GUNNISON COUNTY PLANNING COMMISSION
REGULAR MEETING MINUTES
Thursday, April 21, 2022
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The Gunnison County Planning Commission conducted a regular meeting in the Planning Commission Meeting Room in the Blackstock Government Center, 221 N. Wisconsin, Gunnison, Co. and on Zoom **Present:**

Chairperson- Laura Daniels Vice-Chairperson-Andy Sovick Commissioner-Matt Schwartz Commissioner-Fred Niederer	Director of Community and Economic Development-Cathie Pagano Senior Planner – Rachel Sabbato Manager of Administrative Services- Beth Baker Others present as listed in text

Absent: Commissioners Baca and Appleton
ZOOM: none

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With a quorum present Chairperson Daniels opened the April 21, 2022 regular meeting of the Planning Commission.

Moved by Niederer seconded by Schwartz to approve Planning Commission meeting minutes, dated April 7, 2022. The motion passed unanimously.

Unscheduled citizens: None

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Wildfire Urban Interface (WUI) and Building Codes work session: The Gunnison County Planning Commission conducted a work session. They discussed information concerning WUI and building codes with Director of Community and Economic Development, Cathie Pagano and the Building and Environmental Health Official Crystal Lambert.

With a quorum present Chairperson Laura Daniels opened the work session.

Director Pagano reviewed the Wildlife Urban Interface code. She went over the memos attached here.

From: Cathie Pagano, Assistant County Manager for Community and Economic Development

To: Wildfire Stakeholders

Date: April 21, 2022

Re: Wildfire Policy Recommendations

Community Planning Assistance for Wildfire Technical Assistance

In 2019, Gunnison County received a technical assistance award to participate in the Community Planning Assistance for Wildfire (CPAW) program. County staff worked with a team from Headwaters Economics, Wildfire Planning International, and USDA Forest Service, Rocky Mountain Research Station. The year-long process included

multiple stakeholder engagement opportunities and the general public participated in the discussions. Stakeholder participants include: U.S. Forest Service, Colorado State Forest Service, West Region Wildfire Council, County GIS staff, Crested Butte Fire Protection District, Gunnison Fire Protection District, County Emergency Management, Gunnison County Board of Realtors, property managers, and members of the public.

The CPAW team prepared a report titled, "Community Planning Assistance for Wildfire, Final Recommendations for Gunnison County, CO, 2019" (the CPAW report). In addition to the report the team worked with local fire professionals and stakeholders to develop and update wildfire mapping for the entirety of Gunnison County, along with a table of mitigation difficulty classes and descriptions and a "CPAW Mitigation Difficulty/International Wildland Urban Interface Code (IWUIC) Hazard Crosswalk." The International Code Council has released the 2021 International Wildlife Urban Interface Code and Gunnison County proposes that the County and the municipalities within the County consider adoption of the IWUIC cooperatively and within the same year. Historically, the County and the municipalities have adopted the updated building codes in the same year to maintain consistency and reduce confusion across jurisdictional boundaries.

Wildfire in Gunnison County and Colorado

Gunnison County has been fortunate in the past 40 years that we have not experienced a large-scale, catastrophic wildfire. Many other counties and communities across the State of Colorado have experienced devastating consequences from wildfire, most recently the Marshal fire, along the front-range in Superior and Louisville, became the most devastating fire in state history destroying nearly 1,000 structures across 6,000 acres in just hours. The firestorm was spread by embers through high winds that whipped through suburban subdivisions far from forests. The Colorado Sun noted, "The Marshall fire…didn't need trees. It didn't even travel on the ground. It moved through the air, fanning embers across long spans in seconds" (Blevins, et al. 2022). The Marshal fire is an example of the risk and threat that our residents and community face. Gunnison County has experienced multiple fires of less than 1,500 acres in the past twenty years— most have been successfully suppressed. The CPAW Report explains:

"…successful suppression is a driver in forest encroachment into the open grasslands and increasing fuel loads in the forest fuel types. Compounding the issue are extensive mountain pine beetle and spruce bark beetle infestations across the county, resulting in a significant threat of standing dead and down forest fuels capable of supporting extremely aggressive fire behavior if exposed to ignition sources. The additional elements of complex and often steep topography coupled with the dispersed residential home development pattern common throughout the county present an extremely complex wildfire protection challenge. The county regularly experiences the weather conditions that can support extreme fire behavior, with only the ignition source missing."

Land managers including the U.S. Forest Service and the Colorado State Forest Service have increased their work in the past three years to mitigate the impacts of beetle infestations in the County including the 400-acre Wilder-Highlands Mountain Pine Beetle Response project in the Taylor Canyon and Lost Canyon areas to eliminate the infestations in those areas. These proactive measures support a healthier forest and can reduce some wildfire risk. However, the risk of wildfire and destruction of life and property is exacerbated by rural development patterns and the construction of structures that are not fire resistant.

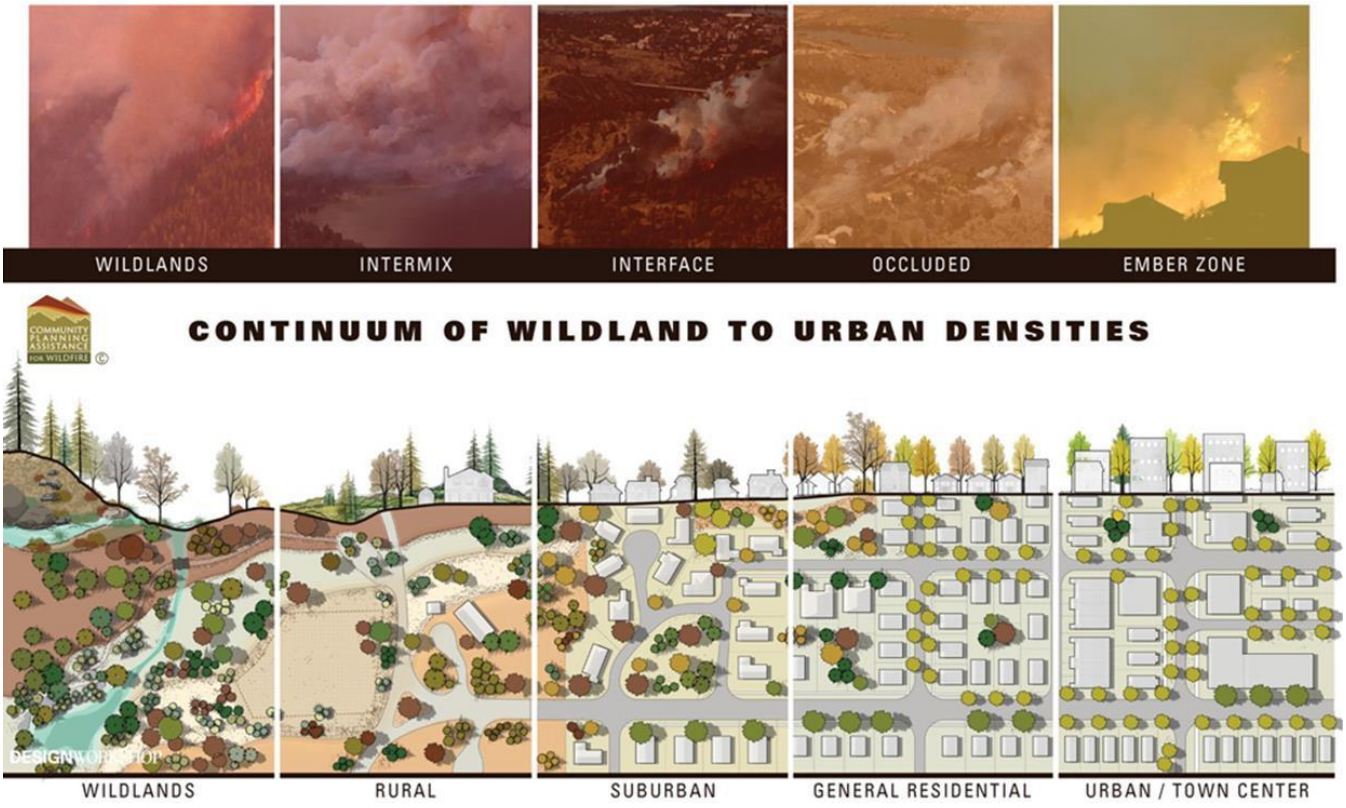
Governor Polis has directed the Colorado Fire Commission and its associated WUI subcommittee to develop recommendations from the IWUIC. Members of the State Legislature have indicated that they intend to propose legislation in 2022 that may include adoption of a state-wide building code including the IWUIC. The WUI subcommittee is working to develop broadly supported recommendations from the IWUIC that will be presented to the legislature before passage of legislation. Recommendations are expected this year and adoption of new regulations would impact the entire state. The state has been ineligible for significant (tens of millions) federal funding because it lacks an adopted building code. Additionally, Gunnison County has seen its Insurance Service Office (ISO) rating drop in recent years because we have not yet adopted the 2021 International Building Codes nor have we adopted the IWUIC. This drop in our rating causes local insurance rates to increase.

