

Governor's Drought Interagency Coordinating Group

November 10, 2011

Forest Health Update



Bob Celaya, Forest Health Specialist

Arizona State Forestry Division

Forest Health & Wildfires

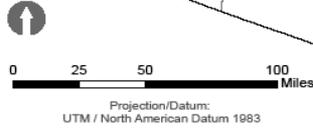
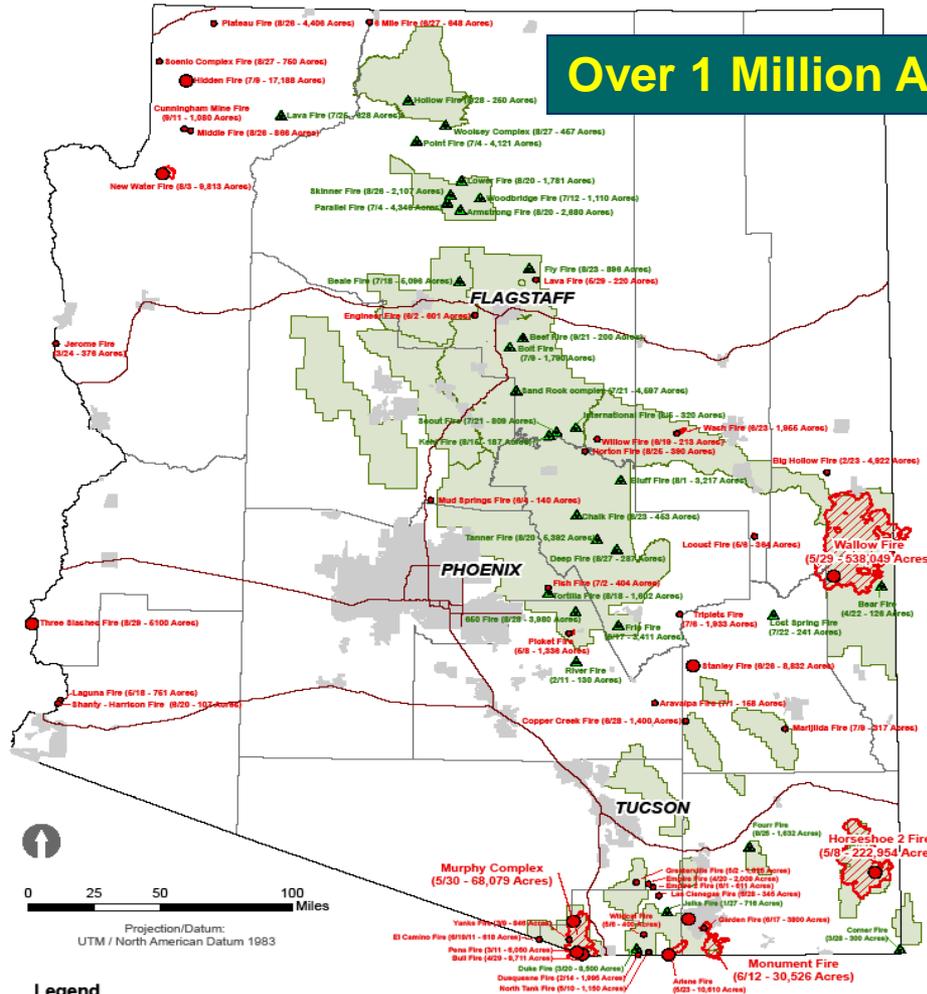
- ◆ Wildfires had the largest impact on forest health in 2011.
- ◆ Wildfires are usually considered a natural disturbance agent affecting the health of many vegetation types (chaparral, woodlands, forests).
- ◆ However, the human-caused fires experienced in 2011 are considered unnatural, mainly due to 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



Legend

Large Fires 100+ Acres

- Size**
- 100 - 5000
 - 5000 +
 - ▲ Large Managed Fires 100+ Acres
- Wildfire Labels:**
- | | |
|---|--|
| ● | Fire Name
(Start Date - Reported Acres) |
|---|--|

- Fire Polygons (where available)
- National Forests of Arizona
- Incorporated Municipalities

Note:

Red Symbols - Wildfires managed for full suppression and perimeter control

Green Symbols - Wildfires managed for multiple objectives

Map Created by Arizona State Forestry - October 24, 2011
 Fire points and polygons based on best available data from:
 NIFC Southwest Coordination Center (<http://gacc.nifc.gov/swcc/>).
 NIFC Eastern Great Basin: <http://gacc.nifc.gov/egbc>
 Inciweb: <http://www.inciweb.org>
 Note: Some fires are still active and final acreage will change.

