

APS Forestry and Special Programs

Fire Mitigation Pole Clearing

*2016 Arizona Wildland-Urban
Interface & Firewise Summit*

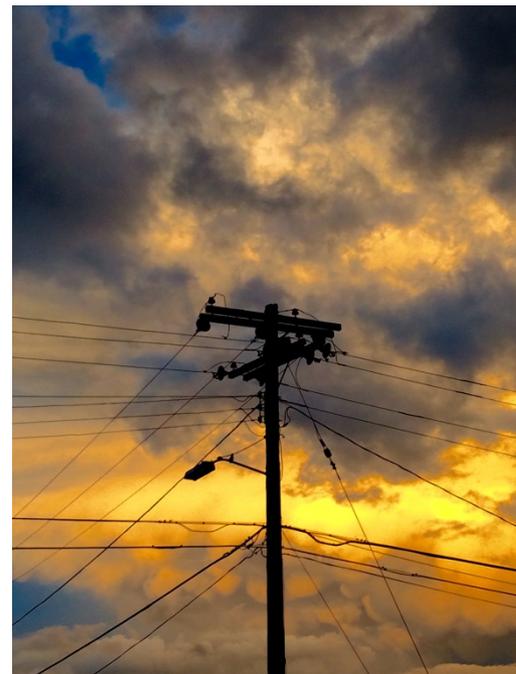


Project Overview

- Compliant with the IFC- Urban Wildland Interface Code.
- State Wide APS has 325,000 equipment identifications.
- 75,000 of those have been identified to be “Urban Interface”.
- Goal is to treat 25K poles per year to create a three year treatment cycle.
- Treatment is done with APS Contract Crews.
- Treatment is done with mechanical saw work, raking and herbicide application where approved.
- APS Pre-Inspectors make contact with homeowners prior to crews doing the work.
- APS’s program support the message of defensible space working with homeowner and the community.

Risk Assessment and Fire Mitigation

- **Recognize**
 - **Assess**
 - **Implement**
-
- **Fire Hazards of Energy Delivery**
 - **Fire Science Risk Assessment**
 - **Vegetation Management of Subject Poles**



