

ORDINANCE NO. 07-01

AN ORDINANCE OF THE GOVERNING BOARD OF THE GROOM CREEK FIRE DISTRICT, YAVAPAI COUNTY, ARIZONA, ADOPTING A NEW TITLE I, SECTION 1 ENTITLED "INTERNATIONAL FIRE CODE" AND BY ADDING A NEW SECTION 2 THERETO ENTITLED "WILDLAND-URBAN INTERFACE CODE", AND DECLARING AN EMERGENCY.

WHEREAS, the implementation of the 2006 International Fire Code and 2006 International Wildland-Urban Interface Code provides a degree of safety to the general public not heretofore addressed in Yavapai County Building codes, and includes improvements over and above current codes.

NOW, THEREFORE, BE IT ORDAINED BY THE GOVERNING BOARD OF THE GROOM CREEK FIRE DISTRICT AS FOLLOWS:

SECTION 1 - International Fire Code:

THAT, The Fire Code of the Groom Creek Fire District is now established by the adoption of the 2006 International Fire Code. It is hereby created by adding a new Section 2 thereto entitled "Wildland-Urban Interface Code", to read as follows:

SECTION 2 - Wildland-Urban Interface Code:

2-1: Adoption of the Wildland-Urban Interface Code

2-2: Amendments

2-3: Enforcement Provisions

2-1: ADOPTION OF ICC INTERNATIONAL WILDLAND-URBAN INTERFACE CODE: That certain Code entitled "Wildland-Urban Interface Code, 2006 Edition", as adopted by the International Fire Code Institute, together with all referenced standards therein and together with appendices I-A, I-B, I-C and II-F, as all of the same may be amended from time to time, is hereby adopted and made part of this Fire Code.

2-2: AMENDMENTS. That the foregoing Wildland-Urban Interface Code shall be amended as follows:

(A) **Section 101.1** entitled "Administration; General; Title" is hereby amended to read as follows: "101.1 Title. These regulations shall be known as the *Wildland-Urban Interface Code* of the Groom Creek Fire District, hereinafter referred to as "this code"."

(B) **Section 101.2** entitled "Administration; General; Scope" is hereby amended to include the following:

Exceptions:

1. Remodeling or additions, including but not limited to, decks of existing buildings or structures are exempt.
2. Permits issued after the adoption of this code for detached accessory structures (non-habitable, as determined by the building codes) shall be subject to the Zone 1 requirements of Appendix B Vegetation Management Plan regarding defensible space and not subject to the tree density requirement.
3. Modular / manufactured buildings affixed on an individual lot are exempted from the construction requirements of this code but are required to comply with the vegetation requirements.

4. Any cultural resources, including but not limited to, buildings, structures, landscapes, streetscape features or sites may be exempted from this code if, (a) it is listed in or officially determined eligible for, the National, or State of Arizona Register of Historic Places and (b) it is determined by the Groom Creek Fire District, and approved by the Fire Chief, that the exemption of said resource will not create an additional fire hazard in the immediate vicinity of the resource.

(C) The first paragraph of Section 101.3 entitled "Administration; General; Objective" is hereby amended to read as follows:

"101.3 Objective. The objective of this Code is to establish minimum regulations consistent with nationally recognized good practice for the safeguarding of life and property. Regulations in this Code are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels. A tiered level approach may be applied, commensurate with the relative level of hazard present, under special circumstances when approved by the Fire Code Official."

(D) Section 105.2 entitled "Administration; Permits; Permits required" is hereby amended by deleting the third paragraph therein and the fourteen subsections thereunder, and to replace said paragraph with the following new paragraph, to read as follows:

"105.2 Permits Required. Permits are required in accordance with Sec.105.6 of the International Fire Code. Open Burning shall require a permit and tiered fire restrictions shall dictate the availability of permits and shall apply to non gas-fired grills and recreational fires. No open burning permits shall be effective during days of High, Very High or Extreme Fire Danger in the Groom Creek Fire District as determined by the National Fire Danger Rating System"

(E) Section 105.3(1) entitled "Administration; Permits; Work exempt from permit" is hereby amended to read as follows:

"105.3 Work exempt from permit.

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet and the structure is located more than thirty (30) feet from the nearest adjacent structure."

(F) Section 105.8 entitled "Administration; Expiration" is hereby amended to read as follows:

"105.8 Expiration. Every permit issued or extended by the code official under the provisions of this code shall expire as set forth in said permit."

(G) Section 106.3 entitled "Administration; Site Plan" is hereby amended by adding the following sentence at the end of said section:

"106.3 Site Plan.

Additional information may be required to be submitted on the site plan by the code official."

(H) Section 106.4 entitled "Administration; Vegetation Management Plans" is hereby amended to read as follows:

"106.4 Vegetation Management Plans. Vegetation management plans shall be prepared and shall be submitted to the code official for review and approval as part of the plans required for a permit. See Appendix B."

