ARIZONA HOUSE OF REPRESENTATIVES
Fifty-second Legislature – Second Regular Session

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CHIEF CLERK'S OFFICE
1-28-16

COMMITTEE ON ENERGY, ENVIRONMENT AND NATURAL RESOURCES

Report of Regular Meeting
Monday, January 25, 2016
House Hearing Room 1 -- 2:00 p.m.

Convened 2:04 p.m.
Recessed
Reconvened
Adjourned 3:11 p.m.

Members Present	**Members Absent**
Mrs. Barton	
Mrs. Carter	
Mr. Clark	
Mr. Finchem	
Mr. Kopec	
Mr. Leach	
Mr. Saldate	
Mr. Bowers, Vice-Chairman	
Mr. Pratt, Chairman	

Agenda
Original Agenda – Attachment 1

Request to Speak
Report – Attachment 2,

Presentations

Name	**Organization**	**Attachments** (Handouts)
Jeff Whitney	Arizona State Forester	3

Committee Action

Bill	**Action**	**Vote**	**Attachments** (Summaries, Amendments, Attendance)
HB2325	DP	9-0-0-0	4, 5
	Committee Attendance		6

Angela Diaz, Chairman Assistant
January 28, 2016

(Original attachments on file in the Office of the Chief Clerk; video archives available at http://www.azleg.gov)

Convened: 2:04 pm
adjourned: 3:11 pm

REVISED - 01/21/16 **REVISED - 01/21/16** **REVISED - 01/21/16**

ARIZONA HOUSE OF REPRESENTATIVES
Fifty-second Legislature - Second Regular Session

REGULAR MEETING AGENDA

COMMITTEE ON ENERGY, ENVIRONMENT AND NATURAL RESOURCES

DATE Monday, January 25, 2016 ROOM HHR 1 TIME 2:00 P.M.

Members:

Mrs. Barton	Mr. Finchem	Mr. Saldate
Mrs. Carter	Mr. Kopec	Mr. Bowers, Vice-Chairman
Mr. Clark	Mr. Leach	Mr. Pratt, Chairman

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1. Introduction of Committee Members and Staff
2. Presentation by Jeff Whitney, Arizona State Forester

Bills	Short Title	Strike Everything Title

ADDENDUM #1 - 01/21/16

HB2325	dp environment; water quality amendments (Pratt: Bowers, Shope) 9-0-0-0 EENR, RULES	

ORDER OF BILLS TO BE SET BY THE CHAIRMAN

AD
~~1/20/16~~
1/21/16

People with disabilities may request reasonable accommodations such as interpreters, alternative formats, or assistance with physical accessibility. If you require accommodations, please contact the Chief Clerk's Office at (602) 926-3032, TDD (602) 926-3241.

Attachment 1

Information Registered on the Request to Speak System

House Energy, Environment and Natural Resources
(1/25/2016)

HB2325, environment; water quality amendments

Support:

Kelly Norton, AZ MINING ASSN; Amanda Stone, AZ DEPT OF ENVIRONMENTAL QUALITY

Oppose:

Craig McDermott, representing self

All Comments:

Craig McDermott, Self: Is there any independent corroboration that the proposed changes to allowable lead content in water pipes is an improvement (or at least no worse) than the status quo? And by "independent", I mean not something that isn't industry or ALEC-funded.

Attachment 2

PLEASE COMPLETE THIS FORM FOR THE PUBLIC RECORD

HOUSE OF REPRESENTATIVES

Please PRINT Clearly

Committee on Energy, Environment and Natural Resources

Bill Number HB 2325

Date 1/25/2016

❑ Support ❑ Oppose ❑ Neutral

Name Randall Matas

Need to Speak? ❑ Yes ❑ No

Representing ADEQ

Are you a registered lobbyist? N

Complete Address 1110 W. Washington St

E-mail Address RGM@AZDEQ.GOV

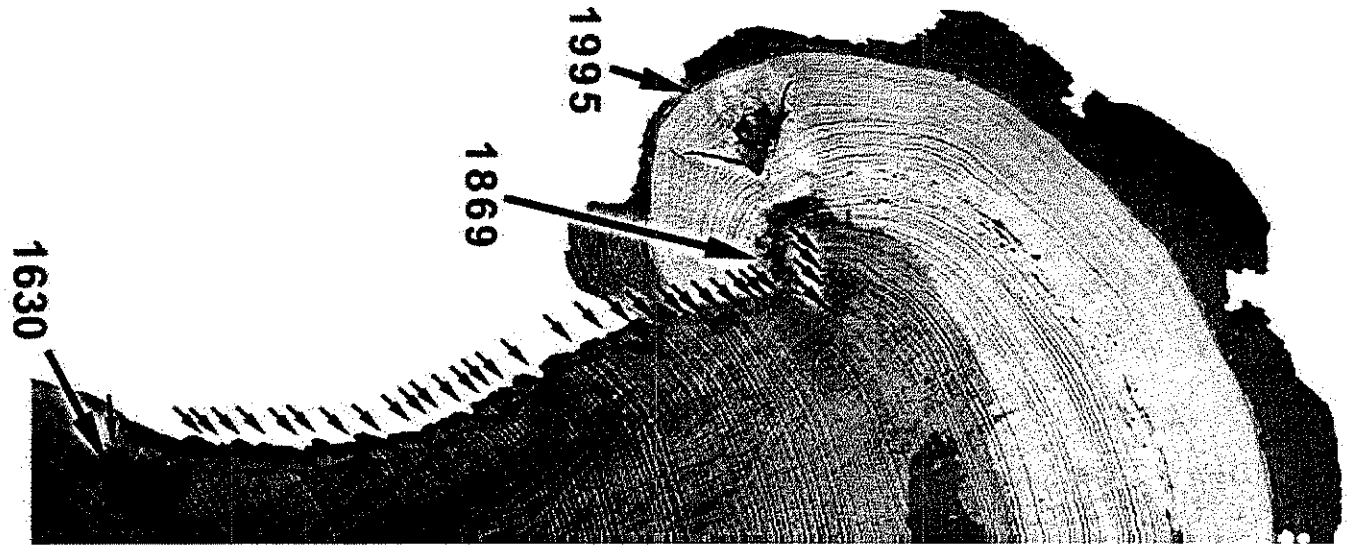
Phone Number 602-771-2306

Comments:

*****FIVE-MINUTE SPEAKING LIMIT*****

Legislative Update: Arizona's Forests and Range Land

Jeff Whitney, State Forester



Arizona State Forestry

Attachment 3

A.R.S. 37-622 B

During the first regular session of each legislature, the state forester shall present information to the legislative committees with jurisdiction over forestry issues...the presentation shall include information concerning:

1. Forestry management, including the current conditions of the forests in this state on federal, state and private property as affected by federal, state and local public policies, climatic conditions, wildfire hazards, pest infestations, overgrowth and overgrowth control policies and methods and the effects of current federal policy on forest management and impacts on forest land management.
2. The wildland-urban interface, including the effects of county and municipal zoning policies and wildfire hazards on public and private property.
3. Wildfire emergency management issues, including:

(a) Intergovernmental and interagency primacy, cooperation, coordination, roles and training of federal, state and local forestry, firefighting and law enforcement agencies.

(b) Channels and methods of communicating emergency information to the public.

(c) The roles of governmental and nongovernmental disaster relief agencies and organizations.

(d) The level of federal, state and local emergency funding.

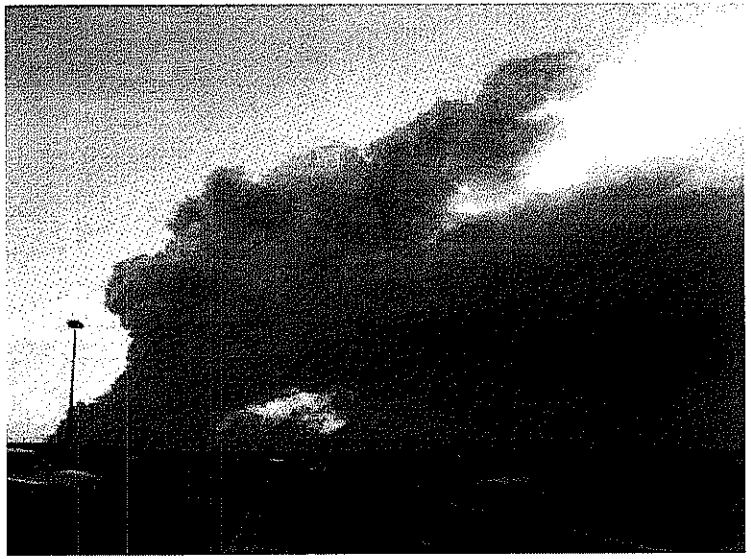
History: We Must Protect our Forests and Watersheds

- 1966: Position of State Forester and Deputy State Forester Created within the State Land Department

(L to R) Tonto NF Supervisor Robert Courtney; Kel Fox, Rancher; O.B. Lassen, State Land Commissioner and State Forester; Norman Johnson, Deputy State Forester; Robert Dunstan, U.S. Forest Service; Arizona Governor Sam Goddard; and Regional Forester William D. Hurst.

