# 17.6.1 Environmental Regulations.

## A. Fire Mitigation and Forestry Management.

1. *Purpose and Intent.* The Town's forests are the predominant, important ecosystem in the Town while also providing the naturally treed landscape context for development and scenery for residents and guests visiting the area. The purpose and intent of the Fire Mitigation and Forestry Management Regulations is to foster and maintain a healthy forest ecosystem and landscape while also protecting buildings from wildfire. These regulations are also intended to promote and maintain forest health, vitality, and diversity for generations to come.

2. *Applicability.* The following types of development shall create and implement a wildfire mitigation plan in accordance with this section:

a. All new building construction that will create a habitable space, including but not limited to commercial buildings that are occupied by employees or guests on a regular basis:

b. Additions that increase a building's habitable floor area or number of stories that have a valuation of <del>fifty **five hundred** thousand dollars (\$50**0**,000) or greater; or</del>

c. Any alteration of the landscaping of a lot that has a valuation of <del>fifty one hundred</del> thousand dollars (\$<del>5100</del>,000) or more, <u>with the exception of</u> the addition of <u>non-</u> <u>flammable decks, patios, walkways, hardscaping</u> and water features.

3. General Standards.

a. No tree greater than four (4) inches dbh may be removed or altered without a written\_permit from the Forestry Division. The Forestry Division shall receive all Forestry permit submittal documents electronically, preferably in pdf format or other electronic plans and submitted through the Town permitting website set forth by the Town Forester. W hen the Town Forester issues a permit, the permit shall be issued electronically to the permit applicant. No work shall be performed until such permit has been issued.

i. Administration. Administration of the Forestry Regulations falls under the Community Development Department, Forestry Division, with the Forester designated as the official under these regulations. <u>ii. Forester Appointment</u>. The Forester shall be appointed by the Community Development Director or its designee in consultation and with the consent of the Town Manager and consultation with the Human Resources Director.

iii. Forester Designees. In accordance with the proscribed procedures of this Town and with the concurrence of the appointing authority, the Forester shall have the ability to recommend to the Planning and Development Services Director and the Town Manager that the Town appoint employees to assist with the implementation of these provisions. Such employees shall have the powers as delegated by the Town.

iv. In the absence of the Forester, the Planning and Development Services Director will appoint a designee and/or will otherwise perform the duties of the Forester.

iv. Forester Roles and Responsibilities.

1. Duties and Powers of the Forester. The forester is hereby authorized to:

a. Enforce the provisions of the CDC and Forestry Regulations.

b. Render interpretation of the Forestry Regulations. Render major interpretations of these codes after consultation with the Planning and Development Services Director and the Town Attorney.

c. Adopt policies and procedures to clarify the application of the codes and Forestry provisions.

i. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of the codes.

ii. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in the adopted codes.

d. Require that hazardous conditions in violation of the codes be corrected when the Forester has found that conditions are hazardous to life or property.

a. b. All new development that must prepare a wildfire mitigation plan as required above shall submit the following plans and information on one (1) plan sheet as a part of the required Design Review Process development application:

i. Tree survey prepared by a Colorado licensed surveyor that shows all live trees that have a caliper of four inches (4") or greater – diameter at breast height ("dbh") – within Zones 1, 2, <u>and 3</u> as defined below. The requirement of a tree survey will be waived for existing development that voluntarily creates a defensible space plan.

ii. Proposed wildfire mitigation plan based on the requirements of this section that shows all trees to be removed that have four inches (4") or greater dbh.

iii. Proposed landscape plan prepared by a qualified professional pursuant to the Design Regulations.

iv. Existing and finished grades in two-foot contours with such grading based on a survey prepared by a Colorado licensed surveyor.

- v. Proposed site plan and associated improvements; and
- vi. Lot lines and dimensions.

b. c. Prior to submitting a development application pursuant to these Fire Mitigation and Forestry Management Regulations, an applicant shall schedule a pre-application meeting with Community Development Department staff to develop the wildfire mitigation plan. Staff may require an inspection of the lot affected by the application to assess forest health.

