# SECTION 17 WILDFIRE HAZARD - OVERLAY DISTRICT

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## 1701 Intent

To identify Wildfire Hazard Areas and to protect the health, safety, and welfare of residents by minimizing the potential for the loss of life and property by the ignition and spread of wildfires in the Wildland/Urban Interface and the Wildland/Urban Intermix.

Castle Pines is very diverse in character with land areas ranging from grasslands and shrublands, to steep, forested Slopes. These areas are often viewed as highly desirable development sites due to their unique scenic qualities. By identifying potential hazard areas, and requiring mitigation measures as part of the land planning and development process, the current and future risk of wildfires can be reduced.

Specific purposes are as follows:

- To develop and maintain a map of Castle Pines that allows for preliminary identification of Wildfire Hazard Areas.
- To identify the process for assessing and mitigating the Wildfire Hazard concurrent with the land planning process.
- To identify specific types of development to be subject to wildfire mitigation measures and the provisions of the Douglas County Wildfire Mitigation Standards.
- To identify the standards with which development proposed in Wildfire Hazard Areas must comply.
- To set forth the procedures for identifying, describing, and mitigating wildfire risk during the land development process.
- To design wildfire mitigation prescriptions which facilitate overall stewardship by the landowner or other appropriate entity.

## 1702 Definitions

The following definitions pertain to the Wildfire Hazard - Overlay District. Additional definitions relating to wildfire mitigation are found in the provisions of the Douglas County Wildfire Mitigation Standards. In the case of conflict, the Director of Community Development, or a designee, shall determine the appropriate definition.

1702.01 Access Route - Principal vehicular ingress and egress to a structure or through a development, crossing more than one parcel, including public and private roads, streets, and lanes that extend to and intersect with a publicly maintained road, street, or lane.

1702.02 Aspect - Direction toward which the Slope faces.

1702.03 Brush - Shrubs and scrub vegetation or other vegetative growth heavier than grass but not full tree size.

1702.04 Combustible - Any material that, in the form in which it occurs or is used, and under the conditions anticipated, will ignite and burn.

1702.05 Defensible Space - A natural or man-made area, where vegetation capable of carrying a fire has been sufficiently treated, modified, or removed to slow the rate of spread and reduce the intensity of a fire; provide a safe area for fire suppression operations; and slow or prevent a fire from traveling – in either direction – between a structure and the vegetation.

1702.06 Douglas County Wildfire Mitigation Standards – Appendix Chapter 58 of the International Building Code (IBC) as adopted by Douglas County. These standards are based on the National Fire Protection Association's (NFPA) standards for protection of life and property from wildfire.

1702.07 Fire Break – An area, usually a long strip of undetermined width, wherein all flammable fuels have been removed to the mineral soil layer for the purpose of stopping a fire's spread.

1702.08 Emergency Access Route - A maintained vehicular Roadway for ingress and egress designed to allow for access and/or evacuation of residents and visitors only during crisis situations. The route may cross more than one parcel, including private roads, streets and lanes.

1702.09 Forest Management Plan – A plan prepared by a Professional Forester that describes the current condition of the subject site and the proposed management activities to be conducted by the applicant. The plan shall describe how these activities improve forest health and reduce Wildfire Hazards. The plan shall address all components of site vegetation, as identified by the Douglas County Professional Foresters. Elements of the plan may include, but are not limited to, insect and disease, wildlife values, aesthetics, and other multiple resource objectives.

1702.10 Forester, Professional - An individual with a bachelor's degree or equivalent in forestry or a closely related field from a college or university accredited by the Society of American Foresters (SAF), eligible for professional membership with SAF, and, for purposes of this Chapter, two years experience with representative fuel types of the Rocky Mountain Region. The term Douglas County Professional Forester shall refer to a Professional Forester employed by Douglas County.

1702.11 Fuel Break - An area, usually a long strip strategically located, wherein vegetative fuels are reduced in volume and maintained to cause a reduction of fire intensity if ignited by a Wildland fire.