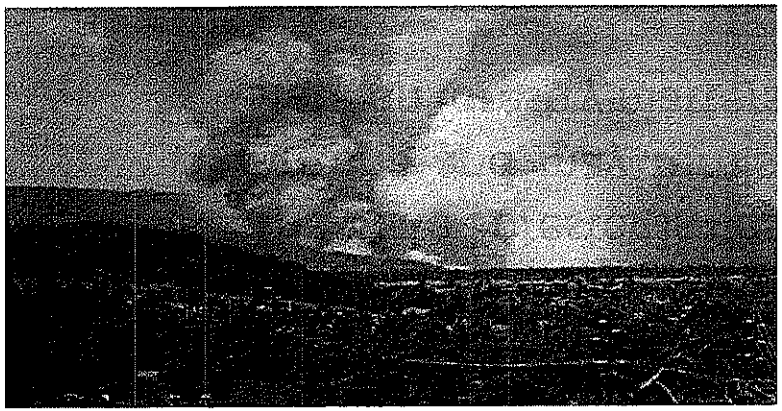
History: We Must Protect our Forests and Watersheds

- In response to worsening fire seasons, the State Forester became a Cabinet Level Position in 2004



Mission

- Manage and reduce wildfire risk to Arizona's people, communities, and wildland areas, and;
- Provide forest resource stewardship through strategic implementation of forest health policies and cooperative forestry assistance programs.



2009 Waterwheel Fire North of Payson

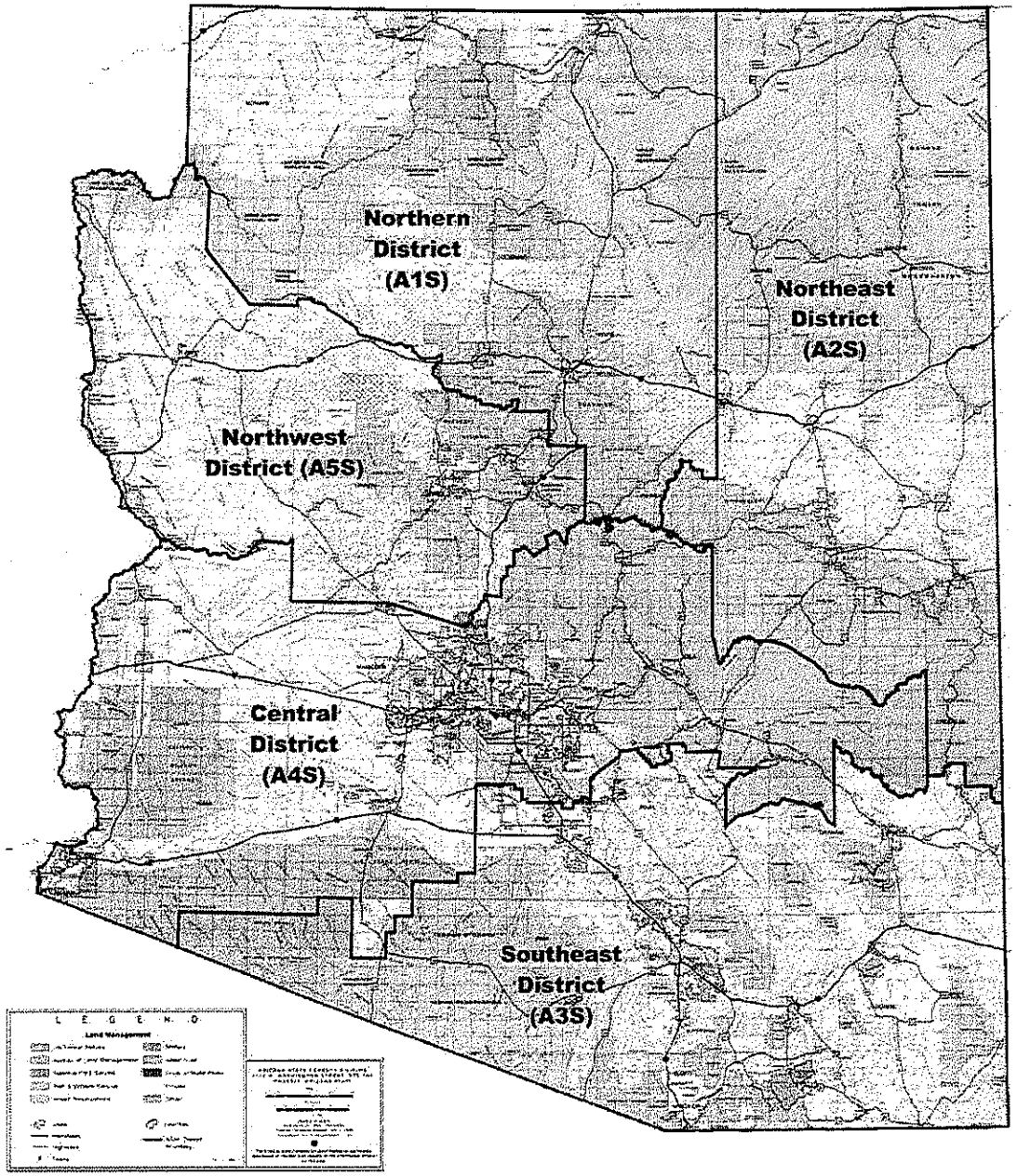
Mission

- The State Forester is designated as the fiscal agent of the state of Arizona and may furnish technical advice to the people of the state on forestry matters.

- The State Forester may do all other acts necessary to take advantage of and carry out the provisions of the Cooperative Forestry Assistance Act of 1978 that provides forestry assistance programs to states.

Mission

- The State Forester shall have authority to prevent and suppress any wildfires on state and private lands located outside incorporated municipalities.
- The State Forester is the Governor's authorized representative to declare a wildland fire emergency.
- The State Forester shall cooperate and coordinate with the State Fire Marshal in the administration of the state fire code.
- The State Forester may enter in cooperative agreements with other state and federal agencies, departments and political subdivisions.



Arizona State Forestry

2015 Fire Season

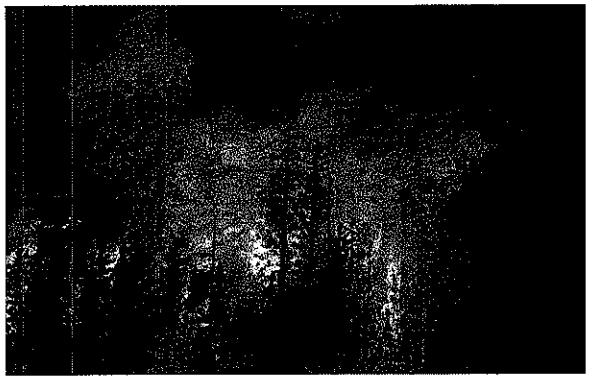
- 2015 Statewide area burned all jurisdictions : 158,493 Acres
- 2015 Statewide number of fires: 1,543 Fires
- 2014 Statewide area burned: 183,406 Acres
- 2014 Statewide number of Fires: 1,541 Fires
- 10 year average acres (2005-2014): 317,781 Acres
- 10 year average fires (2005-2014): 2,144 Fires

2015 Fire Season Large Fires
100+ Acres

From May 20, 2015, the Oak Tree Incident (2,023 acres burned) to September 29, 2015, the Potato Patch Incident (650 acres burned)

There were:

- 34 fires of more than 100 acres.
- 23 fires of greater than 1,000 acres.
- 2 fires of greater than 10,000 acres.



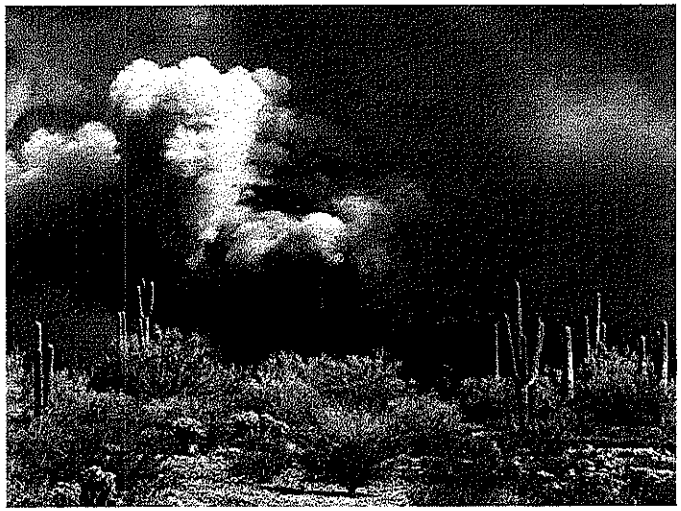
2015 Fire Season Large Fires
Kearny River

Date of Origin: June 17, 2015

Cause: Under Investigation

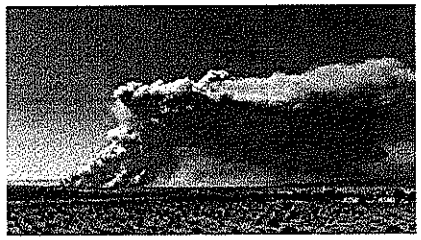
Size: 1,428 Acres

Fuels Involved: River bottom, Salt cedar



Arizona State Forestry

2015 Fire Season Large Fires
Willow Fire

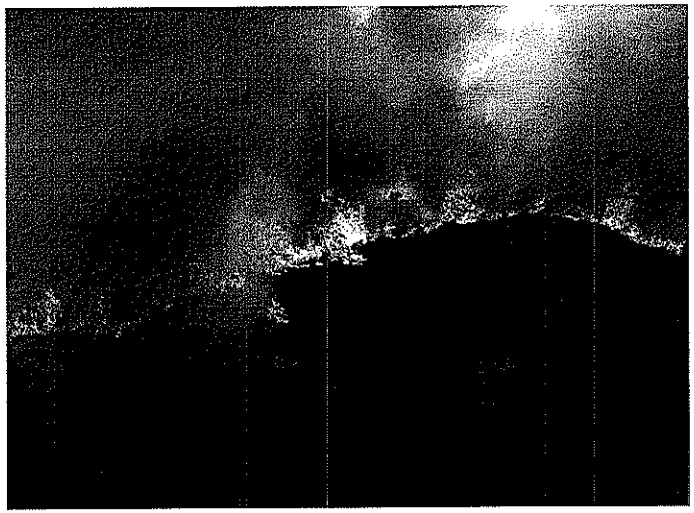


Date of Origin: August 8, 2015

Cause: Under Investigation

Size: 6,780 Acres

Fuels Involved: Salt cedar, mesquite, willow, brush, grass



Factors Affecting Fire Potential

- Drought
- Forest Stand Conditions
- Fine Fuel Condition
- Seasonal Temperature and Precipitation
- Spring and Early Summer Weather
- Monsoon

