

MEMORANDUM

TO: Karen Berchtold and Wade Burkholder, City of Manitou Springs
FROM: Matt Goebel and Tareq Wafaie, Clarion Associates
DATE: November 20, 2017
RE: Manitou Springs Planning for Hazards Assessment Memo

Background

Project Overview

The City of Manitou Springs was selected to participate in a pilot project managed by the Colorado Department of Local Affairs (DOLA) to update the city's zoning and subdivision regulations to reduce the city's risk to key natural hazards: flooding, geologic hazards, and wildfire. This project will implement actions from *Plan Manitou*, the city's integrated master plan – hazard mitigation plan.

Planning staff is working with DOLA staff and a consulting team led by Clarion Associates, with support from Acclivity Associates, to facilitate this project. The project began in April 2017 and extends through June 2018. A working group that includes city staff and stakeholders was convened to guide the direction of the project in Manitou Springs and will review work products at each stage of the project. At their last meeting, the working group reviewed possible ideas for zoning and other land use tools. The group discussed important criteria, such as the ability to reduce risk, alignment with community goals, and staff capacity, and selected four priority tools for reducing the city's natural hazard risk:

- Hazard overlay districts;
- Site plan and subdivision review procedures;
- Streamside buffers; and
- Wildland-urban interface (WUI) code integration.

This memorandum is intended to provide guidance for how to implement those priority tools by identifying recommendations to improve Manitou Springs' zoning and subdivision regulations to reduce risk to hazards. The recommendations are based on feedback from meetings with staff and the working group, the consultant team's assessment of the zoning and subdivision regulations, and a survey that was distributed to members of the public and other city stakeholders. The survey yielded more than 100 responses; approximately 90 percent were residents, and nearly eight percent were board or commission members. A couple of highlights from that survey are summarized below:

- 60 respondents think that hazard mitigation should be a priority when approving new

Contents

<i>Background</i>	<i>p. 1</i>
<i>Improve Current Standards that Address Natural Hazards</i>	<i>p. 5</i>
<i>Establish New Standards to Address Natural Hazards</i>	<i>p. 7</i>
<i>Integrate Risk Reduction into the Development Review Procedures</i>	<i>p. 11</i>
<i>Improve Hazard Mapping</i>	<i>p. 14</i>
<i>Section-by-Section Recommendations</i>	<i>p. 15</i>



development; yet only 20 respondents think that stricter standards should be applied to redevelopment.

- 63 respondents either agree or strongly agree that development regulations should be stricter in high hazard areas. 24 respondents agree or strongly agree that stricter regulations should apply to both new and existing development/redevelopment; whereas 31 respondents either disagree or strongly disagree.

Implementing *Plan Manitou*

Again, a key component of this project is to implement relevant elements from *Plan Manitou*, the city's integrated master plan – hazard mitigation plan. Related to land use tools, the essential goals and policies from *Plan Manitou* are shown below.

Goal LU-5: Minimize risks to property, infrastructure, and lives from natural hazards and disasters.

Policy LU-5.1 High Hazard Areas – guide new development away from and discourage density increases in high risk areas...

Policy LU-5.2 Flood Hazard Areas – encourage flood mitigation measures for existing structures...discourage additional development in mapped floodplain areas...

Policy LU-5.3 Steep Slopes and Geologic Hazards – avoid development on slopes with grades steeper than 30 percent...encourage implementation of best management practices for both existing and new development...

Policy LU-5.4 Wildland-Urban Interface – Mitigate risk to existing and future development in the mapped wildland-urban interface (WUI)...

In addition to the various goals and policies related to risk reduction throughout the document, *Plan Manitou* also identifies areas of hazard risk and vulnerability, and includes a capability assessment of the current zoning and subdivision regulations. ***That assessment concludes that the current zoning and subdivision regulations are deficient in addressing risk to flooding, geologic hazards, and wildfire.***

Notable gaps in the current regulations include a lack of wildfire mitigation standards, the absence of a formal review process or criteria for site plans, and the lack of hazard-specific ordinances outside the floodplain ordinance. To address those gaps, several actions were identified in *Plan Manitou* to further reduce risk. Those land use actions are important components of the city's hazard mitigation strategy and are the impetus for this project.

General Principles We Followed When Developing Recommendations

Because the project has a limited scope focused on targeted updates addressing hazard risk reduction, our team followed the following principles when developing recommendations:

- **Strengthen Hazard-Related Standards.** Where the current regulations are silent on particular hazards or unclear and/or insufficient, we recommend new or revised standards specifically aimed at reducing risk to flooding, wildfire, and geologic hazards. The recommendations focus on tools that will have the most impact on risk reduction to Manitou Springs' three biggest hazards – flooding, geologic hazards, and wildfire.
- **Focus on Tools Prioritized by the Working Group.** As mentioned above, the city has already spent a lot of time preparing strategies for how to best address risk, and the working group identified priority land use tools:
 - Hazard overlay districts;
 - Site plan and subdivision review procedures;

- Streamside buffers; and
- Wildland-urban interface (WUI) code integration.

The recommendations in this memo are aligned with the previous work of staff and discussions with the working group.

- **Recognize the Difference between New Development and Redevelopment.** For many of the recommended tools presented in this memo, it will be essential to determine the trigger points for when the standards would apply to new development (on land not previously developed) versus existing development or redevelopment (new construction on a site that has already been developed). Further policy discussion on these appropriate distinctions will be required during the drafting stage. The team recognizes that because Manitou Springs is largely built out (not much vacant land remains to be developed), not all aspects of risk can be fully addressed through new or revised land use tools. Several comments submitted through the survey were related to the need to make the current regulations more flexible as they relate to infill and redevelopment.
- **Simplify Where Possible.** For chapters and/or sections where we recommend changes, we also recommend simplifying complex regulations for clarity and to make them more user-friendly.
- **Strike a Balance between Protecting Public Safety and Property Rights.** We understand the need to balance new and/or revised regulations intended to reduce hazard risk, while respecting individual property rights.
- **Minimize Large-Scale Structural Changes to the Current Regulations.** With targeted updates, it is important to keep the current general framework intact for Manitou’s zoning and subdivision regulations instead of coming up with new or revised regulations that would require systemic changes to city processes and administration. Rather than drafting entire new sections or chapters, we propose integrating new standards where necessary into the existing code framework.
- **Minimize Changes that are Unrelated to Hazards.** Again, because this project is aimed at risk reduction as the primary goal, our team makes only limited recommendations for updates outside of that overarching goal.

