

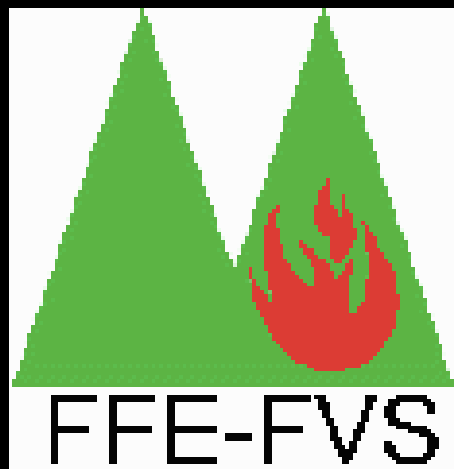
***User Access to the
Forest Vegetation Simulator-Fire,
Fuels, and Nutrient Budget
Extensions***

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Rocky Mountain Research Station
Moscow
April 8, 2003**

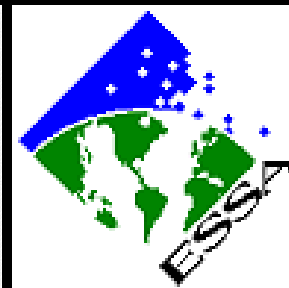
Contents

- Key components
 - Forest Vegetation Simulator
 - Fire and Fuels Extension
 - Nutrient Budget (new idea)
- Support for FVS
 - Access
 - Training
 - User support

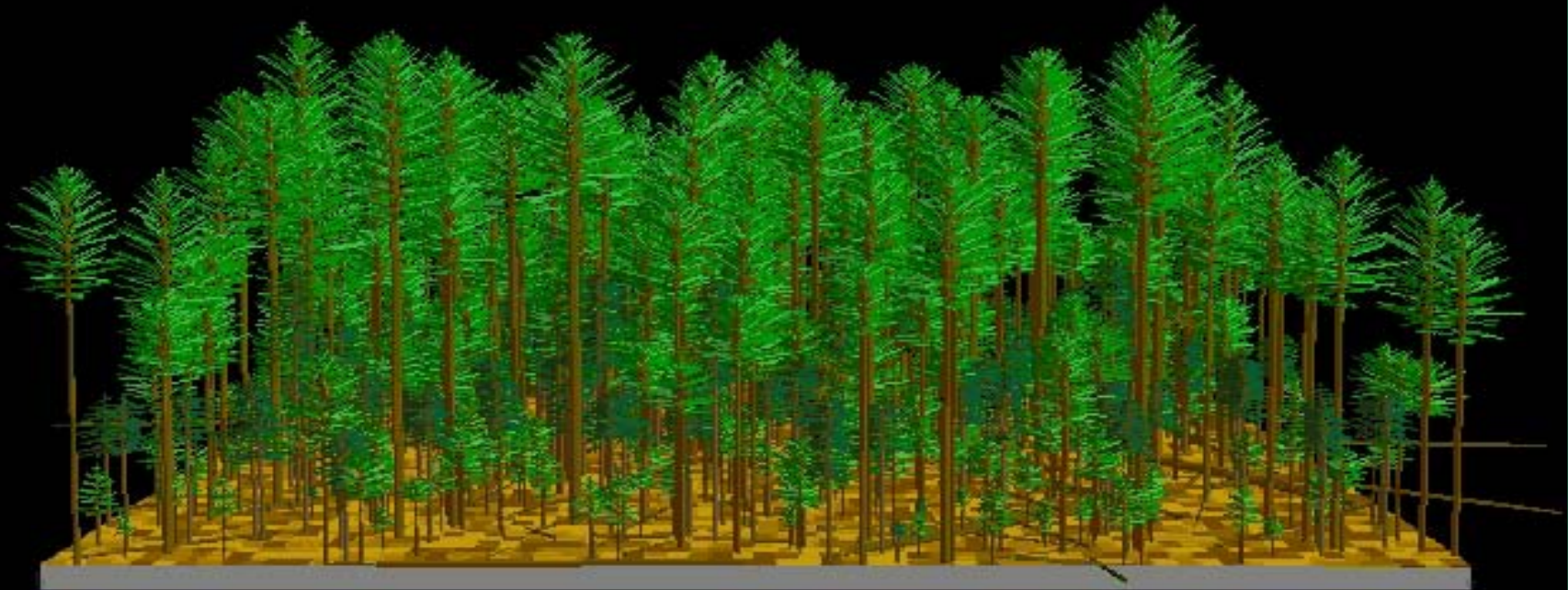
Fuels and Fire Effects Extension to the Forest Vegetation Simulator