Wildfire Risk and Mitigation

The climate, topography, landscape, and persistent drought in Gunnison County lends itself to high wildfire risk. The CPAW report identifies multiple challenges in Gunnison County including: existing subdivisions that may not be designed with wildfire safety and protection features; increases in part-time residents and transient populations that may be less familiar with wildfire prevention and safety; regulatory gaps and enforcement; and lack of community engagement on wildfire issues. The following video (https://vimeo.com/505411007) illustrates the challenges of development in the wildland urban interface and solutions to reduce risk and protect lives and property.

Significant research has been done on wildfire risk and mitigation. As noted in the video, wildfire destruction of property and lives today is similar to building and factory fires in the early 19th century in Chicago and San Francisco—now urban areas are designed with fire hydrants, interior sprinklers, fire alarms and emergency exits. We can design and building structures to resist wildfires—we just haven't wholly adopted the techniques yet. Reduction of wildfire risk requires active management of public lands and improved mitigation measures and risk reduction tools on private lands. The report "Home Survival in Wildfire-Prone Areas: Building Materials and Design Consideration" (Quarles, et al. 2010) found:

> *"Embers are the most important cause of home ignition. Recent research indicates that two out of every three homes destroyed during the 2007 Witch Creek fire in San Diego County were ignited either directly or indirectly by wind-dispersed, wildfire-generated, burning or glowing embers (Maranghides and Mell 2009) and not from the actual flames of the fire. These embers are capable of igniting and burning your home in several ways. In order to have a wildfire-safe home, two equally important factors must be implemented: 1) the wise selection of building materials and designs that will help the home resist the wildfire and 2) the home must have adequate defensible space, based on the wise selection, placement, and maintenance of near-home vegetation. There is a direct link between some survival, the vegetation management required in developing adequate defensible space around the home, and the building materials and design used to construct the home."*



Additional findings from the Forest Sciences Laboratory, Rocky Mountain Research Station of the US Forest Service found:

> *"Recent fire seasons in the western United States are some of the most damaging and costly on record. Wildfires in the wildland urban interface on the Colorado Front Range, resulting in thousands of homes burned and civilian fatalities, although devastating, are not without historical reference. These fires are consistent with the characteristics of large, damaging, interface fires that*

threaten communities across much of the western United States. Wildfires are inevitable, but the destruction of homes, ecosystems, and lives is not…Overcoming perceptions of wildland urban interface fire disasters as a wildfire control problem rather than a home ignition problem, determined by home ignition conditions, will reduce home loss" (Calkin et al. 2013).

The same report goes on to analyze the benefit of fuel treatments aimed at reducing wildfire activity and finds that those are beneficial but that if the home ignition zone (HIZ) or the susceptibility of homes to fire are not addressed the fuel treatment will be inefficient:

"For example, a wildland fuel treatment within the 2007 Angora fire in California reduced fire intensities for Jeffrey pine (Pinus jeffrey) survival (43) but did not reduce the HIZ ignition potential of adjacent homes, resulting in high loss. Last, given a sustained home ignition (or ignitions), the probability of home destruction is influenced by the effectiveness of fire protection efforts in suppressing the structure fire. The disaster sequence shows that, although some WUI fire protection tactics might succeed, these standard response tactics fail to prevent residential fire disasters with highly ignitable communities. Areas of high-density suburban development can lead to additional fire risk through home-to-home ignition. Thus, effective fire protection depends on ignition resistant homes during extreme wildfires" (Calkin et al. 2013)

While the general public often has expected that wildfire risk mitigation should be the responsibility of government land managers—risk reduction can only be accomplished when there is a dynamic and ongoing partnership between land managers and private property owners. Fuel treatments on public and private lands, defensible space on private lands, ignition resistant construction, and ongoing property maintenance over time are all critical to creating an environment that reduces catastrophic threats to life and property. We are fortunate in Gunnison County that multiple agencies including the U.S. Forest Service, Colorado State Forest Service, West Region Wildfire Council, Crested Butte Fire Protection District, and others support the active management and treatment of fuel on public and private lands.

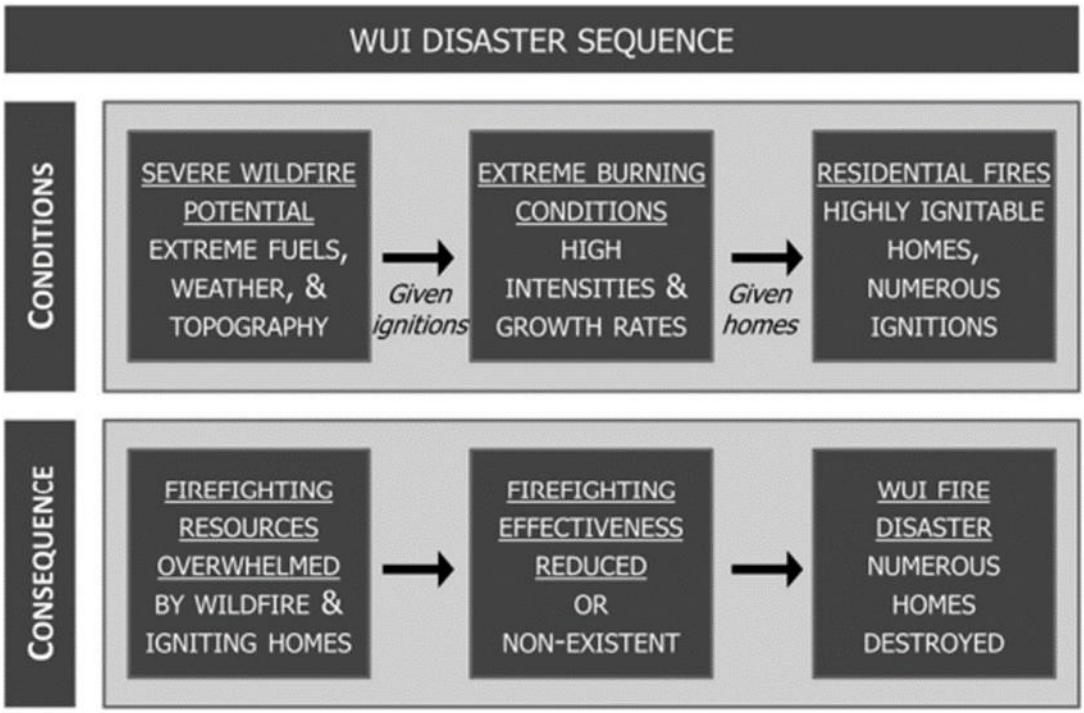


Fig. 2. WUI disaster sequence. Each box corresponds to a factor that critically contributes to high numbers of destroyed homes during a WUI fire. Note that, if homes are ignition-resistant and numerous home ignitions do not occur (step 3), structure protection effectiveness is greater for home ignitions that do occur, thereby preventing disastrous losses.

