

Title: Recently Updated Missoula Fire Sciences Lab Educational Programs and Applications: FireWorks, First Order Fire Effects Model and FuelCalc.

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Workshop: We will present three recently updated Missoula Fire Sciences Lab products: FireWorks, Fire Effects Information System, First Order Fire Effects Model and FuelCalc. This workshop will provide overview and live demonstration of each product and a description of new content.

FireWorks is an educational program that uses hands-on activities to teach about wildland fire behavior and effects. Modules in the program address combustion, fuel properties, fire history, succession, plant and animal adaptations to fire, and management questions. This workshop will review fire science concepts while learning new techniques for engaging students and the public in discussions about science and wildland fire. (45 min.)

FOFEM: The First Order Fire Effects Model is a nationally applicable, interagency application designed to simulate fuel consumption, emissions, soil heating and tree mortality. It was developed to meet the needs of resource managers, planners, and analysts in predicting and planning for fire effects. FOFEM uses a physics-based process model, empirical relationships and heuristic information to accurately simulate treatment effects. (1 hr 30 min.)

FuelCalc is a tool for resource managers, planners, and analysts for simulating the effects of fuel treatments on canopy, surface and ground fuel loading. Treatment options include thinning, pruning, piling, and broadcast burning. Numerous inputs let the user tailor the simulated treatments to specific project objectives. Changes in the fuelbed are presented after each treatment is applied. Model outputs include stand metrics such as trees per acre and basal area, and fuel assessments such as canopy base height, canopy bulk density, and surface fuel load. (1 hr 30 min.)

Length: 4 hours

Minimum Number: 5

Maximum Number: 45

Special Needs: Two tables

Costs: No additional cost