

Governor's Drought Interagency Coordinating Group

November 1, 2010

# *Forest Health and Wildfire Activity*



Scott Hunt, Acting State Forester

Bob Celaya, Forest Health Specialist

*Arizona State Forestry Division*

# Drought/Weather Effects on Wildfire

- Wet years, particularly consecutive wet years bring higher fire potential to lower Arizona deserts due to increased annual vegetation production
- Wet years are generally favorable to our higher elevation vegetation types (chaparral, woodlands, forests)



# Drought/Weather Effects on Wildfire

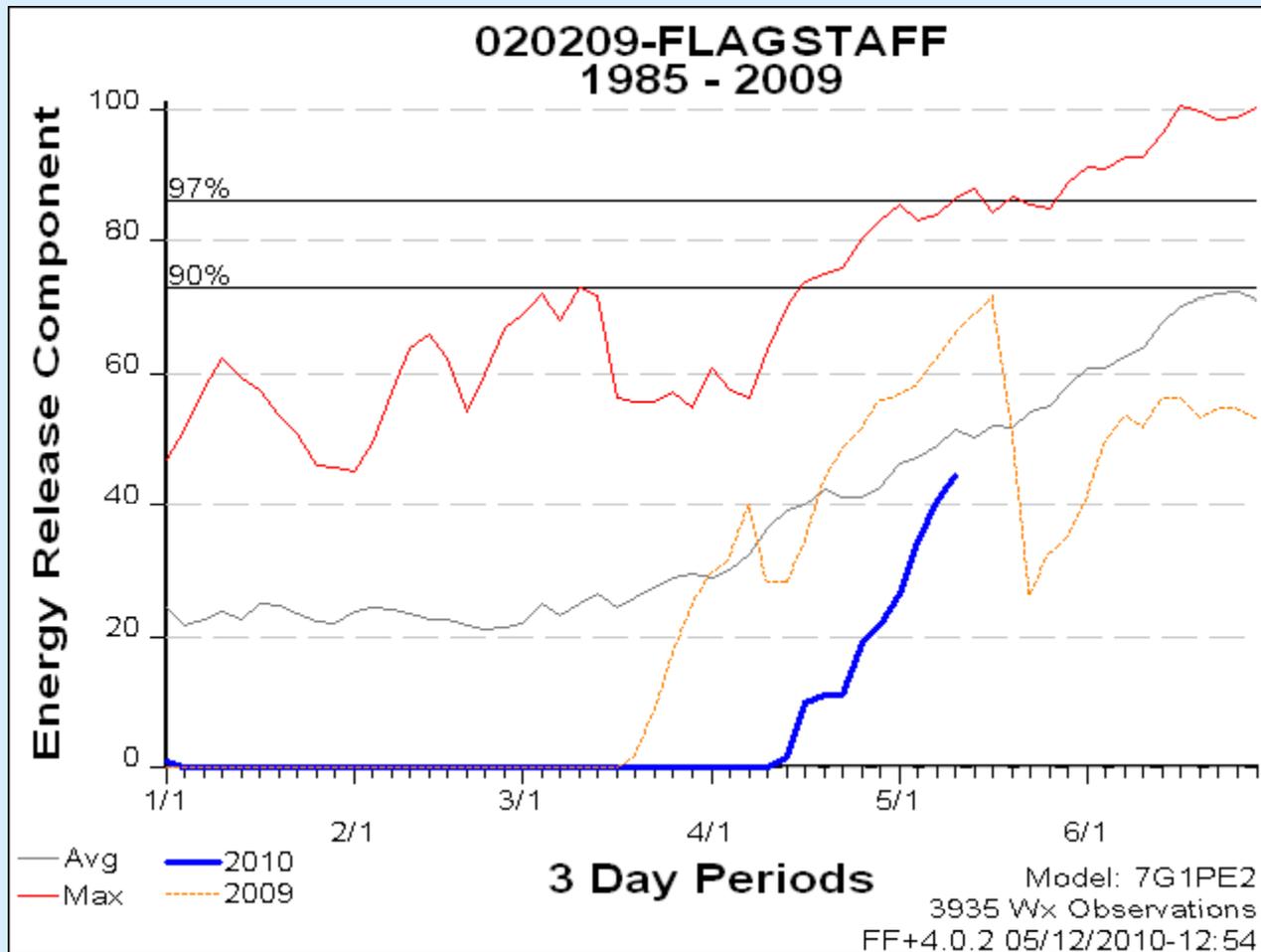
- Dry/Drought Conditions normally increase fire potential in the higher elevations and decrease potential in deserts.
- Overstocked/unhealthy forest stands exacerbate drought effects
- Non-native plants may increase fire potential
- Drought reduces water availability for suppression