Summary of Recommendations

The recommendations in this memo are organized into four main categories:

- Improve current standards that address natural hazards;
- Establish new standards to address natural hazards;
- Integrate risk reduction into the development review procedures; and
- Improve hazard mapping.

The recommended modifications to the Manitou Springs zoning and subdivision regulations to address hazard risk are listed in the table on the following page, and more detail on each of the recommendations is provided in the remainder of this memo following the table.

Summary Table of Recommendations

1. Improve Current Standards that Address Natural Hazards

- 1-A. Improve floodplain regulations
- 1-B. Enhance geologic hazards regulations
- 1-C. Integrate risk reduction into zoning district standards
- 1-D. Consolidate and enhance subdivision regulations

2. Establish New Standards to Address Natural Hazards

- 2-A. Introduce new tools to reduce risk in a coordinated way
- 2-B. Establish a floodplain overlay district
- 2-C. Integrate elements of the International WUI Code into the zoning and subdivision regulations
- 2-D. Coordinate WUI updates with landscaping requirements
- 2-E. Introduce common open space requirements
- 2-F. Embrace green infrastructure options
- 2-G. Provide mitigation information to property owners

3. Integrate Risk Reduction into the Development Review Procedures

- 3-A. Enhance approval criteria
- 3-B. Clarify the subdivision master plan requirements
- 3-C. Consider hazard mitigation during review of minor subdivisions
- 3-D. Clarify grading permit requirements
- 3-E. Ensure development “pays its own way”
- 3-F. Clarify Environmental Impact Statement (EIS) requirements
- 3-G. Clarify minor modifications procedure
- 3-H. Integrate evacuation plan priorities

4. Improve Hazard Mapping

- 4-A. Coordinate zoning and subdivision updates with current geological hazards mapping project
- 4-B. Enhance WUI mapping

1. Improve Current Standards that Address Natural Hazards

The city can effectively reduce risk in many ways through amendments to its current regulations that address natural hazards, while respecting the overall organizational structure of the zoning and subdivision regulations.

1-A. Improve Floodplain Regulations

There are currently over 400 structures located within the 100- or 500-year floodplain in Manitou Springs. The city has advocated for stronger floodplain regulations that exceed minimum State requirements. Updates to the city's floodplain development regulations should be coordinated with the Flood Control Master Plan (FCMP) currently underway, and the FCMP environmental assessment and other findings will inform this proposed approach to floodplain management and stream corridor protection.

The city's floodplain code (Section RBC313 of the Regional Building Code) is administered by the Pikes Peak Regional Building Department (PPRBD), as defined in an intergovernmental agreement between the two entities. The PPRBD Floodplain Administrator reviews building permits for compliance with "no rise" standards. Further discussion is necessary regarding what components of the regional floodplain regulations are working well in Manitou and what components need improvement or local amendments.

- Section 18.06.010.S near the beginning of the zoning regulations states "adequate floodplain avoidance and/or mitigation (sensitively designed) is required and shall be reviewed by the Regional Floodplain Engineer." This standard applies to all zoning districts, and should be clarified by cross-referencing or directly providing standards for review. For example, what types of solutions meet the "sensitive design" criteria? Better coordination between the city and PPRBD is required, including clearly defined roles for reviewing applications within the floodplain.
- PPRBD does not consider bridges or footbridges while conducting floodplain review. Because most of the land adjacent to Manitou Springs' creeks is privately owned, it is essential that the city track all activity that could potentially impact the function of those creeks during or following a flooding event.

The city should also consider establishing a floodplain overlay district, which is described in greater detail later in this memo.

1-B. Enhance Geologic Hazards Regulations

Because Manitou Springs is largely built out, future growth will most likely occur as redevelopment of existing neighborhoods or in areas constrained by steep slopes and/or other hazards. The current city standards for addressing geologic hazards could be improved as follows:

Clarify the Relationship between the HLDR District and Steep Slope Standards

The current steep slope standards are embedded within the Hillside Low Density Residential (HLDR) zoning district regulations (Section 18.08.040). The HLDR district includes several objectives and strategies for reducing risk to geologic hazards, but should be improved.

- The distinction between guidelines and requirements is unclear. For example, paragraph 18.08.040.D.1 outlines the purpose of clustering development within the HLDR, and is listed under the "development requirements" section. However, subdivision standards for clustering development have not yet been drafted and therefore are inconsistent with this section.

- The subdivision regulations (within the preliminary plat procedures) refer to “no-build” areas as those with slopes over 30 percent. This is inconsistent with the other steep slope standards in the HLDR district which provide minimum lot sizes for slopes ranging up to 50 percent or higher.
- The slope standards and lot sizes in Section 18.64.010, Table 1, should be relocated to the HLDR district standards to make them more accessible to the user. Those slope standards should also be revised to reduce the number of categories for slope percentages and to remove the distinction between platted and unplatted land. The HLDR development plan procedure (Chapter 18.76) should also be relocated to the HLDR district in Section 18.08.040 to create a single home for standards related to the HLDR district.

Broaden the Applicability of the Geologic Hazards Plan and Report Requirement

Section 18.72.140, Geologic Hazards Plan and Report, requires major development plan applicants to submit a detailed study to identify hazard threats and provide potential mitigation solutions for such threats. We think this requirement should have broader applicability to any development type within a high hazard area, including minor development plans and conditional uses. The Colorado Geological Survey has agreed to review this section and provide comments as part of the current hazard mapping project they are undertaking for Manitou Springs. Their analysis should be considered and integrated into the final code updates prior to adoption.