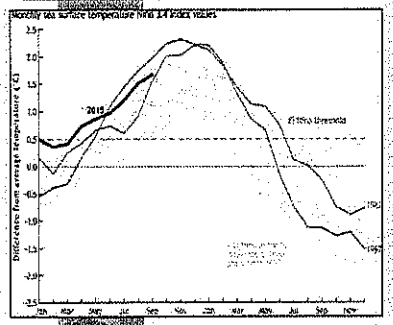
El Niño Fact Sheet

Weather.gov/Phoenix

El Niño is a prolonged period of unusually warm Pacific waters that influence weather patterns

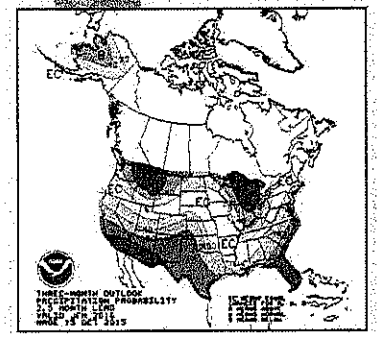
What we know:

- Strong El Niño conditions will exist through winter 2015-16
- This will be one of the strongest recorded El Niño episodes since 1950
- Strong El Niño's lead to the most predictable outcomes of increased rainfall in AZ and SoCal
- Odds clearly point towards a wetter than average winter - especially the latter part of the season



Uncertainties:

- Each El Niño is slightly different and there are other weather influences to consider
- There have only been 6 recorded strong El Niño events and only 3 as strong as this year since 1950
- The small sample size of comparative El Niño events limits more certainty in specific winter predictions

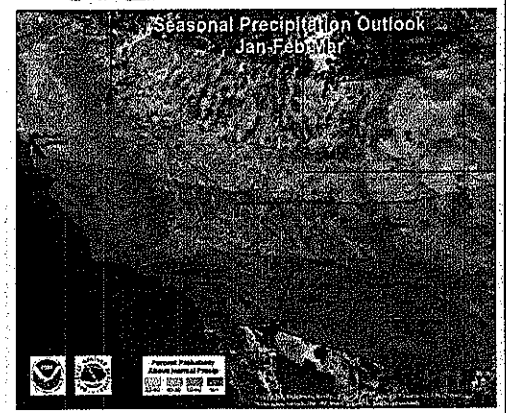


What we don't know:

Arizona State Forestry

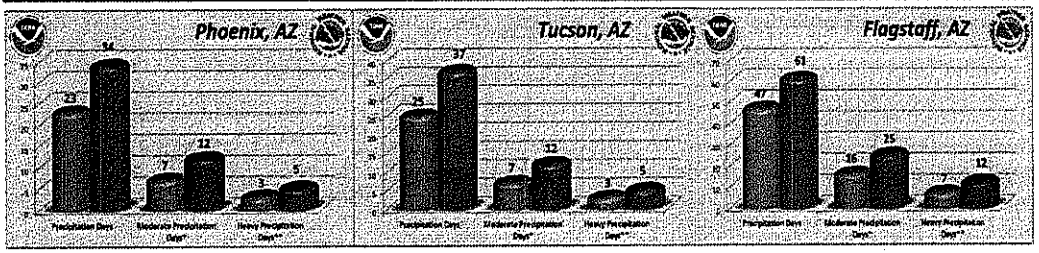
El Niño Fact Sheet

Weather.gov/Phoenix



While strong El Niño's provide little predictive skill regarding temperatures, there is an excellent correlation to wetter than normal winters in Arizona and southern California—particularly later in the winter (Jan-Apr). The Climate Prediction Center forecasts better than a 60% chance of a wetter than normal Jan-Mar (leaving only a 5% chance of below normal).

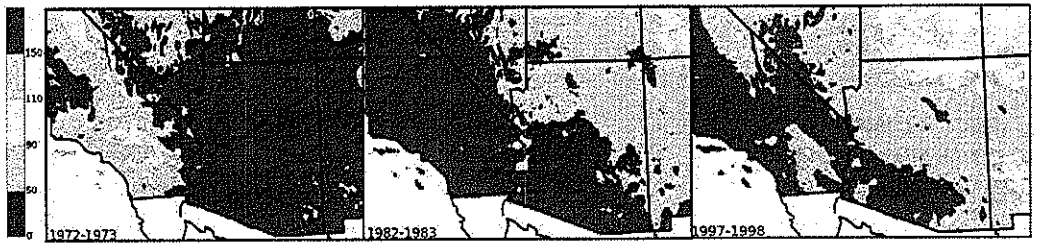
However, each El Niño has a somewhat different "flavor" and even among the strongest episodes, there are notable differences in precipitation amounts and placement. Fortunately, despite typical greater than average precipitation, past strong El Niño events have not produced significant flooding events in Arizona and Southeast California (not saying that it couldn't happen this year). Seasonal mountain snowfall also carries considerable uncertainty, though all the 3 strongest events led to above average snow in Arizona (not shown).



■ Average Winter ■ Strong El Nino Winters

Number of rainfall days during an average winter (Oct-Apr) versus the average during 6 strong El Niños

(* Moderate = 0.25 inches ** Heavy = 0.50 inches)



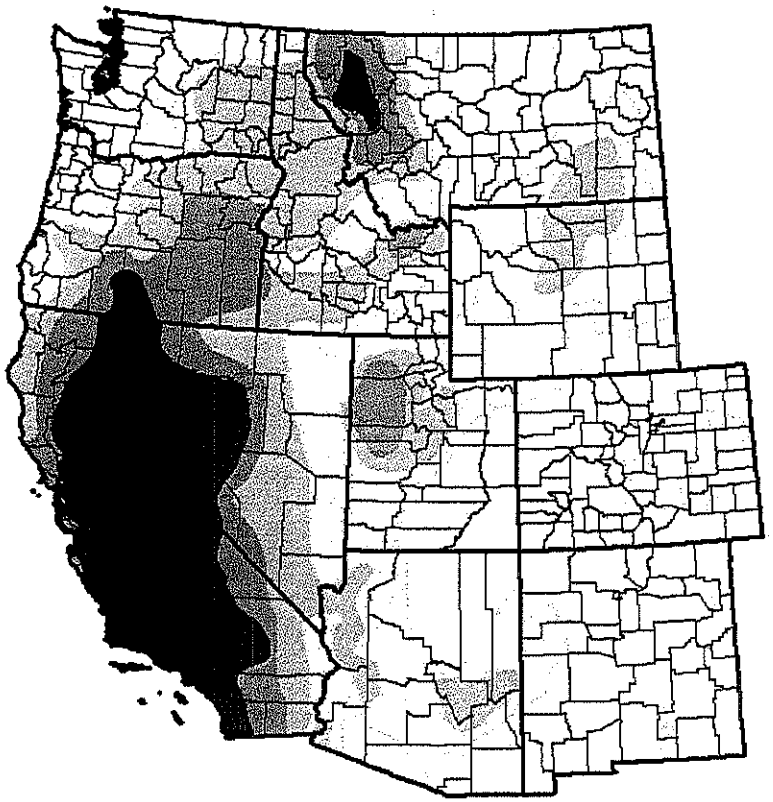
October-April Percent Normal Precipitation from last 3 Strongest El Niño Episodes (1972-73, 1982-83, and 1997-98)

Arizona State Forestry

Drought

U.S. Drought Monitor

West



January 19, 2016

(Released Thursday, Jan. 21, 2016)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	37.36	62.64	40.19	21.59	12.26	6.14
Last Week 1/12/2016	36.54	63.46	42.40	25.31	13.09	6.56
3 Months Ago 10/20/2015	22.91	77.09	56.07	41.32	26.23	7.62
Start of Calendar Year 12/29/2015	33.17	66.83	45.07	29.30	15.92	6.85
Start of Water Year 9/29/2015	22.77	77.23	57.81	42.42	26.50	7.62
One Year Ago 1/20/2015	35.52	64.48	53.09	33.62	18.52	6.36

Intensity:

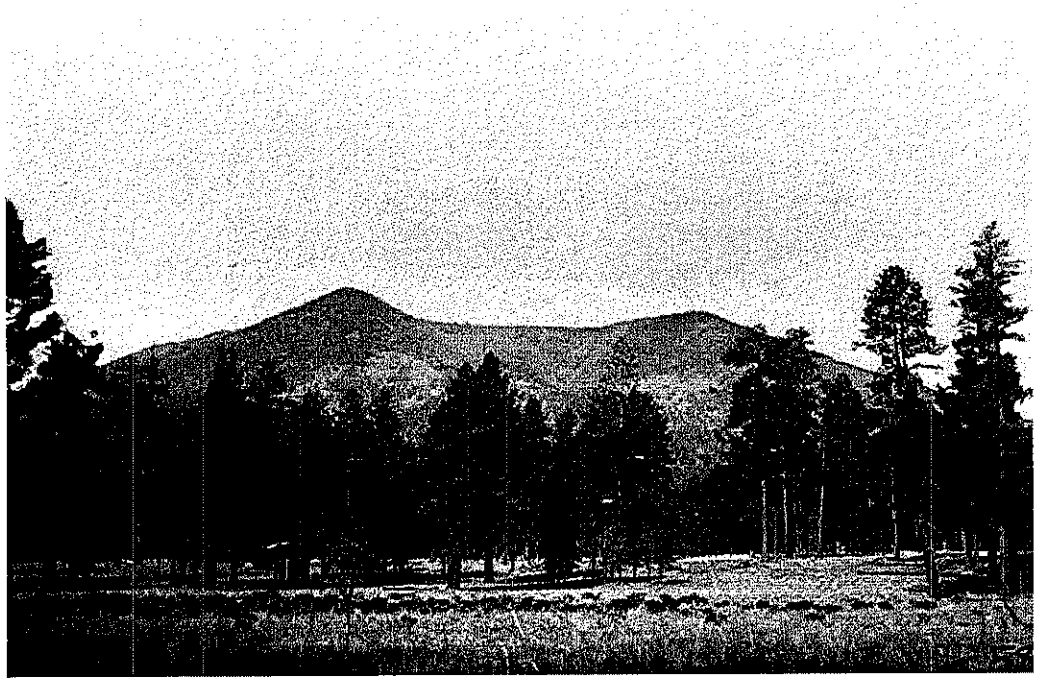
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Mark Svoboda
National Drought Mitigation Center

http://droughtmonitor.unl.edu/

Arizona's Forests in the 1800s



1901 Near Kendrick Mountain Shows Historical Spacing of Trees

"We came to a glorious forest of lofty pines, through which we have traveled ten miles. The country was beautifully undulating...every foot being covered with the finest grass, and beautiful broad grassy vales extending in every direction. The forest was perfectly open and unencumbered with brush wood, so that the traveling was excellent."