A common misconception that was clearly evident by so many (fire professionals included) in the Marshal Fire, is that urban communities such as the City of Gunnison are far enough removed from the forests to have little threat from wildfire. Unfortunately, this is not true and we've seen the evidence many times that it is not a forest fire that burns through a community but the embers from a fire that may be miles away. Embers and firebrands cause significant destruction and are one of the most important threats to address. The adoption of methods of ignition resistant construction as required and standardized by the IWUIC can prevent embers from starting home fires. The following video (https://youtu.be/DvsjNBGwoFo) from the Insurance Institute for Building and Home Safety demonstrates the effectiveness of ignition resistant construction.

Costs

Anytime a new code is proposed for adoption there are questions and concerns related to increased costs of construction to property owners. Gunnison County is currently experiencing increased construction costs, a construction boom, and a significant lack of affordable and attainable housing for the local workforce. Cost is an important consideration in the adoption of building codes. Headwaters Economics led the development of "Building A Wildfire-Resistant Home: Codes and Costs" in 2018. The study analyzed the cost of new construction and remodeling expenses for a three-bedroom, 2,500 square-foot, single-story, single-family residence in southwest Montana which the study notes is one of the fastest growing regions in the country. The study reviewed the components of the home that are most susceptible to fire: the roof, exterior walls, decks, and landscaping. The study found that the use of fire-resistant materials in compliance with wildfire building codes resulted in a cost decrease of 2% with the largest savings being attributed to the use of fiber cement siding rather than cedar plank siding in exterior walls.

The full report and specific analysis, along with a detailed excel spreadsheet of the cost comparison, are linked above. The study highlights the following findings:

"-Wildfire disasters will be more common if unmitigated home development continues in the wildland-urban interface.

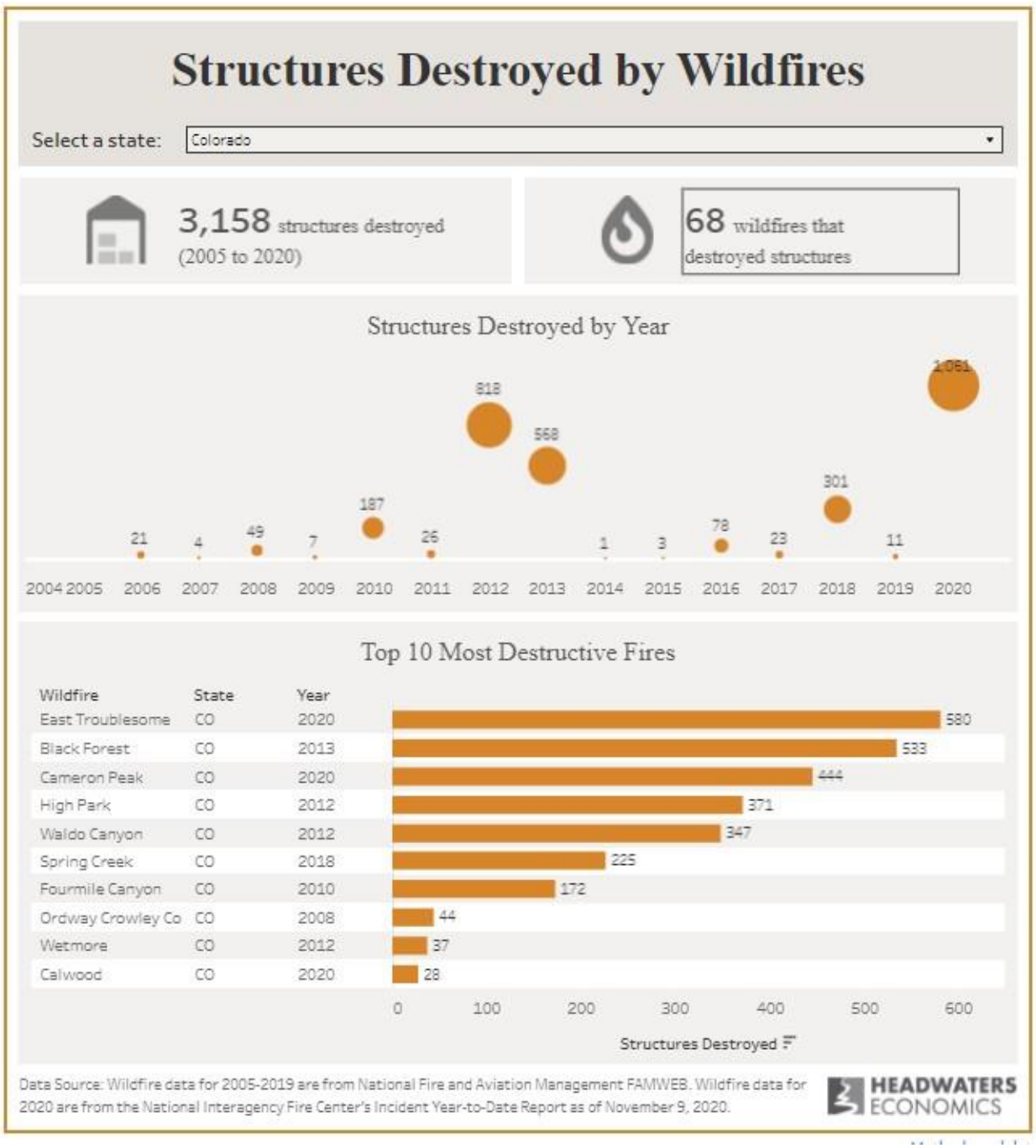
- A new home built to wildfire-resistant codes can be constructed for roughly the same cost as a typical home.

-Costs vary for retrofitting an existing home to be wildfire-resistant, with some components such as the roof and walls having significant expense. Some of these costs can be divided and prioritized into smaller projects.

-Technology and standards exist today that will make communities safer. Cities, counties, and other jurisdictions can implement wildfire-resistant building codes to reduce their vulnerability to wildfire."

Staff has analyzed the cost impacts of the ignition resistant construction materials prescribed in the IWUI and found that, with thoughtful planning at the design phase, the impacts to the cost of construction can be negligible for a typical dwelling.

It is important to recognize that there are enormous costs to individuals, local government, and communities that experience a wildfire. In 2020, 1,061 structures were destroyed in Colorado and we know that in 2021 nearly 1,000 structures were destroyed in the Marshal fire alone.