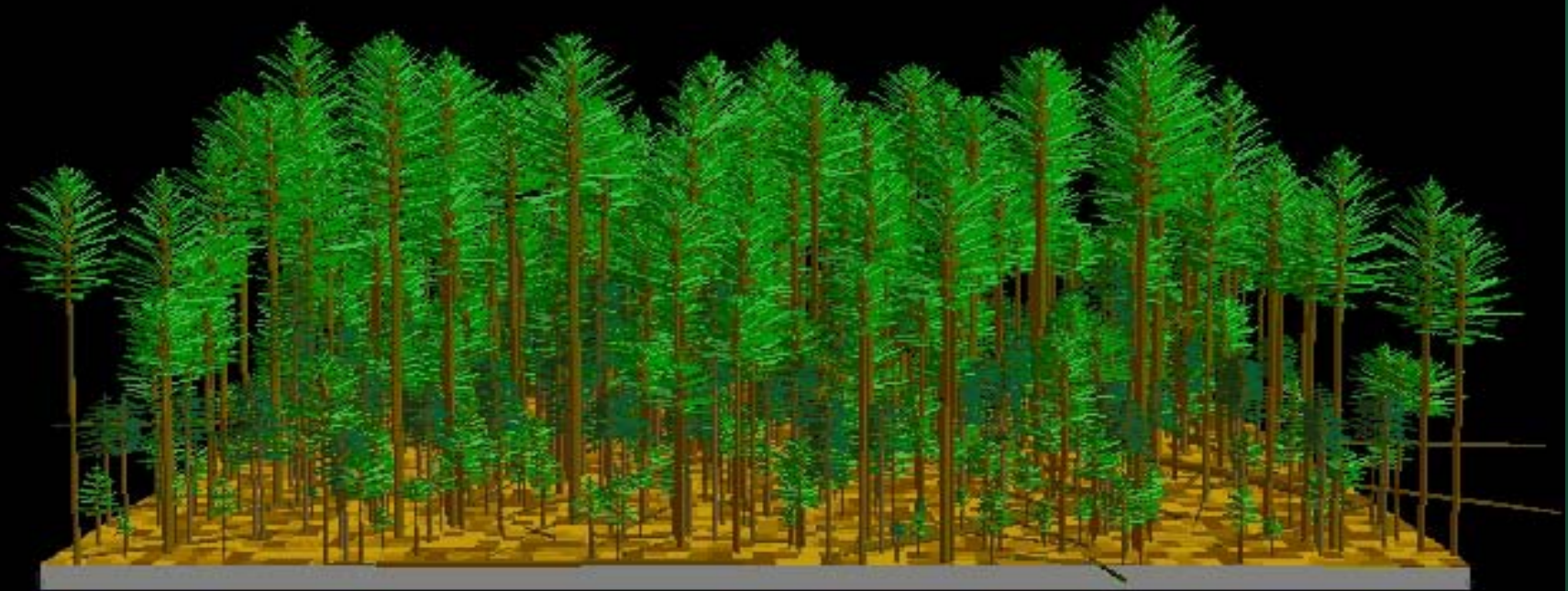
Nicholas Crookston
Elizabeth Reinhardt
Stephanie Rebain
Don Robinson



