

CHECK W/ STACY SALLBERG

CHAPTER 1, IWUIC, ADMINISTRATION

Amend Section 101.2 Scope. By adding:

When determining which conditions constitute a distinct danger to life or property, the Code Official may be guided by industry standards, individual site conditions, hazard ratings, risk assessments, basal area calculations, and/or tree densities determined to be effective in identifying and mitigating fire danger and/or protecting property.

In coordination with the Community Development Department, the provisions of this code shall be applied to all future developments to make properties FireWise prior to the application of resource protection standards found in the Land Development Code.

Amend Section 101.3, Objective, to read:

The unrestricted use of property in wildland-urban interface areas is a potential threat to life and property from fire, economic, and resulting environmental impacts.
(Remainder unchanged)

Amend Section 102.1, Powers and Duties of the Code Official, by deleting the sentence:

"For such purposes, the code official shall have the powers of a law enforcement officer."

Amend Section 106.1, General, by deleting the sentence:

"When such plans are not prepared by an architect or engineer, the code official may require the applicant submitting such plans or other data to demonstrate that state law does not require that the plans be prepared by a licensed architect or engineer."

CHAPTER 2, IUWIC, DEFINITIONS

Amend Section 202, Definitions, by adding the following definitions:

FIRE RESISTIVE VEGETATION is those plants that burn at a relatively low intensity, slow rates of spread, and with short flame lengths. Characteristics include:

1. Growth with little or no accumulation of dead vegetation (either on the ground or standing upright)
2. Non-resinous plants (ex: flowers or aspen trees)
3. Low volume of total vegetation (ex: grass vs. brush)
4. Plants with high live fuel moisture (large amount of water in relation to their dry weight)
5. Drought tolerant plants
6. Stands without ladder fuels (plants without small, fine branches and limbs or adjacent shorter plants that create a ready-avenue for fire to move upward from the ground to the top of the vegetation)
7. Plants requiring little maintenance
8. Plants with woody stems and branches that require prolonged heating to ignite

FOREST STEWARDSHIP PLAN is a comprehensive land-management plan that includes all lands within the city boundary, as well as any parcels or areas served by an emergency response/suppression contract.

HAZARDOUS FUELS are weeds, grass, needles, straw, brush, trees, vines, wood chips, firewood, or other vegetation – living or dead – that a) if ignited, will present a risk to life or property, or b) if left in it's current or natural state, will create an impediment to access, pose a threat to improvements, infrastructure, or public safety, or may cause a fire to ignite.

VEGETATION MANAGEMENT is a plan or operational activity, described below, that is undertaken by property owners at their own discretion or directed/approved by the Code Official designed or required to reduce wildfire threat, promote environmental sustainability, public welfare, and/or community well-being.

1. **Debris Disposal** – Removal of cut, dead, dying, and/or downed vegetation or other combustible materials, including flammable landscaping plants.
2. **Marking** – Designating trees or other vegetation, by location, paint, flagging, or other identification system, that are to be either removed or retained.
3. **Prescribed Fire** – The planned use of fire under specific environmental conditions to achieve forest management or community protection objectives. Used to reduce hazardous fuel levels, control unwanted vegetation, recycle nutrients, favor desired vegetation, and improve visibility and wildlife habitat.
4. **Selective Tree Thinning** – The periodic removal of individual trees or groups of trees to reduce threat of wildfire, improve individual tree vigor and forest health, or achieve other desired objectives.

CHAPTER 3, IWUIC, WILDLAND-URBAN INTERFACE AREAS

Amend Section 301.1 Scope. To read:

The provisions of this chapter provide methodology to establish and record wildland-urban interface areas based on the following findings of fact: high temperatures, low relative humidity, breezy/windy conditions, low fuel moistures, weather-related ignition potential, human-related ignition potential, historical fire data, natural fire-adapted ecosystem, ember lofting and carrying potential, tree densities, crown closure, ladder fuels, surface fuels, and other fire risk factors.

CHAPTER 5, IWUIC, SPECIAL BUILDING CONSTRUCTION REGULATIONS

Amend Table 502.1 Fire Hazard Severity. To read:

TABLE 502.1

FIRE HAZARD SEVERITY

FUEL MODEL^a	CRITICAL FIRE WEATHER FREQUENCY								
	≤ 1 Day			2 to 7 days^a			≥ 8 days^a		
	Slope (%)			Slope (%)			Slope (%)		
	≤ 10	11-20	≥ 30	≤ 10	11-20	≥ 30	10	11-29	≥ 3
Light fuel	M	M	M	M	M	M	M	M	H
Medium fuel	M	M	H	H	H	H	M	H	E
Heavy fuel	H	H	H	H	E	E	H	E	E

^a Days per annum

^b When required by the code official, fuel classification shall be based on the historical fuel type for the area.