Risk Assessment Tools

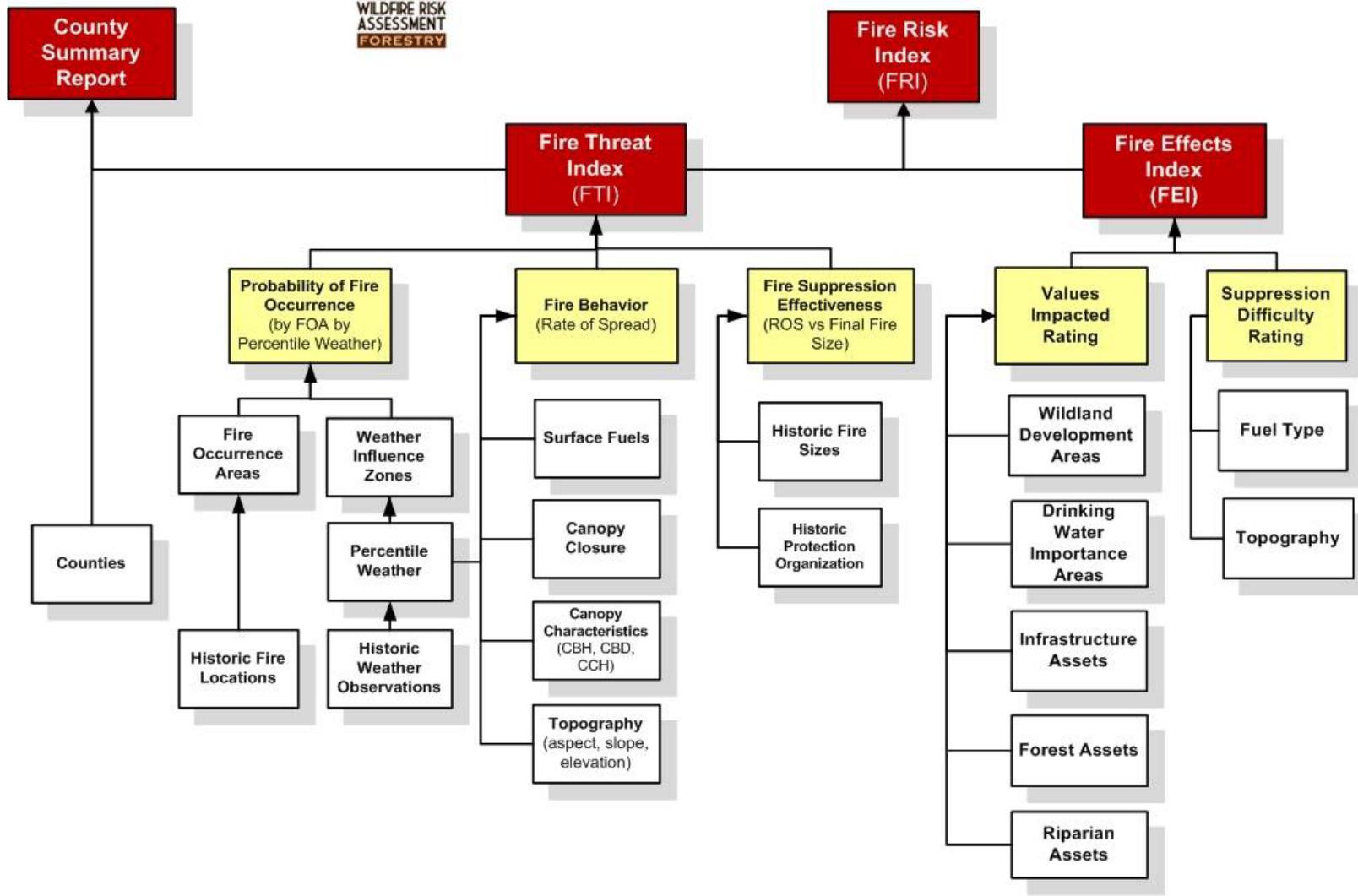
- West Wide Risk Assessment (Council of Western State Foresters)
- Transition & Distribution System History
- Fire History
- Fire Behavior
- Fuel Load
- Partnerships and Projects