(I) Section 202 entitled "Definitions" is hereby amended by adding the definition "Ladder Fuels", to read as follows:

"LADDER FUELS. Flammable materials occurring between surface fuels and crown fuels which act as a ladder to facilitate the spread of a surface fire to tree crowns, or a crown fire down to the surface."

(J) Section 202 entitled "Definitions; Heavy Timber Construction" is hereby amended to read as follows:

"HEAVY TIMBER CONSTRUCTION (HT). As defined by the International Building Code is classified as Type IV construction. HT beams/girders shall be not less than 6-inch nominal in width and not less than 10 inch nominal in depth. Post/columns shall be not less than 8 inches nominal, in any dimension when supporting floor loads."

(K) Section 302.1 entitled "Wildland-Urban Interface Areas; Wildland-Urban Interface Area Designations; Declaration" is hereby amended to read as follows:

"302.1 Declaration. The Governing Board of the Groom Creek Fire District hereby declares the Wildland-Urban Interface area within the Groom Creek Fire District as legally defined boundaries of the Fire District. The Wildland-Urban Interface area is based on the findings of fact as follows:

1. The seasonal climatic conditions during the late spring and early summer create numerous serious difficulties regarding the control of and protection against fires in the Groom Creek Fire District.
2. Average Maximum temperatures of 88.9 degrees in July
3. Relative Humidity: 10 to 15% in May and June
4. 28 days of extreme fire weather conditions from end of April through July
5. Live Fuel Moisture in Chaparral from 61.8% in April to 86.4% in August. (Anything under 80% will burn)
6. Fuel moisture in 1000 hour fuels is 5%
7. Winds: 35 to 40 MPH
8. Numerous dry lightning strikes.
9. Groom Creek Fire District has predominately fuel model 9 (Ponderosa Pine Forest) with fuel model 4 (Chaparral) understory which is found in, or exposing, all of the "at risk neighborhoods". This includes Oak brush (scrub oak) and Manzanita. Utilizing fuel model 4 scenarios as an example, the rate of spread could be 721' per minute. The flame lengths could be 57' high. Burning brands can spot ahead of the fire for a distance of 2.1 miles, and ignite additional fires. The fire could consume 5,641 acres in one hour and spread a distance of 8.1 miles. The perimeter of the fire would be 90,321 feet. This type of fire is uncontrollable by the on duty fire forces due to lack of staffing and lengthy response times. This fire could result in a major structural conflagration. The fire could spread across the Prescott Basin at the Interface."

(L) Section 302.3 entitled ""Wildland-Urban Interface Areas; Wildland-Urban Interface Area Designations; Review of Wildland-Urban Interface Areas" is hereby amended to read as follows:

"302.3 Review of Wildland-Urban Interface Areas. The Code official shall reevaluate and recommend modifications to the Wildland-Urban areas in accordance with Section 302.1 as frequently as deemed necessary by the Fire Chief or the Fire Board"

(M) Section 402.1.2 entitled "Wildland-Urban Interface Area Requirements; Applicability; Subdivisions; Water supply" is hereby amended to read as follows:

"402.1.2 Water supply. New subdivisions and other residential developments as determined by this jurisdiction shall be provided with water supply in accordance with Section 404 and in accordance with the International Fire Code. Structures shall have a water hose bib installed to accommodate the use of a garden hose on the exterior of each side of all dwelling units."

(N) Section 402.2.2 entitled "Wildland-Urban Interface Area Requirements; Applicability; Individual Structures; Water Supply" is hereby amended to read as follows:

"402.2.2 Water Supply. Individual structures hereafter constructed or relocated into or within Wildland-Urban Interface areas shall be provided with a conforming water supply in accordance with Section 404, and in accordance with the International Fire Code. Structures shall have a water hose bib installed to accommodate the use of a garden hose on the exterior of each side of all dwelling units. [The exceptions remain]

(O) The second paragraph of Section 403.2 entitled "Wildland-Urban Interface Area Requirements; Access; Driveways" is hereby amended to read as follows:

"403.2 Driveways. A driveway shall not serve in excess of two dwelling units." [The exception remains]

(P) Section 403.7 entitled "Wildland-Urban Interface Area Requirements; Access; Grade" is hereby amended to read as follows:

"403.7 Grade. The gradient for fire apparatus access roads and driveways shall not exceed 12% or the maximum approved by the code official."

(Q) Exceptions 1 and 2 to Section 501.1 entitled "Special Building Construction Regulations; General; Scope" are hereby amended to read as follows:

"Section 501.1 Scope.

Exceptions:

1. Accessory structures not exceeding 120 square feet (11 m²) in floor area when located at least 30 feet from buildings containing habitable spaces.
2. Agricultural buildings at least 30 feet from buildings containing habitable spaces."