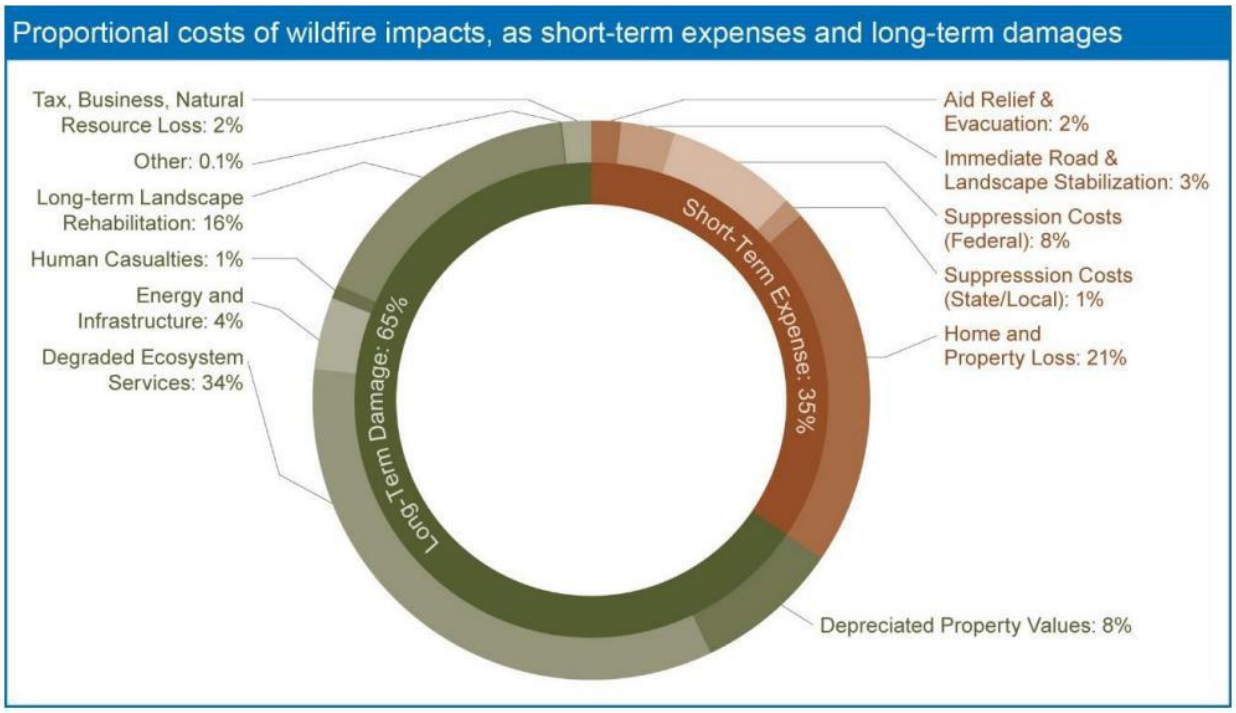
When a fire occurs the short-term and long-term costs can have substantial impacts to property owners, local and federal government. The Full Community Costs of Wildfire, prepared by Headwaters Economics analyzed the short and long-term costs of wildfire and reviewed four case studies including the Hayman

Fire (2002) in Colorado. The report found:

"Analysis of the literature suggests nearly half of all wildfire costs are paid at the local community level by government agencies, non-governmental organizations, businesses, and homeowners. Almost all wildfire costs accrued at the local level are the result of long-term damages such as landscape rehabilitation, lost business and tax revenues, degraded ecosystem services, depreciated property values, and impacts to tourism and recreation.

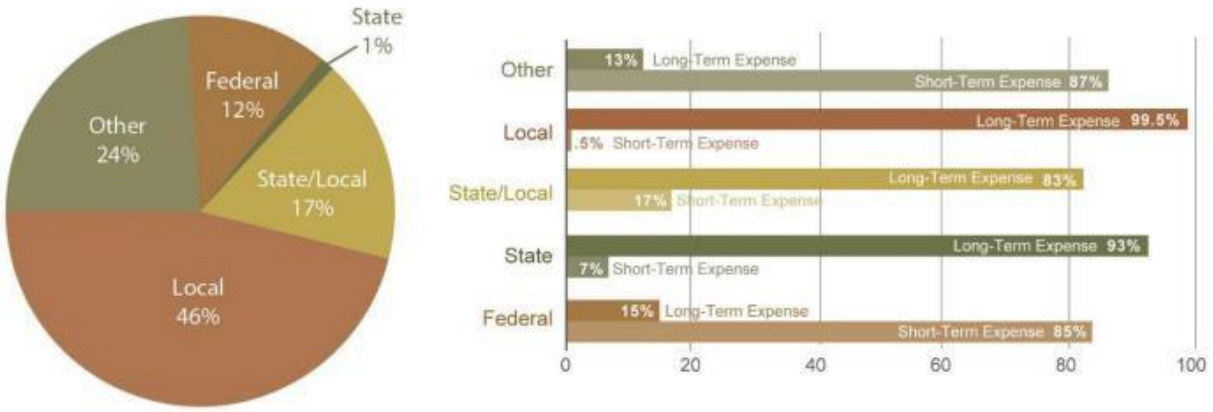
The remaining wildfire costs are paid at the state and federal level, or are paid by a combination of local, state, and federal organizations. State and federal agencies are responsible for paying the bulk of suppression costs. While substantial, suppression costs comprise only nine percent of total wildfire costs; additional short-term expenses and long-term damages account for 91 percent of total wildfire costs. Overall, short-term expenses such as relief aid, evacuation services, and home and property loss comprise around 35 percent of total wildfire costs. Related costs from long-term damages, which can take years to fully manifest, account for approximately 65 percent of total wildfire costs.

Wildfire costs greatly vary depending on factors within the built and unbuilt environment. Socioeconomic context, housing density, the duration and size of a wildfire, and other variables influence the overall cost of a wildfire. In general, upward trends in urban growth and development in areas at risk to wildfires suggest a parallel rise in total wildfire costs" (Barrett, 2018).



Short-term costs include relief aid (Red Cross), insurance claims, flood damage, grants and loans for uninsured property, federal fire suppression, state and local fire suppression. Long-term costs include human casualty, utility line replacement, soil erosion rehabilitation, damaged public facilities, loss of property tax revenue, loss of business revenue, loss of natural resources, loss of wildlife habitat, recovery and water quality mitigation, infrastructure repair, etc. The costs to individuals, communities and government are long and often take years to resolve. As the figure below from the report shows the long- term costs of fire are mostly born by the local community (local government, businesses, individuals and citizens).

Figure 5: Summary of proportional costs paid at the local, state, and federal level and how these costs are distributed as short-term expenses or long-term damages.



The report finds that land use tools such as zoning and regulations can help control "how, when and where development occurs in wildfire-prone areas" (Barrett, 2018) and that adoption of codes that require structures built in high hazard areas to be constructed of ignition-resistant building materials reduce the risk.

Insurance costs are often described as one method to deter construction in high wildfire hazard areas. Headwaters Economics prepared a report, "Do Insurance Policies and Rates Influence Home Development on Fire-Prone Lands?" in 2016. The report finds that insurance rates are rising, but not enough to discourage development: "Insurance rates and policies currently do not appear to consistently drive decisions about whether or not to build homes in wildfire-prone areas. Insurance costs are increasing, but those who can afford it and who value the amenities of living on forested mountainsides with sweeping views of the valley below will continue to build. Insurance carriers are denying homeowner insurance in a few high-risk areas, but homeowners can still find insurance on the alternative market, albeit at a greater cost." Homeowners may have greater difficulty finding insurance coverage in high hazard areas particularly in California. The report indicates that the amenities that drive an individual to purchase property in a wildfire hazard areas such as mountain views and wooded lots outweigh the perceived risk of wildfire, at least in the short term.