Additionally, it is unclear under what scenarios a soils and geohazards report (as identified in Chapter 18.76, HLDR Development Plan) is required. Section 18.76.020.M requires such a report only where the average slope exceeds 17 percent. So for a major development plan on slopes less than 17 percent, would this report not be required, but the Geologic Hazards Plan and Report from Section 18.72.140 would be required? Conversely, would the report be required for a minor development plan on slopes greater than 17 percent? The two report requirements should be reconciled and made consistent. As mentioned earlier, the city should consider the thresholds for when these standards (and report requirements) would apply to new development versus redevelopment (for example, expansion of an existing building by more than 50 percent of the current building footprint may trigger submittal of a geohazards report).

Clarify Retaining Wall Standards

As written, Section 18.64.020.7 authorizes retaining walls of any size to be constructed without regard to setbacks, including within the right-of-way. This overbroad allowance should be reconciled with steep slope standards and coordinated with PPRBD building permit review procedures.

1-C. Integrate Risk Reduction into Zoning District Standards

Some of Manitou Springs’ current zoning districts either directly or indirectly address natural hazard mitigation, especially the Hillside Low Density Residential District (discussed earlier). The districts could be updated to incorporate risk reduction principles, with particular focus on implementing the future land use plan in *Plan Manitou*. We recommend the following additional improvements to Manitou Springs’ zoning districts to address natural hazards:

18.08.065 Redevelopment Overlay (RO) District:

- One of the development and design objectives of the RO corridor is flood mitigation in Fountain Creek (18.08.065.A.2.e). The regulations should clarify how that objective (and other objectives) is reviewed during the development process, including the adequate floodplain avoidance criteria in Section 18.06.010.S.
- In Section 18.08.065.C.1.e, a rear setback incentive award is allowed for up to five feet for decks and patios. Is this award still granted for properties in the floodplain and/or where the rear yard abuts Fountain Creek? If so, that could be contrary to flood protection standards. This requires

further discussion, but the updates could include an exception to the rear yard setback incentive award for properties in the floodplain (or within the streamside overlay – as proposed). Changes to this section require further coordination with the Urban Renewal Authority.

18.08.070 Open Space District:

- The purpose statement should include risk reduction objectives, as are included in several of the residential zoning districts.
- The open space approval procedures should be coordinated with the cluster subdivision provisions (which are referenced in the HLDR district, but not yet fully established elsewhere in the zoning and subdivision regulations) to ensure conservation in perpetuity.

1-D. Consolidate and Enhance Subdivision Design Standards

We recommend consolidating subdivision design standards from the current chapters on lot standards (Chapter 16.20) and streets (Chapter 16.26). Additional standards should be considered for new subdivisions, including adequate ingress and egress for evacuation and emergency response services, and to ensure that new subdivisions in high wildfire hazard areas provide adequate local water for fire suppression systems.

2. Establish New Standards to Address Natural Hazards

Beyond updating existing tools, there are important new standards to consider to better integrate hazard risk reduction into the code.

2-A. Introduce New Tools to Reduce Risk in a Coordinated Way

Rather than adopting specific tools focused on individual hazards, many communities adopt regulations that allow them to address impacts from multiple hazards in a coordinated way. Two of these tools are proposed below – the first at the individual site level (limits of disturbance), and the second for broader areas (sensitive lands overlay).

Establish Limits of Disturbance

The current methodology and categorization of steep slopes appear complex and overly restrictive. In particular, taking the average slope of a lot can result in rendering a lot as a “no-build area” or may result in application of stricter standards than is warranted. For example, a large lot that is mostly flat may be automatically designated as a “no-build area” because of a corner of the lot with a steep slope. The definition of the no-build area describes them as the portions of a site that “should not be built on,” but without specific thresholds for how “no-build areas” are identified.

The city should consider instead establishing “limits of disturbance” standards that require applicants to establish areas on the site within which construction and development activities shall be contained. Slope categories could be defined within the limits of disturbance rather than across the entire parcel, and densities and lot coverage could vary depending on the slopes within the limits of disturbance. The benefit of such system is that the city offers flexibility to allow development to occur on the buildable portions of a lot while protecting sensitive areas (including hazard areas).

An example of simplified slope categories with maximum limits of disturbance from another community is provided below. “Disturbed area” includes the portion of the lot where development activities occur, including but not limited to grading of the site. “Maximum coverage” includes the portion of the lot with permanent impervious surfaces. The “maximum total disturbed area” includes the sum of the disturbed area and maximum coverage. The shallower the slopes, the more total disturbed area allowed.

EXAMPLE:

Building Site Slope Category	Disturbed Area	Maximum Coverage	Maximum Total Disturbed Area
10% to 15%	25%	30%	55%
15% to 20%	20%	25%	45%
20% to 25%	20%	20%	40%
25% to 30%	15%	15%	30%
30% to 35%	12%	10%	22%
Over 35%	10%	7.5%	17.5%

If such standards were established in Manitou Springs, they would need to be further defined since, development is currently limited to slopes of 30 percent grade or less (unless a waiver is obtained). As an alternative to only applying to steep slopes, limits of disturbance could be used more broadly in Manitou Springs to establish a framework for other types of protections beyond steep slopes, such as riparian areas, high wildfire hazard areas, wildlife habitat, and natural terrain or landscape. This approach is discussed in more detail below.

Establish Authorization for a Sensitive Lands Overlay

To consider broader authority for evaluation of large areas or sites within the community, the city could elect to establish a sensitive lands overlay that would respond to various natural hazard conditions in Manitou Springs. The working group initially identified hazard overlays as a priority tool, and this system broadens that approach to address several issues, including but not limited to hazards. A draft outline of that section is provided below.