(R) Section 502 entitled "Special Building Construction Regulations; Fire Hazard Severity" is hereby amended to read as follows:

"502 Fire Hazard Severity. The application of this section may be used only when approved by the Code Official. When the Code Official has determined that special circumstances exist and all other alternatives have been unsuccessfully exhausted, the Code Official may consider the application of this section as an alternative to comply with the intent of the code. The fire hazard severity of building sites for all buildings hereafter constructed, modified or relocated into Wildland-Urban Interface areas shall be established in accordance with Table 502. See also Appendix C."

(S) Section 503.1 entitled "Special Building Construction Regulations; Ignition-Resistant Construction; General" is hereby amended to read as follows:

"Section 503.1 General. Building and structures hereafter constructed, modified or relocated into or within Wildland-Urban Interface areas shall meet the construction requirements in accordance with Section 504. Table 503.1 entitled "Ignition-Resistant Construction", may be applied when approved to do so by the Code Official, and shall be in accordance with Sections 505 and 506."

(T) Section 504.2 entitled "Special Building Construction Regulations; Ignition-Resistant Construction; Roof Covering" is hereby amended by adding an exception to read as follows:

"504.2 Roof covering. Exception: Santa Fe style flat roofs"

(U) Section 504.5 entitled "Special Building Construction Regulations; Ignition-Resistant Construction; Exterior Walls" is hereby amended by adding two new paragraphs at the end thereof, to read as follows:

"504.5 Exterior Walls.

Exterior walls constructed of ignition resistant materials such as cement plaster (veneer one-coat stucco), fiber cement board or other masonry products, as approved by the code official, are allowed and acceptable.

Where wood siding of any type is used, there shall be required a ten (10) foot clearing of all vegetation and a ten (10) foot minimum setback to all property lines.”

(V) Section 504.7 entitled “Special Building Construction Regulations; Ignition-Resistant Construction; Appendages and Projections” is hereby amended to read as follows:

“504.7 Appendages and Projections. Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, the structural support members (post, beams), of said structures and other appendages, shall be a minimum of one-hour-rated fire-resistive construction, heavy timber construction, in accordance with the International Building Code (IBC), or constructed of approved noncombustible materials. Any under floor space 24” or less from the bottom of a floor joist to the ground shall be required to be a patio with a stem wall and a solid floor constructed of noncombustible material.”

(W) Section 504.8 entitled "Special Building Construction Regulations; Ignition-Resistant Construction; Exterior Glazing" is hereby amended to read as follows:

“504.8 Exterior Glazing. Exterior windows, window walls, glazed panels and glazed doors must have a minimum 20-minute fire rating or adhere to the following criteria:

Glass must be of double pane or laminate construction. Single pane materials are prohibited. Acrylic block windows are prohibited. Skylights must be constructed of insulated tempered or heat strengthened laminate glass. Solar tube sky lights must have a maximum exposed plastic lens no larger than sixteen (16) inches in diameter and be used in conjunction with a class “A” roof.

Vinyl frame window assemblies are acceptable and must comply with the following:

1. Frame and sash are comprised of vinyl material with welded corners, and
2. Metal reinforcement in the interlock area, and
3. Frame and sash profiles are certified in American Architectural Manufacturers Association (AAMA) Lineal Certification Program (verified with either an AAMA product label or Certified Products Directory) and
4. Certified and labeled to ANSI / AAMA / NWWDA 101/I.S.2-97 for structural requirements, and
5. Glazed with insulating glass, annealed or tempered glass.”

(X) Section 504.9 entitled “Special Building Construction Regulations; Ignition-Resistant Construction; Exterior Doors” is hereby amended to read as follows:

“504.9 Exterior Doors. Exterior doors shall be solid-core wood not less than 1 ¾-inches (45mm) thick, or doors shall have a minimum 20-minute fire rating or comply with the following criteria: Doors to have a minimum 1 ¾-inch (45 mm) thick stile and rail. Wood doors to have a minimum panel thickness of ¾-inch measured at center of panel. Alternate door materials include 1/16-inch or larger fiberglass composite or Masonite skin when used with a laminate, hardwood, or composite interior perimeter core and a 1 ¾-inch stile and rail. Metal doors must have a minimum 26-gauge skin.

Doors with glass within the door must have minimum double glazed tempered or tempered laminate glass bound in fiberglass, composite or wood frame and have a minimum stile and rail thickness of 1 ¾-inches. Windows within doors and glazed doors shall be in accordance with requirements of section 504.8. Exception: Vehicle Access Doors.”

(Y) Section 504.10 entitled "Special Building Construction Regulations; Ignition-Resistant Construction; Vents" is hereby amended to read as follows:

“504.10 Vents. Attic ventilation openings, foundation or under-floor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall be covered (inside or outside) with noncombustible, corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2mm).