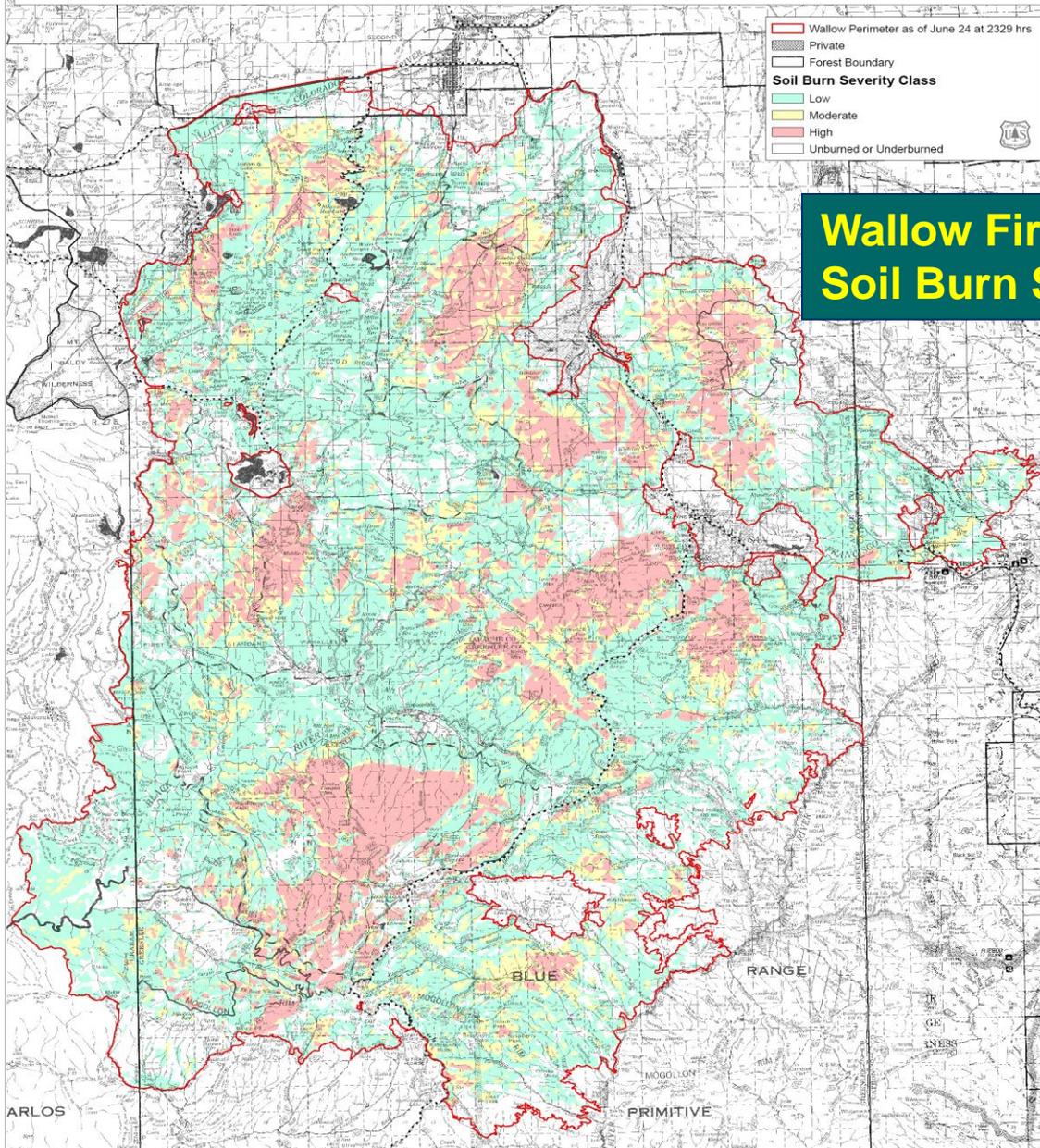
Wallow Fire
Soil Burn Severity Map
Derived from BARC Image Dated June 23, 2011
Apache-Sitgreaves National Forests
and Gila National Forest
June 25, 2011



Disclaimer Statement
The USDA Forest Service uses the most current and complete data available. GIS data are provided "as is" without warranty, including any accuracy, reliability, or completeness. The USDA Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. This map is not a legal document. Public lands are subject to change and leasing, and may have access restrictions; check with local offices. Other agencies have separate jurisdiction.



