org/ibhs/research-center-demo-wildfire-2011/
Vents (A3.0)	IBHS Vulnerability of Vents to Windblown Embers	http://disastersafety.org/wp-content/uploads/2017/08/Vulnerability-of-Vents-to-Wind-Blown-Embers_Executive-Summary.pdf
Spark Arrestors (A4.0)	2012 International Residential Code – Chapter 10 Chimneys and Fireplaces	https://codes.iccsafe.org/public/document/code/362/6125042
Hardened Zone (A5.0)	IBHS- Defensible Space Zones	https://disastersafety.org/wildfire/defensible-space/
Hardened Zone (A5.0)	NFPA- Prepare your home for wildfires	https://www.nfpa.org/Public-Education/By-topic/Wildfire/Preparing-homes-for-wildfire
Exterior Doors (A6.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Exterior Doors	https://www.fema.gov/media-library-data/20130726-1652-20490-8249/fema_p_737_fs_11.pdf

Private Roads & Driveways (A7.0)	Please see pertinent Ouray County code	
Addressing (A8.0)	Please see pertinent Ouray County code	
Defensible Space (B1.0)	Modeling Potential Structure Ignitions from Flame Radiation Exposure with Implications for Wildland/Urban Interface Fire Management	https://www.fs.fed.us/rm/pubs_other/rmrs_1998_cohen_j001.pdf
Defensible Space (B1.0)	Modeling Potential Structure Ignitions from Flame Radiation Exposure with Implications for Wildland/Urban Interface Fire Management	https://www.fs.fed.us/rmrs/science-spotlights/protecting-your-home-wildland-fire
Defensible Space (B1.0)	IBHS- Defensible Space Zones	https://disastersafety.org/wildfire/defensible-space/
Defensible Space (B1.0)	IBHS – Reduce Your Wildfire Risk: Create Defensible Space Zones	https://static.nationwide.com/static/IBHS-Wildfire-Defensible-Space-Infographic-Update.pdf?r=50
Slope (B2.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Selecting the Construction Site	https://www.fema.gov/media-library-data/20130726-1651-20490-7160/fema_p_737_fs_3.pdf
Proximity to High Wildfire Risk Topographic Feature (B3.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Selecting the Construction Site	https://www.fema.gov/media-library-data/20130726-1651-20490-7160/fema_p_737_fs_3.pdf
Background Fuels (B4.0)	NWCG - Surface Fuel Model Descriptions	https://www.nwcg.gov/publications/pms437/fuels/surface-fuel-model-descriptions
Background Fuels (B4.0)	Fire Behavior Fuel Model Descriptions (Anderson, 1982)	https://gacc.nifc.gov/rmcc/predictive/Fire%20Behavior%20Fuel%20Model%20Descriptions.pdf
Background Fuels (B4.0)	Fire Behavior Field Reference Guide 2014	https://gacc.nifc.gov/oncc/docs/FBFRG_2014.pdf
Decks and Fencing (B5.0)	IBHS – Wildfire Research Ignition Potential of Decks Subjected to an Ember Exposure	http://disastersafety.org/wp-content/uploads/2017/10/Deck-Ember-Testing-Report-2017_IBHS.pdf
Decks and Fencing (B5.0)	IBHS Wildfire Research Fact Sheet - Decks	https://www.nfpa.org/-/media/Files/Firewise/Fact-sheets/FirewiseFactSheetsDecks.ashx?la=en&hash=8E124A21ACABDAEF66377242D783611D4D9AD7A5

Decks and Fencing (B5.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Landscape Fences and Walls	https://www.fema.gov/media-library-data/20130726-1652-20490-2634/fema_p_737_fs_14.pdf
Decks and Fencing (B5.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Decks and Other Attached Structures	https://www.fema.gov/media-library-data/20130726-1652-20490-4409/fema_p_737_fs_13.pdf
Eaves, Overhangs and Structural Projections (B6.0)	IBHS Wildfire Research Fact Sheet – Under-Eave Construction	https://www.nfpa.org/-/media/Files/Firewise/Fact-sheets/FirewiseFactSheetsUnderEaves.pdf
Eaves, Overhangs and Structural Projections (B6.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Eaves, Overhangs and Soffits	https://www.fema.gov/media-library-data/20130726-1652-20490-2869/fema_p_737_fs_6.pdf
Windows (B7.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Windows and Skylights	https://www.fema.gov/media-library-data/20130726-1652-20490-8008/fema_p_737_fs_10.pdf
Gutters (B8.0)	Colorado Springs Wildfire Mitigation Design Manual	https://coloradosprings.gov/sites/default/files/final_hillside_wildfire_mitigation_design_manual_final_document_third_printing.pdf
Gutters (B8.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Gutters and Downspouts	https://www.fema.gov/media-library-data/20130726-1652-20490-7674/fema_p_737_fs_9.pdf
Driveway Clearances (B9.0)	Boulder County - Driveway Access for Emergency Vehicles	https://assets.bouldercounty.org/wp-content/uploads/2017/03/w04-emergency-vehicles-access.pdf
Driveway Clearances (B9.0)	FEMA Homebuilders Guide to Construction in Wildfire Zones – Community Infrastructure	https://www.fema.gov/media-library-data/20130726-1652-20490-9581/fema_p_737_fs_17.pdf
Driveway Clearances (B9.0)	Standards for fire department vehicle access – California Fire Code	http://www.unidocs.org/fire/un-096.pdf

**WILDFIRE MITIGATION REGULATIONS
PLANNING COMMISSION TENTATIVE SCHEDULE
Q1 – Q3 2019**

- Jan. 22 – Wk. Session with builders/architects – new construction.
- Feb. 5 – Finalize new construction. Begin looking at puds/subdivisions.
- Feb. 19 – Continue working on puds/subdivisions. Finalize?
- Mar. 5 – Finalize puds/subdivisions? Begin looking at additions/remodels?
- Mar. 19 – Finalize puds/subdivisions or continue with additions/remodels.
- Apr. 2 – Additions/remodels.
- Apr. 16 – Finalize additions/remodels? Begin looking at vacant land?
- May 7 – Additions/remodels or vacant land.
- May 21 – Vacant land.

June – Date TBD: Possible open house/town hall – present entire ‘draft package’.

- June 18 (or ???) – Finalize any remaining details. Develop code outline.

July – Staff develops code language to implement new regulations.

- Aug. 6 – PC reviews staff’s draft code language.
- Aug. 20 – PC public hearing on complete point system and code.

Aug./Sept. - BOCC takes up recommendation. Schedules public hearing.