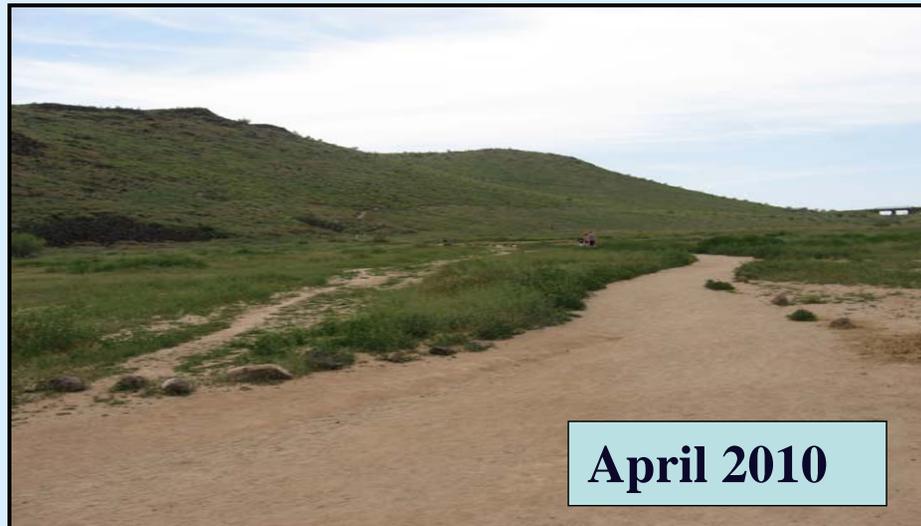
**Flagstaff State Forestry Office Parking Lot 1/21/10**

