

### *Adaptation Strategies to Promote Forest Health and Community Safety Along Critical Routes*

Date/Time/Session: **WEDNESDAY, 5.01.2019, 4:15:00 PM, in the UTILITY FORESTRY session**

Presentation Length: **45 minutes**

Presented by: **Amber Krebbers**

Co-Presenter (if scheduled): **Lisa A. Worthington**

#### **Overview of Presentation:**

California's accelerated decline of millions of acres of mixed conifer forests was initially triggered by extended drought-stress over a five-year period (2014-2018), which exposed the vulnerable stands to multiple pest infestations. The concentration of forest mortality within 10 of California's 58 counties, specifically the Sierra Nevada mountain range has now expanded northward and into the coastal ranges. Although mortality indicators are stabilizing in 2019, the scientific community is engaged at the watershed-scale to address immediate, catastrophic wildfire and long-term forest health. The task at hand is to refine and implement a statewide forest health strategy that leverages Arborists and technical experts, communities, and agencies to ensure fuels treatments are conducted at the edge of communities to reduce severe wildfire risk, and collaboratives are enabled to implement long-term forest recovery. Removal of hazardous trees and prescribed thinning to reduce fuels along critical transportation rights-of-way are vital for safe public travel, access by emergency responders and to create a wider safety zone as "Defensible Space Along Highways." In a review we will look at California Department of Transportation (Caltrans) role in collaboration with Davey Resource Group to prioritize routing based on mortality spread, density and highways impacts. Innovative public messaging and landowner outreach focuses on bark beetle identification, tree health and disposition to assets, as well as sustainable wood utilization and debris management.



#### **Presenter Bio:**

Amber Krebbers is an Area Manager with Davey Resource Group, Inc. managing Natural Resource Management in the Western Region. Her team provides environmental consulting services for utility, renewable energy, and infrastructure development projects including biological, ecological, Integrated Vegetation Management, restoration, mapping and planning services. Amber is responsible for business development, client and project management, and a team of biologists, foresters, and restoration specialists in the western states including California, Texas, Washington, and Oregon. Amber is an International Society of Arboriculture (ISA) Certified Arborist with the Utility Specialist designation (WE-7794AU) and National Association of Landscape Professionals (NALP) certified, CLT and a member of Western Chapter ISA, Utility

Arborist Association, NALP and California Native Plant Society. Ms. Krebbers joined Davey Resource Group, Inc. in 2006 and holds a Bachelor of Science degree in Ornamental Horticulture from California Polytechnic State University, San Luis Obispo.

Lisa Worthington is a licensed Senior Landscape Architect for the State of California, Department of Transportation (Caltrans). Lisa manages the new Forest Management Program in Caltrans HQ Division of Maintenance from the state capitol in Sacramento, California. Her area of responsibility is the linear forest edge within nearly 60,000 miles of scenic and urban state highway roadside. This expansive highway system in California links fourteen widely diverse eco-regions and provides access to all 18 national forests in the state. The Forest Management Program has accountable oversight of \$155 M of direct contracts and consultant services to address dead and dying hazardous trees, associated declines in forest health due to extended drought, and increasing vulnerability and fire risk to highway assets and adjacent communities.

The Forest Management Program is strategically planning to split the program focus in 2019 – 2020 into Pre-Fire and Post-Fire program areas. Pre-Fire projects are envisioned to address the urgent need to thin dense forest stands along public roads using a density and species prescription to form Defensible Space Along Highways. Post-Fire activities include immediate triage to prevent erosion and identifying vulnerabilities unique to burn areas. Caltrans is implementing Weather-Responsive Management Strategies, which looks at rain data, the rate of vegetative recovery, and the associated likelihood of debris flows, flooding and landslides in burn areas to pro-actively close highways and minimize risk to public safety during wet winter weather for 2-5 years following a catastrophic wildfire. Lisa has a total of twenty-seven (27) years of combined work experience in forest management (3), landscape architecture (11) and regional/environmental planning (13) in the private and public sector, with a focus on watershed-scale policy and project management. Lisa holds a Master's degree in Landscape Architecture from California State Polytechnic State University, Pomona and a Bachelor of Arts degree in Planning from University of Pennsylvania, Philadelphia.