E.F. Beale expedition, 1858

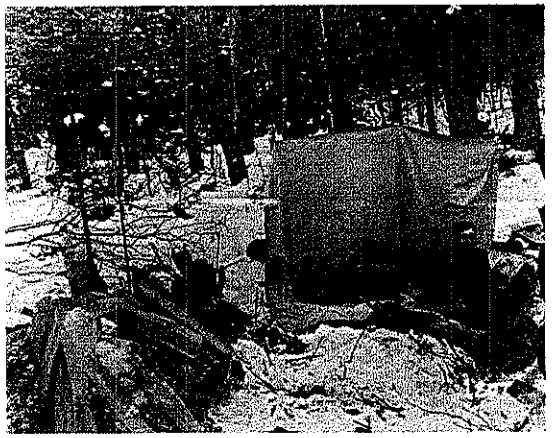
Arizona's Forest Environment Changes in 128 Years

Arizona State Forestry

Gifford Pinchot

August 11, 1865-October 4, 1946

First Chief of the United States Forest Service.

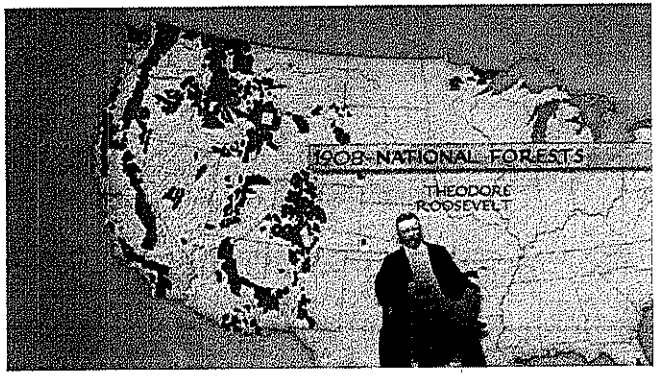


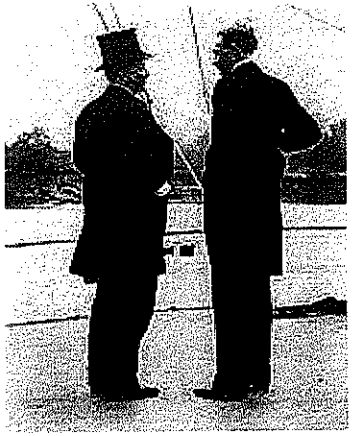
Known for reforming the management and development of forests in the United States and for advocating the conservation of the nation's reserves by planned use and renewal.

Promoted scientific forestry and emphasized the controlled, profitable use of forests and other natural resources.

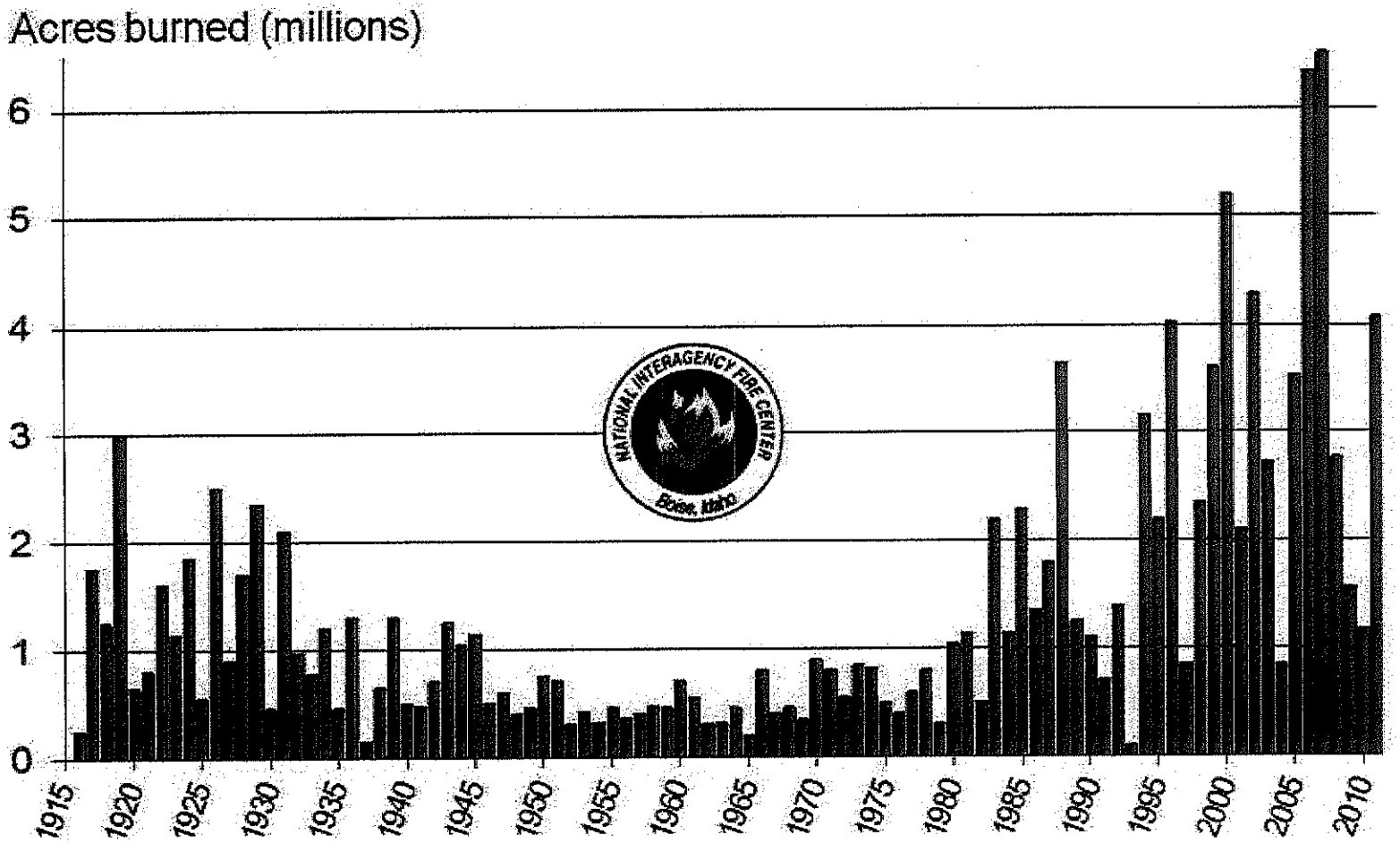
Theodore Roosevelt and National Forests

- Helped Establish 230 million acres of public land.
- Created 150 million acres of national forest.
- Created the US Forest Service in 1905.
- Wanted to conserve forests for continued use. An adamant proponent of utilizing the country's resources, Roosevelt wanted to insure the sustainability of those resources.