1702.12 Fuel Loading - The volume of fuel in a given area, generally expressed in tons per acre.

1702.13 Fuel Modification - The removal of Fuels, increase in spacing of individual plants, or reduction of Fuel Loading.

1702.14 Fuel - All Combustible materials within the Wildland/Urban Interface or Wildland/Urban Intermix, including vegetation and structures.

1702.15 Roadway - Any surface improved, designed or ordinarily used for vehicular travel.

Public - A Roadway dedicated for public use and improved to the standards required by the City in accordance with the Roadway Design and Construction Standards Manual (current edition).

Private - A Roadway intended for limited use and constructed to the standards approved by the Castle Pines Public Works Department and the provisions of the Douglas County Wildfire Mitigation Standards.

1702.16 Slope - Upward or downward incline or slant, usually calculated as a percent of slope (rise or fall per 100 feet of horizontal distances).

1702.17 IBC - The International Building Code as currently amended and adopted by the City.

1702.18 Wildland - An undeveloped area in its natural state containing vegetation characteristic of the region and undisturbed topographical conditions.

1702.19 Wildland/Urban Interface - An area where development and Wildland Fuels meet at a clearly defined boundary.

1702.20 Wildland/Urban Intermix - An area where development and Wildland Fuels meet with no clearly defined boundary.

1702.21 Wildfire - An unplanned and unwanted fire requiring suppressive action; an uncontrolled fire, usually spreading through vegetative Fuels but often threatening structures.

1702.22 Wildfire Hazard - The condition of the natural and built environment creating a Wildfire opportunity that is so adverse to past, current, or foreseeable construction or land use as to constitute a significant hazard to public health, safety or property. The term incorporates the combined effects of Slope, Aspect, topography, climatic conditions, weather, Wildfire behavior, existing vegetation, and state of the vegetation; and may also incorporate additional factors such as evacuation conditions, density of structures, history of fire occurrence, and local emergency service availability.

1702.23 Wildfire Hazard Area - An area containing or directly affected by a Wildfire Hazard as shown on the Wildfire Hazard - Overlay Map and as determined by the City.

1702.24 Wildfire Mitigation Plan - A plan prepared by a Professional Forester that describes the current condition of the subject site and the proposed management activities to be conducted by the applicant. The plan shall describe how these activities reduce Wildfire Hazard levels. The plan shall address all components of site vegetation, as identified by the Douglas County Professional Foresters. While elements of the plan may address insect and disease, wildlife values, aesthetics, and other multiple resource objectives, the primary objective of the plan is hazardous Fuel reduction and how it meets the goal of a reduction in Wildfire risk levels.

## 1703 Applicability

Upon the adoption of the Wildfire Hazard - Overlay District, the regulations contained in this Section shall apply to all land areas identified on the Douglas County Wildfire Hazard - Overlay Map and any land areas field-verified as potential hazard areas.

1703.01 Any area assigned a hazard rating of 16 or higher in accordance with the hazard rating system adopted by the City shall be subject to the provisions of this Overlay District. *(See Section 1705)*

1703.02 The land-use activities subject to the provisions of the Wildfire Hazard - Overlay District are as follows:

1703.02.1 Building permits (for all residential and non-residential structures)
1703.02.2 Exemptions (including rural site plans and clustered 35 - acre splits)
1703.02.3 Rezoning
1703.02.4 Site Improvement Plans
1703.02.5 Subdivision
1703.02.6 35 or larger - Acre Development
1703.02.7 Use by Special Review

1703.03 The provisions of this Overlay District shall apply in addition to the applicable requirements of the underlying zoning district.

1703.04 The provisions of this Overlay District shall supersede otherwise applicable requirements of the underlying zoning district where those requirements are inconsistent with the provisions herein.

## 1704 Wildfire Hazard - Overlay District Map

The Douglas County Wildfire Hazard - Overlay District Map is hereby incorporated by reference and shall be deemed an overlay on any zoning district now or hereafter enacted to regulate the use of land in Castle Pines.