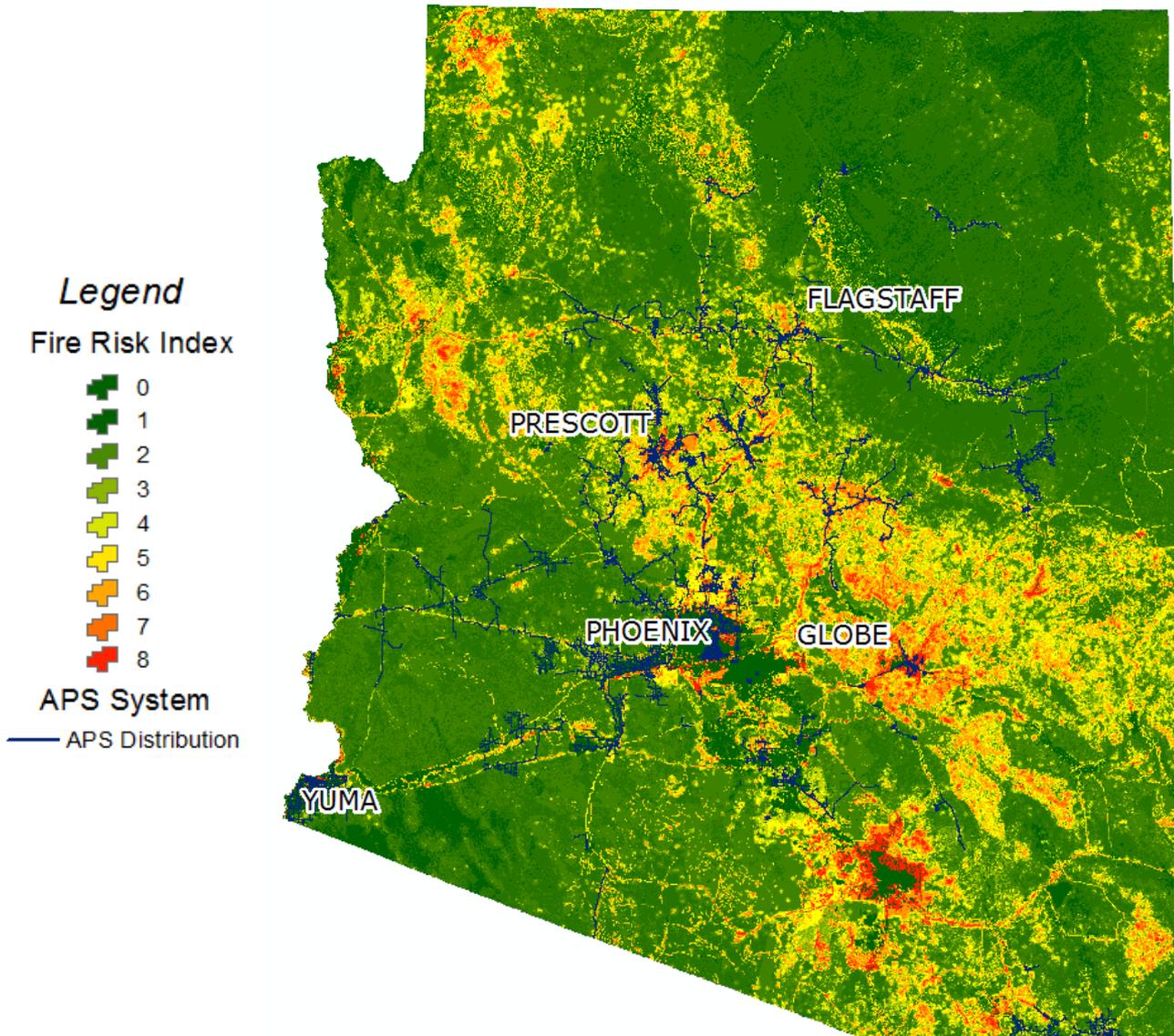




West Wide Risk Assessment

Risk Model Framework





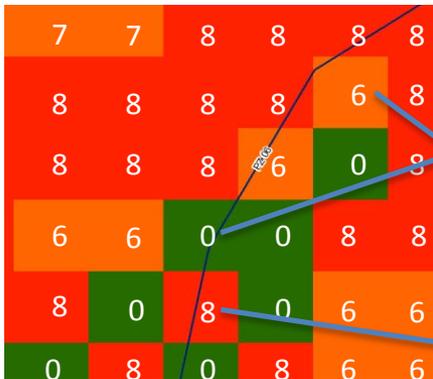
Feeders occur across multiple Fire Risk Indices (0-8)

Overhead feeders were ranked using a weighted average formula

$$(\text{FRIO} * (\% \text{ of feet in feeder in FRIO})) + (\text{FRI1} * (\% \text{ of feet in feeder in FRI1})) \dots / 100$$

PZ 06 feeder

Total length: 135,827 ft.



FRI	feet	Calculation	% of feeder in feet	FRI value
0	36,516.68	$36516.68/135827 * 100 =$	26.88%	0
6	2,964.68	$2964.68/135827 * 100 =$	2.18%	13.08
7	11,155.11	$11155.11/135827 * 100 =$	8.21%	57.45
8	85,190.63	$85,190/135827 * 100 =$	62.71%	50.168

$$\text{Weighted Average FRI} = (0 + 13.08 + 57.45 + 50.168) = 572.21/100 = \mathbf{5.72}$$