Attic ventilation openings in soffits, eave overhangs, between rafters at eaves or in other overhang areas shall be allowed. These vent openings are required to be located as close to the fascia as is possible. Such ventilation openings shall be covered (inside or outside) with a noncombustible, corrosion resistant mesh with openings not to exceed 1/8 inch (3.2mm)."

(Z) Section 504.11 entitled "Special Building Construction Regulations; Ignition-Resistant Construction; Detached Accessory Structures" is hereby amended to read as follows:

“504.11 Detached Accessory Structures. Detached accessory structures located less than thirty (30) feet from a building containing habitable space shall have exterior walls constructed with materials approved for a minimum of one-hour rated fire-resistive construction, heavy timber, log wall construction, or constructed with approved noncombustible materials on the exterior side.

The area below the structure shall have all underfloor areas enclosed with exterior wall construction in accordance with Section 504.5 or underfloor protection in accordance with Section 504.6.

See Section 504.2 for roof requirements."

(AA) Section 602.1 entitled "Fire Protection Requirements; Automatic Fire Sprinkler Systems; General" is hereby amended to read as follows:

"602.1 General. An approved automatic fire sprinkler system shall be installed in all occupancies in new buildings over 5,000 square feet or as required by the current County fire and building codes. The installation of the automatic fire sprinkler systems shall be in accordance with nationally recognized standards."

(BB) The first paragraph of Section 603.2 entitled "Fire Protection Requirements; Fuel Modification" is hereby amended to read as follows:

"603.2 Fuel Modification. In order to qualify as a conforming defensible space for the purpose of Table 503.1, fuel modification shall be provided within a distance from buildings or structures as specified in Table 603.2. For all other purposes, the fuel modification distance shall not be less than 30 feet (9144 mm) or to the property line, whichever is less. Fuel modification shall be in accordance with Appendix B and subject to erosion control treatments of the disturbed soils or sloped areas. Distances specified in Table 603.2 shall be measured along the grade from the perimeter or projection of the building or structure as shown in Figure 603.2."

(CC) APPENDIX A GENERAL REQUIREMENTS Shall be adopted and Section A106.1 of Appendix "A" entitled "General Requirements; Dumping; Waste Material" is hereby amended by adding the following additional exception thereto:

“A106.1 Waste Material Exceptions:

2. Items removed from the forest floor in compliance with this Code may be composted to a safer fire resistive level with the intent to redistribute to the forest floor to maintain forest health. Compost piles must be a minimum of 10 feet from all native fuels and structures.”

(DD) Appendix B entitled "Vegetation Management Plan" is hereby amended by adding new paragraphs at the beginning thereof, to read as follows:

“APPENDIX B VEGETATION MANAGEMENT PLAN

The purpose for creating a defensible space around buildings or structures is to reduce the threat of fire spread by changing the characteristics of vegetation in a safe, yet aesthetic and pleasing

manner. To reduce a Wildland-Urban Interface area hazard, a vegetation management plan shall be established. The plan shall be used for controlling, changing, or modifying wildland areas for safety from wildfires to the benefit of the users, surrounding community and wildlands. A vegetation management plan reduces the amount of fuel available for wildfire and reduces the probability of a rapidly spreading wildfire. Elements of the plan include removal of slash, snags, other ground fuels, ladder fuels, dead trees, and the thinning of live trees. The vegetation fuel modifications shall be completed (within thirty (30) feet of the house or to the property line, whichever is less) prior to the vertical construction. The vegetation fuel modification beyond thirty (30) feet of the house and up to one hundred fifty (150) feet of the house or the property line, whichever is less, shall be completed prior to the issuance of the Certificate of Occupancy.

Where an irrigation system is required for vegetation, it must be completed, inspected and accepted by the code official prior to the issuance of a certificate of occupancy. Any re-vegetation shall be subject to the inspection and approval of the code official upon its completion. Required Irrigation systems shall be approved and installed in accordance with Appendix B-2 "Irrigation Design and Performance requirements.

Tree density shall be determined as outlined in Appendix B-3 "Procedure For Determining Tree Density" of this code."

(EE) Appendix B entitled "Vegetation Management Plan" is hereby further amended by adding a section at the end thereof to read as follows:

"Defensible Space Requirements.

Defensible space practices include:

1. Decreasing the amount of flammable vegetation
2. Increasing the amount of open space
3. Increasing the moisture content of vegetation
4. Planting less flammable plants
5. Rearranging existing plants
6. Reducing trees to a maximum of 200 hydrated or 85 non-hydrated, healthy trees per acre, with under-story pruned and maintained.
7. Removing all combustible materials and vegetation from under decks
8. Continuing maintenance of the area

Open space or common areas shall be maintained to meet the defensible space requirements by the homeowners association and/or owner of the property.