 $\epsilon$ - d. Town staff shall review and approve all wildfire mitigation plans to ensure they meet the requirements of this section.

i. Town staff shall reserve the right to augment or waive the requirements of this section if it is deemed impractical or impossible to implement a wildfire mitigation plan on a particular lot due to lot size, steepness of grade, erosion concerns and proximity to wetlands or negative impact to surrounding properties.

d. e. The following requirements, <u>based on standards set by the Colorado State</u> Forest Service Home Ignition Zone (2012) and National Wildfire Coordinating Group wildfire mitigation standards (2023), shall be followed in creating the required wildfire mitigation plan:

i. Zone 1 is the area that consists of fifteen feet (15") around the building as measured from the outside edge of the building's dripline, including decks, planters-or patios attached to the building. The following provisions shall apply in Zone 1:
 Zone 1 (0 to 5 feet) is the area that consists of five feet (5') from the edge of the building as measured from the outside edge of the building, including

decks planters, roofed walkways, and etc. attached to the building. The purpose of Zone 1 is to create a vegetation free hardscape next to the home utilizing pavers, stone, gravel, lava rock, concrete, or other non-flammable material to protect the building. Zone 1 one must be extended to 7 feet in cases of complex building design and areas with re-entrant corners. This zone requires the most vigilant work in order to reduce or eliminate ember ignition and direct flame contact to the building. The following provisions shall apply in Zone 1:

(a) All slash<u>, other woody debris</u>, and flammable vegetation as identified by staff shall be removed from Zone 1.

(b) All trees and shrubs vegetation including sod, tall grasses, shrubs, and trees located within Zone 1 shall be removed.

# (c) No trees or shrubs shall be planted directly adjacent to or underneath windows, decks, or vents.

c) d) The following exceptions apply to Zone 1:

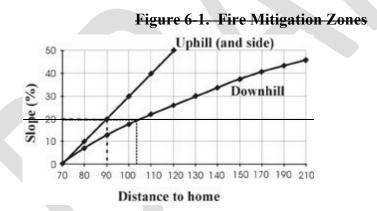
(i) A tree or shrub may remain within Zone 1 provided the defensiblespace distance is measured commencing from the vegetation's drip edgerather than from the building plane (so the tree is considered part of or an extension of the structure), and provided the distance is not limited by a lot line. A shrub, but no trees may remain within Zone 1 in a planter provided the defensible space distance is measured commencing from the vegetation's drip edge rather than from the building plane (so the plant is considered part of or an extension of the structure), and provided the distance is not limited by a lot line and provided a minimum of 15 feet of space outside this area (considered to be part of or an extension of the structure) is maintained tree and shrub free as measured from the outside edge of the tree or shrub at mature size.

(ii) Flammable vegetation shall be allowed in planters attached to the building so long as the planter is within ten feet (10') of a building, and vegetation is not planted directly beneath windows or next to foundationvents. Firewise vegetation (shrubs and non-woody vegetation) shall be allowed in planters attached to the building so long as the planter is within ten feet (10') of a building, the planter contains non-flammable mulch, the planter is permanently irrigated, the planter has a 5 foot vegetation free zone to the outside of the planter, and vegetation is not planted directly beneath windows or directly adjacent to or under a deck, or next to any exterior or foundation vents.

## (iii) Traditional window flower boxes (above grade) are allowed and not specifically required to be irrigated.

d) (e) In the event Zone 1 encroaches upon the general easement, the review authority shall allow the creation of defensible space as required by this section.

(ii) Zone 2 is the area that extends from the outer edge of Zone 1 for the distancespecified in Figure 6-1, Fire Mitigation Zones, based on slope, to the lot line, whichever is less.



Zone 2: is the area 5-30 feet from the building(s) and their attachments that transitions away from the building(s) where fuels should be significantly reduced. This zone is designed to minimize a fire's intensity and its ability to spread while significantly reducing the likelihood of structure ignition because of radiant heat. The purpose of Zone 2 is to provide less fuel for an approaching fire and to reduce its intensity as it nears buildings.

(a) The following provisions shall apply in Zone 2:

(iii) (i). Dominant and codominant live trees with a dbh of four inches (4") or greater shall be spaced with a ten foot (10') crown to crown separation. All

ladder fuels and slash shall be removed from the ten foot (10') crown tocrown separation area. Grasses and other non-woody vegetation shall be kept mowed to a height of four inches (4") or less and accumulations of surface fuels, such as logs, branches, slash, and mulch shall be avoided.

(ii). Dominant and codominant live trees with a dbh of four inches (4") or greater and shrubs shall be installed or thinned so they will produce a 15 foot (15') space between the edge of the crown to the drip edge of the home at maturity and have a ten foot (10') crown-tocrown separation distance at maturity throughout the rest of Zone 2. All ladder fuels and slash shall be removed from in between the crown-to-crown separation areas. Measurements shall be from the outermost branch of one tree or shrub to the nearest branch on the next tree or shrub (mature size) or to the drip edge of the building.

(iii). All ladder fuels (sapling conifers, evergreen shrubs, or woody debris) must be removed under remaining trees.

(v) (iv) All stressed, diseased, dead, or dying trees and shrubs, as identified by staff, shall be removed except for standing dead trees that staff indicates need to be maintained since standing dead trees provide important wildlife habitat.

