## Effects of climate change demand resilience

## By Bob Doppelt

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The International Federation of Red Cross and Red Crescent Societies recently announced the formation of the One Billion Coalition for Resilience. The goal is to engage at least one person in every household worldwide in active steps to enhance community resilience.

This initiative is focused primarily on emergency preparedness. The increased understanding that a major earthquake could occur at any time in Western Oregon is a good example of why communities should build resilience.

But resilience also helps people and communities deal with the causes and consequences of child abuse, poverty, joblessness, crime, violence, terrorism and other maladies. And it can help with the urgent need to prepare for the impacts of climate disruption. June and July were the hottest months on record in Western Oregon, and July was the hottest month in recorded history on a global scale.

Due to past and ongoing human activities, the Earth's surface temperatures already have risen about 1.3 degrees above the level of the late 1800s. No matter how quickly society slashes greenhouse gas emissions, temperatures are now sure to increase by at least that much again. And if little is done to cut emissions and protect ecosystems that sequester carbon, temperatures could rise by as much as 8.6 degrees this century, which would have catastrophic effects.

Higher temperatures produce significant damage due to increasing frequency and intensity of storms, droughts, heat waves, wildfires, floods and other extreme weather events. More heat also is boosting the risk of new illnesses and diseases. Research has found that aggression, crime, violence, terrorism and even war tend to increase as temperatures rise. Climate disruption amplifies many of the traumas and toxic stresses people already experience, here in Lane County and globally. These and other issues provide ample reasons to build resilience. However, the goals and methods for building resilience are not as straightforward.

The disaster preparedness field, for example, typically emphasizes hardening infrastructure and developing post-disaster recovery plans. Indeed, these are the main focuses of Red Cross initiative — as well as the Oregon Resilience Plan, which seeks to prepare the state for earthquakes and tsunamis.

The Transition Town movement, which began in England in 2006, is a resilience initiative focused on preparing for peak oil and climate change. It emphasizes community-based approaches to localization and self-sufficiency focused on reducing consumption of raw materials, energy, and fossil fuel and building local food and renewable energy systems. The climate resilience field usually addresses similar issues, along with preparing public health and other systems to deal with the consequences of rising temperatures.

These areas of focus are important, but none build resilience for the psychological and emotional distress caused by climate disruption. A growing body of research by such experts such as Dr. Daniel Aldrich of Northeastern University shows that the most important factor in building resilience for adversity, whether natural or human-caused, is not beefing up infrastructure or other physical factors. It is building the personal skills, social support networks and psychosocial capacities of people.

Think about it: When we experience acute trauma and persistent stress, the capacity to regulate our natural reactions, emotions and thoughts is a key to avoiding self-destructive or socially harmful actions.

In the midst of adversity it is our social support network — including family, friends and neighbors — that provides the emotional sustenance needed to buffer us from stress as well as practical assistance to deal with hardships. Our ability to find meaning, purpose and hope in troubling times is closely linked to the personal skills and strengths we have nourished.

Enhancing these skills and capacities is the key to dealing with natural and human-caused traumas. Launching an initiative to ensure that at least one person in each of the 68,000 households in Eugene and 144,000 households in Lane County is engaged in building resilience could prove extremely beneficial.

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