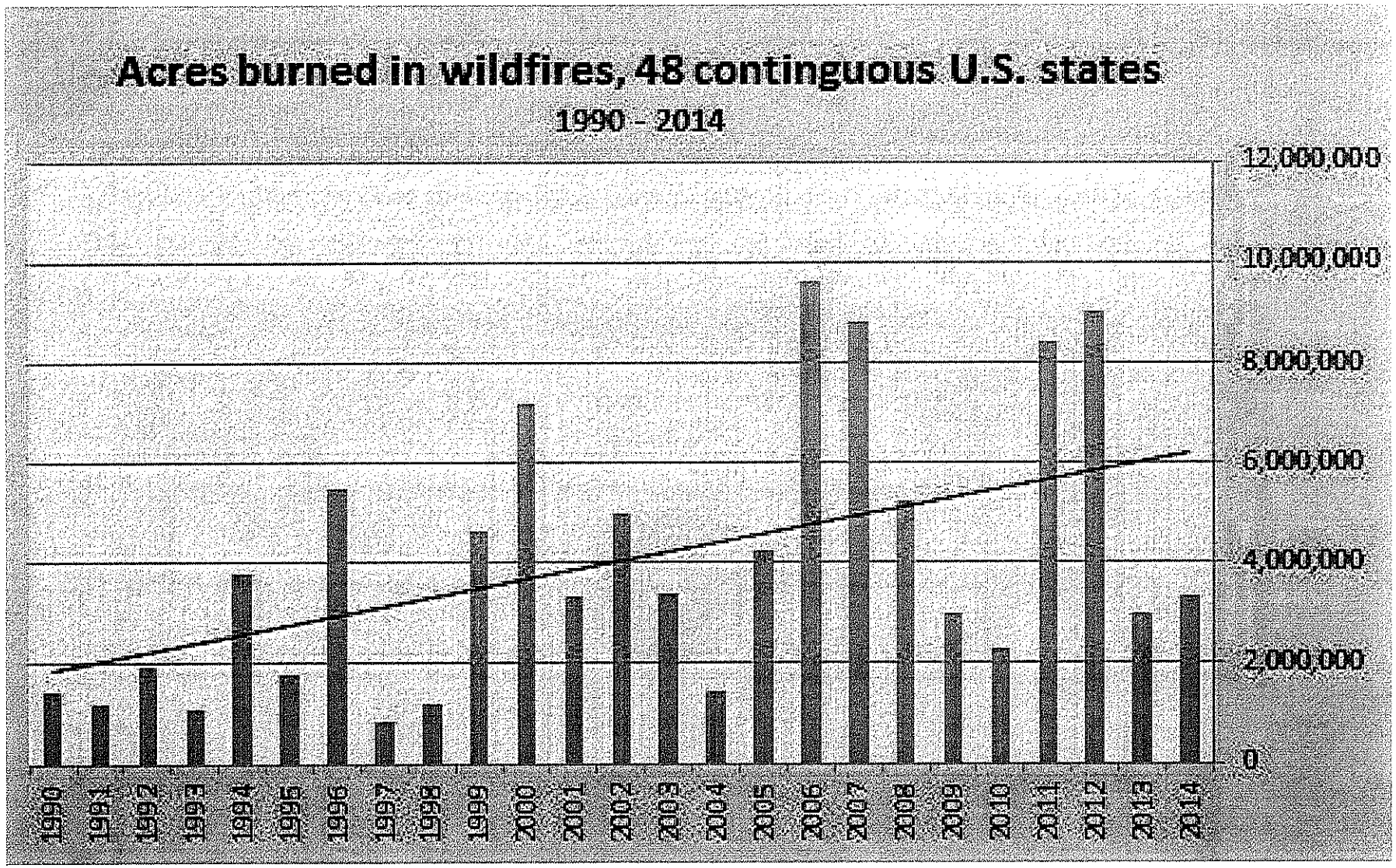


Wildfires in 11 Western States,* 1916-2011

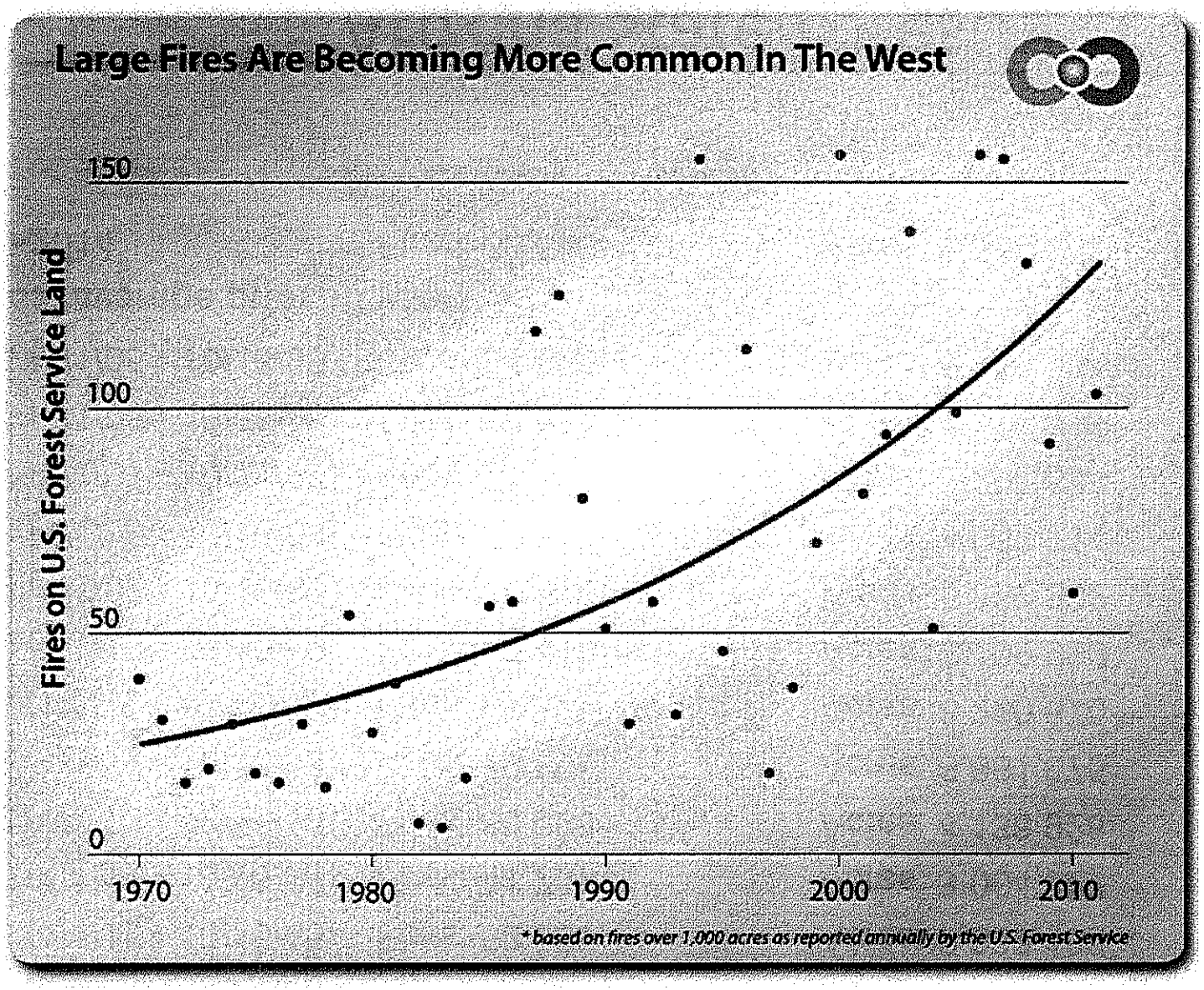


*Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

Source: Jay O'Laughlin, University of Idaho, from National Interagency Fire Center data