# Energy Release Component



*North of Phoenix*

***Comparison:  
2009 (Dry Year) vs. 2010 – (Wet Year)***



**Apache Junction March 29, 2010**





03/26/2010 16:56

S of Wikieup 3/26/10

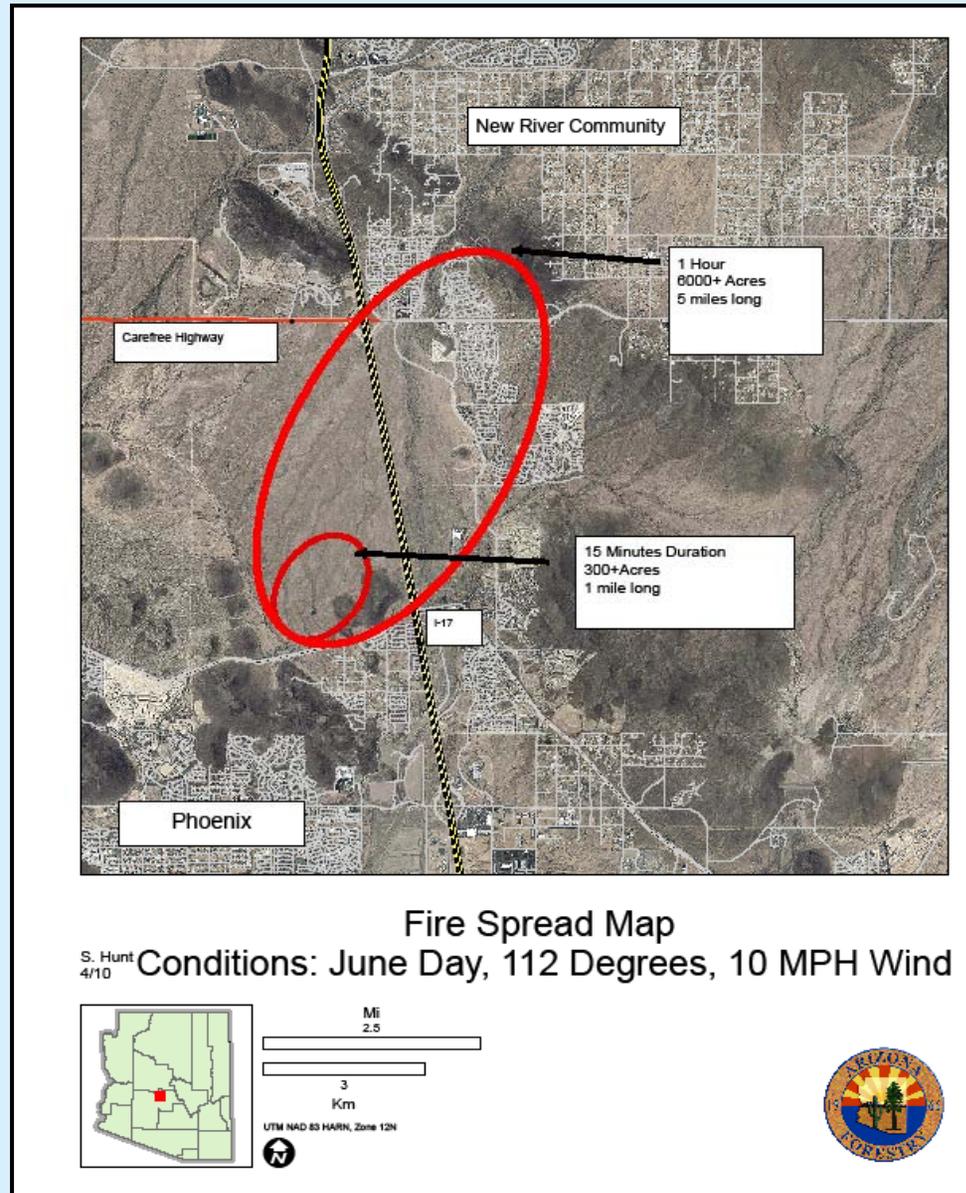




**E of Hwy 91 N of Douglas Cochise Co. 3/24/10**



# Potential Fire Spread in Grassland





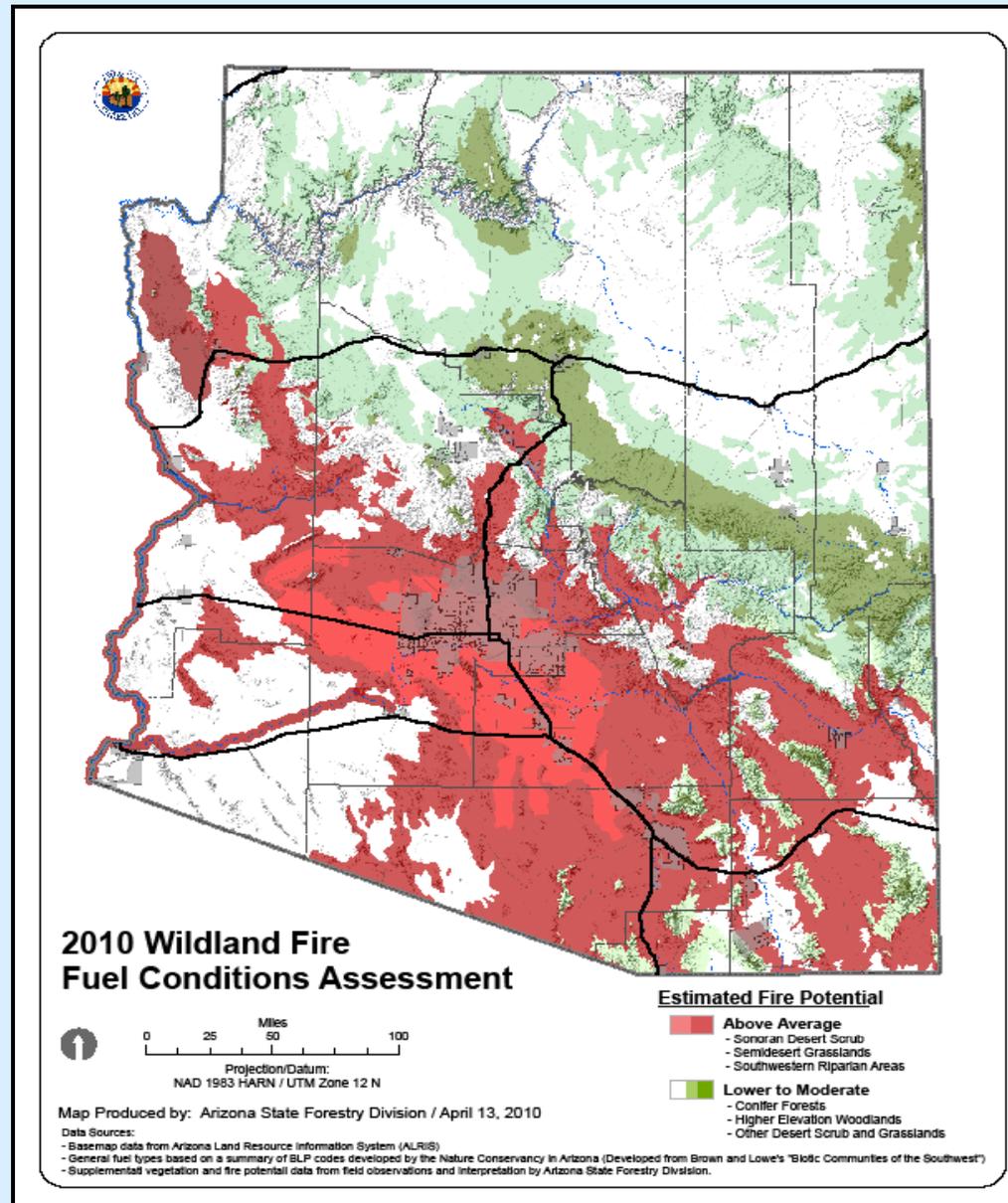
**“Buffel Grass Adobe Mtn 4/08  
Southern Aspect**