E = Extreme hazard.

H = High hazard.

M = Moderate hazard.

Amend Section 504.2, Roof Covering, as follows:

Roofs shall have a non-combustible roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers.

Amend Section 504.3, Protection of Eaves, to read as follows:

Eaves and soffits shall be protected on the exposed underside by materials approved as non-combustible or heavy timber/log construction.

Amend Section 504.5, Exterior Walls, to read as follows:

Exterior walls of buildings or structures shall be constructed with approved materials having a minimum Class A Flame Spread Rating or heavy timber/log construction.

Amend Section 504.6, Unenclosed Underfloor Protection by deleting:

Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction.

Amend Section 504.7, Appendages and Projections, to read:

Unenclosed accessory structures with habitable spaces and projections, such as decks, shall be constructed with approved noncombustible or limited-combustible materials or heavy timber/log construction. Approved noncombustible or limited-combustible materials shall be those approved by the Flagstaff Fire Department as a result of approved fire tests.

Amend Section 504.10, Vents, by changing 1/4 inch to 1/8 inch.

Amend Section 504.10 Vents, by adding:

Exception: Vents installed with compliant mesh and located on fascia or soffits as far from the exterior wall as practical and as approved by the Code Official. Vent size may exceed 144 square inches (0.0929 m²) when approved by the Code Official.

Amend Section 504.11, Detached Accessory Structures, by deleting:

When the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.5 or underfloor protection in accordance with Section 504.6.

Exception: The enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as

required for exterior 1-hour fire-resistance-rated construction or heavy-timber construction.

Amend Section 505.2, Roof Covering, to read:

Roofs shall have a non-combustible roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers.

Amend Section 505.3, Protection of Eaves, to read as follows:

Combustible eaves, fascias, and soffits shall be enclosed with solid material with a minimum thickness of 1/2 inch.

Amend Section 505.5, Exterior Walls, to read as follows:

Exterior walls of buildings or structures shall be constructed with approved materials having a minimum Class B Flame Spread Rating or heavy timber/log construction.

Exception: Exterior walls protected with a non-combustible wainscoting extending a minimum 4 feet above adjoining grades, or fire resistive vegetation/landscaping provided for a distance of a minimum of 30 feet adjoining the wall.

Amend Section 505.6, Unenclosed Underfloor Protection, by deleting:

Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction.

Amend Section 505.7, Appendages and Projections, to read as follows:

Unenclosed accessory structures with habitable spaces and projections, such as decks, shall be constructed with approved noncombustible or limited-combustible materials or heavy timber/log construction. Approved noncombustible or limited-combustible materials shall be those approved by the Flagstaff Fire Department as a result of approved fire tests.

Amend Section 505.10, Vents, by changing 1/4 inch to 1/8 inch.

Amend Section 505.10, Vents, by adding:

Exception: Vents installed with compliant mesh and located on fascia or soffits as far from the exterior wall as practical and as approved by the Code Official. Vent size may exceed 144 square inches (0.0929 m²) when approved by the Code Official.

Amend Section 505.11, Detached Accessory Structures, by deleting:

When the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.5 or underfloor protection in accordance with Section 504.6.

Exception: The enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy-timber construction.

Amend Section 506.2, Roof Covering, to read:

Roofs shall have a non-combustible roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers.

Amend Section 506.3, Unenclosed Underfloor Protection, by deleting:

Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction.

Amend Section 506.4, Vents, by changing 1/4 inch to 1/8 inch.

Amend Section 506.4, Vents, by adding:

Fireworks issued under permit by the Fire Department will be prohibited in the wildland-urban interface by the Code Official during periods of Very High or greater fire danger as determined by the Coconino National Forest.

Amend Section A104.7.1 Outdoor fires, Exception, to read:

Exception: Outdoor fires within inhabited premises or designated campsites where such fires are in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator, grill, or any other outdoor fire appliance listed for such purposes and are a minimum of 15 feet (9144 mm) from any combustible material or non fire-resistive vegetation.

Amend Section A107.3, Fuel Modification area, by deleting:

Of not less than 30 feet (9144 mm).