- **Purpose.** This section will describe the purpose and intent of the overlay, including avoiding natural hazard areas, minimizing disruption of other environmental features (such as wildlife habitat and natural resources), and compliance with the goals and policies of *Plan Manitou*.
- **Applicability.** This section will prescribe which lands are subject to the standards of the sensitive lands overlay, including its applicability to new development and existing development or redevelopment. This section should also describe the process by which land within the overlay are designated on the zoning map for the purposes of tracking approved development entitlements.
- **Standards.** This section will include the basic standards that apply to all properties within the overlay and will provide the parameters by which the Director (or other approval body) shall consider other attributes of the site within the overlay. Some standards may be required automatically (such as lot and building standards), whereas others may be based on a discretionary review process on a case-by-case basis (such as landscaping, grading, or establishing protected open space) depending on the types of hazards or other conditions present on the site. This flexible approach allows the Director to establish only the minimum standards necessary to adequately mitigate risk while still allowing development on the site.
- **Procedures.** This section will describe the process by which development within the overlay shall follow, which will depend on the type of development being proposed. For example, some applications within the overlay may only require a minor development approval, whereas others may require subdivision and major development approvals.

A sensitive lands overlay could be amended over time to address additional hazards and/or non-hazard related issues by including mapped areas for areas such as important wildlife habitat, as well as rock outcroppings and ridgelines that are important aesthetic assets to the community.

2-B. Establish a Floodplain Overlay District

The city should develop and adopt a floodplain overlay district that is based on the FEMA mapped 100-year Special Flood Hazard Area (SFHA) as amended. The floodplain overlay district should be a tool used primarily as a development and inspection tracking mechanism. Properties within the overlay would be subject to city review to alert staff of development and redevelopment applications in the floodplain to ensure compliance with NFIP regulations and that proper inspections occur. Review criteria for properties within the overlay should address issues such as building location (outside the floodplain), stormwater management, erosion control, and design standards to mitigate risk.

Staff identified a host of other issues that impact the function of city creeks that are not development related. A particular concern is the high rate of erosion of the city's creek banks (as documented in the FCMP environmental assessment). Some particular concerns that should be addressed include: dumping and debris that impacts the buffer and flow; manmade alterations that impact bank stability; inconsistent maintenance of vegetation that is critical for bank stabilization; removal of vegetation that is impeding water flow; and other approaches to reduce erosion and preserve creek banks and function. These issues could be addressed through improved standards and enforcement and administration of the Municipal Code (for example, Chapter 6.16, Water—Streams) which is outside the scope of this project but could be planned as a future action.

Manitou Springs is also limited in its ability to establish streamside buffers/setbacks or expand riparian habitat given the existing development patterns along Fountain Creek. Establishment of streamside buffers is a complex issue identified in the *Plan Manitou* action plan, but requires future analysis of the feasibility of establishing such buffers.

2-C. Integrate Elements of the International WUI Code into the Zoning and Subdivision Regulations

During the *Plan Manitou* process, a Wildland-Urban Interface (WUI) map and other maps that were generated by the Colorado Wildfire Risk Assessment Portal were reviewed as part of the Hazard Mitigation plan and incorporated within the plan to guide future land use planning. The International Code Council has developed model regulations for wildland-urban interface areas. The International Wildland-Urban Interface Code (IWUIC) establishes minimum regulations for land use and structures through prescriptive and performance-based measures. As with any model regulations, the contents should be tailored for local administration. We recommend considering integrating some of the components from the following chapters of the IWUIC into the Manitou Springs zoning and subdivision regulations:

Chapter 3 – Wildland-Urban Interface Areas

This chapter provides the methodology to officially establish WUI areas based on findings of fact. The essential component of this chapter is the mapping of the WUI, which should be updated frequently (the WUI Code suggests every three years) based on changing conditions and ongoing mitigation (see section on *improve hazard mapping*, p. 14).

Chapter 4 – Wildland-Urban Interface Area Requirements

This chapter includes the standards required for properties located within a designated WUI area. The chapter includes standards related to access and roads, water supply, and fire protection plans (which document considerations for water supply, access, building ignition, fire protection systems, defensible space, and vegetation management). We recommend including the basic standards from this chapter related to access and adequate water supply for fire protection services. Further

discussion is required related to the requirement for a fire protection plan. Fire protection plans are based on site-specific wildfire risk assessments, which were not identified by the working group as a priority; however, we recommend requiring site-specific assessments for areas identified as high hazard on the WUI map (once the map is developed). Some of the standards in this chapter are engineering technical standards (such as specific dimensional requirements for roads and driveways) that could be located outside the zoning or subdivision regulations in a separate manual of city technical standards.

Chapter 5 – Special Building Construction Regulations

This chapter focuses largely on ignition-resistant construction standards for both existing and new construction. These standards should be reviewed by the Regional Building Department for appropriate application. Implementing the standards in this chapter may require an update to the regional building code, which is not within the purview of this project scope.

Chapter 6 – Fire Protection Requirements

This chapter includes minimum standards for automatic sprinkler systems, maintenance of defensible space, installation of spark arresters, and storage of LP-gas containers and other combustible materials. At a minimum, the city should consider including defensible space standards based on the hazard risk as established through WUI mapping. The WUI model code provides suggested required defensible space distances for fuel modification distances (fire-resistant vegetation and clear of structures) which could be tailored for application to Manitou Springs. Defensible space standards could be implemented through a site plan review procedure, in the landscaping standards, and through the regional building code (outside of this project scope). These standards are best tailored using a site-specific assessment process, if such a process is considered by the Fire Department and/or city staff in the future.

Effective integration of these standards requires further review by staff to determine how best to incorporate WUI code elements into the existing interdepartmental and interagency review structure, and how or if these standards would apply only to new development versus existing development and redevelopment.

