

April 14, 2016

## **Memo**

To: Headwaters Economics

From: Molly Mowery, Wildfire Planning International

Re: Review and recommendations to improve wildfire planning in Taos County

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Per our contract agreement, Wildfire Planning International (WPI) reviewed current planning and regulatory documents related to Taos County's wildland-urban interface & wildfire mitigation planning process. The purpose of this review process was to develop a set of recommendations to strengthen Taos County's planning approach to wildfire risk reduction in the built environment.

The following documents were reviewed as part of this process:

- Taos County Comprehensive Plan Update (2004)
- Taos County Land Use Regulations (Ordinance 2015-02)
- Taos County Subdivision Regulations (Ordinance 2005-8)
- Taos County Community Wildfire Protection Plan Update (2016)
- Comprehensive Plan Template & Scope of Work (from Taos County)

In addition, several conversations with community staff aided WPI's understanding of current conditions and desired outcomes.

The following recommendations provide a roadmap for Taos County's Planning Department to initiate revisions in the Comprehensive Plan and Land Use Regulations. In many cases, more detailed work, such as drafting of policies and regulations, will be required. However, the timing of the upcoming Comprehensive Plan Update, the recent adoption of the updated CWPP, the forthcoming risk map from Anchor Point, and increased staff capacity provides the perfect opportunity for Taos County to move forward with implementing new regulations.

Please let me know if you have immediate questions on this memo's content, and how you'd like to share this information with Taos County. I'll look forward to coordinating the next steps with you to schedule a webinar with Taos County staff, and continue our discussion for an in-person site visit.



Molly Mowery  
Owner, Wildfire Planning International

## Analysis & Recommendations for Taos County:

### **Priority #1: Elevate wildfire as a community topic in the next Comprehensive Plan Update**

#### **1) Recommendation: Revise and expand wildfire strategies.**

The current Comprehensive Plan (2004) primarily discusses wildfire and the wildland-urban interface in Chapter IX. Infrastructure/Community Facilities Element, which includes a brief background on Taos County's wildfire history and the link between watersheds and catastrophic fire. Many of the goals are limited to improving fire protection infrastructure and response (e.g., water supply and access).

During the next Comprehensive Plan update, Taos County has the opportunity to expand the scope of its wildland-urban interface risk reduction strategies, and relocate this content to better align with related priorities (e.g., protection of natural resources, multi-hazard mitigation). Content should either be moved to a new Environment Element or Hazard Mitigation Element, depending on the final template which Taos County utilizes.

Wildfire mitigation strategies should be expanded to improve resilience and safety in the built and natural environments. Specifically, new strategies should promote:

- a. Use of fire-resistant construction methods and building materials in wildfire prone areas to reduce ignition potential and structure vulnerability from wildfire, including direct flames, radiant heat and ember attacks;
- b. Acceptable densities for new development in high wildfire risk areas;
- c. Standards for site development and design, including vegetation management and maintenance, setbacks, access and attachments;
- d. Implementation of other planning and growth management tools—such as transfer of development rights, density bonuses, and conservation easements;
- e. Integration with other hazard mitigation and resource protection activities, such as watershed and forest management, drought mitigation and planning for climate change.

#### **2) Recommendation: Reference and utilize information in the recently updated Community Wildfire Protection Plan (CWPP).**

The new *Environment Element* should link to and draw from recently updated content available through the Taos County CWPP. This will avoid duplication and ensure consistency with definitions, identification of wildfire risk, and fire history. Synergies between Comprehensive Plan strategies and CWPP actions related to land use planning can also mutually reinforce one another. Finally, future growth plans in the Comprehensive Plan should take into account areas at risk to wildfire, as addressed in the CWPP.

## **Priority #2: Revise Land Use Regulations for consistency and clearly defined wildfire mitigation standards**

### **1) Recommendation: Be consistent with references to fire plans.**

The terms “fire protection plan” (*Section 2.1.2 Definitions*), “fire risk management plan” (*Section 4.3.1.D. Wildland Urban Interface Areas*) and “fire prevention plan” (*Section 4.8.1.G. Fire Prevention Plan*) are all used in the code. Although this may seem minor, it can cause confusion as to whether references are to the same plan and submittal requirements. If these three referenced plans are intended to be distinct from one another, they should each be clearly defined in the Definitions section. Otherwise, only one term should be consistently used. “Fire risk management plan” is the most accurate term for WUI mitigation.

### **2) Recommendation: Revise definition of the wildland urban interface to more accurately represent intended areas of reference.**

Taos County’s current definition of “Wildland Urban Interface” refers to multiple types of areas that can be considered the WUI, including: any areas in which structures and other human development meet or intermingle with wildland, forest, or mountainous terrain containing hazardous fuels; areas adjacent to evacuation routes for at risk communities, and watersheds endangered by human development.

Typically, WUI definitions do not specifically name watershed and evacuation areas. More universally accepted WUI definitions focus generally on any developed areas where conditions affecting the combustibility of both wildland and built fuels (e.g., fuel moisture, fuel size, relative humidity, slope, roof assembly, structure walls) allow for ignition and spread of fire through the combined fuel complex. Watersheds and evacuation areas are more appropriately addressed through a wildfire risk map in the CWPP that identifies neighborhoods and other values at risk, and should be removed from the definition to avoid confusion.

Finally, the terms “Wildland Urban Interface Areas” (*Section 4.3.D*) and “Wildland Urban Interface Impact Areas” (*Section 4.8.W*) appear to be used interchangeably. One term should be consistently applied across Land Use Regulations.

