

Vegetation: Current and Desired Conditions

Considerations:

- Left alone, seeding and successful regeneration of trees will be rare within large high-severity patches
- Shrub growth (from sprouting and seeds) with likely be extensive
- To re-establish forest, tree (pine) seedlings will need to be favored, planted and protected
- Protection is reducing fire extent and severity until regenerating trees have higher fire resistance (for pine \approx 40-65 yrs depending on growth rates)
- After that period, managed wildfire and prescribed fire may be the most effective means of increasing a tree's fire resistance



Management practices measured against historic disturbance: temporal, spatial and biological legacies

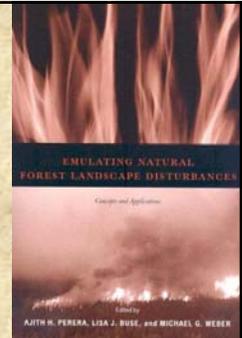
Legacies important for ecosystem recovery

Traditional focus is on CWD: logs and snags

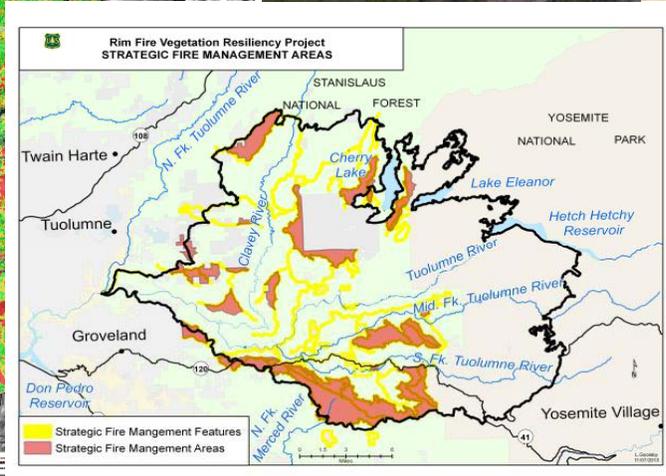
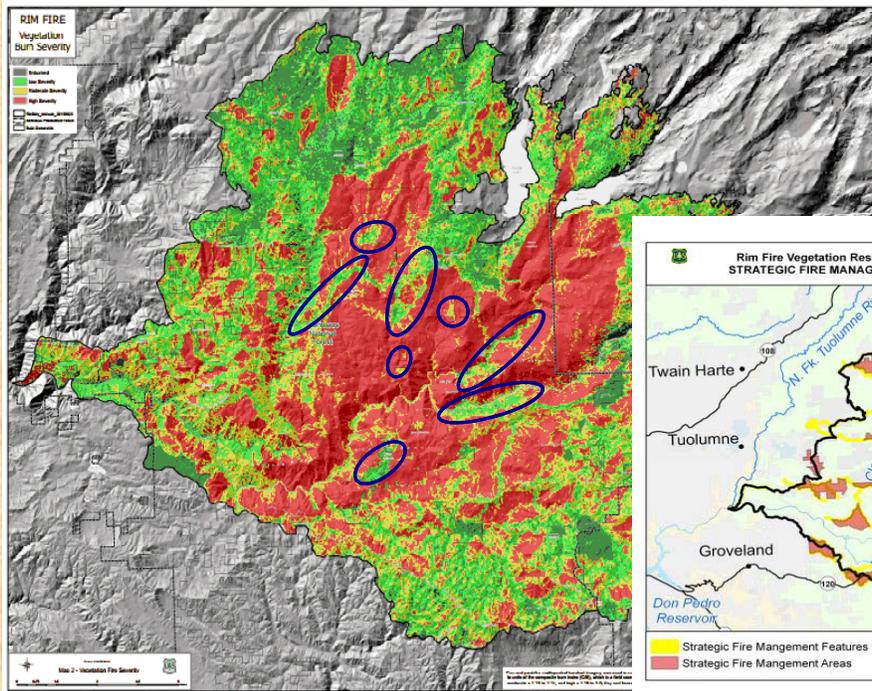
However in frequent fire forests, its not clear how long CWD persisted (Ritchie et al. 2013)

In the Rim Fire, green trees may be the most important biological legacies

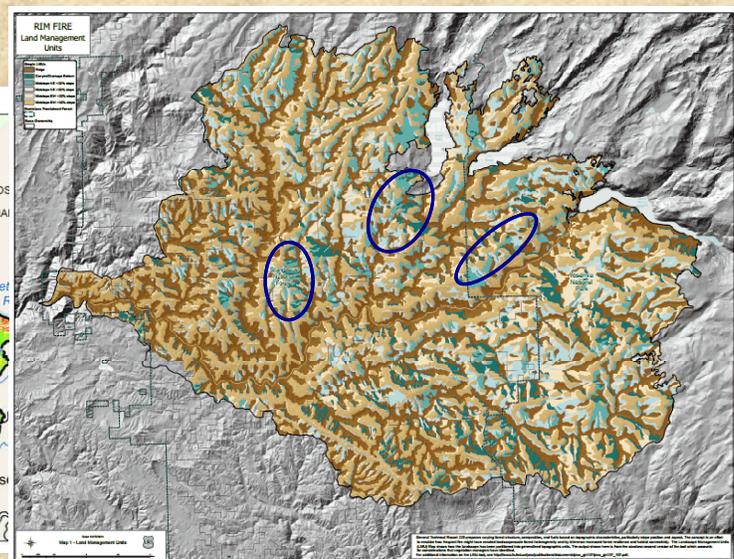
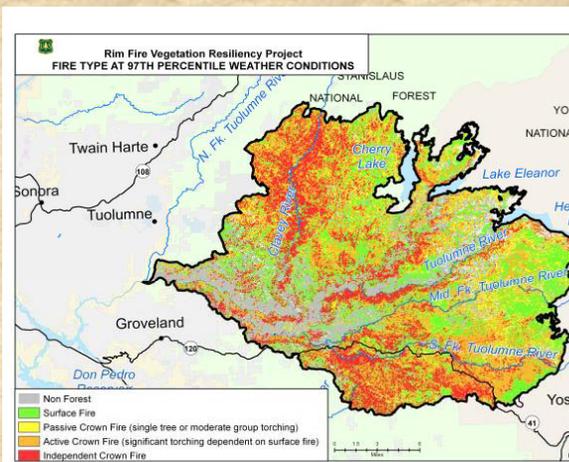
- How best to retain and minimize impacts to individual and patches of live trees?



Green trees in low and moderate severity patches within the high-severity blocks are important nuclei for tree regeneration and provide contrasting habitat: Protect with network of 'Fire Management Features and Areas' rather than fuels treatments within these patches



“When considering reforestation, topography and fire severity patterns are crucial” Rim Fire: Vegetation Resiliency Project



General approach: vary density and species with topography

2 planting strategies (R&K):

- Foundational forest: low density of widely dispersed regeneration clusters
- Nucleation: ‘safer’ sites invested with planned re-entry/maintenance