(v) Shrubs over five feet (5') tall shall have an average spacing of ten feet
(10') from shrub-to-shrub <u>and fifteen feet (15') from the building.</u>

(vi). The above specified distances are minimums and distance requirements may be increased by staff to reduce potential fire behavior, particularly on steep slopes.

(b) The following exceptions apply to Zone 2:

(i) Groupings of trees or shrubs may be allowed provided that all of the crowns in such group of trees or the edge of the shrubs are spaced ten feet (10') from crown-to-crown or from edge of shrub to any trees or shrubs-outside of such grouping. Small groupings of trees or shrubs (2 – 5 trees and shrubs) may be allowed provided that 30 feet (30') of space

is maintained in between tree groups. All the crowns of trees or the edge of the shrubs within the tree groupings must be spaced a minimum of 15 feet (15' away from the drip edge of the building(s) and provide fifteen feet of space to the edge of the crowns of adjacent trees and shrubs at maturity or 30 feet if adjacent to another grouping of trees or shrubs.

(ii) Aspens, narrowleaf cottonwoods, willows and other trees and shrubs listed in CSU Cooperative Extension Publication 6.305, Firewise Plant Materials as amended from time to time, may be spaced closer than the ten-foot (10') crown-to-crown separation as approved by staff.

(iii) Closer spacing of any trees may be allowed by staff upon a determination that the required ten-foot (10') crown-to-crown spacing would put the remaining trees at undue risk of wind-throw or snow breakage.

(iv) Tree removal for the creation of defensible space, if such tree removal is determined to be impractical by the Town due to steep slopes, wetland or other environmental constraints, and other mitigation is provided.

(c) Trees remaining within Zone 2 shall have branches pruned to a height of ten feet (10'), but notwithstanding said height requirement, branches need not be pruned to more than one-third (1/3) of the tree height with the following exceptions:

(i) Aspen trees; and

(ii) Isolated spruce and fir trees if a minimum of 15' of space around them is maintained.

(d) In the event that Zone 1 or 2 extends upon the general easement, the review authority shall allow the removal of trees to implement the wildfire mitigation plan.

(e) Chipped wood and small timber may be spread throughout Zone 3 provided the wood chips have a maximum depth of two to three inches (2" –

3") and small timber has a diameter of three inches (3") or less and is cut up into lengths that are three feet (3') or less.

iii. Zone 3 is the area extending beyond Zone 2 to the edge of the lot subject to development. In Zone 3, all diseased, beetle infested, dead or dying trees, asidentified by staff, shall be removed except for standing dead trees (aka tree snags) that staff indicates need to be maintained since standing dead trees provideimportant wildlife habitat. Zone 3 is the area extending beyond Zone 2 to 100 feet away from the building(s) or the edge of the lot subject to development. In cases where steep slopes exist, staff may increase the distance of the outside edge of Zone 3 to a distance up to 200 feet to minimize the advance of a wildfire. This is because wildfire intensity and movement are most often accelerated on steep slopes. The goal of Zone 3 is to reduce the continuity of fuels in such a way that large flames (crown fire) cannot persist. Trees and tree groupings shall be spaced from one another at a minimum distance of 10 feet crown separation (at mature size) to reduce the transfer of crown fire. All dead and down fuels shall be removed. In Zone 3, all diseased, beetle infested, dead or dying trees, as identified by staff, shall be removed except for standing dead trees (aka tree snags) that staff indicates need to be retained as important wildlife habitat.

(a) For lots greater than five (5) acres in size, the Town shall only require that Zone 3 be implemented for a maximum distance of 200 feet from the outside edge of Zone 3. A lot owner may propose to implement Zone 3 for all of the lot.

iv. Beyond Zone 3 (Larger Landscape): The landscape beyond Zone 3 should be considered for management when possible. Fuels in this area could be managed in such a way to lessen the volume of ember production, decrease fire intensity, and create opportunities for fire suppression equipment and personnel while being in line with other forest management goals, such as forest health.

e. Firewood may only be stored on a lot that has a solid fuel burning device permit issued by the Town that meets the following limitations:

i. Indoor storage can only occur within an enclosed room that is a part of the primary structure on the lot.

ii. Outdoor storage shall only occur in the rear yard.

iii. Up to ten (10) cubic feet of outdoor firewood storage may be located in Zone 1
 or Zone 2. Outdoor firewood storage shall have a minimum thirty-foot (30')
 distance from the structure.

V. iv. Outdoor firewood storage shall be screened from view from surrounding lots.

f. Prior to the issuance of any certificate of occupancy or certificate of completion, staff shall inspect the lot affected by the fire mitigation plan to ensure that such plan has been implemented in accordance with the approved wildfire mitigation plan.

g. The wildfire mitigation plan shall be maintained by the lot owner as required by this section.