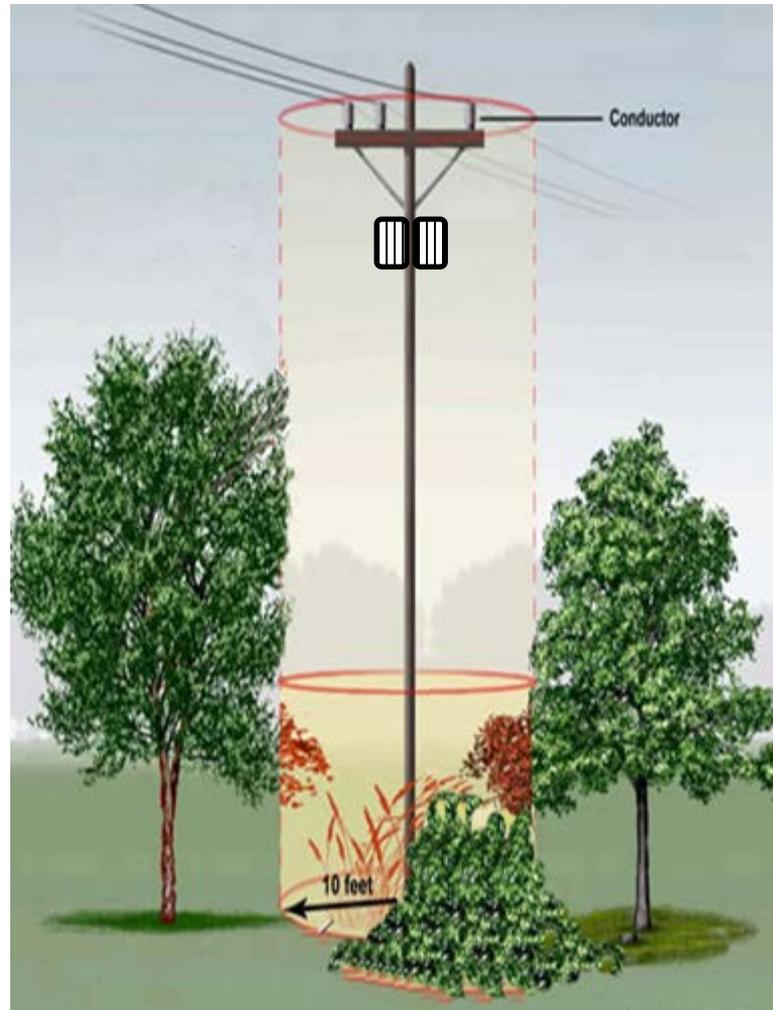
PlanningProfile.....Treatment



Pole_Number	Equipment Type	Equipment Type 2	Treatment Code	Units	Lat	Long	Comments	CustName	Contact Number
547530	Transformer	Fuse	41	1	33.35068	-110.9864	52-1	<Null>	<Null>
2649575	Transformer	Fuse	41	5	33.38642	-110.8875	52-1/do not touch the pecan tree	poeling	9288122160
539742	Transformer	Fuse	41	1	33.38783	-110.8852	52-1	<Null>	<Null>
353285	Transformer	Fuse	41	6	33.38785	-110.8847	52-1		
547553	Transformer	Fuse	42	1	33.34967	-110.9916	52-1 possible axs from 52945 harper rd call osv	<Null>	<Null>
547412	Transformer	Fuse	42	1	33.39398	-110.8805	41-3 52-1	<Null>	<Null>
353307	Transformer	Fuse	51	1	33.35153	-110.9896	leave wood in sizable pieces inside fence	geneva	9282002723
353311	Transformer	Fuse	51	1	33.35012	-110.9926	possible axs from 52945 harper rd call osvaldo		

WUI Code Intent

- Create combustible-free space.
- Access equipment safely.
- All vegetation within ten feet of the pole in all directions will be removed and treated.
 - Grasses
 - Shrubs
 - Trees











Utility Line Safety

- Right Tree-Right Place
- Minimum Approach Distance
- Contracted Tree Worker Safety