Arizona State Forestry

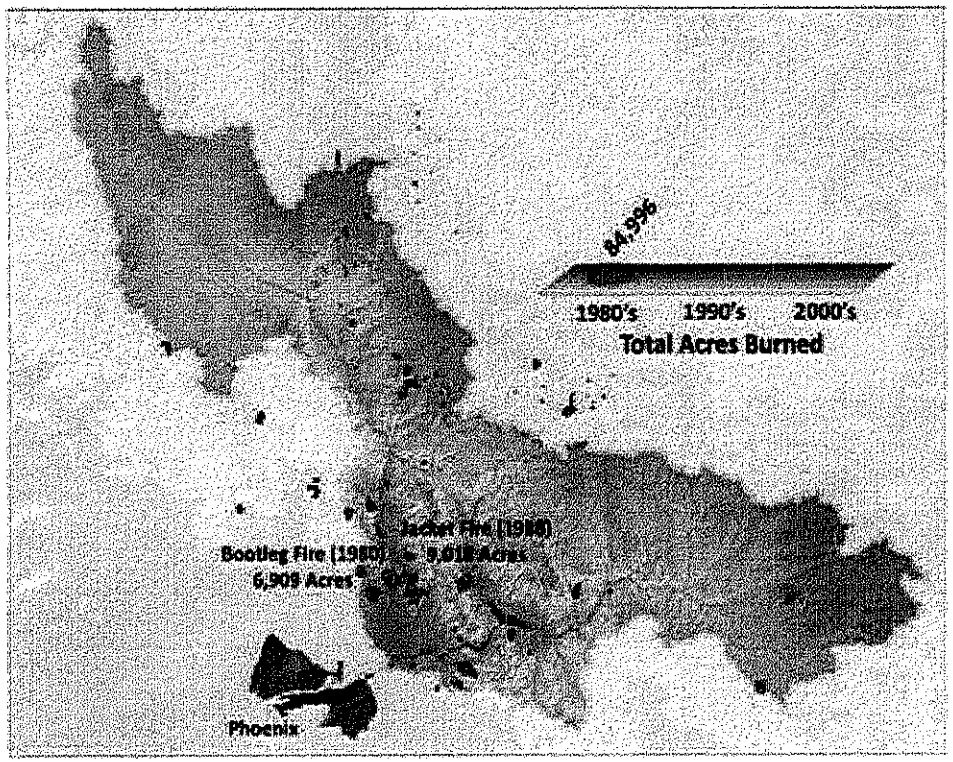


Arizona State Forestry

National Interagency Fire Center

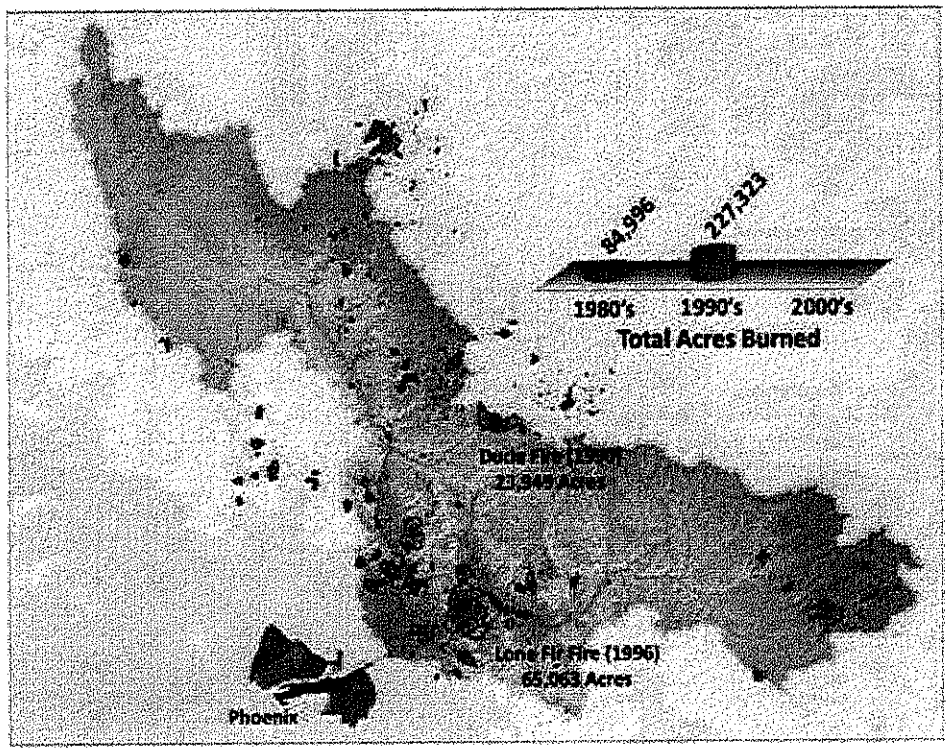
Year-to-date statistics		
2015 (1/1/15 - 10/16/15)	Fires: 52,505	Acres: 9,332,109
2014 (1/1/14 - 10/16/14)	Fires: 41,707	Acres: 3,064,327
2013 (1/1/13 - 10/16/13)	Fires: 38,698	Acres: 4,136,928
2012 (1/1/12 - 10/16/12)	Fires: 49,506	Acres: 8,861,675
2011 (1/1/11 - 10/16/11)	Fires: 61,879	Acres: 8,290,670
2010 (1/1/10 - 10/16/10)	Fires: 57,419	Acres: 3,109,960
2009 (1/1/09 - 10/16/09)	Fires: 70,548	Acres: 5,667,362
2008 (1/1/08 - 10/16/08)	Fires: 70,548	Acres: 4,962,214
2007 (1/1/07 - 10/16/07)	Fires: 74,415	Acres: 8,292,604
2006 (1/1/06 - 10/16/06)	Fires: 84,578	Acres: 9,114,636
2005 (1/1/05 - 10/16/05)	Fires: 54,425	Acres: 8,186,434
Annual average prior 10 years		
2005-2014	Fires: 60,586	Acres: 6,350,289

Total Acres Burned 1980s



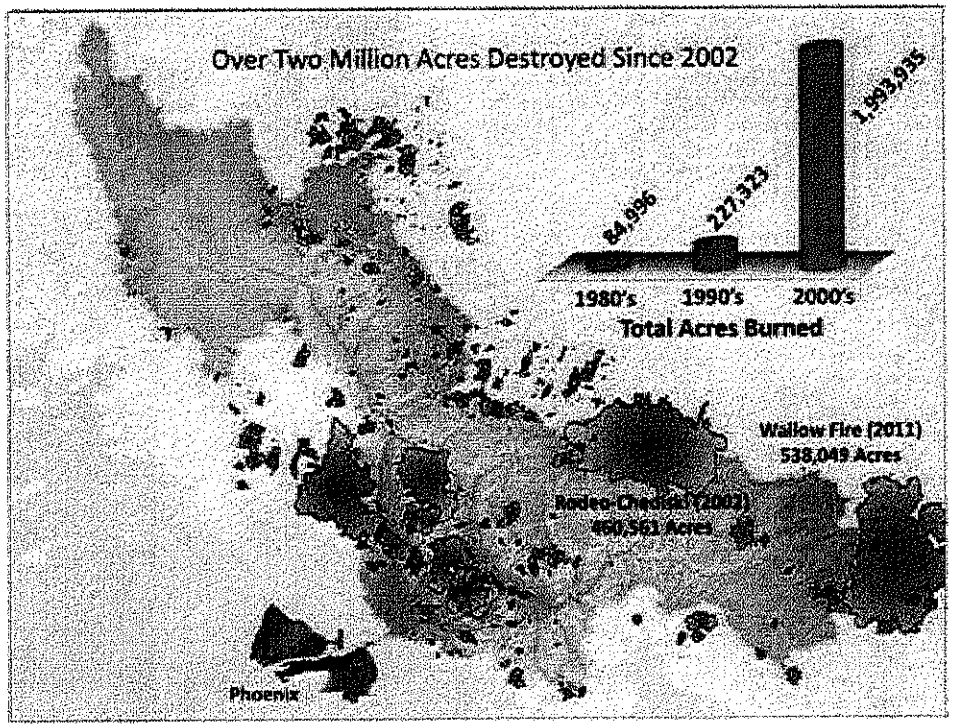
Arizona State Forestry

Total Acres Burned 1990s



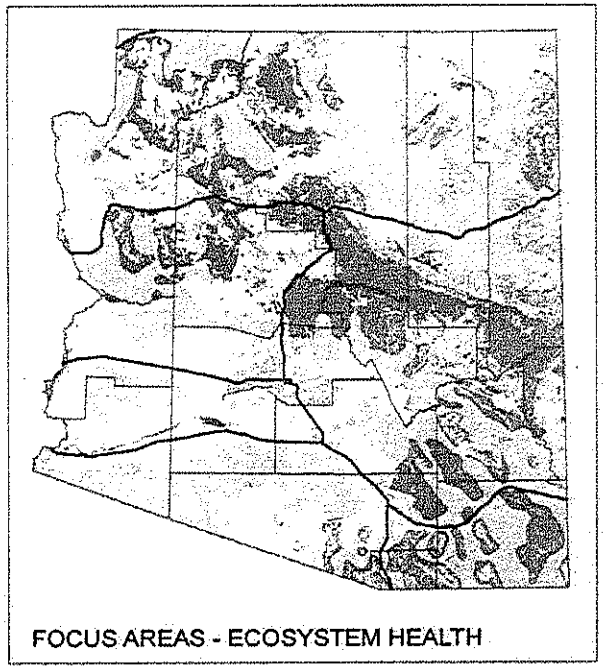
Arizona State Forestry

Total Acres Burned 2000s



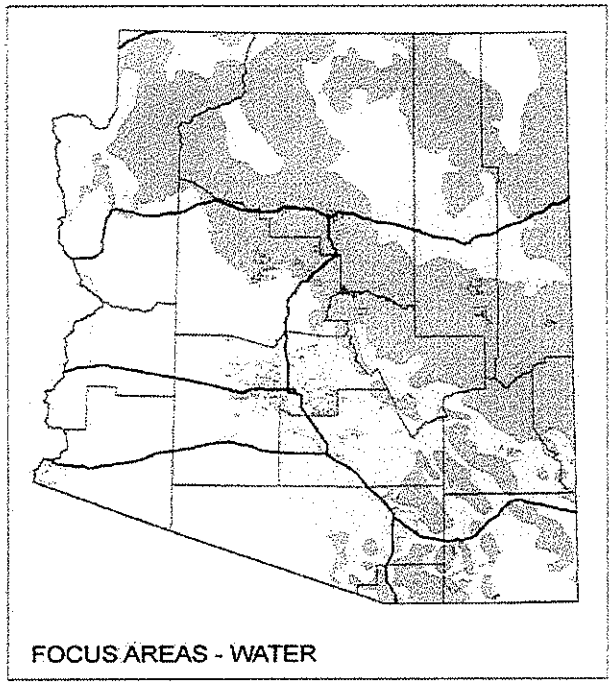
Arizona State Forestry

Statewide Forest Health View



Ecosystem Focus Area - Forest and Woodland
Ecosystem Focus Area - All

Dark green areas showing forest ecosystem focus areas based on fire regime condition class, critical wildlife habitat, and forest insect & disease risks.

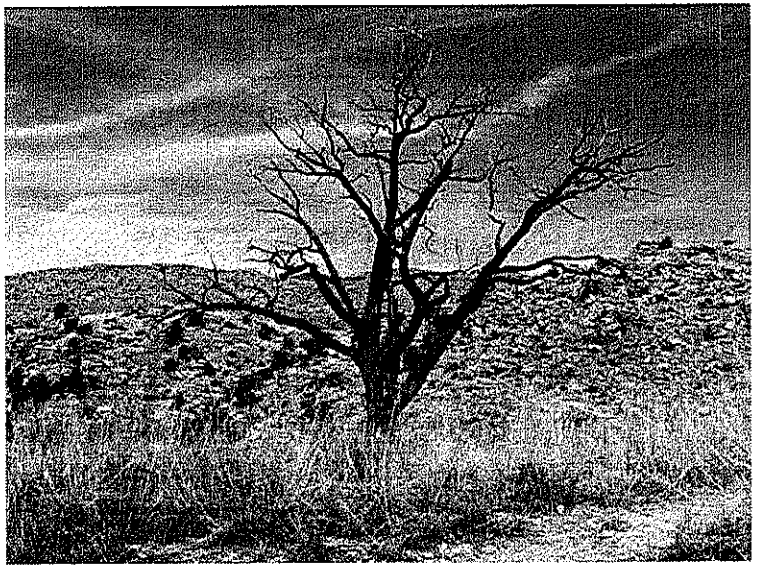


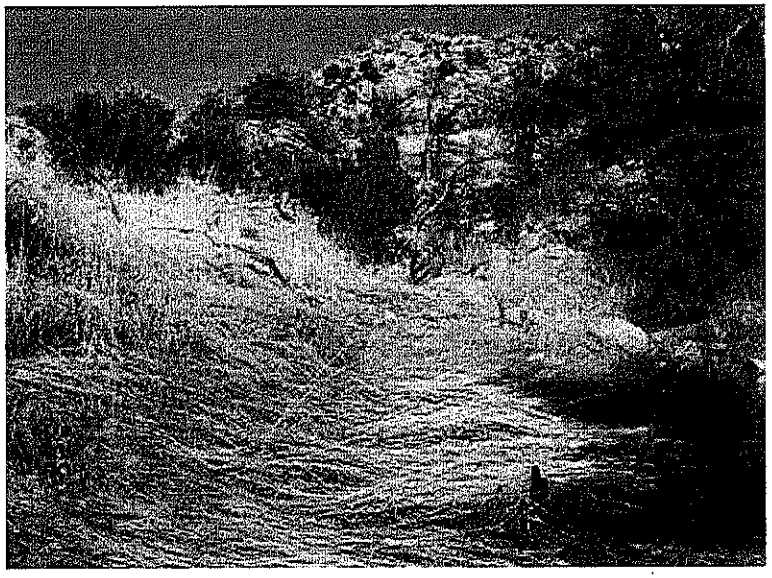
Focus Areas - All
Focus Areas - Forest and Woodland

Dark blue areas showing impaired forest watershed focus areas due to high sediment, turbidity, and E. coli.