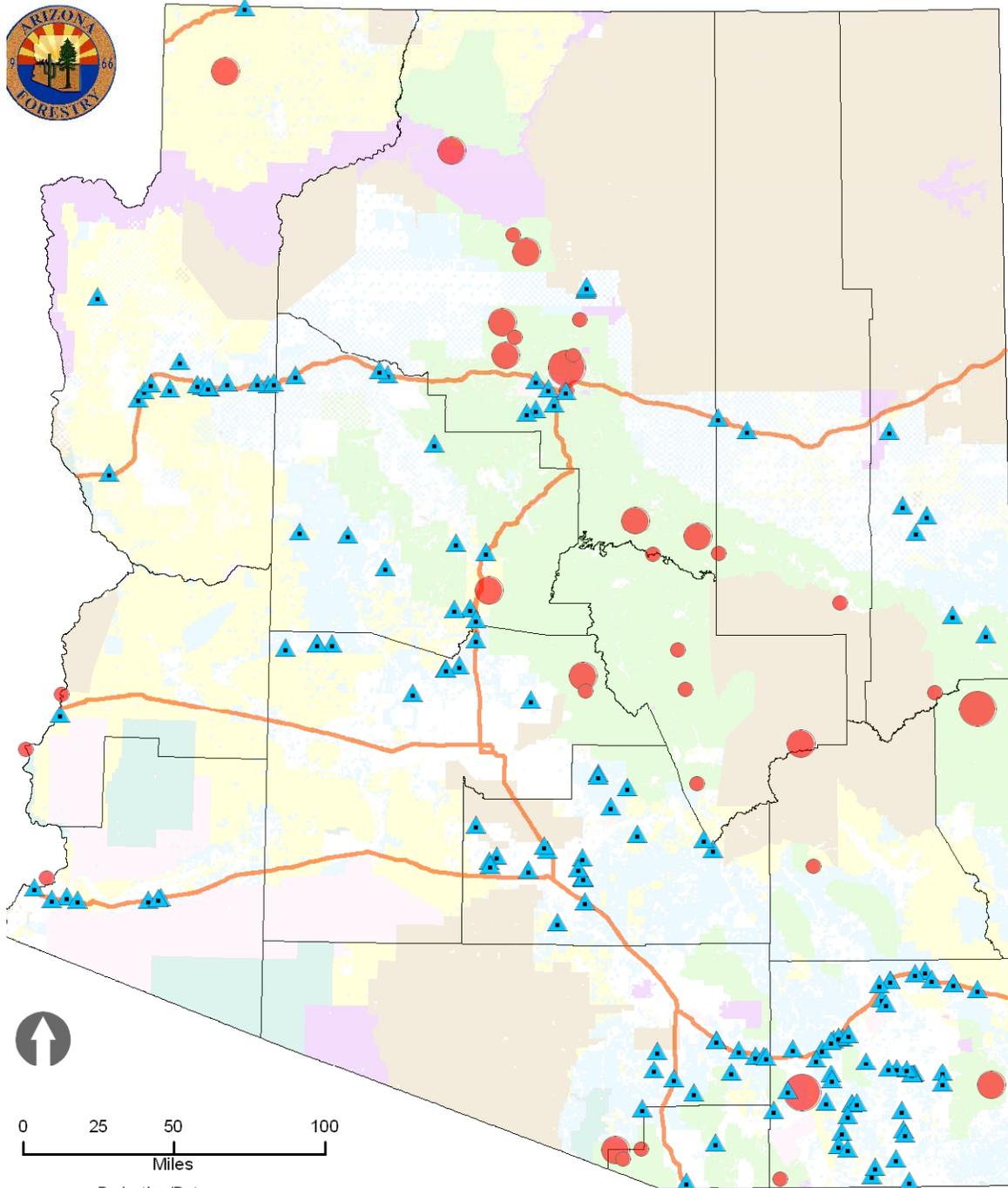
**Highway 95 North of Quartzite 4-4-10 Sahara Mustard Weed Invasion**

# Spring 2010 Fuel Conditions Assessment



# 2010 YTD Wildfire Stats

- Az. State Forestry Jurisdiction Lands:
  - 5% of Average for Acres Burned
- All Ownerships in Arizona (Pvt, State, Federal):
  - 38% of Average for Acres Burned
- Nationally:
  - 50% of Average for Acres Burned



Projection/Datum  
NAD 1983 HARN / UTM Zone 12 N

# 2010 Wildland Fire Activity

## Fire Occurrence Data

(2010 Data is thru 10/28/2010)

-  .1 - 99 Acres (State Data Only)
-  100 - 900 Acres (Large Fires-All Agencies)
-  1,000 - 4,730 Acres (Large Fires-All Agencies)
-  5,000 - 15,000 Acres (Large Fires-All Agencies)

