

Governor's Drought Interagency Coordinating Group
November 10, 2011

Forest Health Update



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Forest Health & Wildfires

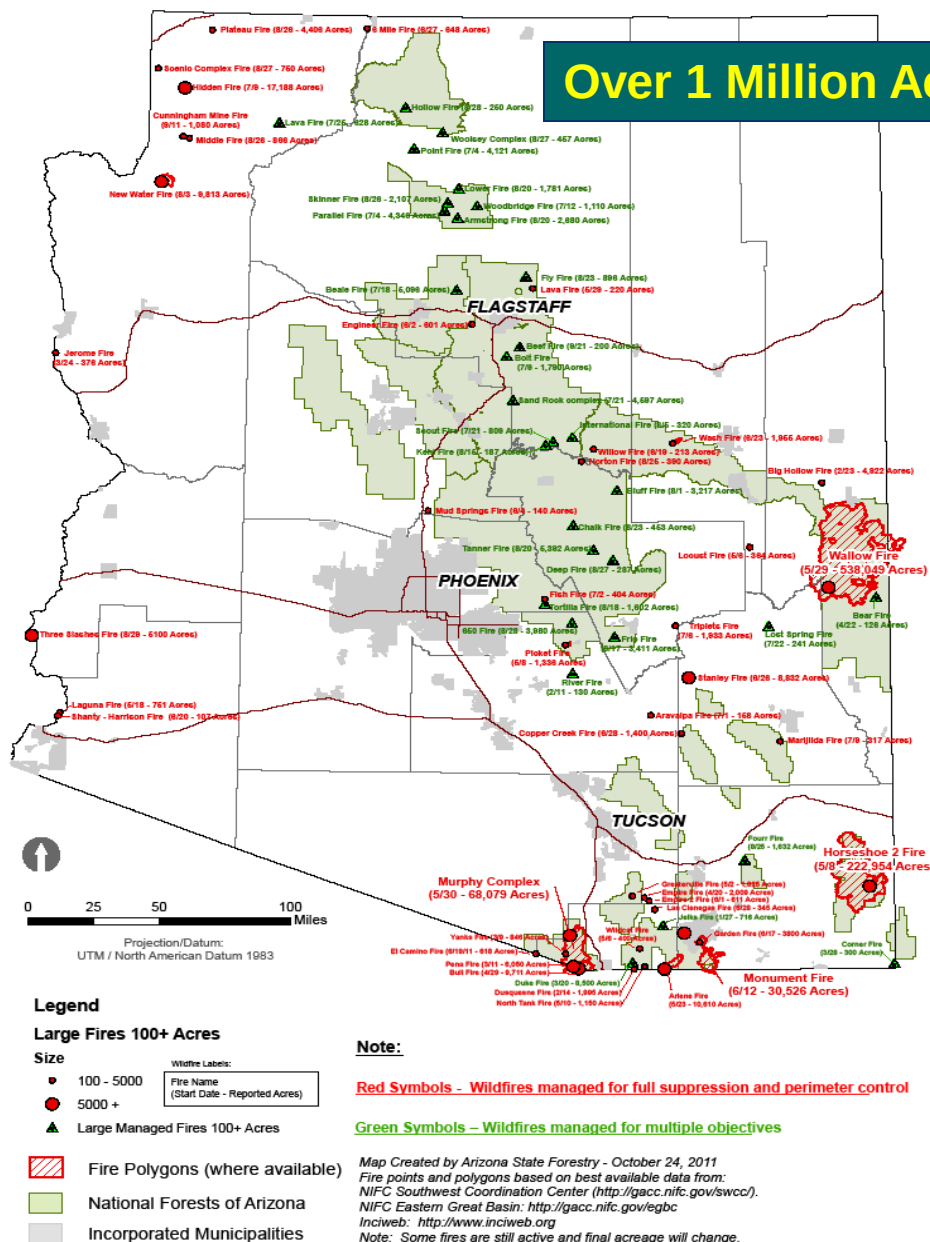
- ◆ Wildfires had the largest impact on forest health in 2011.
- ◆ Wildfires are usually considered a natural disturbance agent affecting the health of many vegetation types (chaparral, woodlands, forests).
- ◆ However, the human-caused fires experienced in 2011 are considered unnatural, mainly due to their size and intensity.
- ◆ Fire suppression, grazing and forest management practices the last 150 years, have produced very unhealthy and flammable forests and woodlands.