Amend Section A107.4, Trees, to read:

Hazard trees, as determined by the Code Official, shall be removed.

Portions of trees that extend to within 30 feet (9144 mm) of combustible portions of water storage and pumping facilities shall be removed unless permitted to remain under a vegetation management plan approved by the Code Official.

Tree crowns within the defensible space shall be pruned to remove limbs located less than 6 feet (1829 mm) or one-third of the canopy height above the ground surface adjacent to the trees.

Portions of trees that extend within 10 feet (3048 mm) of the outlet of a chimney shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm).

APPENDIX B, IWUIC, VEGETATION MANAGEMENT PLAN

Amend Section B101.2, Plan content, to read:

Vegetation management plans shall describe all action that will be taken to prevent a surface fire from extending vertically and a canopy or crown fire from extending across a piece of property. Vegetation management practices shall be maintained

regularly or at least annually. A vegetation management plan shall include at least the following information:

1. A copy of the site plan.
2. Methods and timetables for controlling, changing or modifying areas on the property. Elements of the plan shall include fuel reduction to 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.
3. Methods to be used to provide for ecosystem sustainability, specifically methods to provide for age and size class distribution over the areas of the property.
4. A plan for maintaining the proposed fire protection measures.

APPENDIX C, IWUIC, FIRE HAZARD SEVERITY FORM

Amend Appendix C, Fire Hazard Severity Form, to read:

Vents shall be installed with compliant mesh and located on fascia or soffits as far from the exterior wall as practical and as approved by the Code Official.

Amend Section 507.1, General, to read:

The roof covering on buildings or structures in existence prior to the adoption of this code that are replaced or have more than a 10 foot by 10 foot section replaced in a 12-month period shall be replaced with a roof covering required for new construction based on the type of ignition-resistant construction specified in accordance with Section 503.

CHAPTER 6, IWUIC, FIRE PROTECTION REQUIREMENTS

Amend Section 603.2, Fuel Modification, to read:

Defensible space shall be required on new structures and subdivisions within the Wildland-Urban Interface containing a moderate, high or extreme fire danger rating.

In order to qualify as a conforming defensible space for the purposes of this code, fuel modification shall be provided for an entire property or development as prescribed by a vegetation management plan approved by the Code Official using best management practices and industry standards. When approving a vegetation management plan, the Code Official may be guided by individual site conditions, hazard ratings, risk assessments, basal area calculations, and/or tree densities determined to be effective in identifying and mitigating fire danger and/or protecting property.

Persons owning, leasing, controlling, operating or maintaining buildings, structures, or property requiring defensible spaces are responsible for modifying or removing non-fire-resistive vegetation on the property owned, leased or controlled by said person.

Amend Section 604.4, Trees, to read:

Trees adjacent to any structure shall be allowed to remain in place when in conformity to the approved vegetation management plan. Tree crowns shall be required to be pruned to remove limbs located less than 6 feet (1829 mm) above the

ground surface or no more than one-third of the live crown when required by the vegetation management plan.

Portions of tree crowns that extend within 10 feet (3048 mm) of the outlet of a chimney shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm). At no time may tree crowns or limbs extend into the vertical plane of a chimney outlet. Tree limbs shall not touch roof coverings at any time.

Deadwood and litter shall be regularly removed from trees and the surrounding area.

Hazard trees, as determined by the Code Official, shall be removed. When determining hazard trees, the Code Official may be guided by industry standards, individual site conditions, hazard ratings, risk assessments, basal area calculations, and/or tree densities determined to be effective in identifying and mitigating fire danger and/or protecting property. Trees that are in such a position that they may fall endangering life or property are determined to be hazard trees.

APPENDIX A, IWUIC, GENERAL REQUIREMENTS

Delete Section A103.4, Use of Motorcycles, Motor Scooters, Ultra Light Aircraft and Motor Vehicles.

Amend Section A104.4, Smoking, by adding the following sentence:

Smoking may be prohibited in the wildland-urban interface by the Code Official during periods of Very High or greater fire danger as determined by the Coconino National Forest.

Amend Section A104.5 Equipment and devices generating heat, sparks or open flames, by adding:

Equipment and devices generating heat, sparks or open flames may be prohibited in the wildland-urban interface by the Code Official during periods of Very High or greater fire danger as determined by the Coconino National Forest.