Office of the State Forester  
October 28, 2010

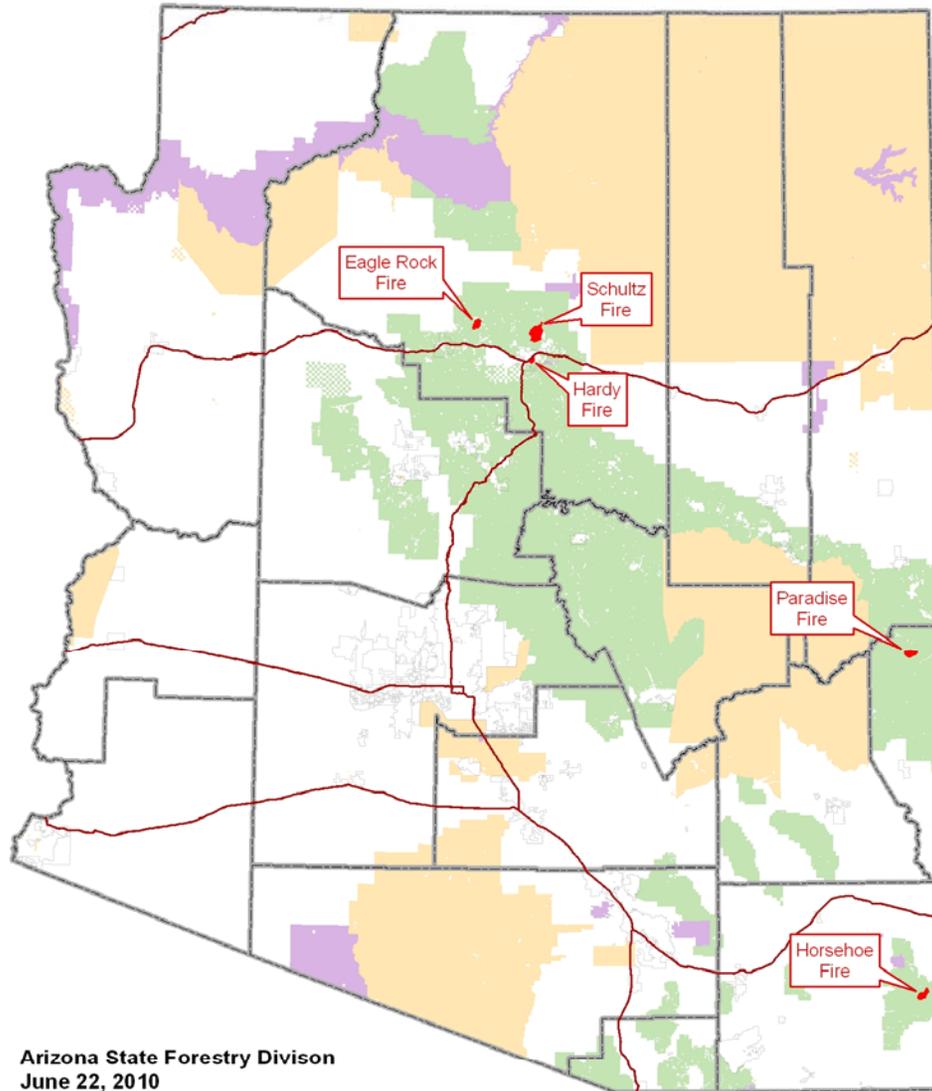
### Data Sources:

Basemap Data - Arizona Land Resource Information Center (ALRIS)  
Fire Activity - Arizona Dispatch Center WildCAD dispatch system,  
SW Area Coordination Center, & USFS FamWEB

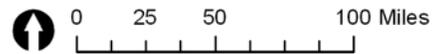
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# Arizona Large Fire Overview



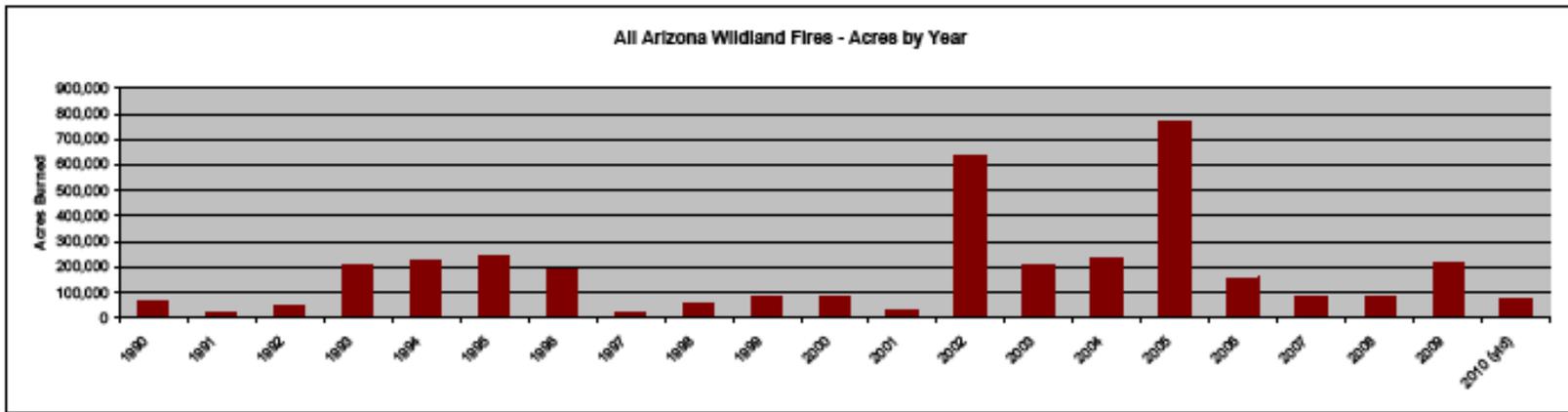
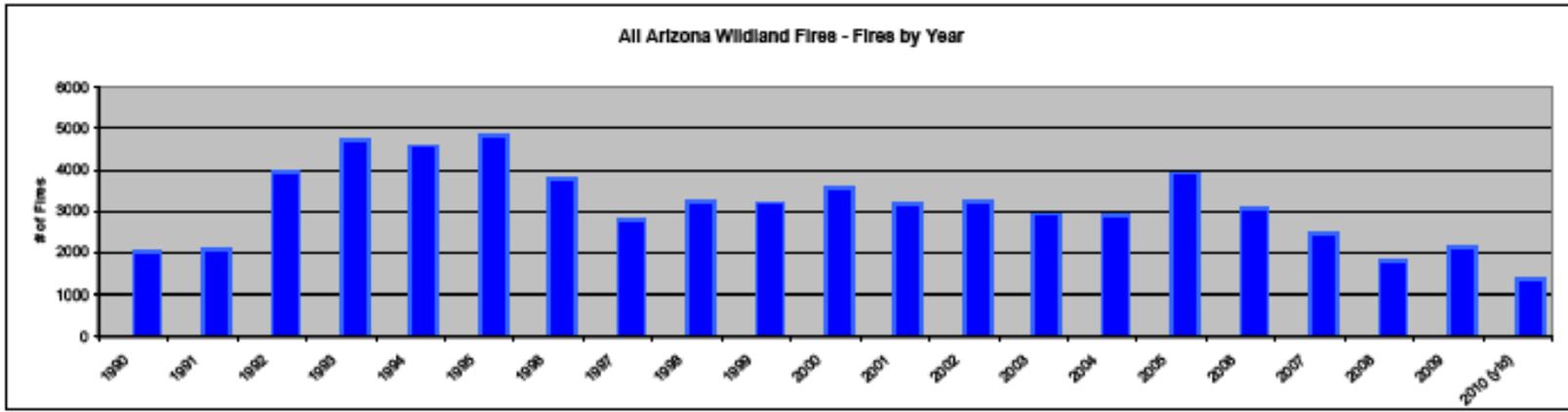
Arizona State Forestry Division  
June 22, 2010