2-D. Coordinate WUI Updates with Landscaping Requirements

The city currently has minimal landscaping requirements, which are scattered throughout the code but mostly located within the landscape plan requirements for Major Development Plans in Chapter 18.72. Plan Manitou includes a short-term action to develop landscape standards for commercial and residential development. The city has also recently considered updates to its plant list (advisory, not regulatory), identifying species appropriate for Manitou Springs.

- Although substantive updates to the landscaping requirements were not included with this scope, any updates to the code related to landscaping (such as defensible space requirements) should be coordinated with the current landscape plan requirements in Section 18.72.060 and any plant lists maintained outside the zoning and subdivision regulations. Adopting new landscaping standards allows the city to include some “Firewise” and WUI code standards to reduce wildfire risk. If new landscaping standards are adopted, landscape plans submitted by applicants would need to demonstrate compliance with such standards (for example, emphasizing fire-resistant vegetation) and the definitions of “fire prone areas” (Section 18.72.060(C).12) may need to be redefined for consistency with WUI regulations.
- The landscaping requirements within the grading permit procedures in Section 18.68.040.B.1.k should be reconciled with Section 18.72.060.

2-E. Introduce Common Open Space Requirements

The city should consider including minimum common open space requirements, which are effective set asides that can serve multiple objectives such as recreation, hazard mitigation, water quality, and aesthetics. Many communities require common open space for both residential and nonresidential development. Manitou should consider minimum requirements (e.g., 10 percent of the development site area) and should determine whether or not such open space should be open to the public in some or all cases. Additionally, the city will need to determine whether or not these set asides would apply only to new subdivisions, or to redevelopment of existing properties, and whether or not to require conservation of those set asides in perpetuity through restrictive covenants.

2-F. Embrace Green Infrastructure Options

Stakeholders are also seeking additional options for flood control including green infrastructure (generally using natural features rather than structural/man-made systems) to improve water quality while conveying runoff. Alternatives for green infrastructure solutions could be included as options for stormwater management, but should be coordinated with any existing engineering standards and/or BMPs that live outside the zoning and subdivision regulations (such as stormwater design criteria).

Further discussion is required to clarify what suggested improvements and/or best management practices should be integrated into the zoning or subdivision regulations versus integrated into the Regional Building Code.

2-G. Provide Mitigation Information to Property Owners

As noted in the city’s hazard mitigation strategy, it is important to mitigate wildfire risk in existing developed areas. The city should consider developing a checklist for individual property owners of actions they can take to reduce risk on their property. This checklist (or pamphlet) would be developed by staff outside the scope of this project, and would not be located in the zoning and subdivision regulations, but rather within the city offices and online as a resource.

3. Integrate Risk Reduction into the Development Review Procedures

A key element in making hazard mitigation and risk reduction a priority is to embed objectives into the development review procedures (for example, through enhanced approval criteria). Doing so ensures that the topic remains relevant in the community and is actively discussed in public hearings. Currently the development review procedures are scattered throughout the zoning and subdivision regulations, making it challenging to understand the minimum requirements and approval process. As stated at the beginning of this memo, one of the general principles in developing these recommendations is to minimize major structural changes to the current code; however, the procedures are one area that should be reorganized when the city has available time and resources to devote to such improvements. Improvements to the procedures that can be accomplished under this scope of work are included below.

3-A. Enhance Approval Criteria

The current development review procedures in Manitou are scattered throughout the zoning and subdivision regulations, including planning permission and administrative reviews to major development plans and final plats. Some, but not all, of these application types include approval criteria by which the approval body bases a recommendation and/or approval or denial of the application. Other applications, such as rezonings, preliminary plats, minor subdivisions, administrative reviews, and concept plans do not include approval criteria. This is a major gap that should be addressed comprehensively throughout the procedures.

Establish New Approval Criteria

For those application types without existing approval criteria, such criteria should be developed and should include a risk reduction component. For example, for preliminary plats the applicant shall demonstrate that adequate access and water supply (for both use on site and for fire protection) is provided for development in high or moderate hazard areas. Also, any new buildable lots created shall avoid steep slopes and other high hazard areas to the “maximum extent practicable” – which we could define in the definitions in Chapter 16.05. Rezoning applications should also include similar criteria, and could take a step further to ensure that appropriate uses and densities are considered in moderate to extreme hazard areas. Both preliminary platting and rezoning applications are important application types that should be based on strong approval criteria, since they set the stage for future development in an area.

Modify Existing Criteria

For application types that already have established approval criteria (such as minor and major development plans and conditional use permits), the criteria should be improved to address risk reduction (which may be multiple criteria tailored for specific hazards). Presumably, if appropriate risk reduction criteria are developed for platting and rezoning applications, then risk reduction at the specific development application should always generally be met. Additionally, some of the approval criteria for both minor and major development applications are actually submittal requirements, such as development fees and the application being prepared in accordance with professional standards (see Section 18.24.035.F and G). These are all elements that should be reviewed and confirmed by staff prior to forwarding the request to the Planning Commission and/or City Council. Submittal requirements should be located outside the zoning and subdivision regulations since they are subject to more frequent administrative change, and to ensure that they are not confused with approval criteria.

3-B. Clarify the Subdivision Master Plan Requirements

The current master plan requirements are included in Chapter 16.06. In addition to establishing approval criteria for master plans, the procedure should be clarified as follows:

- It is unclear how (or if) the master plan process is related to the concept plan requirement in Chapter 18.20, which is intended to provide preliminary approval of the land use, circulation, open space, and overall development pattern. These procedures can likely be combined for projects triggering a master plan.
- Section 16.06.030.K.4 should be coordinated with the geohazards report requirements in the zoning regulations, Section 18.72.140. Additionally, the city should clarify at what level of detail the Planning Commission and City Council are reviewing the hazard mitigation component. As written, 16.06.030.K.4 states that a plan to mitigate the hazards to acceptable levels must be provided for review and approval. Approval by whom? The Colorado Geological Survey? Staff? The City Council?

