# The Spring's

### **Topography**

The Spring's community is built on relatively flat ground and does not have any significant Topographic or slope features that would have substantial impact on wildland fire behavior within the Subdivision or areas immediately surrounding the community. Slopes within The Springs are generally 10% - 20% of slope, The Spring's Community consists of 440 homes, and these homes have concrete or stone patios, with wooden deck porch patio covers however this community does not have decks that overhang Slopes.

### Vegetation

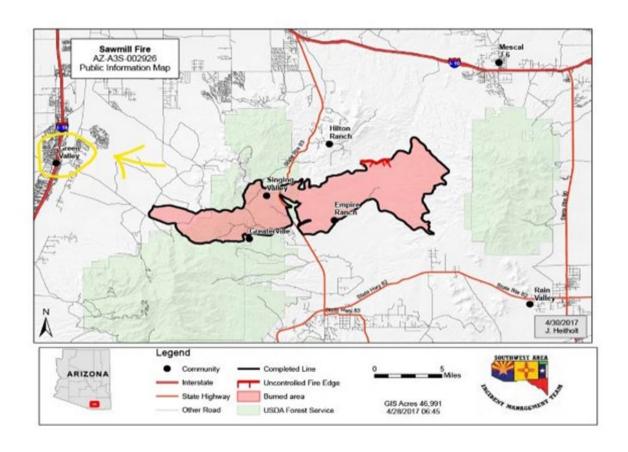
Vegetation within The Springs primarily consists of native Sonoran Desert species in drainage/wash areas with landscaped private yards. Vegetation fuel loads primarily consist of Mesquite, Acacias, and Palo Verde trees with creosote, brush, grass and several types of cacti. Wildfire conditions can exist across the Sonoran Desert due to abundant dried grasses and brush. During times of heavy winter and/or early spring rain grass, and shrub increase significantly, then as weather conditions become hotter and drier this growth dies out and can become especially susceptible to fast-moving, wind driven, high intensity wildland fire. The land/ Drainages adjacent to the community has become overgrown with thick vegetation and lack of separation between trees, brush/shrubs and grasses, contributing to a fuel load and ladder fuel effect along the edges of the community and immediately adjacent to undeveloped desert land with native vegetation.

### Weather

The spring's Community is located within the Sonoran Desert of the Southwestern US. As such, it is subject to periods of strong, very hot/dry pre-monsoonal weather between the months of April-July each year, which makes it subject to critical and sometimes extreme fire behavior. Usually starting in early to mid-July, typical weather will include periods of monsoonal activity with varying amounts of possible rain and at times heavy lightning activity. Additional periods of wet and/or extremely dry and hot weather will have an impact on the fire risk and fire behavior of the community. With the variable rain levels, the presence (or lack) of excessive flashy fuels will also have an impact on fire spread and intensity.

## **Fire History**

In 2017, Sawmill Fire 8 miles east of Green Valley which burned 46,911 acres.





Vegetation in the Intermediate zone. Keep separation of Trees/ Bushes around 5' along with grass trimmed.



Grass and brush in the extended zone/Undeveloped land. Recommend making contact with land owner/city to take steps to manage or maintain.



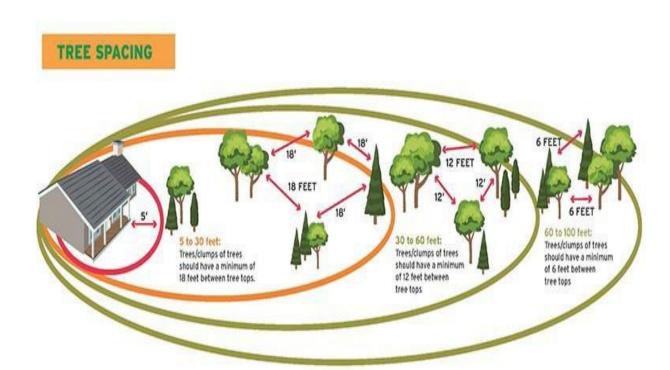
Vegetation in the Intermediate zone. Recommend keeping trees limbed up 5' also break up continuous Fuel/ i.e. brush, grass keep spacing between bushes 4-5'.

### Recommendations

1) Continue to improve defensible space

To increase your home's chance of surviving a wildfire, choose fire-resistant building materials and limit the amount of flammable vegetation in the three home ignition zones. The zones include the immediate Zone: (0 to 5 feet around the house), the Intermediate Zone (5 to 30 feet), and the Extended Zone (30 to 100 feet).

2) Keeping Buffel grass down by using herbicides to eliminate the grass to its roots and then removing the grass.



#### Immediate zone

The home and the area 0-5' from the furthest attached exterior point of the home; defined as a non-combustible area. Science tells us this is the most important zone to take immediate action on as it is the most vulnerable to embers. START WITH THE HOUSE ITSELF then move into the landscaping section of the Immediate Zone.

- Clean roofs and gutters of dead leaves, debris and pine needles that could catch embers.
- Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration.
- Reduce embers that could pass through vents in the eaves by installing 1/8 inch metal mesh screening.
- Clean debris from exterior attic vents and install 1/8 inch metal mesh screening to reduce embers.
- Repair or replace damaged or loose window screens and any broken windows Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.

Move any flammable material away from wall exteriors – mulch, flammable plants, leaves and needles, firewood piles – anything that can burn. Remove anything stored underneath decks or porches.

### Intermediate zone

5-30' from the furthest exterior point of the home. Landscaping/hardscaping- employing careful landscaping or creating breaks that can help influence and decrease fire behavior

- Clear vegetation from under large stationary propane tanks.
- Create fuel breaks with driveways, walkways/paths, patios, and decks.
- Keep lawns and native grasses mowed to a height of four inches.
- Remove ladder fuels (vegetation under trees) so a surface fire cannot reach the crowns. Prune trees up to six to ten feet from the ground; for shorter trees do not exceed 1/3 of the overall tree height.
- Space trees to have a minimum of eighteen feet between crowns with the distance increasing with the percentage of slope.
- Tree placement should be planned to ensure the mature canopy is no closer than ten feet to the edge of the structure.
- Tree and shrubs in this zone should be limited to small clusters of a few each to break up the continuity of the vegetation across the landscape.

### **Extended zone**

30-100 feet, out to 200 feet. Landscaping – the goal here is not to eliminate fire but to interrupt fire's path and keep flames smaller and on the ground.

- Dispose of heavy accumulations of ground litter/debris.
- Remove dead plant and tree material.
- Remove small conifers growing between mature trees.
- Remove vegetation adjacent to storage sheds or other outbuildings within this area.
- Trees 30 to 60 feet from the home should have at least 12 feet between canopy tops.\*
- Trees 60 to 100 feet from the home should have at least 6 feet between the canopy tops.\*