Outreach

Gunnison County Community Development staff, along with the CPAW team, conducted significant community outreach in 2019 including multiple stakeholder and public meetings. In 2022, Community Development staff conducted additional outreach to bridge the gap between the CPAW work in 2019 and today. County staff convened a meeting which included staff from the City of Gunnison, Town of Crested, and the Town of Mt. Crested Butte along with staff from Gunnison Fire Protection District, Crested Butte.

Fire Protection District, West Region Wildfire Council, and the Colorado State Forest Service. The purpose of the meeting was to discuss regional adoption of the 2021 IWUIC. Each of the municipalities attended and

identified adoption of the IWUIC as something that they were currently considering or would begin to work toward. Staff expects that it will be important for the County to lead the way on adoption which often enables the municipalities to follow and create model programs based on a County-wide program. There was strong support from the fire professionals to adopt the IWUIC.

In March 2022, the County held a public meeting to discuss our analysis and recommendations related to wildfire risk and policy. This meeting was advertised in the newspapers, social media, and via email blasts to County contractor stakeholder lists (~approximately 400 addresses). Approximately 40 people attended the meeting and provided comment on the matter. At that meeting there were no public comments that discouraged adoption of the IWUIC or other policies to reduce wildfire risk. Additionally, the County did briefly discuss wildfire hazard at our annual spring contractor meeting in April 2022.

Recommendation

After analysis and stakeholder outreach, County staff recommends adoption of the 2021 IWUIC and adoption of the updated mapping included in the CPAW report including:

- **Gunnison County Landscape Wildfire Hazard**: "This scale (120-m pixel resolution) represents the likelihood (probability) of a fire occurring and the intensity of the fire at the landscape level based on the inherent landscape characteristics, including broad existing vegetation, biophysical settings, fire regimes, and fire histories. To provide the assessment in a format that is easily interpreted by the expected users (public, developers, land use planners), the pixelated display was summarized to polygon boundaries based on the U.S. Geological Survey Hydrological Unit Code (HUC) 12 (sub-watershed) boundaries. The landscape-level hazard assessment (Figure 10) is delineated into the following rankings: moderate, high, very high. The factors influencing these rankings can be used to determine the potential landscape-level exposure that a development will be subject to. The ranking at this scale is difficult to change at the local/parcel level. Mitigation affecting change at this scale is typically done by large-scale disturbances such as insect mortality, fires, or landscape-level mitigation" (CPAW, 2019)
- **Gunnison County Local Wildfire Hazard**: "This scale (90-m pixel resolution) is based on an extreme event (worst fire days). To provide the assessment in a format that is easily interpreted by the expected users (public, developers, land use planners), the pixelated display was summarized to polygon boundaries based on the catchment boundaries within the HUC 12 boundaries (Figure 11). This does not show the likelihood of a fire occurring but does show where fires are likely to burn at high intensity" (CPAW, 2019)

- **Gunnison County Wildfire Mitigation Difficulty**: "The Mitigation Difficulty component (30-m pixel

resolution) uses the life form (grass, shrubs, trees), slope, and crown fire potential to classify the potential mitigation success of any given 30-m pixel on the map (Figure 12). This is represented by nine categories" (CPAW, 2019)

- **Gunnison County Wildland Urban Interface**: *"A general WUI definition used across all policies, plans, and regulations should account for the "set of conditions" where vegetation (wildland fuels) and structures or infrastructure (built fuels) are influenced by weather and topography to allow fire to ignite and spread through the WUI environment. To provide the basis for a true understanding of the risk that Gunnison County faces, the WUI should be more accurately defined as: 'Any developed area where conditions affecting the combustibility of both wildland and built fuels allow for the ignition and spread of fire through the combined fuel complex.'*

  In order to provide a spatial reference in defining the WUI, the CPAW/ RMRS team modified SILVIS lab's approach for spatially defining the WUI. The SILVIS lab approach originated in the Federal Register report 16 on WUI communities at risk from fire. This approach was modified by the CPAW/RMRS team to the following parameters:

  - *WUI Intermix: Areas with ≥1 house per acre and ≥50 percent cover of wildland vegetation. These areas have a potential for exposure to radiant and convective heat, as well as airborne embers.*
  - *WUI Interface: Areas with ≥1 house per acre and ≤50 percent cover of vegetation and within 1.5 mi of area with >= 75% wildland vegetation.*
  - *Non- WUI Vegetated (no housing): Areas with ≥50 percent cover of wildland vegetation and no houses (e.g., protected areas, steep slopes, mountain tops).*

  Based on these definitions, most of the developed areas (areas currently with habitable structures, or platted subdivisions without structures (potential WUI) within Gunnison County have been classed as WUI Intermix with some small areas of WUI Interface, mostly within the City of Gunnison and Town of Crested Butte (Figure 13). All areas outside of federal land ownership—including areas currently defined as "state, county, or local land ownership (grey areas on map)"—also have the potential to become WUI if development is planned. Although these areas of land ownership are not currently developed, the county should consider including these areas as the spatially defined WUI."

- **Gunnison County Wildfire Hazard Severity Map**: Mike Pelletier, Gunnison County GIS Manager has created a wildfire hazard severity map based on criteria set forth in IWUIC.

County staff recommends the adoption of all these maps into applicable codes and regulations as a basis for informing decision making for regulators and as a baseline for general understanding of possible wildfire hazard and risk at the parcel level for property owners. The maps shall be used as an informational baseline not as final determination of actual hazard at a specific parcel. County staff would need to analyze the mapping,

mitigation difficulty classes and descriptions, aerial photos, any vegetation management proposed, and local knowledge of a parcel to make a determination of standards of the IWUIC that shall be applied to an individual property. There are some shortcomings of the above maps-namely that the vegetation layer that informs much of the mapping is not as accurate as preferred. It is unlikely that this layer will be improved soon--for this reason it is recommended that the maps are considered one tool in assessing risk on a parcel level. Adoption of the 2021 IWUIC is recommended for all jurisdictions. Construction of fire-resistant structures is one of the most important levers that local government can use to effect and reduce wildfire risk to structures and people.

County staff does not recommend adoption of the "CPAW Mitigation Difficulty/International Wildland Urban Interface Code (IWUIC) Hazard Crosswalk." Our analysis has concluded that this crosswalk is overly onerous and will require high levels of home hardening or defensible space potentially in locations that do not exhibit a relative high risk. This analysis has included input from fire professionals including Crested Butte Fire Protection District, West Region Wildfire Council, and the Colorado State Forest Service. For example, the CPAW Crosswalk grouped together water supply and defensible space as either conforming or not conforming versus the IWUIC which separates the two, providing for some credit if one or both can be achieved.

Possible amendments to the Gunnison County *Land Use Resolution*:

- Update the mapping references in Section 1-112: *Use of Maps* and Section 11-105: B.
- Define the Wildland Urban Interface in Article 2: *Definitions* as: "'Any developed area where conditions affecting the combustibility of both wildland and built fuels allow for the ignition and spread of fire through the combined fuel complex." Define minimum qualification requirements for wildland fire professionals providing wildfire mitigation plans for individual property owners.
- Potential amendment to Section 12-105: Water Supply to refer to IWUIC Section 404 and NFPA 1142. Staff recommends the Planning Commission discuss Section 404 of the IWUIC; this section requires a conforming water supply and storage of water on site for fire protection purposes. This requirement has benefits to the community and may also propose challenges for some property owners who wish to subdivide.
- Section 12-107: *Fire Protection* review access standards
- Update Section 11-105: *Development in Areas Subject to Wildfire Hazard* to reflect update mapping tools, adoption of IWUIC, reference to Community Wildfire Protection Plan, and Hazard Mitigation Plan. Require wildfire mitigation plan for any new development including subdivisions. Require protective covenants to address maintenance of vegetation as part of wildfire mitigation plan.