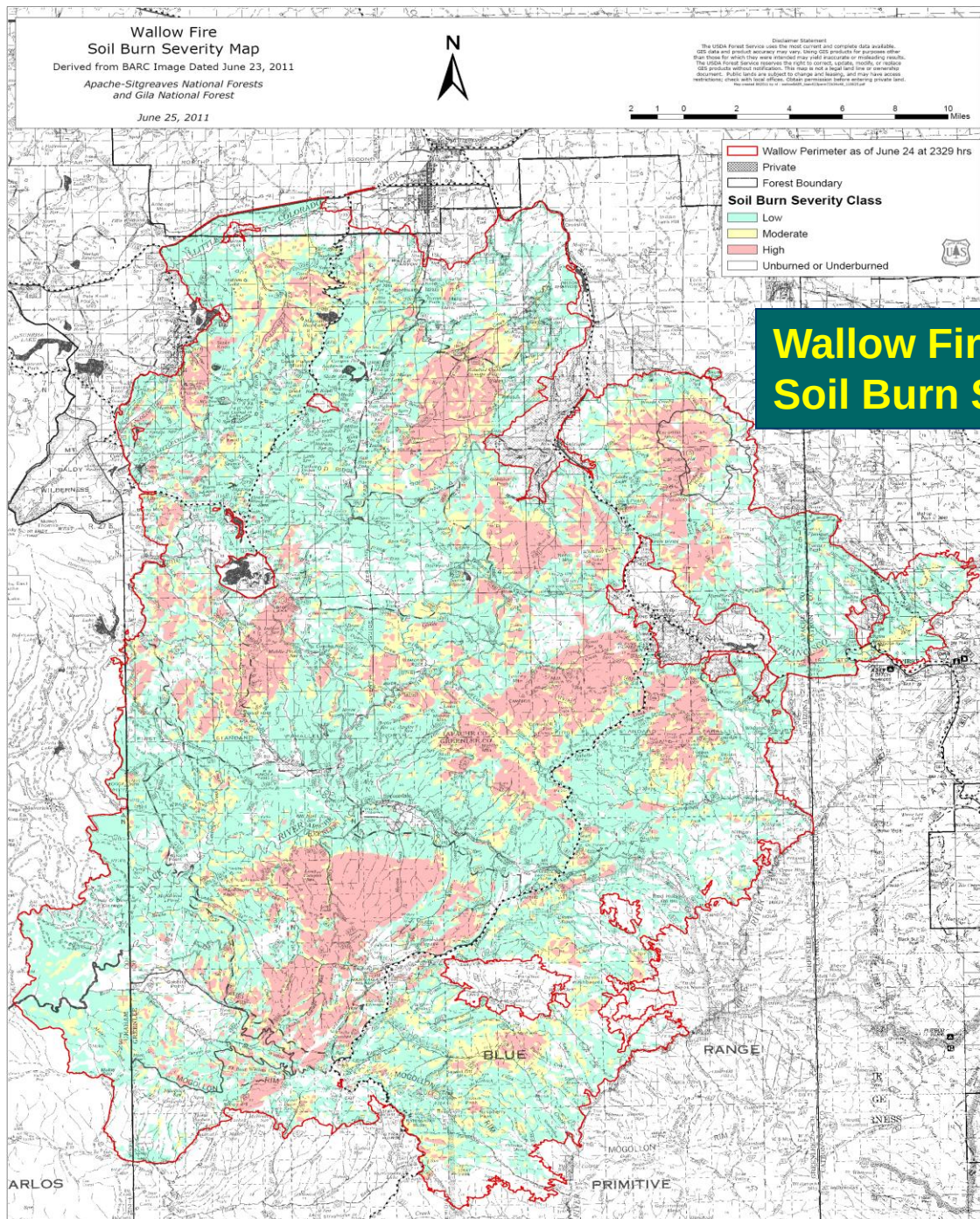


ARIZONA LARGE FIRES

January 1 to October 7, 2011

Over 1 Million Acres Burned in 2011





**Wallow Fire
Soil Burn Severity Map**

538,049 Acres Affected = About 841 Square Miles





Escudilla Mountain Lookout 6/21/2011



Before 6/28/2007



Greer, Arizona

After 6/21/2011

- ◆ 38 Structures destroyed mainly in Greer



Greer, Arizona



Ponderosa Pine Vegetation Type: 2-10 Years Fire Frequency



**Estimated 16 million
mature ponderosa
pines killed by fire**

Severe Soil Erosion



Mixed Conifer Vegetation Type: 5-25 Years Fire Frequency



