## Fire Reduction Policies - by Kay Stewart

My husband and I are OK, this time. We are at risk though, at the end of the dry season any year, when high winds blow, because we live next to Tecolote Canyon. It is a matter of the odds of when we will have a fire in our finger of the canyon. This is one of the hundreds of canyons that carve up San Diego County. You can't build on these steep unstable slopes, so they must be left in vegetation. Fires in that vegetation can impact homes at the edge and up to 1 mile inland; though it is the first 300' from that edge that are most at risk. Thus our WUI is immense. I read one estimate that there are 600 lineal miles of homes next to wildlands. So though we weren't affected this time, it is really just a matter of time. We know it, and I grow cold at the thought. However, we are not just at risk of being victims of the odds. We may be able to change the odds, reduce the risk. I am not a fatalist. That is why I am writing this. Sadly, despite our terrible 2003 fires, and the year of hearings, and a whole slew of ordinances, it is clear that we didn't change public policy and funding of solutions enough to protect people this time around. Some strong conditions were placed on new construction. However, most bureaucracies focused most policy changes on further reducing fuel in open space.

For starters, whatever is growing in those canyons, and things will grow, some or a lot is "fuel": dead, ready to burn; or standing dry, almost ready to burn. Depending on the kind of vegetation, that fuel may grow huge in a year, or just a little. Intelligent management of the vegetation to create affordable, sustainable low-fuel conditions is argued and debated.

Reducing risk in open space is politically the easiest action, because it is public lands, and public funds could be used, and no politician has to try to impose a cost on a constituent on their land. But very few governments commit even the relatively manageable costs of doing this work, and implementation is poor, and spotty, and often badly done. For instance, even though San Diego made thinning of shrublands (natives) or clearing of fast-growing annuals (exotics) the top priority, the work is poorly funded, resulting in little risk reduction overall. Funding per year to "manage" fuel have dealt with less than 5% of the boundary WUI these past few years.

But most important, wildland fuel management is not the single task needed to reduce wildfire risk significantly. U.C. Berkeley fire lab expert Steven Quarles, who spoke in San Diego in 2004, noted that 60-70% of wildfire risk in California's existing neighborhoods at the WUI is found in structural vulnerability to either firebrands (embers), hot air/wind, or direct flame impingement. He pointed out that risk must be reduced by retrofitting/altering existing structures. Then in addition, risk must be reduced by eliminating flammable structures and maintaining plants inside yards. The remainder of risk is in the wild landscape. All need to be reduced or the odds are high of a structure burning. By the political leadership stating the vegetation is the highest priority for risk management, people have been misled into leaving untouched the huge fire risks in existing structures and yards at the WUI.

An appropriate response to this ranking of risk would be masses of funds to modify existing homes and other structures and site landscaping around the homes on the edge and into communities at least 300' from the WUI, in addition to wildland fuel management. We could very roundly estimate the cost to retrofit windows, roofs, doors, vents, decks, and fences could amount to \$20,000-\$50,000 per home, and with at least 50,000 homes in San Diego, by these estimates, \$100 -\$250 million in loans,

grants, tax relief, etc., would have to be allotted to this purpose. This is a ton of money.

Still, this would be less cost than losses that are piling up this week: if we lose 2,000 homes valued at least \$500,000 each, plus their contents double that loss, and the loss is over \$2 billion. Then there is the loss of productivity of those people whose lives have been devastated by this. This is a truly horrible cost and makes the cost of reducing risks very small by comparison.

Sadly our "individual rights and responsibilities" society has a hard time forging social compacts between communities and its vulnerable members, regardless of the fact that the entire community suffers if a group is harmed. All that has been given to those most vulnerable at the WUI is weak advice to "take action." This advice is given to people who are often in debt to the limit on homes and stretched financially to sustain the cost of living, and isn't even accompanied by good information about materials, methods, and means to reduce structural and yard risk. Without stronger mandates, assistance, or other effective actions, good advice won't solve our communities' needs for protection from catastrophes like the one we are witnessing right now.

It seems we need public grants and low-interest loans to help existing homes reduce fire risk, but I am not sure how to get that message to those who have the power to act on them. In the meantime those who understand risks, like me and my husband, are making individual changes to our homes as much as we can afford, when repairs are required. But that work is partial, and if our neighbors don't do anything, we all are at high risk. Since we have to play the odds in this region, I advocate that we need money to change the odds, and that means spending a lot, and spending it intelligently.

Kay Stewart, landscape architect 2171 India Street Suite A San Diego CA 92101