**Presentation Abstracts**

**Prescribed Burning in Soquel Demonstration State Forest: How good fire can improve forest health and community safety**

**Tuesday, October 25th, 2022**

 **6:00-7:35pm**

**Angela Bernheisel:** Soquel Demonstration State Forest, Fuel Management and Wildfire Resilience

**Abstract:** The Soquel Demonstration State Forest (SDSF) is part of CAL FIRE’s Demonstration State Forest Program. Demonstration State Forests are managed for sustainable timber production, resource protection and enhancement, demonstration and education, research and public recreation. SDSF is unique due to its proximity to urban populations which provides opportunities to large numbers of people for education programs and community demonstrations. Addressing the wildfire problem and fuel buildup within California forests must occur at an increased pace and scale to create forests more resilient to climate change and wildfire effects. SDSF is working on strategic projects across the forest to increase wildfire resilience and forest health using the latest regulatory tools and incorporating state of the art research. The first broadcast burn since the forest was established is planned to occur at SDSF this fall. A vast amount of preparatory work and planning has gone into this project. One of the important goals of the project is to provide robust information and learning opportunities about this process for the community and stakeholders surrounding the Forest.

**Brett Agler:** Prescribed Burn Implementation

**Abstract:** Once a burn plan is in place there is still a great deal of planning and preparation that needs to happen before that plan can be implemented. As VMP Forester it is my job to coordinate with the key players and stakeholders to take a close look at the project area and environmental setting to determine the logistics and feasibility of burning the units successfully. Considerations concerning weather, smoke management, timing, resource availability, safety, and notifications are closely examined before the prescribed burning can be initiated. Several permissions and authorizations must be obtained, and a series of criteria must be met in order to ensure a safe and successful operation.

**Matthew Mosher:** Environmental Impact Analysis and Positive Environmental Benefits of Prescribed Fire

**Abstract:** There are many categories of potential environmental impacts which must be comprehensively analyzed and mitigated for in preparation of prescribed fire projects. Additionally, prescribed fire is often referred to as “good fire”, as when properly executed it provides substantial benefit to local species and ecosystems which have evolved with fire. This brief talk will discuss how CAL FIRE analyzes and mitigates for environmental impacts, as well as the positive ecological effects of returning fire to the landscape.

**Joe Restiano:** Prescribed Fire Research and Monitoring at Soquel Demonstration State Forest

**Abstract:** Through the California Climate Investments program, the CALFIRE Forest Health Research Program (FHRP) supports scientific studies that provide critical information and tools to forest landowners, resource agencies, fire management organizations and policy makers across California on a variety of topics related to forest health and management. In 2021, the FHRP successfully funded a project entitled, “Understanding the costs and limits of vegetation management for wildfire mitigation in coastal California: a comprehensive ecological and economic study at the Soquel Demonstration State Forest. (PI: Dr. Richard Cobb, California Polytechnic University San Luis Obispo).” In this webinar, I will summarize the framework of that study, which is designed to quantify fuel treatment effects to: above- and below-ground carbon, transpiration and stream outflow - and will also deliver an economic and policy analysis on vegetation management and wildfire mitigation. In my presentation, I will also discuss how this critical work at Soquel DSF relates to ongoing and planned work in the Central Coast Region and its contribution to statewide goals for prescribed fire monitoring, and the increased use of prescribed fire.