Mixed Conifer Vegetation Type: Abnormal Burn Severity

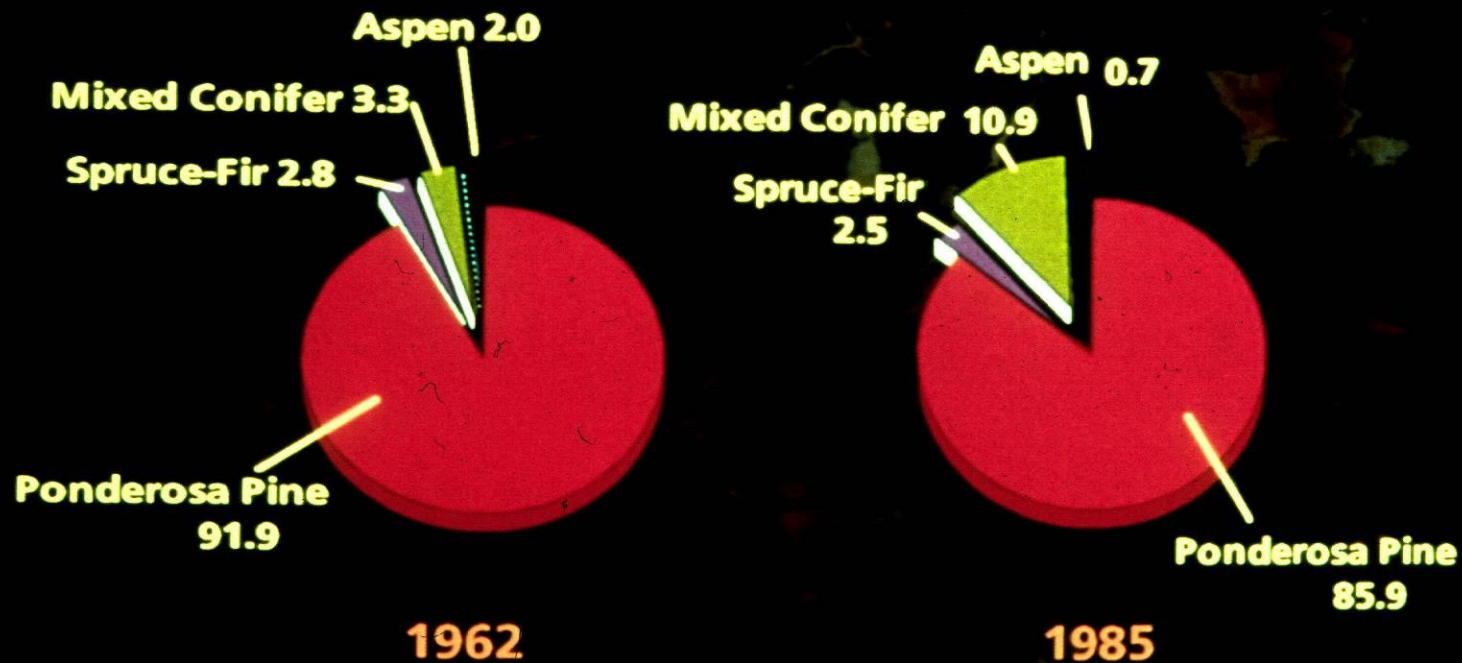


Mixed Conifer Vegetation Type: Burn Mosaic



Aspen Decline

Changes in Species Composition on Arizona Forests



- 95% Mortality observed at around 7500'
- 61% mortality 7500'-8500'
- 16% mortality above 8500'



Causes: Frost, Drought, Defoliation by western tent caterpillars & lack of fire

Post-fire aspen regeneration



Spruce-fir Vegetation Type: 150+ Years Fire Frequency



Horseshoe 2 Fire-Chiricahua Mountains

222,954 Acres = 350 Square Miles



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