#### 4. Tree Preservation and Removal Policy.

a. Subject to review and approval by the review authority trees shall only be removed from a lot for:

- i. Approved development as permitted by the CDC;
- ii. Approved fire mitigation;
- iii. Approved forest management;

iv. View corridors from windows provided the removal of such trees is minimized;

v. Utilities provided it is not practical for the utilities to follow the driveway or other corridors where trees are being removed as allowed by this section;

vi. Renewable energy systems provided it is not possible to locate such on the buildings allowed on the lot, or within areas where trees are already being removed as allowed by this section;

vii. Ski area access as may be permitted by the review authority;

viii. Potential damage to a structure or other constructed improvement on a lot, such as a utility line or utility meter, tramway or snowmaking equipment; and/or ix. Protection of the public health, safety or welfare.

b. No tree four inches (4") or greater dbh located on any lot within the Town may be removed or materially altered without the prior written approval of the review authority.

i. All dead or live trees with a diameter of four inches (4") or greater shall be preserved on the site unless the review authority has approved the removal of such trees as a part of the required development application process.

c. A tree removal development application must be submitted to the Town prior to the removal or material alteration of any dead or living tree greater than four inches (4") dbh. Such development application shall include the information and plans as required by this section.

d. Trees, living or dead, to be removed from the general easement or open space must be marked and field inspected prior to removal.

i. Trees removed by the ski resort operator in the ordinary operation of the ski area or golf course, including without limitation trees removed for utility and snow making installation, are exempt from the requirements of this section provided notice and information is provided to the Planning Division and it determines that the tree removal is part of the ordinary operation of the ski area or golf course. Other tree removal that is deemed by the Planning Division to not be a part of the Ordinary operation of the ski or golf course operations requires the submission of an tree removal development application pursuant to the requirements of this section and the CDC.

ii. The Town has the right to remove any trees on Town-owned lot for forest health or fire mitigation provided the trees to be removed have been marked and staff inspects and approves the proposed tree removal.

e. Any tree deemed by staff to be a hazard to any building, structure, public facility, roadway, adjacent lot, gas line, well head, telephone and/or electrical box shall be removed by the owner of the lot or the affected utility agency within a reasonable amount of time (as determined by the Town base on the nature of the hazard) after notification. Documentation of the hazard and the Town's approval of the tree removal shall be provided prior to the removal of the hazard tree.

i. In cases of an emergency, a hazard trees may be removed without prior approval if photo documentation of the hazard is provided to the Town that clearly shows the emergency nature of the tree removal. Such emergency tree removal shall be reported and the required documentation provided within forty-eight (48) hours of the tree removal.

f. All development shall use the following best management practices to protect and preserve trees that will be retained on a project site:

i. All dead or live trees with a dbh of four inches (4") or greater that are to be saved that may be affected by construction shall be protected by placing and maintaining fencing at the tree's dripline <u>or Critical Root Zone (CRZ).</u>

(a) The Building Regulations' required construction mitigation plan shall show the location of all required fencing to protect trees in close proximity to grading or other construction activity.

ii. Developers shall use extreme care during grading and excavation to avoid damage or removal of existing trees and shrubs to be retained on a project site and to preserve their root structures.

(a) No vehicles shall be parked within the dripline of a tree or shrub to be retained.

(b) No accessway shall be constructed within the driplines of tree to be retained.

(c) No grading shall occur on a site until approved fencing is placed at the dripline of trees and shrubs to be retained on the project site.

(d) All trees to be retained shall be clearly marked on the project site to ensure such trees are not removed.

(e) Timber and slash generated during development shall be removed from the site within thirty (30) days of cutting. No burning of wood or any other material is permitted.

#### 5. Tree <u>Alteration or</u> Removal Violation and Penalties.

a. In addition to the violations and penalties as established in Chapter 1, each tree removed or materially altered in violation of this section shall constitute a separate violation of the CDC and shall be subject to a fine of no less than five thousand dollars (\$5,000) per tree.

(i) Any amount of backfill or excavation that occurs within the dripline or CRZ of a tree without written authorization constitutes an alteration and is finable.

(ii) Any damage to trees including but not limited to trunk wounding, tearing or cutting of roots, and compaction, backfill, or excavation within the dripline or CRZ is a finable alteration.

b. Any party that violates any provision of this section as well as the owner or lessee of the lot on which the violation has occurred shall be subject to the penalties imposed pursuant to the CDC.

### 17.8.1 Definitions

<u>Tree Alteration.</u> <u>Alteration is defined as damaged, destroyed, or to change the</u> <u>physiological processes that affect the functioning of a tree's system, especially if the</u> <u>change occurs within the critical root zone of a tree within the TPZ. The critical root zone</u> <u>of a tree is defined as one (1) foot radius from the tree trunk for every inch of diameter at</u> <u>breast height of the tree (dbh).</u>