The Planning Commission may also consider amendments to the IWUIC as part of this review and analysis.

County staff proposes the following implementation and program:

- A phased implementation may need to be considered. If the IWUIC is adopted in the spring it is expected that many property owners will have been working with designers and HOAs to obtain approval for their plans and may be negatively impacted by an immediate adoption. The County may consider at least a 6-month delay of some portions of the IWUIC.
- Gunnison County works with West Region Wildfire Council, CBFPD, and potentially Gunnison Fire Protection District to develop a program for site visits and fuel/vegetation treatment plans. Site visits are not expected to be required for every parcel but will be determined based on the level of hazard, complexity of the site, and mitigation proposed by the applicant. Parcels in areas with known high hazards (e.g. Trapper's Crossing, Quartz Creek properties, Marble ski area filings) are expected to require on site visits. Areas with lesser hazards (Castle Mountain, CB South) may only require a staff review of mapping and plans in office.
- Once an application for development is submitted it shall be reviewed initially for its hazard and mitigation difficulty and compliance with the IWUIC and Gunnison County *Land Use Resolution*. If staff determines that an on-site visit is necessary the applicant shall be referred to the appropriate entity (CBFPD, WRWC, GFPD) for initial consultation and review. The applicant shall pay any associated fees to the referral agency and work with the agency to identify a mitigation and defensible space plan for the parcel.

Additional Programming Opportunities

Currently programs from West Region Wildfire Council and Colorado State Forest Service offer funding and technical assistance to property owners to conduct site visits and complete vegetation management treatments (defensible space). Neither of those programs specifically addresses retrofits for existing construction to create additional ignition resistance. There are grant opportunities that exist that may be able to support a program and funding for retrofits---application and program development would need to be review and approved by the Board of County Commissioners. However, it is unlikely that the County would receive grant funding without adoption of IWUIC or some other type of wildfire mitigation program.

There are several bills currently proposed in the State legislature related to wildfire including:

- HB22-1007 which proposes a wildfire mitigation resources and best practices grant program.
- HB22-1012 which proposes to create the wildfire mitigation and recovery grant program.
- SB22-007 which would require the Colorado State Forest Service to convene a working group to consider how best to conduct enhanced wildfire awareness month outreach campaigns in 2023 and 2024 as well as other outreach efforts that inform and motivate residents in the WUI to engage in more wildfire risk mitigation.

Next Steps

- Planning Commission shall identify additional information, questions, or concerns that should be addressed by staff prior to the next work session.
- Staff will outline an agenda for next work session that may include review of specific sections of the IWUIC and invite fire professionals to attend to give feedback.
- Identify any other outstanding issues that should be addressed.

UPDATE

GUNNISON COUNTY CPAW MITIGATION DIFFICULTY AND IWUIC HAZARD CROSSWALK

Based on follow-up discussions with Gunnison County planning staff, anomalies in the grass and agriculture fuel types with regards to the hazard rating and mitigation difficulty were identified. The subsequent investigation into the anomalies prompted the CPAW team to make changes to the mitigation difficulty spatial layers, as well as Table 5. Gunnison County CPAW Mitigation Difficulty/ IWUIC Hazard Crosswalk.

IWUIC Hazard Crosswalk

Table 5. Gunnison County CPAW Mitigation Difficulty/ IWUIC Hazard Crosswalk was updated to to reflect mitigation difficulty classes (1 to 9) in all appropriate hazard classes (moderate to very high). The appropriate IR Construction requirements were also adjusted to align with these changes. Finally, the N.C. definition was adjusted for further clarification to the user.

This new updated table should replace the current table 5 of the 2019 CPAW Gunnison County Final Recommendations document.

Replace IWUIC Fire Hazard Severity Rating with CPAW Hazard Assessment Tools

Within the IWUIC, the Fire Hazard Severity methodology is used to determine appropriate mitigation requirements. The critical fire weather threshold within this rating does define all of Gunnison County as “Extreme”; however, within the local environment, it does not account for the differences between heat transfer (radiant, convective, conductive) exposure of individual structures.

Heat transfer exposure and general mitigation guidance can be better demonstrated using the CPAW-generated “Local Wildfire Hazard” and “Mitigation Difficulty” maps to support land use planning and regulation within the county. The use of the wildfire hazard assessment for guiding the application of the IWUIC (2018) will link required mitigation actions to expected wildfire exposure (see Recommendation 1). The county should consider integrating the newly developed wildfire hazard assessment to determine the appropriate application of the proposed adopted IWUIC (2018) through the following process**:**

A. Determine the Local Level Wildfire Hazard summarized ranking in which the proposed development is located to understand the likelihood of the building exposure to high intensity fire.

B. Determine the Mitigation ranking (0 to 9) of the parcel in which the proposed development is located and the parcel(s) immediately adjacent to it.

C. Use the following table (Table 5) to determine the appropriate IWUIC mitigation standards to apply.

TABLE 5: GUNNISON COUNTY CPAW MITIGATION DIFFICULTY/ IWUIC HAZARD CROSSWALK

Local Wildfire Hazard	Table 603.2 Minimum Required Defensible Space (site/slope adjustment required)[1]	CPAW Mitigation Difficulty and Slope % category			24.301.181(21) Minimum IR Construction		
		<15	**15≤ to <30**	**>30**	**Non-Conform[2]**	**Conform**	**1.5x Conform**
Moderate	30 ft.	1, 2, 4	1, 3, 5	4	IR 1 (N.C.)	IR 2	IR 3
High[3]	30 ft	1, 2, 4	1, 3, 5	4	IR 1 (N.C.)	IR 2	IR 3
	50 ft.	6	7	6	IR 1 (N.C.)	IR 2	IR 2
Very High	30 ft.	1, 2, 4	1, 3, 5	4	IR 1 (N.C.)	IR 2	IR 3
	50 ft.	6	7	6	IR 1 (N.C.)	IR 2	IR 2
	100 ft.	7	8	8, 9	IR 1 (N.C.)	IR 1	IR 2

Table Notes:

(1) "Distances are allowed to be increased due to site-specific analysis based on local conditions and the fire protection plan" (Figure 603.2- 2012 IWUIC).

(2) **Non-conforming** indicates that the minimum slope-adjusted defensible space distances with appropriate mitigation cannot be achieved from the structure to vegetative fuels, or minimum water supply requirements cannot be achieved; as opposed to **conforming** in which the defensible space distances with appropriate mitigation and minimum water supply requirements can be achieved.

(3) High hazard is also used where non-conforming structures are present within 50 ft of the primary structure.

N.C. = requires feature or component (window, vent, siding), or group of features or components (a porton of the building) to be constructed of a rated Non-Combustible materials; including tempered glass where windows are the component or part of the group of features or components.

Mitigation Difficulty

The Mitigation Difficulty component (30-m pixel resolution) uses the life form (grass, shrubs, trees), slope, and crown fire potential to classify the potential mitigation success of any given 30-m pixel on the map (Figure 12). This is represented by nine categories (Table 4).

The mitigation difficulty map was reviewed by Eva Karau, who subsequently updated the product. Please visit the link we provided in the email to download the new spatial data.