1704.01 The Wildfire Hazard - Overlay Map shall be maintained by the Community Development Department, Building Division.

1704.02 The Wildfire Hazard - Overlay Map is intended to serve as a guide to identify lands potentially at risk for Wildfire. All land areas in the Overlay District shall be subject to field investigation to confirm actual level of risk. The degree of mitigation required will depend on the results of the field investigation.

## 1705 Wildfire Hazard Rating Inspection

Land proposed for development shall be subject to on-site inspection by the Douglas County Professional Foresters for the purpose of determining a Wildfire Hazard rating in accordance with Section 1707.

1705.01 If a Douglas County Professional Forester is not available to perform the assessment and/or rating in a timely manner, Castle Pines may require that the applicant contract with a Professional Forester for the on-site inspection to determine the Wildfire Hazard rating. In this instance, the applicant is responsible for the costs associated with such inspection.

1705.02 In the event of a conflict pertaining to the outcome of the assessment and the subsequent rating prepared by Douglas County Professional Foresters, Castle Pines reserves the right to contract with a Professional Forester as defined to assist with the review of the rating and assessment submitted on behalf of the applicant. The cost of this additional review shall be paid by the applicant.

## 1706 General Standards

Development determined to be subject to the provisions of the Wildfire Hazard - Overlay District shall be required to mitigate identified hazards through compliance with and utilization of the Douglas County Wildfire Mitigation Standards, and may require the implementation of a Wildfire Mitigation or Forest Management Plan. Additional measures aimed at reducing the risk of Wildfire may be imposed at the discretion of the Chief Building Official. The types of mitigation measures required are as follows:

1706.01 Wildfire Mitigation and Forest Management

Identification of Fuel Modification and vegetation management measures may be required in order to reduce the threat of Wildfire. If Fuel Modification, vegetation management, or other Forest Management practices are determined to be necessary, a plan shall be prepared by a Professional Forester, as defined herein. Required elements shall be specified by the Douglas County Professional Foresters and shall include but are not limited to the following:

1706.01.1 Identification of fuel type, condition, and loading, in conjunction with an assessment of Slope and Aspect, to determine the ability for a Wildfire to spread.

1706.01.2 Reduction of Fuel Loading, modification of fuel types to reduce the risk to structures or adjacent vegetation, and resource values on and around the project including the creation of Fuel Breaks and Fire Breaks.

1706.01.3 Identification of current forest conditions at the time of application such as species composition, the presence of insect and disease, stocking levels, significant numbers of standing dead and/or down trees, and any other conditions that may affect current or future forest health or sustainability. The Wildfire Mitigation or Forest Management Plan shall contain a prescription that will decrease the spread or intensity of Wildfire and improve forest health. Any short-term or temporary conditions affecting the existing vegetation shall be noted in the mitigation or management plan with an explanation of its relative importance and how, or if, it changes the prescription.

1706.02 Road and Street Design

All Roadways in a Wildfire Hazard Area shall be required to comply with the Douglas County Roadway Design and Construction Standards or Chapter 4 of the Douglas County Wildfire Mitigation Standards. Public and private roads, streets, and ways shall allow for safe access for emergency fire equipment and civilian evacuation during an emergency. Requirements may include, but are not limited to, the following:

1706.02.1 Two separate and distinct points of access; an Emergency Access Route and/or evacuation route may qualify as a second access. Entries divided by a median shall not qualify as two separate access points.

1706.02.2 Roads, shoulders and easements of sufficient width, grade and surface composition to support emergency vehicles.

1706.02.3 Dead end roads limited in length shall provide cul-de-sac or hammerhead "T" turnaround area.

1706.03 Driveway Design

All driveways located in Wildfire Hazard Areas shall comply with the applicable provisions of the Douglas County Wildfire Mitigation Standards, as determined by the Chief Building Official.