When, in the professional opinion of the code official, particular vegetation does not constitute a fire danger (including but not limited to cases of natural groupings), the code official may grant exceptions to the requirements as set forth in the Defensible Space Requirements.

A three-zone approach should be applied to accomplish the defensible space requirements of this code as outlined below.

Zone 1: 0 feet to 10 feet from buildings, structures, decks, etc.

1. Thin native brush, leaving only the best specimens. Those remaining specimens should be opened up by pruning and by removal of dead and weak material.
2. Trim all non-hydrated trees to where the lowest branches or canopy are above the roofline. Any tree that cannot be limbed above the roofline due to tree structure must be hydrated by an approved automatic irrigation system in accordance with Appendix B-2. Such trees shall not have a ladder fuel condition below their canopy.

3. Trim or prune native shrubs/vegetation to a maximum height of two (2) feet and provide a clear space around each plant of at least four (4) feet. Native shrubs/vegetation that normally grow taller than two (2) feet shall be removed rather than improperly pruned (i.e. topped). No ladder fuel conditions shall be allowed to exist or be created.

Exceptions:

1. Cultivated ground cover does not require clear space.
2. Ornamental, non native vegetation is not required to meet the clear spacing and height of lowest limb limitations, providing a ten (10) foot distance is maintained from all native fuels and they are on an approved automatic irrigation system. The non fire-resistive ornamental vegetation shall not create a ladder fuel condition under a structure overhang.”
3. Remove all dead materials from the ground.
4. Remove all combustible materials and vegetation from under decks. No native brush or grasses shall be within 3 feet of buildings, structures and decks.
5. The maximum tree density shall not exceed the limits as established in Appendix B-3.
6. Defensible space shall be maintained at least annually.

Zone 2: 10 feet to 30 feet from buildings, structures, decks, etc.

1. Remove all ladder fuels by trimming back, pruning up or removing vegetation from under trees. Distance to the lowest tree branches should be a minimum of 3 times the brush height.
2. Trim all tree limbs a minimum of six (6) feet from the ground or to where the lowest branches or canopy are above the roofline when the branches or canopy are closer than ten (10) feet from any structure. Any tree that cannot be limbed above the roofline due to tree structure must be hydrated by an approved automatic irrigation system in accordance with Appendix B-2. Such trees shall not have a ladder fuel condition below their canopy.
3. The maximum tree density shall not exceed the limits as established in Appendix B-3.
4. Reduce continuity of fuels by removing dead materials and removing/ thinning so a person can walk between them.
5. Cut sod grasses to a maximum height of 4 inches above the ground.
6. Where plants/vegetation is greater than four (4) feet in height, create a clear space around each plant (or group of plants), twice the height of the plant in width (clear space not to exceed a maximum of ten (10) feet or compromise erosion). The plants/vegetation will create an island for wildlife habitat.

Exceptions:

1. Cultivated ground cover does not require clear space.
2. Ornamental, non native vegetation is not required to meet the clear spacing and height of lowest limb limitations, providing a ten (10) foot distance is maintained from all native fuels and they are on an approved automatic irrigation system. The non fire-resistive ornamental vegetation shall not create a ladder fuel condition under a structure overhang.
3. Emphasis is placed on slopes greater than 20% gradient, in which case, additional vegetation treatment may be required. (Example: Zone 2 treatment may be required to extend out an additional 100 feet to a total of 130 feet from the structure.) Control erosion and sedimentation from exposed soils through terracing, gravel beds, rocked and appropriate irrigated ground covers.
4. Remove all but one (1) inch of the last-season pine needle or leaf droppings. It is important to leave one (1) inch of the new and all of the decomposing layers of needles and leaf droppings to build healthy soil.
5. Defensible space shall be maintained at least annually.

Zone 3: 30 feet to 150 feet from buildings, structures, decks, etc. where no slopes exist.

