

Chapter 16.117

FOREST HEALTH AND FIRE PROTECTION

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16.117.010 Purpose.

The purpose of this chapter is to protect the health, safety, and welfare of the citizens of Pinetop-Lakeside. The Town also intends to promote the health of the Town's "urban forest" which will help protect residential, commercial, and undeveloped property values, help reduce the threat of wildland fire, and help reduce infestation and disease of the ponderosa pine trees and other coniferous trees within the Town. This chapter establishes requirements and recommendations to help property owners nurture healthy trees and plants while mitigating the risk to life and property from the threat of wildland fire and to help keep the fire on the ground.

16.117.020 Scope

This chapter shall apply to all land within the Town.

16.117.030 Definitions.

A. The following definitions apply to this chapter:

1. "Basal Area" is a measurement of tree density. The basal area is the cross-sectional area of a tree 4.5 feet above ground. The basal area of all trees in a given land area describes the degree to which an area is occupied by trees and is generally expressed in square feet per acre. The basal area calculation is: X^2 times .005454 where x = tree diameter in inches at 4.5 ft above ground. For example: The basal area of a 12-inch dbh (diameter at breast height) tree = $12^2 \times .005454 = .7854$ sf or $(12 \text{ times } 12 = 144 \text{ times } .005454 = .7854$ square feet).

The Concept of Basal Area



Exhibit 1

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2. "Defensible Space" is the area around a building that is intentionally maintained to provide a separation of the building from non-fire resistant vegetation to help prevent the spread of fire. The Town uses a three-zone approach to help create a defensible space around buildings and between neighboring properties.

3. "Director" means the Director of the Community Development Department of the Town of Pinetop-Lakeside.

4. "Forest Health Committee". The Town Council shall serve as the Forest Health Committee until such time as a separate Forest Health Committee is appointed by the Town Council at which time the Council will establish provisions for creation, appointment, term of office, qualifications of members and meetings.

5. "Fuel Modification" means changing the type or amount of plant fuels to reduce fire danger.

6. "Ladder fuels" are living or dead trees, bushes and grasses that allow a fire to travel from the ground to the forest or tree canopy. Ladder fuels help convert a ground fire to a crown fire.

7. "Non-fire resistant vegetation" includes trees and other plant material, dead or alive, which increase the fire danger to unreasonably high levels. The fire danger which results may be due to low moisture content, high levels of oil or pitch, a dense plant structure or other characteristics which make the trees or plants capable of producing or spreading high intensity fire.

8. "Responsible Person" means the owner and the possessor of land, and includes owners in possession, landlords and lessors, tenants and lessees, real property managers and any other person or entity which has possession, a right to possession or any management or supervisory authority over land. Responsible Person may be one or more persons which persons shall be jointly and severally liable and responsible for forest health and fire protection of land within the Town.

9. "Urban-Wildland Interface" is the area where buildings, structures and people come together and mix with the forest or non-fire resistant vegetation.

16.117.040 Forest health and fire protection.

The Responsible Person shall be responsible for modifying or removing trees, plants and other non-fire resistant, insect infested, or disease ridden vegetation and debris on the land, and for carrying out such other fuel modification which is necessary to promote forest health and to help prevent the spread of fire to adjacent property by establishing and maintaining defensible space. Fuel modification shall meet the minimum defensible space requirements as described herein.

16.117.050 Fuel modification.

Fuel modification shall be accomplished to help prevent or significantly limit the spread of fire to or from all buildings and property. The required and recommended fuel modification for each of the three zones around buildings is set forth in Section 16.117.070 A. B. C. and in the Three-Zone Plan Chart, listed as Exhibit 2, below.

A. General Guidelines.

1. Fire resistant plants used as ground cover, such as green grass, ivy, succulents or other approved fire-resistant ground cover which do not form a means of readily transmitting fire to or from buildings are recommended and encouraged.

2. Coniferous trees within the defensible area should be spaced so that the trees do not unnaturally compete for water and soil nutrients, and should also be spaced so that the horizontal distance between crowns of adjacent coniferous trees or groupings of coniferous trees meets the defensible space guidelines outlined in Section 16.117.070 B.2.b. and in the Three-Zone Plan Chart listed as Exhibit 2.