Wildfire in 2035



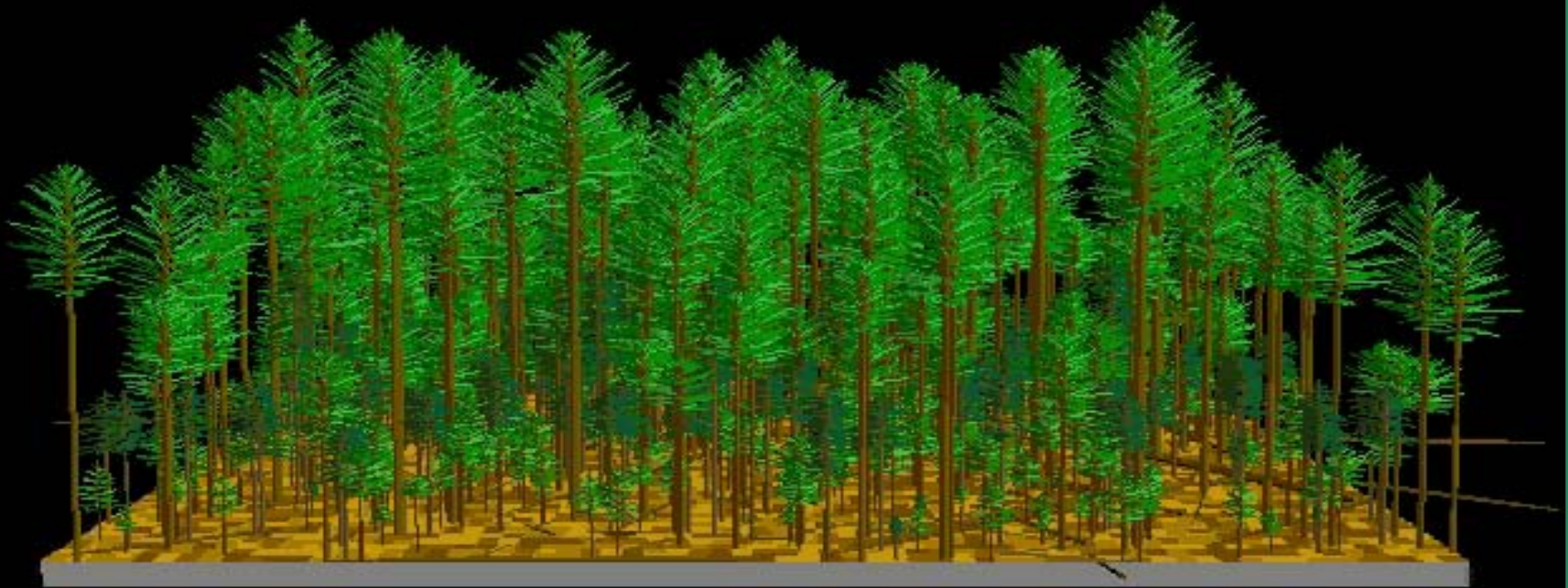
Underburn Now, Wildfire in 2035



FVS - Nutrient Budget Extension



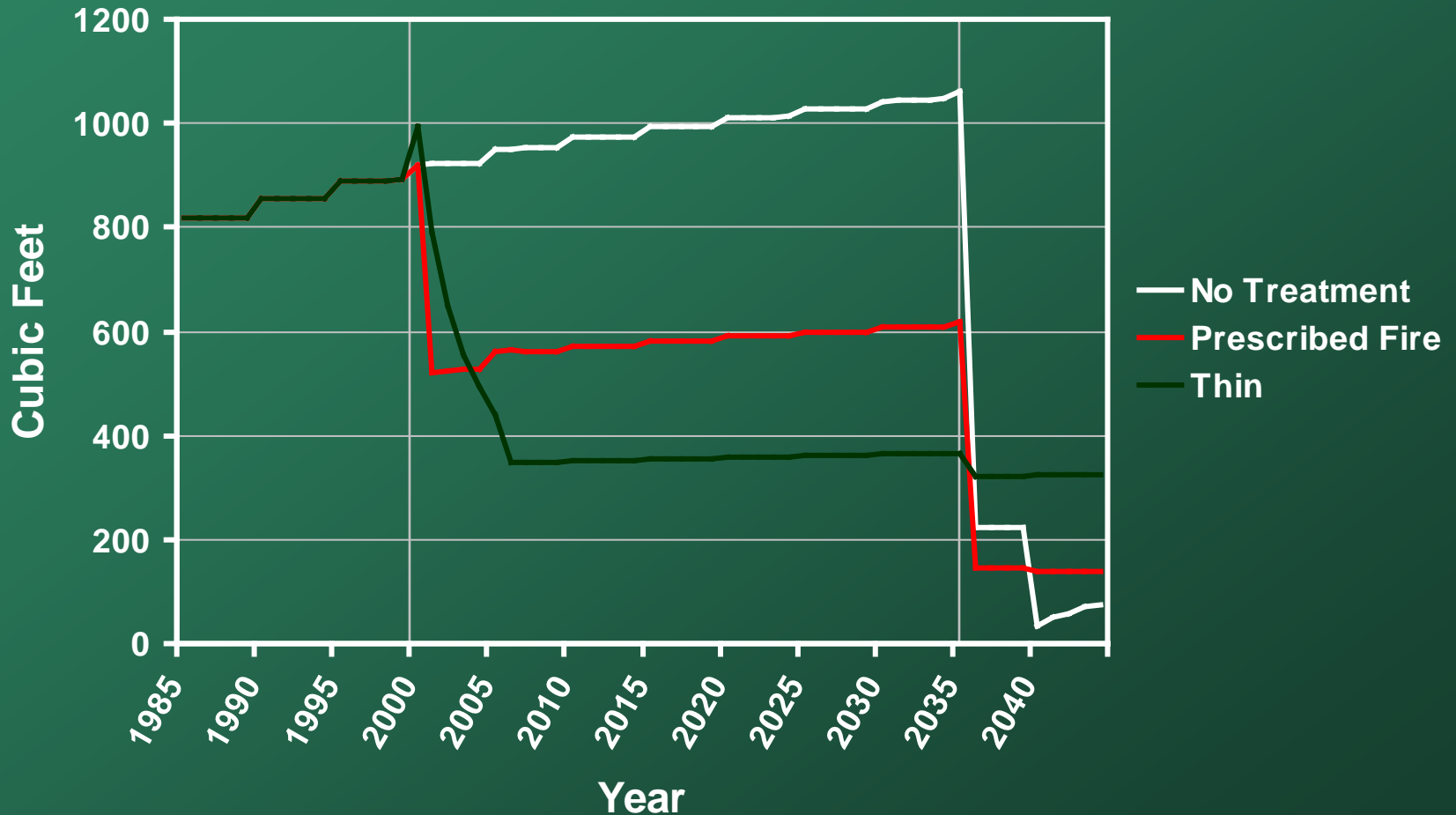
Thin Now, Wildfire in 2035



FVS - Nutrient Budget Extension