Fine Fuels: Potential for Fires in 2016

- Above average rainfall means an abundance of continuous fine fuels in general within Arizona.
- Forests, woodlands, and deserts likely to exhibit increased fuel loads in 2016.





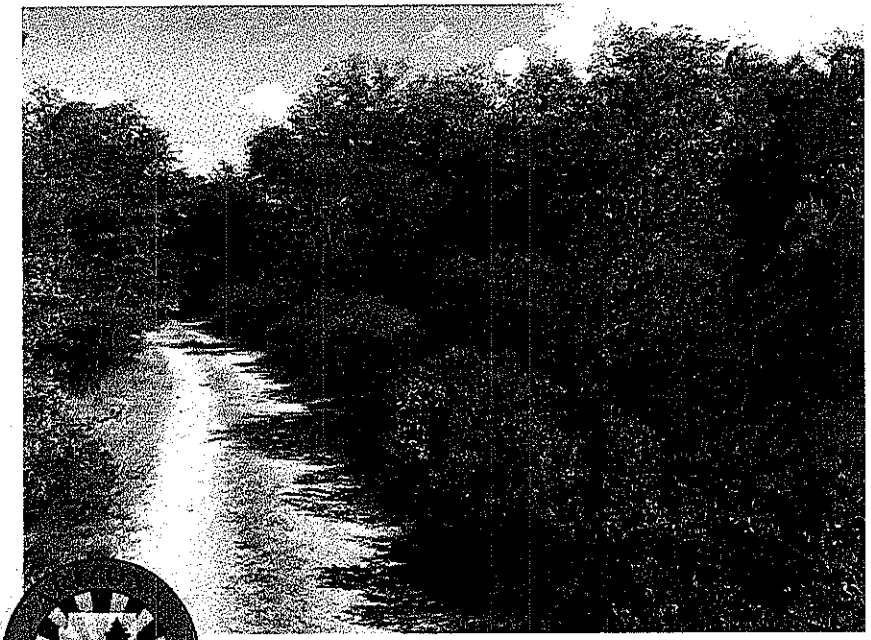
Arizona's Forests and Forests Throughout the West: Extreme Fire Danger Persists

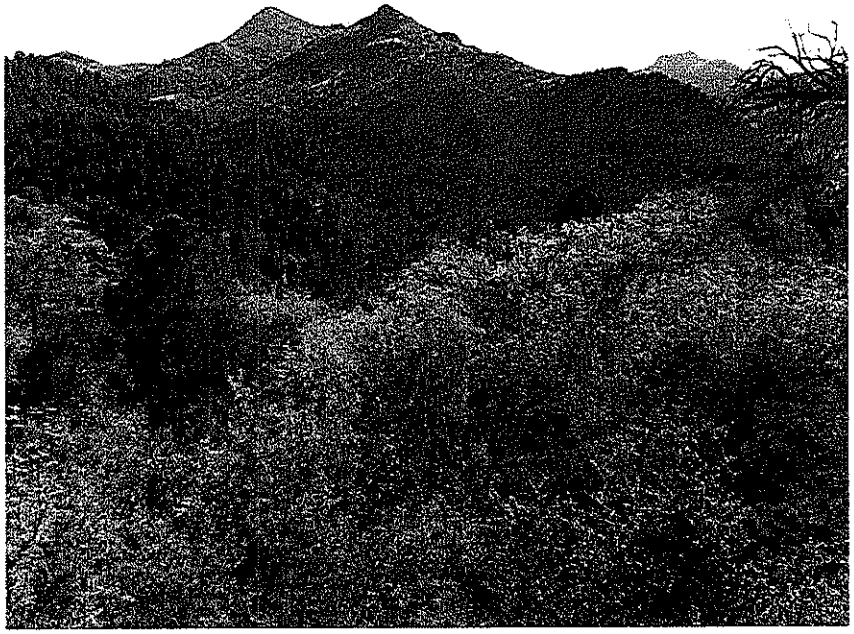
- Under pre-settlement conditions, healthy Arizona forests consisted of about 50 trees per acre.
- Today, that same acre supports up to 1,000 trees.
- Much of that growth is small diameter trees which, due to competition for nutrients and water, are much less healthy, highly susceptible to insect infestation and disease, and have become a substantial fuel load for wildfires.