3. Dead wood and vegetative litter shall be regularly removed from the ground and from trees.

4. The concepts and practices recommended by *The Urban-Wildland Interface Code, as amended; Firewise Communities; the Arizona Wildfire and Environmental Series of the University of Arizona College of Agriculture and Life Sciences*; as well as other programs, lists or publications approved by the Pinetop-Lakeside Town Council ("Authoritative Sources") shall be made available to the public, to foresters and to others who attempt to comply with this chapter, and they shall be considered authoritative sources for the

Forest Health Committee and the municipal court when deciding matters relating to this chapter. Excerpts from any document approved as an “Authoritative Source” shall be admissible when offered by any party or witness in an appeal or court proceeding relating to this chapter.

16.117.060 Recommendations for creating defensible space.

A. Ways to create defensible space include:

1. Decrease the amount of non-fire resistant vegetation by reducing the density of trees and plants and creating sufficient space between trees and plants to promote forest and plant health and help reduce the spread of fire.
2. Increase the amount of open space.
3. Increase the moisture content of vegetation (adequate watering of trees and plants).
4. Plant fire resistant plants.
5. Rearrange existing trees and plants.
6. Reduce coniferous vegetation to a maximum density of 100 healthy trees per acre or sixty square feet basal area (60sf B.A.) with proper spacing and understory clearance
7. Remove all combustible materials and vegetation from under decks and porches and within 10 feet of buildings.
8. Regular, continued maintenance of the area.

16.117.070 Three-Zone plan for developed parcels and for undeveloped parcels less than two acres.

A three (3)-zone approach shall be applied to accomplish the defensible space requirements of this code on all parcels where there is a building or structure and for vacant parcels of less than two acres. (See Exhibit 2.)

A. **Zone 1:** Zero (0) feet to ten (10) feet from buildings, structures, decks, etc.

1. Required Zone 1 Fuel Modification:
 - a. Remove fuel ladders and reduce non-fire resistant brush, leaving primarily fire-resistant specimens.
 - b. Remove and destroy all insect infested, diseased, and dead trees to prevent spread to healthy vegetation.
 - c. Remove all dead plant material from the ground which may create fuel ladders or contribute to the spread of fire.
 - d. Where applicable, trim coniferous trees to where the lowest branches or canopy are above the roofline and a minimum of ten (10) feet from chimneys or other sources of ignition.
 - e. Remove flammable debris from gutters and roof surfaces.
 - f. Remove all combustible materials and vegetation from under decks. Non-fire resistant vegetation within three (3) feet of buildings, structures and decks should be spaced to limit ignition from surrounding vegetation and the creation of fuel ladders.

2. Zone 1 Recommended Fuel Modification:

- a. Defensible space should be regularly maintained during periods of high fire danger.
- b. Provide adequate hydration for all vegetation.

B. **Zone 2:** Ten (10) feet to thirty (30) feet from buildings, structures, decks, etc.

1. Required Zone 2 Fuel Modification:
 - a. Remove all ladder fuels and dead material.
 - b. Remove and destroy all insect infested, diseased, and dead trees to prevent spread to healthy vegetation.
2. Recommended Zone 2 Fuel Modification:
 - a. Zone 2 defensible space shall be maintained at least annually.
 - b. Create separation between trees, tree crowns and other plants based on fuel type, density, slope, and other topographical conditions that may adversely affect fire behavior.
 - c. Reduce continuity of fuels by creating clear space around brush or planting groups.

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d. Control erosion and sedimentation from exposed soils through terracing, gravel beds, rocked or other appropriate ground cover. Emphasis is placed on slopes greater than 20% gradient, in which case, additional vegetation treatment may be required.

e. Remove all but one (1) inch of pine needle or leaf droppings. It is important to leave a layer of decomposing plant material to maintain adequate moisture levels for further decomposition and plant hydration.

C. **Zone 3:** Thirty (30) feet to one hundred (100) feet from buildings, structures, decks, etc. where slopes do not exist and undeveloped lots of less than 2 (two) acres.

1. Required Zone 3 Fuel Modification:

a. Remove all ladder fuels and dead material.

b. Thin coniferous trees to achieve an overall average density of not more than one hundred (100) trees or sixty square feet basal area (60sf B.A.) per acre.

c. Remove and destroy all insect infested, diseased, and dead trees to prevent spread to healthy vegetation.

2. Recommended Zone 3 Fuel Modification:

a. Zone 3 defensible space should be maintained at least annually.

