TIME! The fourth element!!

It takes a certain amount of heat and TIME to dry a certain amount of fuel, raise the temperature of the fuel to its ignition temperature and ignite it. The cooler and wetter the fuel, the longer it takes to ignite it.

Wildfires travel relatively fast - on average from 6 - 14 miles per hour depending on meteorological and topographical factors: wind speed and direction, relative humidity, ambient temperature, hills, valleys, flatland, etc., and the type and amount of fuel available. While the flame front may be LONG, it seldom is very DEEP - usually less than 100 feet.

If the fuel could be sufficiently dampened and cooled far enough in advance of the arrival of the flame front so that by the time the flame front arrived and had passed, there wouldn't be enough time for the heat from the flame front to dry the fuel, raise it to is ignition temperature and ignite it. The flame front would divide and pass around the pre-wetted area BEFORE the wet fuel could ignite, reconnecting on the other side of the protected property and continuing on its way.

How much notification time is needed? Mere minutes, sometimes seconds.

With new technology, sensors can determine how much time an advancing wildfire will take to reach the protected property, and provide enough time in advance of the arrival of the approaching wildfire to allow application of a predetermined amount of water , foam, surfactant, etc. to wet a defined protective perimeter and area.

Knowing this information, the solution to the problem becomes a technological exercise involving meteorology, chemistry, physics and engineering. All of this technical expertise is available and has been utilized to generate our solution. Can we wet tens of thousands of square FEET of property/fuel? Absolutely.

Can we wet tens of ACRES? Absolutely. And we can do it within 9 minutes after our system has detected and CONFIRMED an approaching wildfire.

Even with the HOW determined, the solution must make economic sense.

Predictably, the solution is not inexpensive when considered as a one time, stand alone cost. No complex solution to a complex problem ever is. But if the elimination of unnecessary loss of life and replacement costs of lost homes and property are considered, and when the system cost is included in new construction pricing or home improvement financing to be amortized over normal mortgage/financing time periods, it is definitely cost effective for those in wildfire prone areas.

There are many factors involved in the specification and design of a system to protect a one acre, single family site or a twenty seven acre, multiple condominium townhome site. Initially, a data sheet/questionnaire will be provided will afford the information necessary to begin determination of the scope and design of a system suitable for the property described in the questionnaire. From that initial design, an estimated cost can be determined. If the estimated cost/price seems appropriate to those seeking such protection and agree that further investigation is warranted, site visits will also be conducted.