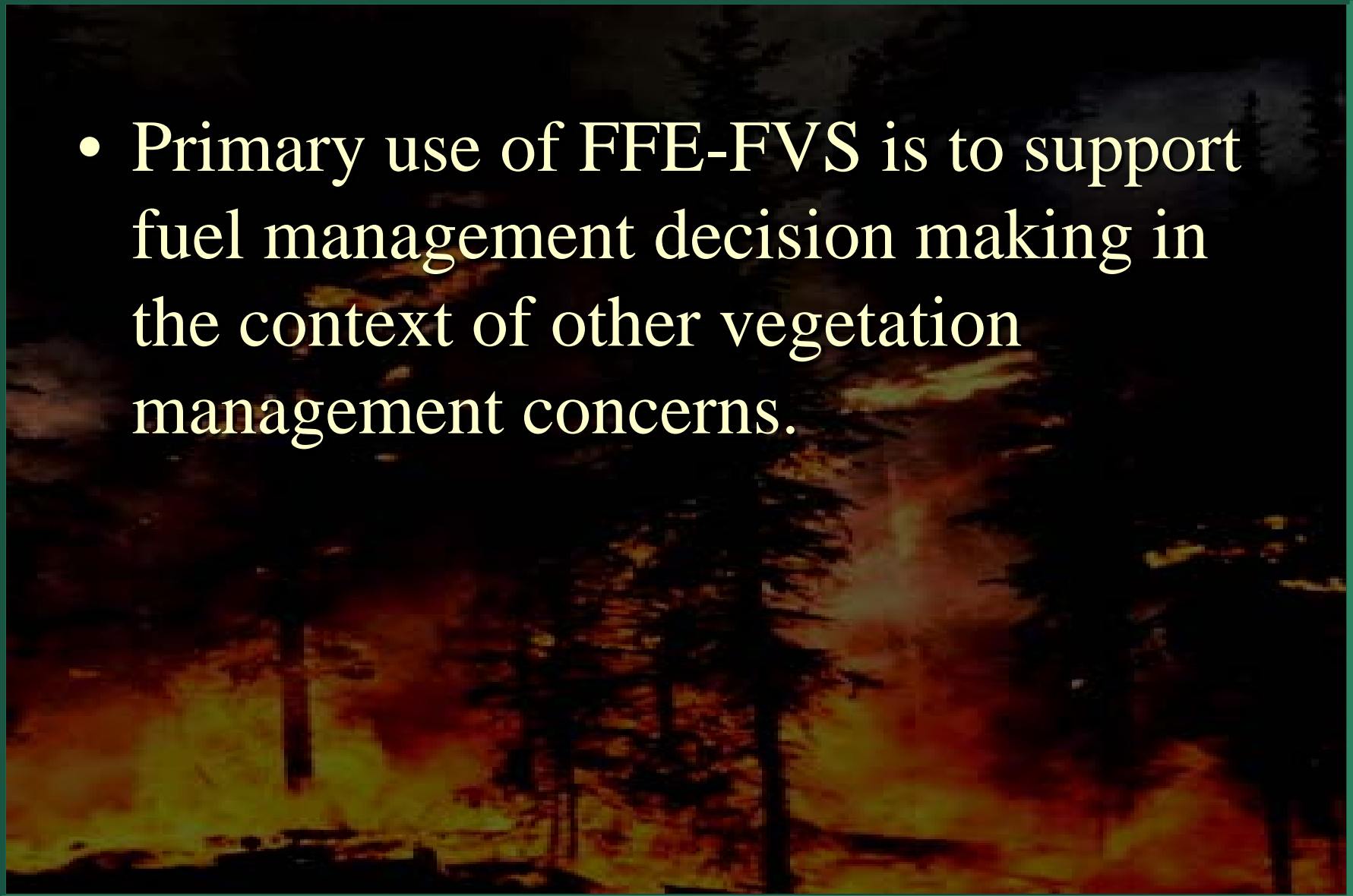
Potential Mortality



FVS - Nutrient Budget Extension



- Primary use of FFE-FVS is to support fuel management decision making in the context of other vegetation management concerns.



FVS components

- Individual-tree distance independent stand growth model.
- Variables include:
 - Trees: Species, DBH, Height, crown length
 - Stands: Site productivity
- Extensions represent insect and pathogen dynamics.