THREE-ZONE PLAN CHART

Defensible Space Criteria	Required Actions	Recommended Actions
Zone 1 (0 to 10 feet from structures)		
1. Remove all ladder fuels (See 16.117.070 A.1.a.)	X	
2. Reduce flammable vegetation (See 16.117.070.A.1.a.)	X	
3. Remove and destroy all insect infested, diseased, and dead trees (See 16.117.070 A.1.b.)	X	
4. Remove all dead plant material from ground (See 16.117.070 A.1.c.)	X	
5. Prune tree limbs overhanging roof (See 16.117.070 A.1.d.)	X	
6. Remove branches within 10' of chimney (See 16.117.070 A.1.d.)	X	
7. Remove flammable debris from gutters and roof surfaces (See 16.117.070 A.1.e.)	X	
8. Remove all combustible material and vegetation from under decks (See 16.117.070.A.1.f.)	X	
9. Regularly maintain defensible space (See 16.117.070.A.2.a.)		X
10. Provide adequate hydration (See 16.117.070 A.2.b.)		X
Zone 2 (10 to 30 feet from structures)		
1. Remove all ladder fuels (See 16.117.070.B.1.a.)	X	
2. Remove and destroy all insect infested, diseased, and dead trees (See 16.117.070 B.1.b.)	X	
3. Regularly maintain defensible space (See 16.117.B.2.a.)		X
4. Create separation between trees, tree crowns and other plants based on fuel type, density, slope and other topographical features (See 16.117.070 B.2.b.)		X
5. Reduce continuity of fuels by creating clear space around brush or planting groups (See 16.117.070 B.1.c.)		X
6. Control erosion and sedimentation (See 16.117.070.B.2.d.)		X
7. Remove all but one inch of pine needle or leaf droppings (See 16.117.070.B.2.e.)		X
Zone 3 (30 to 100 feet from structure)		
1. Remove all ladder fuels (See 16.117.C.1.a.)	X	
2. Maximum density: (Whichever is greater) Ponderosa pine - 60 sq ft Basal Area OR Average density 100 trees per acre (See 16.117.070.C.1.b.)	100	80
3. Remove and destroy all insect infested, diseased, and dead trees (See 16.117.070.C.1.c.)	X	
4. Regularly maintain defensible space (See 16.117.070.C.2.a.)		X

16.117.080 Fuel modification plan for undeveloped parcels in excess of 2 acres.

The responsible person for parcels of vacant property in excess of two (2) acres in area shall prepare a fuel modification plan. This section shall also apply to undeveloped tracts, new subdivisions and parcels or voluntary groupings of parcels which exceed two (2) acres in area.

A. It is recommended that the fuel modification plan be prepared or certified by a professional forester, a certified arborist, or another qualified individual or organization and approved by the Community Development Director. A fuel modification plan identifies actions necessary to promote forest health and to help prevent the spread of fire to adjacent property by establishing and maintaining defensible space. The plan should include considerations for both wildlife and ground water protection. The action identified by the fuel modification shall be completed prior to the issuance of any building permit or the approval of any maps or plans for subdivisions or property.

B. After a site visit and inspection of the property, the Director may request submission of a fuel modification plan before or as a part of the plans required for plat approval, issuance of a building permit, or in the case of existing developed areas, for fuel modification required by this chapter.

C. A Fuel Modification Plan shall include at least the following information:

1. A copy of the site plan.
2. Methods and timetables for controlling, changing, or modifying fuels on the property(ies) in a timely and effective manner.
3. Elements of the plan shall include removal of slash, snags, vegetation that may grow into overhead electrical lines, other ground fuels, ladder fuels and dead trees, and the thinning of live trees.
4. Methods and timetables for control and elimination of diseased and/or insect infested vegetation.
5. A plan for the ongoing maintenance of the proposed fuel-reduction and disease and insect infestation control measures. To be considered fuel modification and disease/infestation control for purposes of this code, continuous maintenance of the clearance or control measure is required.
6. When a grouping of parcels in multiple ownership is proposed to achieve compliance with this chapter, the proposed vegetation management plan shall be accepted by all owners of property covered by the plan.

16.117.090 Other landscape or vegetation management plans acceptable.

Nothing contained in this chapter shall prohibit a property owner(s) from developing a landscape plan or a fuel modification plan that is not in strict accord with the defensible space guidelines established by this chapter, so long as the plan accomplishes the purposes of this chapter and so long as the plan is certified by a professional forester, a certified arborist, or another qualified individual or organization and approved by the Director.

