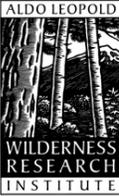


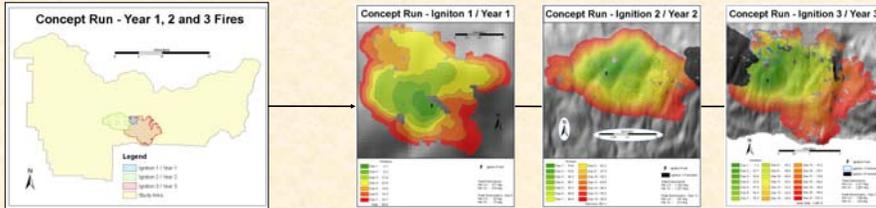
Retrospective fire modeling to quantify the cumulative effects of suppression

The Aldo Leopold Wilderness Research Institute
Missoula, Montana

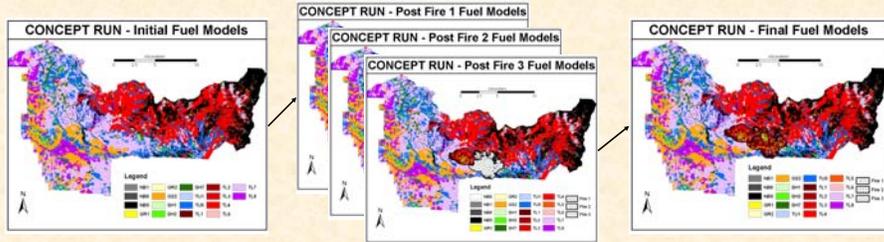


Yosemite and Sequoia-Kings Canyon NPs need to understand and track the consequences of fire suppression decisions. To address this need we are using retrospective fire behavior modeling and risk-benefit assessments.

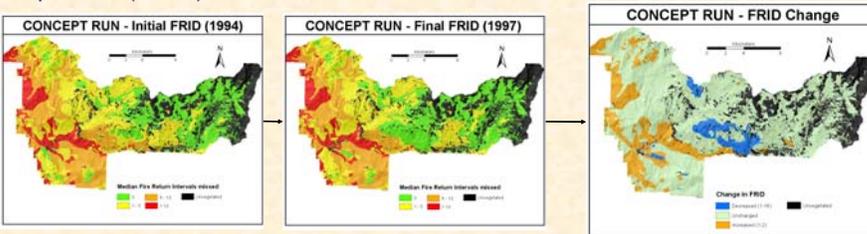
Step 1: Determine where lightning-ignited fires would have spread had they not been suppressed using FARSITE modeling and actual weather conditions.



Step 2: Determine what the effects of those fires may have been on landscape characteristics (e.g. Fuel Type).

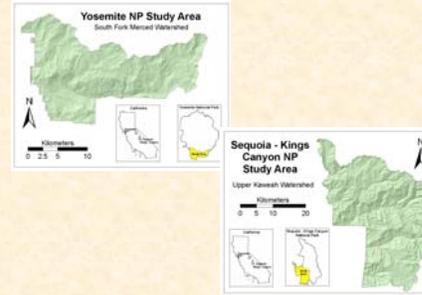


Step 3: Determine the cumulative impacts of suppression on Fire Return Interval Departure (FRID).

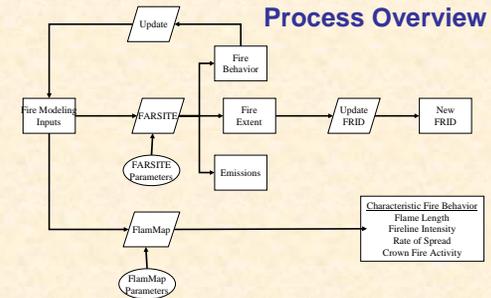


Step 4: Develop a guidebook so fire management staff can update the cumulative analysis on their own.

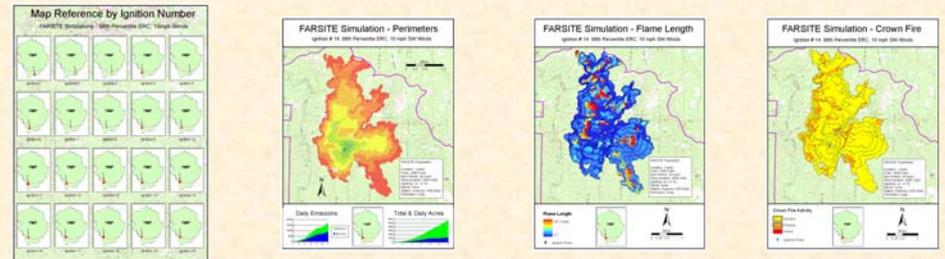
Study Areas



Process Overview



Corollary Objective: Map Library of potential fire spread. Uses theoretical ignition points and various weather scenarios. Useful for supporting decision making on future incidents (e.g. defining MMAs)



Research Team

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- Michael Beasley, Fire Use Manager, Yosemite National Park, National Park Service
- Tony Caprio, Fire Ecologist, Sequoia-Kings Canyon National Park, National Park Service
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