## Treating Tahoe's West Shore trees

## By Christina Restaino

Last winter marked one of the most severe flu seasons in recent memory. Thousands of people were hospitalized and many died. People with compromised immune systems such as the elderly or young children were hit particularly hard with the flu.

Lake Tahoe's forests are no different.

Just as humans are susceptible to the flu when our immune systems are delicate, forests are more susceptible to pest infestations and other plights when trees' immune systems are weakened by drought. Tahoe forests were clear-cut during the 1800s Comstock mining era. As a result, fire suppression and lack of management allowed these forests to become overly dense, making them even more vulnerable to fire, insects, and disease.

Lake Tahoe agencies have been working to combat this challenge for 15 years.

Since the Angora wildfire of 2007, agencies have treated more than 50,000 acres for hazardous fuels reduction. The largest project covered approximately 10,000 acres to reduce the fire risk in the wildland urban interface where the forest connects to neighborhoods. But there is more work to do, and resource managers at Tahoe are committed to restoring the health of forests throughout the basin.

After five years of extreme drought, the West Shore is at particularly high risk of a high-intensity wildfire. A new approach has emerged to tackle this challenge and to target treatment of 60,000 acres from the lakeshore to the upper forest.

The Lake Tahoe West Restoration Partnership is working to improve the health of our forests in an area at high risk for wildfire. Multiple agencies and stakeholder partners are collaborating on how to boost the immune system of our forests. It started with an overall assessment of general forest health and resilience. The group is studying what optimal health looks like—how dense the forest should be, what healthy wildlife habitats look like, and what tree species are best suited for our forest.

Next, the group identified how far the West Shore forest is from optimal health. Out of this process emerged the Landscape Resilience Assessment—a comprehensive look at the values and services we derive from our forests and how far afield these are from desired conditions.

The Landscape Resilience Assessment found that a majority of the West Shore forest is at risk of high-intensity wildfire or beetle mortality, which usually follows drought. The assessment identified where the least-healthy, least-resilient areas are for forest density, wildlife, and fire risk. The partnership can now use this information to help target areas for improved resource management.

The Lake Tahoe West group is also working on a Landscape Restoration Strategy to outline and communicate the why and how of forest restoration goals and activities. Strategy development is occurring alongside a detailed, science-based modeling initiative to understand how different forest treatments affect attributes like fire risk, wildlife habitat, air quality, and water quality. This modeling work is considering landscape-level dynamics and will help the group sketch out solutions that match the scale of the problem. Partners will complete the Landscape Restoration Strategy in the fall of 2018 and project-scale planning will begin. Lake Tahoe West has involved stakeholders and helped land management agencies partner with communities to find solutions to our most pressing problems. This collaboration will help forest managers create more resilient forests while improving recreation, wildlife habitat, and scenic quality. For more information, go **online**.

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