Amend Section A104.6, Fireworks, by adding:

APPENDIX C - 1 (NEIGHBORHOOD)

FLAGSTAFF FIRE DEPARTMENT WILDLAND FIRE HAZARD SEVERITY ASSESSMENT FORM Building Construction Requirements

For Use on non-developed Properties following Hazard Fuel (Defensible Space) Work
** When utilized, replaces Table 502.1 **

Name: _____ Date: _____
Address: _____ Phone: _____
Assessor: _____

Element	Points	Score	Comments
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. greater/equal to 24 feet	0	_____	_____
b. greater/equal to 20 feet & less than 24 feet	2	_____	_____
c. less than 20 feet	7	_____	_____
3. All-season road condition			
a. Surfaced road, grade less than 5%	0	_____	_____
b. Surfaced road, grade greater than 5%	2	_____	_____
c. Non-surfaced road, grade less than 5%	5	_____	_____
d. Non-surfaced road, grade greater than 5%	7	_____	_____
e. Other than all-season	10	_____	_____
B. Topography – within 300 feet of property center-point			
1. Slope less than 5%	1	_____	_____
2. Slope 6% to 19%	4	_____	_____
3. Slope greater than 20%	10	_____	_____
C. Water Source Availability			
1. Conforming	0	_____	_____
2. Nonconforming	10	_____	_____

Total for HOME 0

RESULTS

Construction Requirements

Ignition Resistant Construction (IR) 3
Ignition Resistant Construction (IR) 2
Ignition Resistant Construction (IR) 1

Total Points

Less than 20
21-29
Greater than 30

Remarks: _____

more about property 1
maintenance
(individual homes & lots)

APPENDIX C - 2
FLAGSTAFF FIRE DEPARTMENT
WILDLAND FIRE HAZARD SEVERITY ASSESSMENT FORM
Property Maintenance

Name: _____ Date: _____
Address: _____ Phone: _____
Assessor: _____

PROPERTY	Points	Score	Comments
A. Vegetation - Predominate over entire property			
1. Light (grasses, forbs, scattered brush, etc.)	5		
2. Medium (brush, open pine stands, limited ladder fuels)	10		
3. Heavy (dense brush/timber, abundant ladder fuels and/or downed/dead material)	20		
B. Additional Rating Factors (rate all that apply)	N Y		
1. Topographical features that adversely affect wildland fire behavior (<i>chimneys, steep slopes, etc.</i>)	0 5		
2. Area has history or evidence of high fire occurrence (<i>campfires, children, arson, etc.</i>)	0 5		
3. Non-conforming water supply	0 5		
Total for PROPERTY		0	

STRUCTURE	Points	Score	Comments
A. Driveway Access			
1. Length			
a. Less than/equal to 100 feet with turnaround or park on/work from street	0		
b. Greater than 100 feet with turnaround	2		
c. Less than/equal to 100 feet with no turnaround or unable to park on/work from street	5		
d. Greater than 100 feet with no turnaround	7		
2. Width: <i>as influenced by cut-bank, vegetation, drop-off, etc.</i>			
a. Greater than 20 ft. or able to park on street/not block access	0		
b. Less than 19 ft., or unable to park on street/not block access	10		
B. Roof Covering			
1. Non-combustible	0		
2. Combustible	20		
C. Building Construction			
1. Materials (predominate)			
a. Non-combustible siding, eaves, deck, or ground fire unable to contact structure	0		
b. Fire-resistive siding and deck or ground fire likely to contact structure	3		
c. Combustible siding and deck or ground fire likely to contact structure	10		
2. Location: <i>Building setback relative to slopes of 30% or more</i>			
a. No such slope present	0		
b. Greater/equal to 50 feet	2		
c. Less than 50 feet	5		
D. Additional Rating Factors (rate all that apply)	N Y		
1. Fire-prone landscaping with 50 ft. of structure	0 5		
2. Flammable materials stored under deck or adjacent to structure	0 5		
3. Needles/leaves accumulated on roof	0 5		
Total for STRUCTURE		0	

INDIVIDUAL HAZARD TREE(S)	Points	Score	Comments
A. Healthy and Safety (rate all that apply)			
1. Dead or dying	1		
2. Damaged	1		
3. Adjacent to street/road, structure, fence, wires, yard, etc.	1		
4. Interfering with electrical wires, visibility, etc.	1		
Total for INDIVIDUAL HAZARD TREES		0	

RESULTS	Property	Structure	Individual Hazard Tree(s)
No Action Needed:	5 or less	5 or less	0
Action Recommended:	6 - 13	6 - 29	1
Action Required (Sec 107)	14 or more	30 or more	2 or more
Remarks:	_____		