3-C. Consider Hazard Mitigation During Review of Minor Subdivisions

In addition to establishing approval criteria for minor subdivisions in Chapter 16.10, we recommend including similar requirements for major subdivisions and master plans related to risk reduction, including demonstration that adequate protection from hazards is provided and the land is suitable for development given identified hazards. Even plats for fewer than five lots (defined in Manitou as minor subdivisions) may have natural hazard implications that should be considered during review and approval. To determine an effective mitigation approach, the applicant may need to submit documentation related to various hazards; for example, demonstrating geologic mitigation through

retaining walls or avoidance of steep slopes, or fire mitigation by providing defensible space and multiple points of access.

NOTE: As a cleanup item, the thresholds for minor vs. major subdivisions should be relocated from the definitions into an “applicability” section within each procedure.

3-D. Clarify Grading Permit Requirements

The primary standards for grading permits are located in Chapter 18.68, Grading Permit. We recommend the following improvements:

- The standards are referred to as an “appendix” in several locations throughout that chapter. This is probably a leftover from a previous update, but should be modified for clarity since these standards have been brought into the body of the code.
- In Section 18.68.040, consider adding a requirement for a grading permit for any grading activities in a geologic hazard area or floodplain.
- The application for a grading permit in Section 18.68.060 gives overbroad appeal authority to the applicant (or any other individual) if he or she feels the decision by the planning director was “unfavorable.”
- It is unclear who the final decision-making body is on a grading permit. Some standards reference the regional building department (18.68.060.A.2), but others (18.68.060.C and D) make it appear that the planning director has final say. This should be clarified.
- Chapter 18.26, Major Development Procedures, state in 18.26.005.A that the City Council shall consider recommendations of the City Planning Commission before the issuance of a grading or building permit. Does this only apply to grading permits that require Major Development approval? Additionally, would a minor development plan need council approval for grading permit? These approval requirements should be reconciled with 18.68.060.

Updates to the grading permit requirements should be coordinated with the city’s drainage criteria manuals and be reviewed by Public Services.

3-E. Ensure Development “Pays its Own Way”

We heard from stakeholders that development in Manitou should minimize the burden on city resources. Developments requiring public site improvements such as roads, water, sewer, and fire suppression systems should provide such improvements prior to issuance of building permits. If such improvements are not being dedicated to the city, then developers should provide a long term maintenance plan for such improvements. Chapter 16.24, Improvements, currently requires such public improvements as the developer’s responsibility, but further discussion is required related to the effectiveness and administration of these standards.

3-F. Clarify Environmental Impact Statement (EIS) Requirements

For major subdivisions, a preliminary plat submittal requires that the subdivision master plan environmental impact statement conditions and impacts are updated for the area within the proposed preliminary plat (see section 16.08.040.C). If a master plan included the EIS requirements, then under what conditions would it need to be updated? Also, what if the area did not trigger a master plan? Would the city still require EIS information, or would that standard 16.08.040.C be waived? Additionally, the environmental review should be renamed since “environmental impact statement” is an official federal process required by the National Environmental Protection Act (NEPA), and comes with specific requirements. The EIS procedures should also be tied into the new sensitive lands overlay, if that is the city’s preferred approach.

3-G. Clarify Minor Modifications Procedure

Chapter 18.34, Minor Modifications, is important for addressing existing development. It is unclear, however, what types of plans and/or development applications are eligible for minor modifications. The timing for modifications should be clarified – can modifications be approved by the Planning Director after construction? Also, the criteria for minor modifications appear to be extremely limited given that it is already stated that the modification cannot exceed what is allowed under the applicable zoning district. This could be an opportunity to improve flexibility for redevelopment sites, which is important in Manitou Springs because most new development in the city will occur as redevelopment.

3-H. Integrate Evacuation Plan Priorities

For major developments (Chapter 18.72), a Traffic Impact Analysis (TIA) is required for several applications depending on the size and use as stated in Section 18.72.130.A. One of the requirements for developments in high hazard areas could be coordination with local evacuation plans, if applicable.

4. Improve Hazard Mapping

If city staff is applying standards that rely on identified specific hazard risk areas, or making distinctions between levels of hazard risk, then those risk categories will require technical mapping grounded by solid data based on local conditions. For example, the current floodplain regulations are tied to FEMA floodplain maps. We recommend the following additional mapping improvements in Manitou Springs:

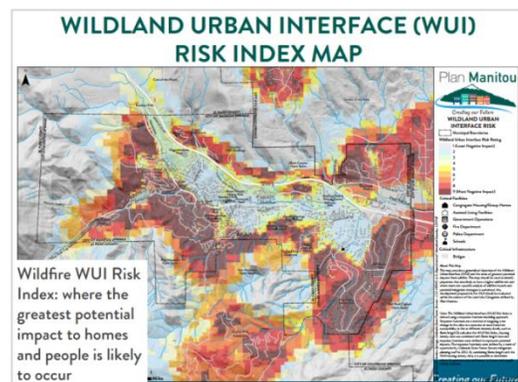
4-A. Coordinate Zoning and Subdivision Updates with Current Geologic Hazards Mapping Project

The city is currently working with the Colorado Geological Survey to prepare updated maps and data related to Manitou Springs' geologic hazards. This project has already begun and will include defining hazards, mapping, and assigning level of risk to the city's geologic hazards. Drafting updates to the zoning and subdivision regulations should be coordinated with this effort to the extent possible, so that categorization of risk is aligned with the development requirements. The results of this mapping project will influence the city's final approach to addressing geologic hazards through the land use tools presented in this memo.

4-B. Enhance WUI Mapping

Integrating WUI code elements will involve identifying the geographic area where specific standards are going to be applied. Manitou Springs identified the adoption of a WUI overlay map and regulations for safe growth and construction within wildfire hazard areas as one of their highest priority mitigation actions in *Plan Manitou*. Establishing a WUI boundary map through a collaborative process also is a requirement of a Community Wildfire Protection Plan (CWPP), and this plan is currently underway through the city's Fire Department.