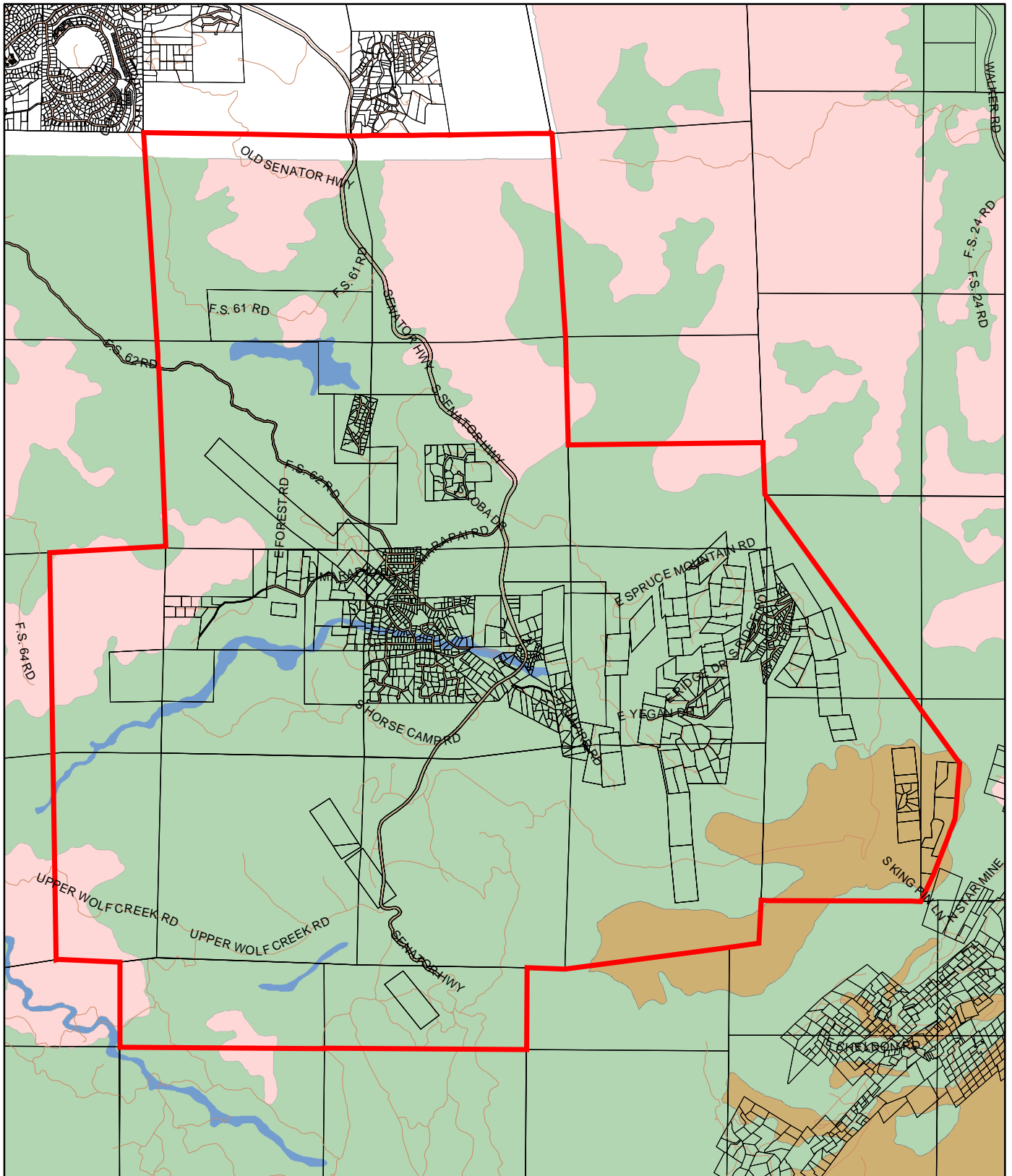
1. Remove all ladder fuels and dead materials by trimming back, pruning up or removing vegetation from under trees. Distance to the lowest tree branches should be a minimum of 3 times the brush/shrub height.
2. Defensible space shall be maintained at least annually."

(FF) The International Wildland-Urban Interface Code is hereby amended by adding an Appendix "B-1" thereto, entitled "Groom Creek Fire District Wildland-Urban Interface Vegetation Management Map", to read as follows:

APPENDIX B-1

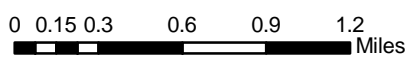
**GROOM CREEK FIRE DISTRICT WILDLAND-URBAN INTERFACE VEGETATION
MANAGEMENT MAP"**

Appendix B-1 Groom Creek Fire District Wildland-Urban Interface Vegetation Map



Legend

Fire District Boundary	Fuel Types	Grassland	Pinyon_Woodland
GC Parcels	ECOTYPE	Juniper_Woodland	Pipo/Quga_Woodland
	Private/Riparian/Water	Mixed_Conifer_Woodland	Steppe_Shruh
	Chaparral	Oak_Woodland	



(GG) The International Wildland-Urban Interface Code is hereby amended by adding an Appendix "B-2" entitled "Irrigation Design and Performance Requirements" to read as follows:

"APPENDIX B-2 IRRIGATION DESIGN AND PERFORMANCE REQUIREMENTS

The irrigation system design will provide for the automatic delivery of a minimum of ½" of equivalent precipitation spread across the critical root zone of the tree or shrub being hydrated at a minimum frequency of twice per month year round.