Eva provides a short explanation of her findings and changes:

While taking a closer look at the original Gunnison County Mitigation Difficulty map, I found some interesting patterns in the way an agricultural land type was mapped in the LANDFIRE 2016 data. It seems to overestimate the amount of ag lands in some areas, overriding where there may actually be other life forms besides grass. I compared some of these areas with previous versions of LANDFIRE data that did not have this problem. In general, I think the 2016 data is a better product and based on more recent satellite imagery, but for just the life form piece of the mitigation difficulty map, I investigated using a combination of the 2016 and 2012 LANDFIRE data. Specifically, for each pixel, I selected the life form that would have the higher difficulty rating from the 2012 ore 2016 data. For example, if a pixel was grass in the 2016 version and shrub for the 2012 version, that pixel would be assigned to shrub for my final mitigation difficulty index. This method really seems to show more realistic patterns in the areas we were looking at on our last call, and I could demonstrate this on the next call.

I also included a polygon file with a field that contains the mitigation difficulty rating assigned to parcels. To derive the parcel rating, the maximum mitigation value for all 30-m cell size pixels within the parcel is assigned to the polygon parcel rating. So, in the case of a parcel that has half of its area in a low mitigation difficulty category, and half of its area in a high category, the final value assigned to the parcel will be high. This method will definitely overestimate the mitigation difficulty for some parcels, but the alternative would be underestimation. Ultimately that parcel rating will flag those parcels that have any areas where mitigation work will be difficult to accomplish. But, like we discussed on the call, a landowner whose parcel has a high/very high rating might be able to protest the rating if they were to provide evidence that where their structure lies within the parcel is actually a good distance away from the area that caused the high rating. In that case, the polygon file could be updated with the specific information, in a new, custom mitigation difficulty field.

Here is a metadata description of the 2 datasets included in the zip file:

MitigationDifficulty_pixel_MAR2020
This dataset is a 30-m cell size raster characterizing the difficulty and effort involved in modifying landscape characteristics in a way that could reduce hazard. This MAR2020 version is an update from the original JAN2019 version; it incorporates both 2016 and 2012 LANDFIRE Existing Vegetation Type data within life form element of the mitigation difficulty index calculations. This modification represents life form patterns in certain agricultural areas more realistically.

MitigationDifficulty_parcel_MAR2020
This is a polygon file with a field (named MitDiff) that contains the mitigation difficulty rating assigned to parcels. It is misleading that much of the county is in the highest mitigation difficulty category (9) in this file, but this is because many of the parcels are very large, and if any pixels with a value of 9 lie within the parcel, the whole parcel receives that value. This could be modified with GIS queries that reduce the pixels included in the analysis. For example, exempt parcels could be omitted. I did omit parcels that had no parcel IDs (most of these were roadways), but otherwise I left the layer in a more raw state, so that it could be customized locally.

Table 4. Mitigation Difficulty Classes and Descriptions

To help you with your follow up, we've includes the original Table 4. Mitigation Difficulty Classes and Description below

TABLE 4. MITIGATION DIFFICULTY CLASSES AND DESCRIPTIONS		
Class	Characteristics	Mitigation Discussion
1	Sparsely vegetated, or developed, with potential for ember impact	Barren ground/water/developed/ sparse vegetation or land that lies within potential spotting distance of a wildfire. Mitigation will involve appropriate structure ignition zone and structure construction.
2	Herbaceous on a shallow slope (<15%)	Fires are typically easier to suppress in these areas. However, high winds combined with dry conditions lead to potentially dangerous, fast-moving, high-intensity fires. Mitigation may involve a combination of irrigation, mechanical (mowing) treatment, frequent burning, and fuel breaks in conjunction with appropriate structure ignition zone and structure construction.
3	Herbaceous on moderate slope (≥15 to <30%)	Harder to construct fuel breaks, increased difficulty in mechanical (mowing) treatment, increased potential for erosion, increased rate of spread and intensity may make frequent burning and other mitigation more difficult. Focus should be on appropriate slope setbacks, structure ignition zone, and structure construction mitigation.
4	Herbaceous on steep slope (≥ 30%)	Significant challenges in fuel break construction, unlikely option for mechanical (mowing) treatment, significant potential for erosion, high rate of spread and intensity potential may make frequent burning and other mitigation difficult. High winds combined with short-term drying conditions lead to potentially dangerous, fast-moving fires with fire fighter access concerns. Mitigation potential may involve a combination of frequent burning and fuel breaks in conjunction with slope setback, appropriate structure ignition zone, and structure construction.
	Shrub on shallow slope (<15%)	Fires are typically harder to suppress than grassfires in these areas. High winds combined with dry conditions lead to potentially dangerous, fastmoving, high-intensity fires with fire fighter access concerns. Mitigation may involve a combination of frequent burning and fuel breaks in conjunction with appropriate structure ignition zone and structure construction.
5	Shrub on moderate slope (≥15 to <30%)	Harder to construct fuel breaks, increased difficulty in mechanical (mastication) treatment, increased potential for erosion, increased rate of spread and intensity may make prescribed burning more difficult. Focus should be on a combination of appropriate mechanical treatment and burning, slope setbacks, structure ignition zone, and structure construction mitigation.
6	Shrubs on steep (≥30%) slopes	Significant challenges in fuel break construction; unlikely option for extensive mechanical (mastication) treatment. Significant potential for erosion or slope instability resulting from treatments is a likely mitigation challenge. Increased

TABLE 4. MITIGATION DIFFICULTY CLASSES AND DESCRIPTIONS		
Class	Characteristics	Mitigation Discussion
		rate of spread and significant intensity may make prescribed burning more difficult. Focus should be on a combination of appropriate mechanical treatment and burning, slope setbacks, structure ignition zone, and structure construction mitigation.
	Tree on shallow slope (<15%)	Open canopy must be maintained to prevent increased crown fire potential. Surface fuels must be treated/maintained in a state that reduces the chances of fast-moving surface fires. Mitigation should also include appropriate slope setbacks, structure ignition zone, and structure construction mitigation.
7	Tree on moderate slope (≥15 to <30%)	Open canopy must be maintained to prevent increased crown fire potential, which may be more difficult due to the slope. Surface fuels must be treated/maintained in a state that reduces the chances of fast-moving surface fires. Increased potential for erosion or slope instability resulting from treatments can be a mitigation challenge. Mitigation should also include appropriate slope setbacks, structure ignition zone, and structure construction mitigation.
	Tree on shallow slope (<15%) with potential for crown fire	Dense canopy needs to be thinned to reduce crown fire potential. Surface fuels must be treated to reduce risk of fast-moving surface fires. Mitigation should also include appropriate structure ignition zone and structure construction mitigation.
8	Tree on moderate slope with potential for crown fire (≥15 to <30%)	Dense canopy needs to be thinned to reduce crown fire potential, which may be more difficult due to the slope. Surface fuels must be treated to reduce risk of fast-moving surface fires. Increased potential for erosion or slope instability resulting from treatments can be a mitigation challenge. Mitigation should also include appropriate slope setbacks, structure ignition zone, and structure construction mitigation.
	Tree on steep slope (≥30%)	Open canopy must be maintained to prevent increased crown fire potential, which can be significantly difficult due to the slope. Surface fuels must be treated/maintained in a state that reduces the chances of fast-moving surface fires. Significant potential for erosion or slope instability resulting from treatments is a likely mitigation challenge. Mitigation should also include appropriate slope setbacks, structure ignition zone, and structure construction mitigation.
9	Tree on steep slope (≥30%) with potential for crown fire	Dense canopy needs to be thinned to reduce crown fire potential, which may be extremely difficult if not prohibitive due to the slope. Surface fuels must be treated to reduce risk of fast-moving surface fires. A very high potential for erosion or slope instability resulting from treatments is a likely mitigation challenge. Mitigation should also include appropriate slope setbacks, structure ignition zone, and structure construction mitigation.