Further discussion is required regarding the implementation of a more fine-grained definition of the wildland-urban interface in Manitou Springs, and tailoring regulations for the various levels of risk. We recommend forming a small steering committee to discuss the WUI map and the integration of WUI code elements. Potential outcomes range from new WUI standards and a more fine-grained WUI map, to development of educational materials that can be distributed to current residents, business owners, and development applicants.



The WUI risk index map included in Plan Manitou was based on Colorado State Forest Service Data and depicts the areas of greatest potential impacts from wildfire.

Section-by-Section Recommendations

Rather than drafting entirely new sections or chapters in the zoning and subdivision regulations, we propose integrating revisions and new standards into the current framework. This final section of the memo illustrates how the recommended updates to the zoning and subdivision regulations could be integrated into the current structure. This is a draft for discussion purposes, and other changes may be made to the existing regulations after further discussion with staff and stakeholders. Proposed amendments to existing zoning and subdivision regulations are summarized in the table below, with further detail often provided in the preceding sections of this memo.

Chapter in Current Regulations	Proposed Amendments
Title 18 Zoning	
Chapter 18.04 Title, Purpose and Intent	Replace references to the “Rainbow Vision Comprehensive Plan” with “comprehensive plan” to avoid having to update the code with each plan update.
Chapter 18.05 Rezoning	<ul style="list-style-type: none"> • The requirements for change in Section 18.05.010 should be restated as approval criteria. • Approval criteria should consider risk reduction, such as avoiding areas of steep slopes and/or other hazard areas to the maximum extent practicable.
Chapter 18.06 General Provisions	18.06.010.S should be clarified.
Chapter 18.07 Community Agriculture	No change
Chapter 18.08 Specific Zone Designations	<ul style="list-style-type: none"> • 18.08.040 HLDR <ul style="list-style-type: none"> ○ Include standards from 18.64 and 18.76. ○ Remove references to future development of cluster development standards. ○ Simplify slope standards and consider establishing new limits of disturbance standards. • 18.08.065 Redevelopment Overlay <ul style="list-style-type: none"> ○ Clarify the intent of the objective “flood mitigation in Fountain Creek.” How is that reviewed? ○ Clarify whether or not the rear setback incentive should apply to encroachments in the floodplain. • 18.08.070 Open Space <ul style="list-style-type: none"> ○ Include protection/avoidance of hazard areas in the purpose statement. ○ Coordinate conservation in perpetuity requirement with subdivision dedication requirements. <p>Hazard Overlay Options:</p> <ul style="list-style-type: none"> • Option 1 (recommended) - Consider a new Sensitive Lands Overlay district that could incorporate the wildland-urban interface regulations, steep slope standards, streamside/floodplain regulations (and could be amended over time to include other hazards and/or non-hazard related sensitive lands such as wildlife habitat). • Option 2 - Separate overlay districts could be considered for each hazard. • Option 3 – Create sections within the individual development standards sections within Chapter 18.10 that would address hazard mitigation, rather than creating hazard overlays.

Chapter in Current Regulations	Proposed Amendments
Chapter 18.10 Development Standards	This chapter merely references the standards in Chapter 18.64. Relocate some of the standards in 18.64 here.
Chapter 18.12 Supplemental Regulations	
Chapter 18.14 Planning Permission	Clarify how this procedure relates to other development review procedures – e.g., is this required for all development applications? Are these documented? Is this Manitou’s version of a “pre-application meeting?”
Chapter 18.16 Administrative Review	No change; however, clarify that the appeal standards apply to administrative decisions, not the City Planning Commission.
Chapter 18.20 Concept Plan	The concept plan should be coordinated (and possibly combined) with the Master Plan process in the subdivision regulations.
Chapter 18.24 Minor Development Procedures	<ul style="list-style-type: none"> • Clarify the process for determining whether or not additional studies are required – and provide examples if possible. The same standard (as revised) should also be coordinated with those in the procedures for major development plans. • Consider removing submittal requirements from the approval criteria. • Revise approval criteria to include a criterion for risk reduction and/or hazard avoidance.
Chapter 18.26 Major Development Procedures	<ul style="list-style-type: none"> • Consider removing submittal requirements from the approval criteria. • Clarify that appeals would be appeals of a City Council decision, not the City Planning Commission. • Revise approval criteria to include a criterion for risk reduction and/or hazard avoidance.
Chapter 18.30 Conditional Use Requirements and Procedures	No change; however, consider revising procedure with future update.
Chapter 18.32 Variances	
Chapter 18.34 Minor Modifications	<ul style="list-style-type: none"> • Clarify what types of applications are eligible for minor modifications. • Clarify whether or not an approved plan can be modified after a building permit is issued or after construction. • Revise the thresholds for increased flexibility.
Chapter 18.36 Parking Requirements	No change; however, consider relocating the parking requirements tables from Chapter 18.64 to this section.
Chapter 18.38 Outdoor Display, Outdoor Seating and Mobile Vending	
Chapter 18.40 Home Occupations	
Chapter 18.42 Nonconforming Uses and Structures – Redevelopment	No change; however, consider more flexible standards, clarifying when compliance is required, and establishing new nonconforming site feature requirements.
Chapter 18.44 Public Notice, Hearing and Appeals	No change; however, consider cleaning up outline in 18.44.020.
Chapter 18.48 Enforcement and Violations	
Chapter 18.50 Amendments to the Zoning Code	
Chapter 18.52 Legal Status of the Zoning Code	