The following systems are allowed:

- A. Gear drive rotor or impact head sprinkler
- B. Spray head sprinkler
- C. Soaker line
- D. Drip system

All systems must be equipped with an approved back-flow prevention device, appropriate to the specific application, and must conform to all applicable codes pertaining to automatic irrigation.

Method to determine system delivery requirements.

To determine the total gallons of water required to cover the critical root zone with ½" of equivalent precipitation, figure the square footage of the ground surface area from the trunk to the outer drip edge of the limbs and multiply by one-third or 0.3. The delivery of this water should be distributed evenly throughout the critical root zone areas."

(HH) The International Wildland-Urban Interface Code is hereby amended by adding an Appendix "B-3" entitled "Procedure For Determining Tree Density" to read as follows:

Appendix B-3 PROCEDURE FOR DETERMINING TREE DENSITY

As there are 43,560 square feet in an acre, there would be one tree allowance for every 544.5 square feet in accordance with Appendix B-2 This does not mean that the trees must be arranged with equal separation. They may be clustered in any arrangement but cannot exceed the total Zone allowance.

Any trees that do not have ten- (10) feet separation between their canopies must be hydrated by an approved automatic irrigation system in accordance with Appendix B-2. The trees shall not have a ladder fuel condition below their canopy.

Where non fire-resistive construction materials are used for exterior walls, the tree density provision stated above does not apply and there shall be required a ten- (10) foot clearing of all vegetation.

Exception: Designated historic or specimen trees are allowed to remain. This allowance is made regardless of the trees' proximity to structures or the roofline, provided the trees conform to the following:

1. Trees are estimated to be a minimum of twenty (20) years old or have at least a six (6) inch caliper and,
2. Trees do not have any ladder fuel within ten (10) lateral feet of their canopy and,
3. Trees must be irrigated on an approved automatic irrigation system and,
4. Only one (1) tree is allowed in every thirty (30) feet of lateral distance between canopies.

Where trees are hydrated by an approved automatic irrigation system in accordance with Appendix B-2, a maximum density of 80 trees per acre will be allowed. Deciduous trees under 2-inch caliper in size will not be counted in the density limitation. Also, evergreen trees 4-inch caliper in size or less will not be counted in the density limitation.

Where trees are not automatically hydrated by an approved automatic irrigation system in accordance with Appendix B-2, the following density will be allowed:

All trees shall not exceed 80 trees per acre.

Exception: Any tree 2-inches and less in caliper size will not be counted in the density limitation provided: a ladder fuel condition is not created; vegetation fuel continuity breaks are created and maintained; there is compliance with all other provisions of this code."

(II) APPENDIX C – FIRE HAZARD RATING

Appendix C shall be adopted to replace table 502.1. Appendix C shall be replaced by NFPA 1144 (2002 Edition) Wildland Fire Risk and Hazard Severity Assessment Form (Figure A.4.2) as follows:

APPENDIX C: WILDLAND FIRE RISK AND HAZARD SEVERITY ASSESSMENT FORM

Date:

Address:

Jurisdiction:

Assessor:

Assign a value to the most appropriate element in each category and place the number of points in the column in the right.

Element	Points
A. Means of Access	
1. Ingress and egress	
a. Two or more roads in/out	0 _____
b. One road in/out	7 _____
2. Road Width	
a. $\geq 7.3\text{m}$ (24ft)	0 _____
b. $\geq 6.1\text{m}$ (20 ft) and $< 7.3\text{m}$ (24ft)	2 _____
c. $< 6.1\text{m}$ (20 ft)	4 _____
3. All-season road condition	
a. Surfaced road, grade $< 5\%$	0 _____
b. Surfaced road, grade $> 5\%$	2 _____
c. Non-surfaced road, grade $< 5\%$	2 _____
d. Non-surfaced road, grade $> 5\%$	5 _____
e. Other than all-season	7 _____
4. Fire Service Access	
a. $\leq 91.4\text{m}$ (300ft) with turnaround	0 _____
b. $> 91.4\text{m}$ (300ft) with turnaround	2 _____
c. $< 91.4\text{m}$ (300ft) with no turnaround	4 _____
d. $\geq 91.4\text{m}$ (300ft) with no turnaround	5 _____
5. Street Signs	
a. Present [10.2cm (4 in.) in size and reflectorized]	0 _____
b. Not present	5 _____
B. Vegetation (Fuel Models)	
1. Characteristics of predominate vegetation within 91.4m (300ft)	
a. Light (e.g., grasses, forbs, sawgrasses, and tundra) NFDRS Fuel Models A, C, L, N, S, and T	5 _____
b. Medium (e.g., light brush and small trees) NFDRS Fuel Models D, E, F, H, P, Q, and U	10 _____
c. Heavy (e.g., dense brush, timber, and hardwoods) NFDRS Fuel Models (e.g., B, G, and O)	20 _____
d. Slash (e.g., timber harvesting residue) NFDRS Fuel models J, K, and L	25 _____
2. Defensible Space	
a. More than 30.48m (100ft) of vegetation treatment from the structure(s)	1 _____
b. 21.6m to 30.48m (71ft to 100ft) of vegetation treatment from the structure(s)	3 _____
c. 9.14m to 21.3m (30ft to 70 ft) of vegetation treatment from the structure(s)	10 _____
d. $< 9.14\text{m}$ (30ft) of vegetation treatment from the structure(s)	25 _____
C. Topography Within 91.4m (300ft) of Structure(s)	
1. Slope $< 9\%$	1 _____
2. Slope 10% to 20%	4 _____
3. Slope 21% to 30%	7 _____
4. Slope 31% to 40%	8 _____
5. Slope $> 41\%$	10 _____