- Wallow Perimeter as of June 24 at 2329 hrs
- Private
- Forest Boundary
- Soil Burn Severity Class**
- Low
- Moderate
- High
- Unburned or Underburned



Wallow Fire
Soil Burn Severity Map

538,049 Acres Affected = About 841 Square Miles



Alpine, Arizona 6/21/2011



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

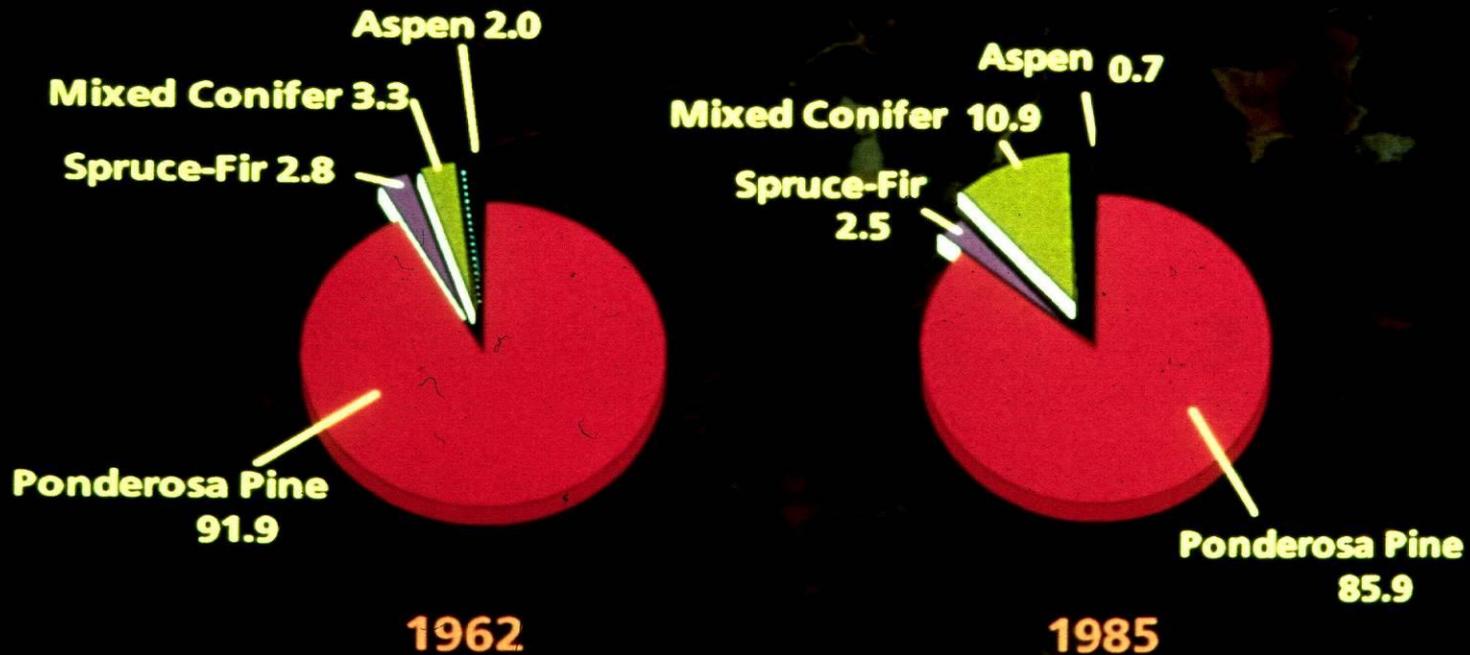


Mixed Conifer Vegetation Type: Burn Mosaic



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



**Bob Celaya, Forest Health Specialist,
Arizona State Forestry Division
bobcelaya@azsf.gov
602-771-1415**