Following the review of the memos, Pagano explained the next steps;

- Planning Commission identifies additionaal information needed, questions or concerns

- Review the Wildfire Urban Interface code and identify possible amendments
- Planning Commission reviews and makes recommendations to the Board of County Commissioners (BOCC)
- BOCC conducts a Public Hearing and makes a final decision

The commissioners suggested;

- Daniels requested the commission go over case studies using realistic examples
- Niederer suggested doing a mock house review.
- The commissioners suggested inviting the State Forest Service or West Region to discuss what they consider on site.
- Looking at cost sharing opportunities
- Schwartz suggested a certificate that would help with lowering insurance premiums
- Cleaning up some of the tables and charts to make them more understandable
- Sovick asked what burden will this put on the department?

Chairperson Daniels closed the work session at 10:30 A.M.

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Johnson Colorado Trust- Two Lot Subdivision (LUC-21-00067) work session: The Gunnison County Planning Commission conducted a work session. They discussed the applicants request to uncluster two subdivision lots back to the originally platted subdivision lots. The lot cluster was approved in 2019. November 2021 the applicant submitted this subdivision application back to the planning commission. This would result in one lot of approximately 11 acres and one lot of just over 1 acre, all as originally approved from the original plat. Located -Lots 1 and 2, Wolf Canyon Subdivision, County of Gunnison; AKA 588 Wolf Canyon Dr. Taylor Park, Co.

With a quorum present Chairperson Laura Daniels opened the work session.

Applicant's representative attorney Jacob With, explained the applicants are requesting an unclustering of two lots that the applicants had clustered in 2019. They are now requesting subdividing these clustered lots. They are basing their request on the topography of the lot and the vegetation.

Colorado Parks and Wildlife (CPW) submitted comments, which With has responded to; noting they will comply with all the CPW comments.

With said the owners are trying to configure the lots the way they have historically been, on the original plat. Lot one is substantially larger than any lot in the subdivision. Lot two is consistent with the adjacent lot 19, and the other lots in the subdivision. The owners have decided they should never have clustered the lots in 2019.

With explained originally the owners had intended to build two residences close together, and they did not end up doing that. It wasn't practical. With said the owners had received bad advice and should not have ever clustered the lots.

Planner Sabbato explained the CPW comments and the response from the applicants. The referral noted because the subdivision is in place, each comment request is taken on a case by case. The subdivision has already been fragmented. These comments could be incorporated in the decision. There are two wells permits.

The commissioners determined a site visit was not necessary.

The commission directed staff to schedule a joint public hearing. They also directed staff to prepare a draft recommendation for their review.

Chairperson Daniels closed the work session at 11:10 A.M.

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Larry Darrien- One Lot Subdivision (LUC-22-00002) work session: The Gunnison County Planning Commission conducted a work session. They discussed Darien's request to subdivide 1.427 acres from the 185.24 acre Darien Ranch. The proposed use of the lot is a single-family unit with an ADU. The water source will be provided by an existing well (Permit #83104-F) who's court decree of augmentation is 16CW3033. The septic will be served by a County approved OWTS. Access will be from Gunnison County Road 3 (approved application dated 5/1/98 attached). The access will be along the North side of the Darien Ranch Lodge along the old alignment of County Road 3. All utilities (electricity and phone) are on site. Located-186.587 acres in Sections 20 &21, T11S, R88W, County of Gunnison; AKA 2880 County Rd. 3, Marble, Co.

With a quorum present Chairperson Laura Daniels opened the work session.

Sabatto explained this site is three miles from the Town of Marble. There have been several applications approved previously, including a bed and breakfast. She said part of the most recent application and approval was a required new septic system be installed. That has not been completed yet.

Sabbato reviewed her staff report;

- The septic was designed for five bedrooms
- The application meets residential lot coverages
- A detention pond / bio swale is required
- 20 ft. access easement will be recorded as part of the lodge application
- There is sufficient water, the adjacent lot has its own well
- Residential density was categorized as no significant adverse impacts
- Covenants were submitted
- There will be an accessory dwelling unit and home occupations are allowed.
- There were no comments from Colorado Parks and Wildlife (CPW)

Applicant Larry Darrien explained his ranch has been in his family since 1938. In 2019 he completed an agricultural exemption, splitting the lodge from the ranch. He placed a conservation easement on 160 acres in 2006. He said the new lot would be to the left of the new lodge. He is concerned with the area, he has lived there for a long time and wants it remain the same.

The commissioners determined a site visit was not needed, the mapping submitted was sufficient.

The commissioners directed staff to schedule a joint public hearing, and draft a recommendation, for review.

Chairperson Daniels closed the work session at 12:05 pm.

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Rask Dietrich- New Berms (LUC-21-00043) work session: The Gunnison County Planning Commission conducted a work session. They discussed the applicants request to haul material from other job sites in the Gunnison valley to process and screen materials to construct topsoil for 27,318 square feet of berms located on the northern and eastern (Highway side) of the property where an existing residence is located. When the berms are thoroughly shaped they will be eight to twelve feet tall covered with the screened topsoil and then will be seeded and fully revegetated. Located -45.6 acres in Sections 27 &34, T14S, R85W, County of Gunnison; AKA 20143 Highway 135, Crested Butte, Co.

With a quorum present Chairperson Daniels opened the work session.

Applicant Rask Dietrich participated on Zoom. He explained the property is located at 20143 Highway 135. He said he had a reclamation permit, but there was a concern, which resulted in this application. He said a map and a plan were submitted. The berms are being constructed for a screen from the highway, and for noise dampening. The berms as submitted, are Intended to have a natural look. The topsoil will be hauled in from other job sites. The screening of the material will be minimal. He will be covering the berms with a foot of topsoil. Dietrich said an application was required and work was stopped due to height and look of the dirt on site. There was concern with dust control, they will not be working on a windy day. Water is not used in dirt screening process. He will be spending between $30,000 and $50,000 on trees and seed.

Planner Sabbato explained the Land Use Resolution (LUR) requires a land use change when clearing more than 7,500 sq. ft of land. Berms are required to hold vegetation. The BOCC does not want a labyrinth style look of berms up and down the highway. The application is categorized as mining because he is over the size threshold. The berms will be eight to 12 ft. tall. That height of berm does minimize noise.

Dietrich described his dust control plan. When the top soil is on the berm, it is sprayed down, and work will not be done on a windy day.

Sabbato noted the application meets the setbacks for construction and materials processing. There are no water bodies on site. There is a residential structure in proximity. The CPW comments noted they were not concerned, because there is already a house on site. Neither Public Works or the CB Fire had concerns with line of sight on Highway 135. There will be a bond held by the county until the vegetation has taken hold.

The commissioners had no questions.

The commissioners determined no site visit was necessary.

The commissioners directed staff to schedule a public hearing, and prepare a draft decision for review. The bond will be written in to the conditions of approval. It will also include the hours of operation and the wind conditions.

The commissioners closed the work session at 12:15 P.M.

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Daniels adjourned the meeting at 12:20 P.M.

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/s/ Beth Baker

Gunnison County Community and Economic Development