### **3) Recommendation: Determine consistent approach for where mitigation requirements apply in the WUI.**

Defining the WUI is also essential to apply a transparent and easy process for mitigation requirements. Depending on the type of application, regulations currently state that an applicant may have to present a fire risk management plan if the property is within a “high risk county designated Wildland Urban Interface area” (*Section 4.3.D*), and/or “when the planning department deems it necessary” (*Section 4.8.1.G*), and/or if it has been identified in any CWPP as a “wildfire hazard area” (*Section 4.8.1.W*).

Taos County has several options to make this approach more consistent:

- a. Designate the WUI area by referencing the forthcoming Anchor Point wildfire risk map and require properties with a certain rating to submit a mitigation plan (higher risk areas within the county could also become a “WUI Zone Overlay”)

- b. Designate the WUI area as countywide, with potential areas of exemption
- c. Designate the WUI area based on the 65 named communities at risk in Taos County (as listed in the CWPP)

As part of this decision, Taos County should consider the level of risk reduction it hopes to achieve. This will determine whether more/less properties are considered to be in the WUI, whether existing homes would be included (and require mitigation as part of a renovation, expansion, or retrofit), which rating (e.g., “moderate” or “high”) triggers mitigation requirements, and whether on-site assessments will be needed to determine specific mitigation requirements. As a best practice, approaches a. & b. are most widely accepted.

**4) Recommendation: Develop clear set of standards for WUI submittal requirements.**

*Section 4.3.1.D Fire Prevention Plan* describes elements of a plan that must be submitted by an applicant to the planning department upon request: defensible space, vegetation management, water supply access, building ignition, fire resistance factors, and fire protection systems and equipment. While these components are appropriate topics to address, there are currently no specific standards that applicants are required to meet. Staff provides informational guidance only on defensible space principles.

Staff should develop a clearly defined set of standards for the requested plan. Additional topics could address: setbacks, attachments, and accessory dwelling units. Staff can use model code language, example language from other communities, and/or tailor either of these for Taos County. In the future, staff should also consider how density, layout and other subdivision design principles can incorporate wildfire mitigation standards. See Resources section below for additional guidance.

**5) Recommendation: Reconcile existing conflicts and avoid creating new ones.**

Once regulations are more clearly defined, staff should review existing Land Use Regulations for potential conflicts. For example, *Section 4.8.1.S Landscaping* requires applicants to submit a landscaping plan addressing aesthetics, water conservation, erosion controls and buffering. These standards may be at odds with wildfire mitigation plans that require vegetation removal. Other instances where defensible space, vegetation management, and other fire mitigation requirements are in conflict with development regulations typically occur with setbacks, attachments (decks and fences), and visual screening.

Potential conflicts can be resolved by deciding which plan or standard takes precedence in the review process. For instance, *Section 4.14.2 Visual Impacts on Steep Slopes and Adjacent Ridgelines* contains a subsection that restricts the removal of trees and other vegetation *unless* required by defensible space requirements in the WUI.

**6) Consider mechanisms for enforcement to ensure long term maintenance.**

One of the challenges with wildfire risk reduction in the WUI is that it requires ongoing maintenance. It will be important for Taos County to integrate WUI vegetation management into Section 11.1 Enforcement to ensure staff has mechanisms to maintain the intentions of the code. See Resources section below for additional guidance.

## Resources for Taos County:

### Model WUI Codes and Standards

#### ICC WUI Code

The International Code Council (ICC) Wildland-Urban Interface Code—commonly referred to as the “WUI Code”—provides model language that many jurisdictions adopt in part or whole. The most recent version (2015) is available for [viewing and purchase online](#). Previous code versions (e.g. 2012) are also available online.

#### NFPA Technical Standards for the WUI

Technical standards are also available through the National Fire Protection Association:

- [1141: Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas](#) (standards focus more on subdivision);
- [1144: Standard for Reducing Structure Ignition Hazards from Wildland Fire](#) (standards focus more on building ignitions).

### Community Examples

Many communities have adopted WUI codes and standards, or have drafted their own ordinances. Examples include:

- Flagstaff, AZ: City’s Fire Code ([Section 5-02-001](#)) adopted the 2006 International Fire Code and the 2008 ICC WUI Code, with amendments;
- Eagle County, CO: Site Development Standards ([Section 4-430, Development in Areas Subject to Wildfire Hazards](#)) requires submittal of a vegetation management plan, and water supply and access standards;
- Ruidoso, NM: Village’s Fire Prevention and Protection standards ([Chapter 42 of Municipal Code](#)) includes language on notices, collection fees, violations, fuels management standards for a three-zone approach, fire hazards rating form;
- Boulder County, CO: County’s updated [Building Code](#) (multiple sections) incorporates a robust set of standards to for ignition-resistant materials and construction;
- City of San Diego, CA: Landscaping Regulations ([Section 142.0412](#)) provided a detailed example of brush management in a two-zone approach.

### Additional Planning Tools

- The state of Colorado recently released a new guide “[Planning for Hazards – Land Use Solutions for Colorado](#).” This online resource provides land use planners with hazard planning community examples, draft policy language, and appropriate planning tools to address different hazards, many of which are focused on [wildfire](#);
- Headwaters Economics recently [profiled five communities](#) across the western U.S. to illustrate how planning tools can be used to address the WUI;
- The Fire Adapted Communities Learning Network offers a series of FAC Quick Guides on [Using Plans and Regulations to Increase Community Fire Adaptation](#);
- [Fire Adapted New Mexico Learning Network](#) provides state and regional resources to help communities work on fire adaptation.