16.117.100 Time for compliance.

All property subject to this chapter shall be brought into compliance in accordance with the following schedule:

- A. Within two (2) years of enactment:
 1. Compliance with all requirements of 16.117.070, Zone 1.
 2. Undeveloped parcels of less than two (2) acres shall achieve compliance with 16.117.070, Zone 3 requirements, subsections C.1.a and c.
- B. Within four (4) years of enactment:
 1. Compliance with all requirements of Zone 1 and 2 for property governed by 16.117.070.
 2. Undeveloped parcels of less than two (2) acres shall achieve compliance with all Zone 3 standards.
 3. Where an undeveloped parcel adjoins a parcel with a building or structure, and the distance from the property line to a structure is less than thirty (30) feet, that portion of the undeveloped parcel that is within thirty (30) feet of a structure shall achieve Zone 2 standards.
- C. Within six (6) years of enactment:
 1. Compliance Zones 1, 2 and 3 standards shall be achieved on all property regulated by section 16.117.070.

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2. All property regulated by 16.117.080 shall have trees and other plants modified and maintained in accordance with an acceptable or an approved fuel modification plan.

D. All new residential and commercial construction of any building or structure shall comply with Zone 1, 2, & 3 requirements prior to completion of construction. A Certificate of Occupancy shall not be issued until the requirements of this chapter are met.

E. All proposed new subdivisions shall provide, as part of the preliminary and final plat approval process, a Fuel Modification Plan meeting the requirements of this chapter.

16.117.110 Appeals; Forest Health Committee.

A. Appeals resulting from enforcement of this ordinance are heard by the Town Council who shall serve as the Forest Health Committee.

B. The Forest Health Committee will hear appeals resulting from the enforcement of this ordinance by the Town staff.

C. The Forest Health Committee shall hear and decide appeals from any order, requirement or decision of the Director of the Community Development Department relating to this chapter.

D. When the Director deems it appropriate, the Director may defer orders, requirements or decisions relating to this chapter to the Forest Health Committee for its consideration or decision. In any such circumstance where the Director elects to defer the Director's decision on an issue or question relating to this chapter, the Forest Health Committee shall meet and hear from both the Director and the responsible person and reach a decision within thirty (30) days from the date the landscaping plan, Vegetation Management Plan or other issue was first presented to the Director.

16.117.120 Fuel modification or removal by the Town.

A. In the event that the responsible person does not perform the fuel modification or removal of trees, plants or other vegetation in accordance with the requirements of this chapter, the property shall be a public nuisance which nuisance may be abated by the Town, and for which the responsible person may be cited, be found responsible or be enjoined by appropriate court proceeding.

B. The cost of any fuel modification, removal, abatement or injunction of such public nuisance, along with any associated legal costs, shall be assessed against the land where the nuisance existed. The Town may record the cost of removal, abatement or injunction as an assessment in the Navajo County Recorder's Office, including the date and amount of the assessment, the legal description of the property and the full name and address of the Town. Any such assessment is prior and superior to all other liens, obligations, mortgages or other encumbrances except liens for general taxes. A sale of the land to satisfy an assessment obtained under the provisions of this chapter shall be made upon judgment of foreclosure and order of sale. The Town shall have the right to bring an action to enforce the assessment in the Navajo County Superior Court at any time after the recording of the assessment. The failure to enforce the assessment by such legal action shall not affect the assessment's validity. A recorded assessment shall be prima facie evidence of the truth of all matters recited therein, and of the regularity of all proceedings prior to the recording thereof.

C. Assessments that are imposed under this chapter run against the land until paid, accrue interest at the rate of ten (10) percent per year or as otherwise prescribed by Arizona Revised Statutes, Title 44, Chapter 9, Article 1, Section 44-1201; and are due and payable in equal annual installments as follows:

1. Assessments of less than five hundred dollars (\$500.00) shall be paid within one year after the assessment is recorded.

2. Assessments of five hundred dollars (\$500.00) or more but less than one thousand dollars (\$1,000.00) shall be paid within two (2) years after the assessment is recorded.

3. Assessments of one thousand dollars (\$1,000.00) or more but less than five thousand dollars (\$5,000.00) shall be paid within three (3) years after the assessment is recorded.