Element

Points

D. Additional Rating Factors (rate all that apply)

- 1. Topographical features that adversely affect wildland fire behavior 0-5 _____
- 2. Areas with a history of higher fire occurrence than surrounding areas due to special Situations (e.g., heavy lightning, railroads, escaped debris burning, and arson) 0-5 _____
- 3. Areas that are periodically exposed to unusually severe fire weather and strong dry winds 0-5 _____
- 4. Separation of adjacent structures that can contribute to fire spread 0-5 _____

E. Roofing Assembly

- 1. Class A roof 0 _____
- 2. Class B roof 3 _____
- 3. Class C roof 15 _____
- 4. Nonrated 25 _____

F. Building Construction

- 1. Materials (predominate)
 - a. Noncombustible/fire-resistive siding, eaves, and deck 0 _____
 - b. Noncombustible/fire-resistive siding and combustible deck 5 _____
 - c. Combustible siding and deck 10 _____
- 2. Building setback relative to slopes of 30% or more
 - a. $\geq 9.14\text{m}$ (30ft) to slope 1 _____
 - b. $< 9.14\text{m}$ (30ft) to slope 5 _____

G. Available Fire Protection

- 1. Water source availability
 - a. Pressurized water source availability
 - 1892.7 L/min (500gpm) hydrants $\leq 304.8\text{m}$ (1000ft) apart 0 _____
 - 946.4 L/min (250 gpm) hydrants $\leq 304.8\text{m}$ (1000ft) apart 1 _____
 - b. Nonpressurized water source availability (off site)
 - $\geq 946.4\text{ L/min}$ (250gpm) continuous for 2 hours 3 _____
 - $< 946.4\text{ L/min}$ (250gpm) continuous for 2 hours 5 _____
 - c. Water unavailable 10 _____
- 2. Organized response resources
 - a. Station $\leq 8\text{ km}$ (5 mi.) from structure 1 _____
 - b. Station $> 8\text{ km}$ (5 mi.) from structure 3 _____
- 3. Fixed fire protection
 - a. NFPA 13, 13R, 13D sprinkler system 0 _____
 - b. None 5 _____

H. Placement of Gas and Electric Utilities

- 1. Both underground 0 _____
- 2. One underground, one aboveground 3 _____
- 3. Both aboveground 5 _____

I. Totals for Home or Subdivision (Total of all points)

Hazard Assessment	Total Points
Low hazard	<40
Moderate hazard	40-69
High hazard	70-112
Extreme hazard	>112

2-3: ENFORCEMENT PROVISIONS:

(A) Any person who violates any provision of this Chapter shall be guilty of a misdemeanor, and upon conviction thereof shall be **punished as provided by current Yavapai County code enforcement provisions**. Each and every day any such violation continues shall be deemed and considered a separate offense.

(B) The penalties set forth above shall be cumulative and nonexclusive. In addition to those penalties set forth above, the Groom Creek Fire District may institute any other remedies available, including but not limited to a civil action to seek injunctive relief for a violation of this Chapter, and the recovery of attorneys' fees for such violation.

SECTION 3 – Severance Clause

The provisions of this Ordinance and the Code it incorporates are hereby declared to be severable, and if any section, sentence, clause or phrase of this Ordinance or the Code it incorporates shall, for any reason, be held to be invalid or unconstitutional, such decisions shall not affect the validity of the remaining sections, sentences, clauses and phrases of this Ordinance and the Code it incorporates, but they shall remain in effect, it being the legislative intent that this Ordinance and the Code it incorporates shall stand notwithstanding the invalidity of any part thereof.

SECTION 4 – Effective Date

DELAYED EFFECTIVE DATE. This Ordinance is effective from and after Jan 1, 2008

Adopted this _____ day of _____ 20__

By the Groom Creek Fire District Governing Board:

_____ Board Chairman
Robert Schulz

_____ Board Vice-Chairman
Gary Williams

_____ Board Clerk
Terry Hammon