Projection / Datum: UTM Zone 12 / NAD 83

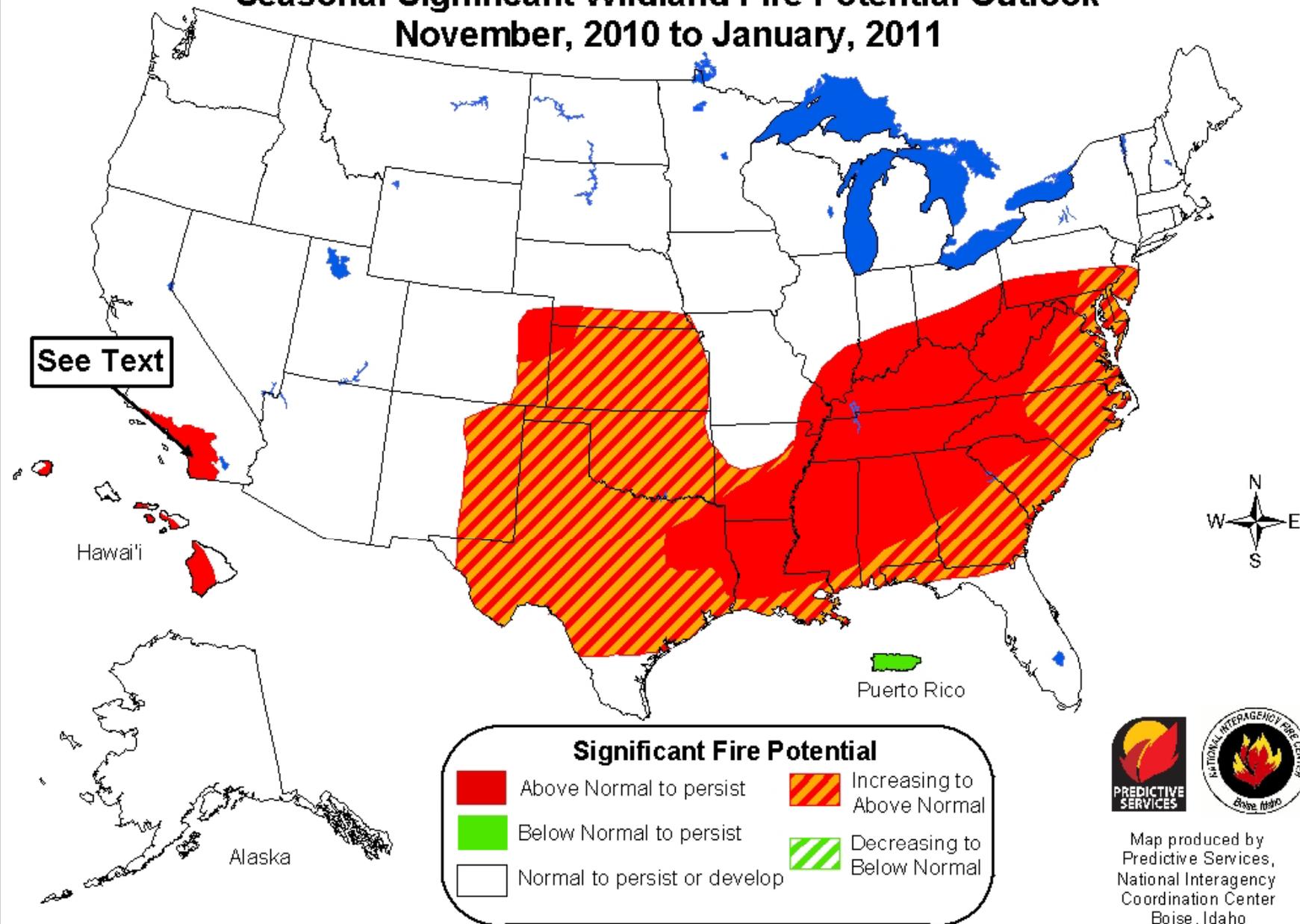
### Land Management

- National Forests
- Indian Reservations
- National Parks



Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 (ytd)
All Fires	2,012	2,057	3,956	4,735	4,579	4,844	3,790	2,802	3,233	3,211	3,579	3,167	3,218	2,931	2,882	3,919	3,080	2,454	1,795	2,133	1,368
Acres	61,143	21,229	41,806	204,774	222,899	244,763	188,187	18,547	51,150	82,280	82,896	30,503	629,876	204,520	252,142	761,959	155,852	84,442	85,425	216,818	71,325

# Seasonal Significant Wildland Fire Potential Outlook November, 2010 to January, 2011



Significant fire potential is the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

Map produced by  
Predictive Services,  
National Interagency  
Coordination Center  
Boise, Idaho  
Issued October 1, 2010  
Next issuance November 1, 2010