4. Assessments of five thousand dollars (\$5,000.00) or more but less than ten thousand dollars (\$10,000.00) shall be paid within six (6) years after the assessment is recorded.

5. Assessments of ten thousand dollars (\$10,000.00) or more shall be paid within ten (10) years after the assessment is recorded.

D. Subsequent Assessments. A prior assessment for the purposes provided in this chapter shall not be a bar to a subsequent assessment or assessments for the same or similar purposes; and any number of assessments on the same land may be enforced in the same legal action.

E. Civil Penalty. Any owner, tenant or other responsible person who, after notice as required by Section 16.117.130 (A) does not perform the fuel modification or removal of trees, plants or other vegetation in accordance with the requirements of this chapter and abate the condition which constitutes a hazard to the public health and safety, by the date stated in the Notice, shall be subject to a civil penalty as set forth in Chapter 16.144 of these zoning regulations.

16.117.130 Enforcement

A. Notice of Civil Violation.

1. Notice of Civil Violation. A written notice of any violation of this chapter shall be delivered to the responsible person. This written notice shall give a minimum of at least thirty (30) additional days before the date set for compliance, and shall include the following information:

- a. The name and address of the responsible person to whom the notice of violation is directed; and
- b. The physical property address or the legal description of the land upon which the violation has occurred or is occurring; and
- c. A description of the violation, including a reference to this chapter by section number; and
- d. A brief statement of the action required to be taken to correct the violation; and
- e. The date before which the corrective action shall be taken, which date shall be at least thirty (30) days after the date of the notice of civil violation; and
- f. The estimated maximum cost of such removal to the Town if the responsible person does not comply.

2. Delivery of Notice. Delivery of a written notice of civil violation may be made by posting the notice at or on the property in a conspicuous place and by any of the following additional methods:

- a. Personal service on the responsible person;
- b. By certified mail to the responsible person at his/her last known residence or business address, or at the address to which the tax bill for the land was last mailed.

3. Recording of Notice. The Town may record the notice of civil violation in the Navajo County Recorder's Office provided that if compliance with the notice of civil violation is subsequently satisfied, the Town shall record a release of the notice, also.

4. In the event that the notice of violation or assessment is mailed, delivery shall be conclusively presumed to have occurred five (5) days from the date of mailing. In the event of personal service, the date of delivery is the date of such service. In the event of a posting of the Notice at or on the property, delivery shall be conclusively presumed to have occurred five (5) days from the date of posting.

B. Continuing Duty to Correct. Payment of a civil monetary penalty pursuant to this chapter does not relieve a responsible person of the duty to correct the violation as ordered by the Town in any notice of civil violation.

C. Civil Court Action. In any civil action brought to enforce the provisions of this chapter, photographic evidence that the public nuisance or other violation of this chapter was present on the land within ten (10) days of preparation of the notice of civil violation shall create a presumption that the defendant is in violation of this chapter.

D. Collection of Civil Monetary Penalty. The Magistrate Court shall have the primary duty to collect civil monetary penalties pursuant to this chapter. In addition, the Town Attorney, on behalf of the Town, is authorized to collect the civil monetary penalties assessed pursuant to this chapter by use of appropriate legal remedies.

E. Enforcement Officers. The Community Development Department and the Police Department are authorized to request compliance with and enforce the provisions of this chapter. (Ord. 97-141 § 2 (part): Ord. 90-82 § (1)(21.2.06)) In addition, employees of any fire district with authority within the Town boundaries may request compliance with this chapter and may report violations of this chapter to the Director.

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F. Within ten (10) days from the delivery of a notice of civil violation or an assessment, the responsible person may appeal the notice of civil violation or assessment to the Town Council. All such appeals shall be in writing and filed with the Administrator. Within thirty (30) days of the receipt of the appeal, the Forest Health Committee shall set a time and place for an appeal hearing. Within fifteen (15) days after the conclusion of the appeal hearing the Forest Health Committee shall enter its order affirming, denying or modifying the notice of violation or assessment. In the event that the Forest Health Committee affirms or modifies the notice of violation or assessment, the responsible person shall remove or abate the public nuisance, perform the required fuel modification or otherwise comply with the requirements of this chapter within thirty (30) days of the date of the order. The decision and order of the Forest Health Committee shall be final and binding, and any party wishing to appeal from such order shall do so in the Navajo County Superior Court, only.