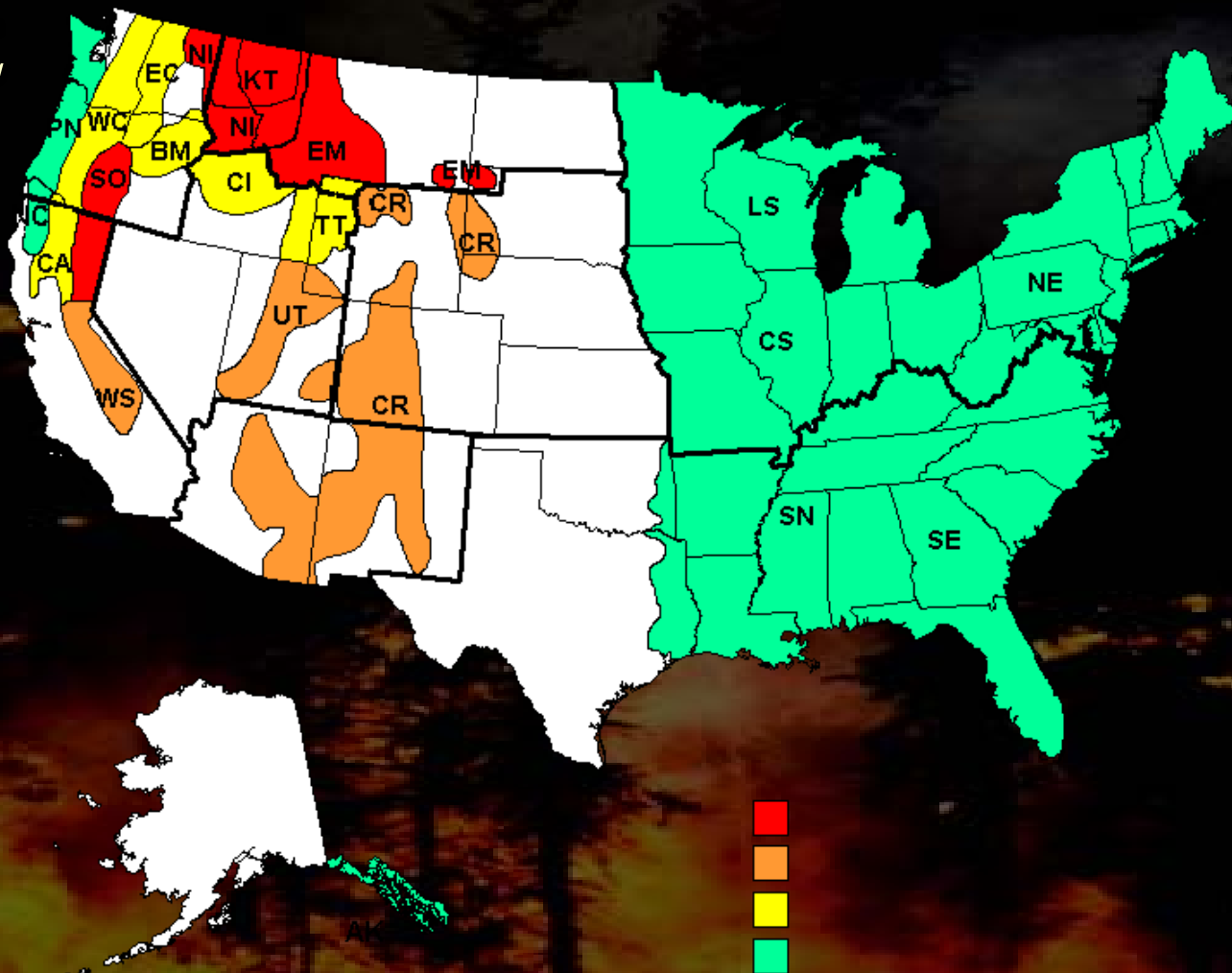
FFE components

- Snag breakage and fall down
- Down wood accumulation and decomposition (weights of duff, litter, and several size classes)
- Fire behavior (Behave)
- Fire effects (FOFEM and CONSUME)
- Crowning (NEXUS).

FVS - Nutrient Budget Extension



FVS-FFE Variants



Nutrient Budget Extension-

- Given that we are modeling most of the vegetation components in FVS, it seems possible to add the coop's information about nutrients to this system.
- Peter Mika and Mariann Johnston will talk about that work.

FVS - Nutrient Budget Extension



Support, training, and program distribution

**USDA Forest Service
Forest Management Service Center
Fort Collins, CO
Phone: 970-295-5770**

<http://www.fs.fed.us/fmsc/fvs>

FVS - Nutrient Budget Extension



Nutrient Concentration

N P or K?