1706.04 Road, Street and Building Signage

Changes in signage may be necessary for development proposed in Wildfire Hazard Areas in order to facilitate locating a fire and avoiding response delays. Road, street and building signage shall comply with Chapter 5 of the Douglas County Wildfire Mitigation Standards, and the

Manual on Uniform Traffic Control Devices, as amended. Design requirements shall include, but are not limited to, the following:

1706.04.1 Road and street signs of a sufficient height, size, and location to allow for adequate visibility in the event of a Wildfire.

1706.04.2 Building signage and addresses of sufficient size and reflectivity to be clearly visible from the road.

1706.04.3 Emergency Access Routes may require specific signage and use restrictions.

1706.05 Emergency Water Supply

An emergency water supply shall be required to be identified as a condition for development in a Wildfire Hazard Area. Emergency water supplies shall comply with Chapter 6 of the Douglas County Wildfire Mitigation Standards. The Chief Building Official shall conduct any evaluation required to determine emergency water supply needs. Additional requirements may include, but are not limited to, the following:

1706.05.1 Demonstrated compliance with Appendix 59: Standard for Water Supplies for Rural Fire Fighting, of the International Building Code, as amended and adopted by Castle Pines.

1706.05.2 Demonstrated compliance with the Water Supply - Overlay District contained in Section 18A of this Ordinance.

1706.06 Structural Design

Buildings, structures, and other forms of development in or adjacent to Wildfire Hazard Areas shall be located, designed, and constructed in a manner to minimize the possibility of ignition from a Wildfire and the spread of a structural fire to the Wildland.

All buildings and structures allowed to be located in a Wildfire Hazard Area shall be required to comply with the design standards specified in the Douglas County Wildfire Mitigation Standards.

1707 Application Requirements, Hazard Rating, and Assessments

1707.01 Prior to the processing of any application for a land use activity referenced in Subsection 1703.02, a Wildfire Hazard rating shall be obtained from the Douglas County Professional Foresters, and where required, a Wildfire Mitigation or Forest Management Plan shall be prepared and submitted to the Douglas County Professional Foresters for review and approval.

1707.02 Douglas County Professional Foresters may assist the applicant at the pre-submittal stage to determine the field inspection requirements

necessary to obtain a Wildfire Hazard rating in accordance with the provisions of Section 1705.

1707.03 If the Wildfire Hazard rating is 16 or greater, an assessment shall be prepared by the Douglas County Professional Foresters assessing relevant factors. If the City requires that the applicant contract with a Professional Forester for a Wildfire Hazard rating determination, the individual responsible for the determination shall also be responsible for preparing the rating and assessment. The rating and assessment shall, at a minimum, include the following:

1707.03.1 A description of the existing site characteristics including vegetative, topographical, and other pertinent environmental conditions;
1707.03.2 A determination as to whether the site characteristics constitute a hazard;
1707.03.3 An assessment of the severity of the hazard and its implications relative to the protection of life-safety and resource protection for future development;
1707.03.4 An analysis of the intensity and character of existing and proposed development and its effect on the hazard;
1707.03.5 An analysis of the relationship between the development and the hazard, both inside and outside the proposed development;
1707.03.6 Recommendations pertaining to the form, type and extent of the required mitigation measures as outlined in the Douglas County Wildfire Mitigation Standards and the provisions of this Overlay District.

1707.04 The assessment shall be evaluated in conjunction with the land use application to determine if a Wildfire Mitigation or Forest Management Plan is required prior to approval.

## 1708 Review Procedures

1708.01 The review procedure for the provisions of this Section will coincide with the review procedure established by the City for the type of development or use proposed and the requirements of the underlying zoning district.

1708.02 In deciding whether to approve a land-use activity, the City Council shall consider the evidence and information required by this Section. Based on this evidence and information the Council may approve, approve with conditions, or deny the requested development activity. Additional conditions for approval may include, but are not limited to, the following:

1708.02.1 Alteration of the physical characteristics of the land;
1708.02.2 Alteration to the vegetative features of the land;
1708.02.3 Construction standards required of structures proposed;

1707.02.4 Construction standards of roads intended to serve the development;
1708.02.5 Design and density within the area proposed for development
1708.02.6 Location of structures, uses, or other improvements within the area proposed for development.