# 2009 Forest Mortality and Defoliation Aerial Detection Map

 Mortality or Defoliation Observed

50  
 Miles

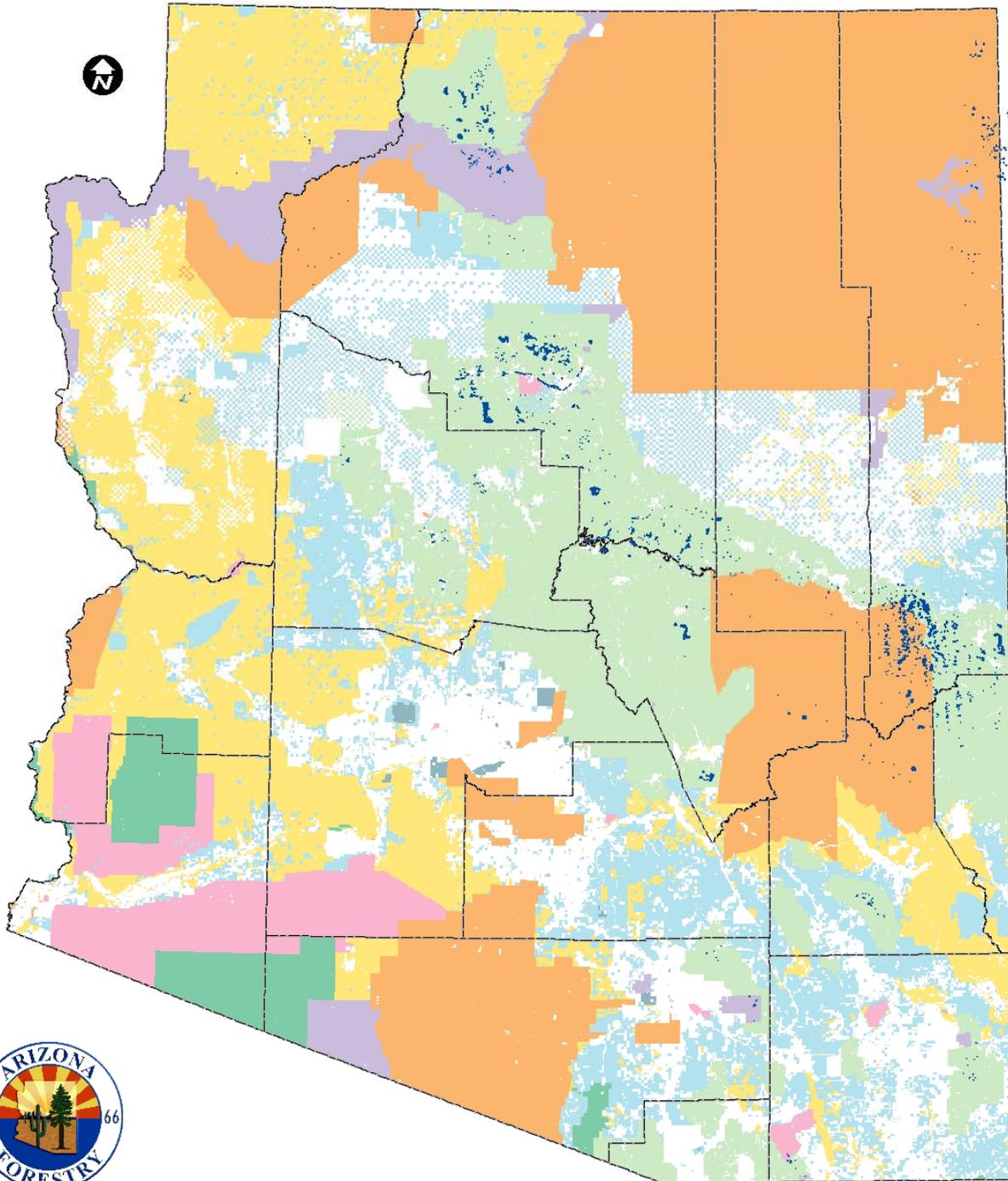
UTM NAD 83 HARN, Zone 12N

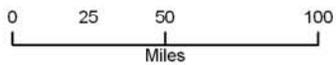
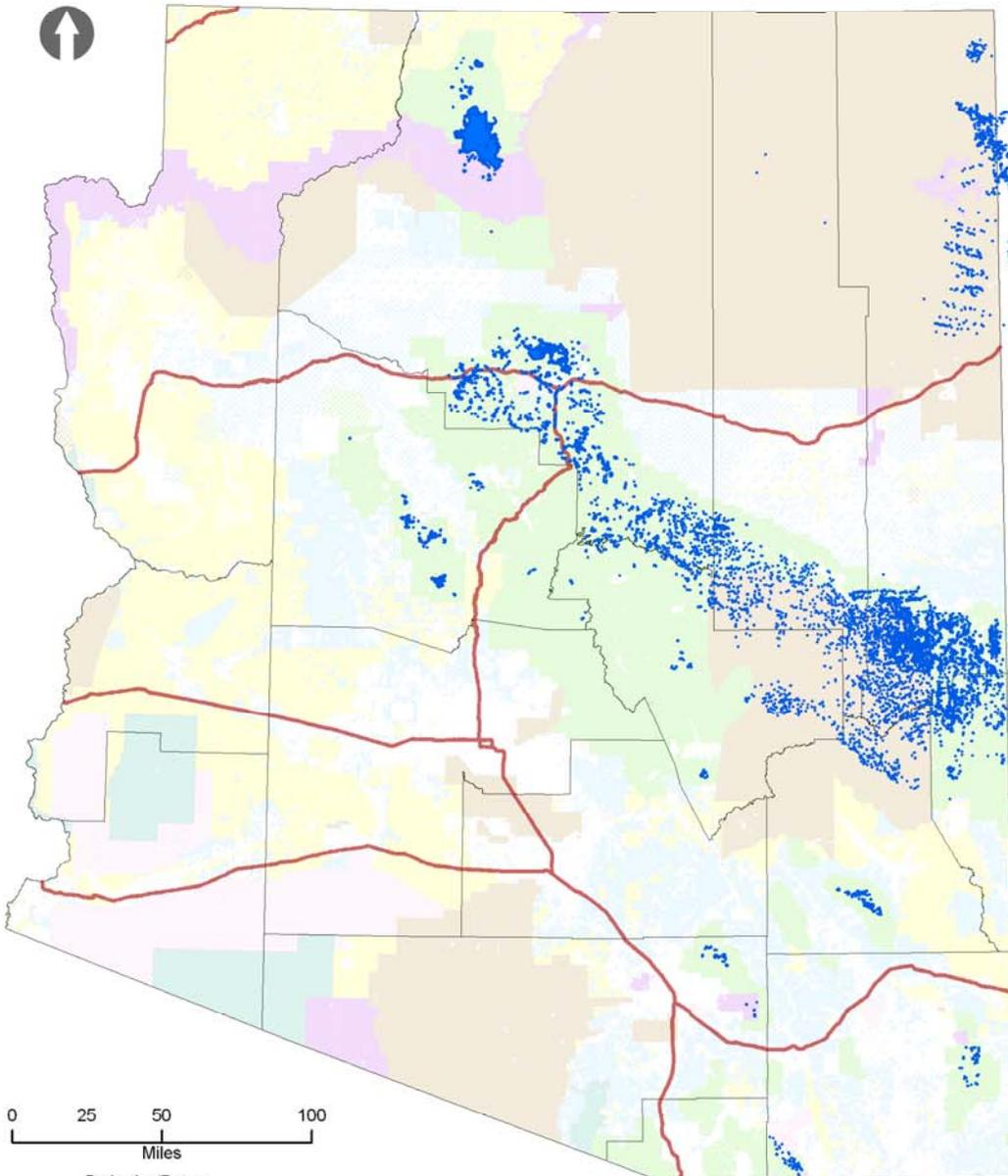
#### Date Sources:

Basemap Data: Arizona Land Resource Information Center (ALRIS)

Aerial Detection Data: USFS Region 3, Arizona State Forestry

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Projection/Datum  
NAD 1983 HARN / UTM Zone 12 N

# 2008 Forest Mortality and Defoliation Detected through Aerial Detection

## Aerial Detection Data

(July - August 2008)

 Mortality or Damage Observed

Office of the State Forester  
October 28, 2009

Data Sources:  
Basemap Data - Arizona Land Resource Information Center (ALRIS)  
Aerial Detection Data - US Forest Service Region 3, Arizona State Forestry

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Tornado Damage-Flagstaff FD



Tornado Damage-Bellemont



Winter Storm Damage



Bark Beetles-Prescott



Walnut Leafhopper-Star Valley



Knapweed-Flagstaff