Chapter in Current Regulations	Proposed Amendments
Chapter 18.60 Definitions	<ul style="list-style-type: none"> • Include new definitions for terms introduced through code updates (e.g., WUI terms, limits of disturbance). • When drafting, include necessary definitions of terms that are not currently defined.
Chapter 18.64 Development and Parking Standards Tables	<ul style="list-style-type: none"> • Relocate 18.64.010 to the HLDR district regulations in Chapter 18.08, specific zone designations. • Simplify 18.64.010 to fewer slope categories and to remove distinction between platted and unplatted land. • Relocate 18.64.020 to Chapter 18.08, specific zone designations. • Clarify the intent of the “temporary setbacks.” That term is not defined. Are those applicable to temporary structures? • Revise Section 18.64.020.7 – retaining walls to coordinate with other city regulations. It is unusual to allow such broad authority for building retaining walls (even in the public right-of-way). • Consider relocating 18.64.040 to parking requirements in Chapter 18.36.
Chapter 18.68 Grading Permit	<ul style="list-style-type: none"> • Remove references to “appendix,” since these standards have been directly incorporated into the zoning regulations. • Consider requiring a grading permit when any grading activity is proposed in a geologic hazard area under 18.68.040. • Reconsider the broad appeal authority under 18.68.060 for applicants that feel that the decision was unfavorable. Also, reconcile with the appeal authority granted later in this chapter in Section 18.68.130. • Relocate the landscaping standards found in 18.68.060.B.k to general development standards and coordinate with those required for major development plans in Section 18.72.060.
Chapter 18.72 Major Development Plan (MDP)	<ul style="list-style-type: none"> • Under the landscape plan requirements in Section 18.72.060.C.12 – fire prone landscaping requirements should be coordinated with new WUI code standards, if embraced. • Many of the other plan requirements are actually development standards and should be considered (in future update) for relocation to the development standards chapter and cross-referenced here. For example, the lighting plan requirements and the landscaping plan requirements include both plan submittal requirements and minimum standards. • The geologic hazards plan and report in 18.72.140 should be coordinated with the HLDR slope standards (as revised). Also, CGS should review these standards for compliance with best practices prior to adoption.
Chapter 18.74 Citizen Participation Plan and Report	
Chapter 18.76 HLDR Development Plan	<ul style="list-style-type: none"> • Relocate these standards to the HLDR district standards in Chapter 18.08.040. • Coordinate these standards with grading permit requirements in Chapter 18.68.
Chapter 18.80 Process	No change; however, consider relocating this to a separate chapter on all development review procedures.

Chapter in Current Regulations	Proposed Amendments
Chapter 18.82 Manitou Springs Official Zoning Map	
Chapter 18.84 Marijuana Clubs	
Chapter 18.86 Long-Term Occupancy Lodging	
Chapter 18.88 Telecommunication Facility Requests	
Chapter 18.89 Vacation Rentals	
Title 16 Subdivision	
Chapter 16.04 General Provisions	
Chapter 16.05 Definitions	<ul style="list-style-type: none"> • Clarify definition of “no build area.” • Reconcile with definitions from Title 18- zoning. For example, several terms are defined differently including “alley,” “lot,” and “subdivision.” • Include new definitions for terms introduced through code updates. • When drafting, include necessary definitions of terms that are not currently defined.
Chapter 16.06 Master Development Plans	<ul style="list-style-type: none"> • Coordinate this procedure with the current concept plan procedure. These procedures could potentially be combined. • Coordinate 16.06.030.K.4 with the geologic hazards report requirements in 18.72.140. • Separate submittal requirements from approval criteria in 16.06.030.
Chapter 16.08 Major Subdivisions	<ul style="list-style-type: none"> • Clarify the environmental impact statement requirements for preliminary plats (Section 16.08.040). • Establish approval criteria for preliminary and final plats and include a criterion for risk reduction and/or hazard avoidance.
Chapter 16.10 Minor Subdivisions	<ul style="list-style-type: none"> • Establish approval criteria for minor subdivisions and include a criterion for risk reduction and/or hazard avoidance.
Chapter 16.12 Issuance of Building Permits to Unplatted Lands – Administrative	No change; however, city has suggested removing this chapter.
Chapter 16.14 Issuance of Building Permits to Previously Platted Lands – Administrative	No change; however, city has suggested removing this chapter.
Chapter 16.16 Waiver	<ul style="list-style-type: none"> • It is unclear whom the final decision making body is for waivers. Section 16.16.040 states that the Planning Commission may approve or recommend to City Council waivers from these regulations. • Identify subdivision design requirements where waivers would not be considered, and provide examples of cases where waivers should be considered. This overbroad authority for waivers is not transparent.
Chapter 16.18 Land Dedications	<ul style="list-style-type: none"> • Coordinate this section with open space district (conservation in perpetuity) regulations. • This chapter should clarify the decision-making body for public dedications, (which should be City Council).

Chapter in Current Regulations	Proposed Amendments
Chapter 16.20 Lot Standards	<ul style="list-style-type: none"> • These standards should be combined with block standards in chapter 16.26, Streets – Design and Naming, and should be converted into broader “subdivision design standards.” • Additional standards should be considered for new subdivisions, including adequate ingress and egress for evacuation and emergency response services, and to ensure that new subdivisions in high wildfire hazard areas provide adequate local water suppression systems.
Chapter 16.22 Easements	
Chapter 16.24 Improvements	No change; however, further discussion is required with city staff to determine how to make these more effective to ensure developers are “paying their own way” for development.
Chapter 16.26 Streets – Design and Naming	<ul style="list-style-type: none"> • Block standards should be coordinated with lot standards in Chapter 16.20. • Consider coordination with the city’s evacuation planning requirements.
Chapter 16.28 Uniform Street Standards	No change; however, these could be relocated to a technical standards manual rather than included in the zoning and subdivision regulations. Additionally, the cross-sections included in <i>Plan Manitou</i> could be integrated into the uniform street standards.
Chapter 16.30 Extraterritorial Major Street Standards	
Chapter 16.32 Requirements for all Drainage Plans and Reports	These standards should be updated to incorporate appropriate best practices from the flood control master plan (underway).
Chapter 16.34 Vacations of Rights-of-Way	
Chapter 16.36 Vacation Plats	
Chapter 16.38 Vacation of Easements	