The Problem – Unhealthy Forests

Arizona State Forestry

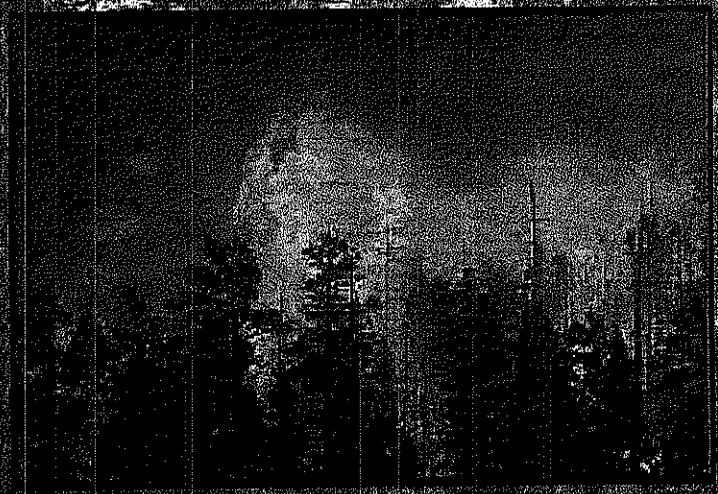
Pinyon Juniper Woodlands Need Treatment

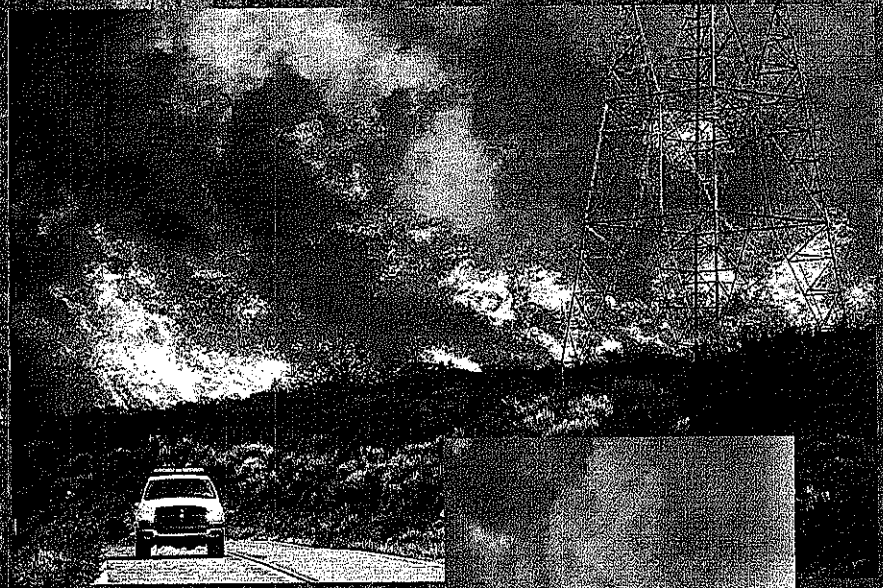


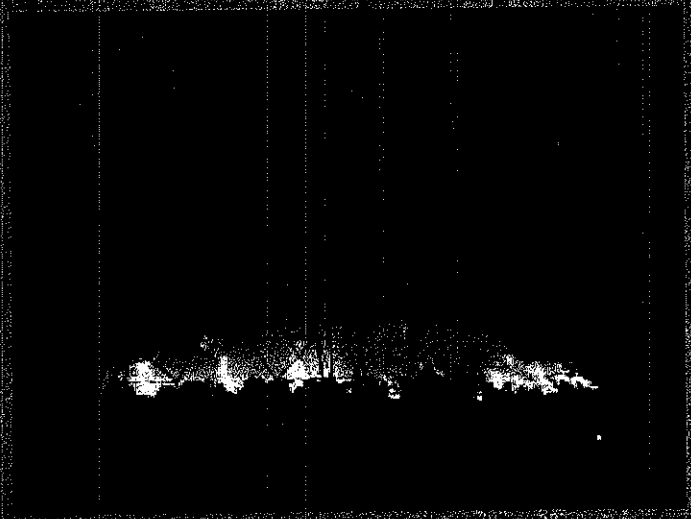


Arizona State Forestry

Result – Catastrophic Wildfires







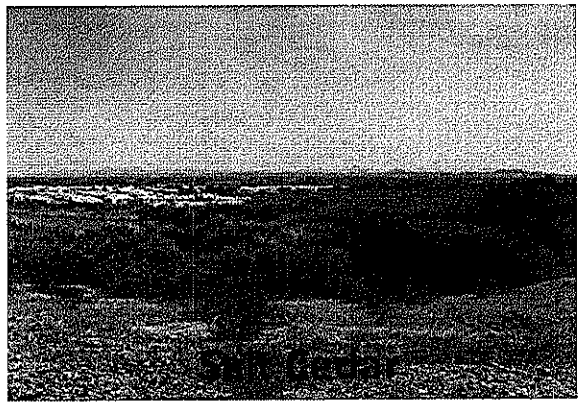
Arizona State Forestry

Post Fire Effects

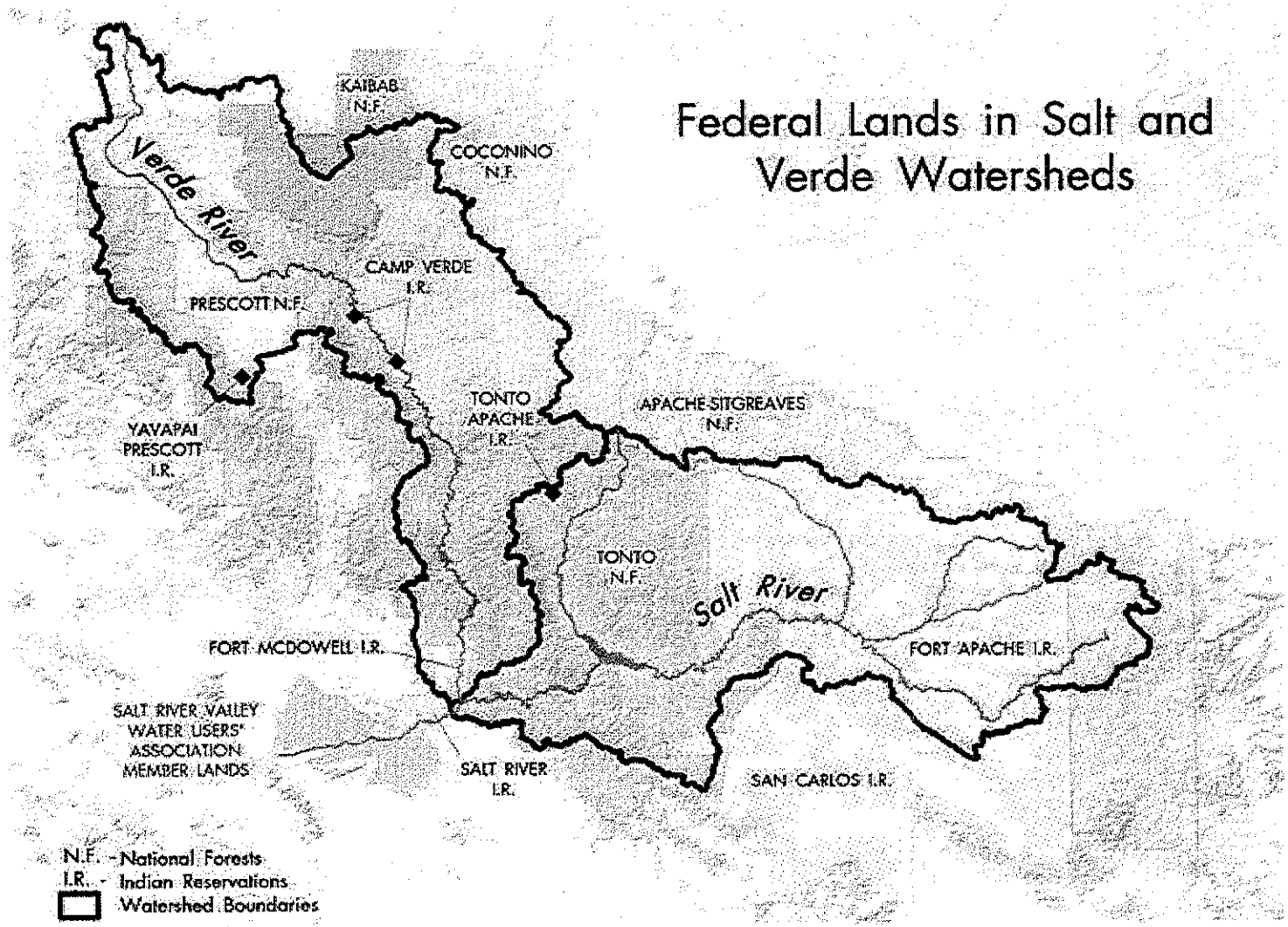
2002 Rodeo Chediski Fire. Runoff in ephemeral stream channel with sediment and ash.

No vegetation to hold runoff

Invasive Plants



Arizona State Forestry



Arizona State Forestry

Forest Water Yield

- Initial water yield increases of 15-40% are realistic when ponderosa pine forests are thinned, depending on soil type (Baker 2003). These increases are caused in part by changes in one or more of the following hydrologic factors:

  1. reduced interception losses
  2. reduced transpiration (use of water by vegetation)
  3. more efficient conversion of snowpack to stream flow.

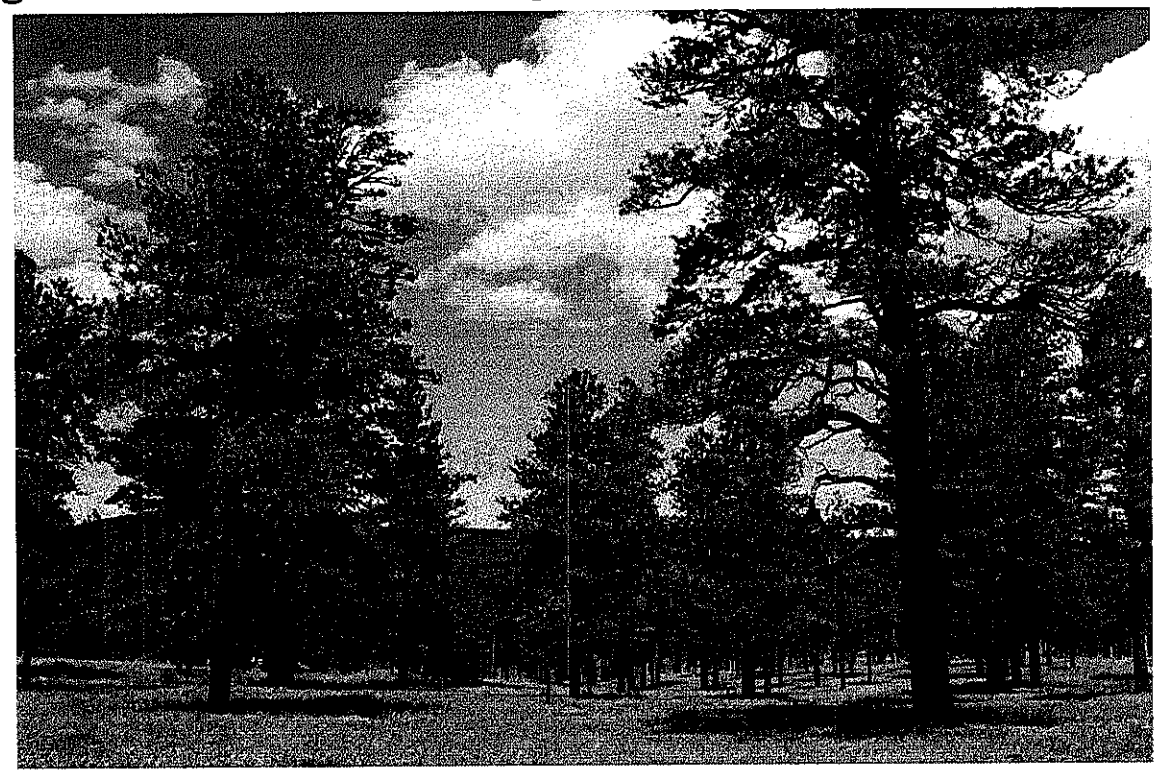
- Application of proper management practices (BMP's) reduce potential for erosion and water quality degradation from related forest management activities (thinning, harvesting, prescribed burning, roads)

Forest Watersheds

- Healthy forests are the foundation of healthy watersheds.
- Forested lands in Arizona contribute nearly 90% of the total streamflow in the state, much of which comes during spring snowmelt (Ffolliot 1975).
- Ponderosa pine forests, in particular, are the source for a large portion of the state's water. While occupying only 20% of the total land surface of the Salt and Verde River basins, ponderosa pine forests account for almost 50% of the total water yield (Barr 1956).
- Stable healthy stream channels and riparian areas are needed to maintain water quality.
- In much of Arizona's coniferous forests, the # of trees per acre and canopy cover have both increased creating a closed canopy intercepting much of the precipitation.
- Burned over areas are highly erosive and snowpack evaporates or sublimates rapidly back into the air.

Healthy Forest

The ability of the forest to sustain itself ecologically and provide what society wants and needs is what defines a healthy forest. Maintaining the balance between forest sustainability and production of goods and services is the challenge for owners and managers of the state's forests.



Healthy Forest

- Ecological: A healthy forest maintains its unique species and processes, while maintaining its basic structure, composition and function.
- Social: A healthy forest has the ability to accommodate current and future needs of people for values, products and services.

Cohesive Wildfire Strategy

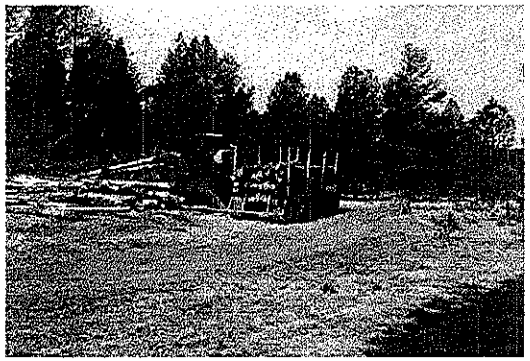
The National Cohesive Wildland Fire Management Strategy is a strategic push to work collaboratively among all stakeholders and across all landscapes, using best science, to make meaningful progress towards the three goals:

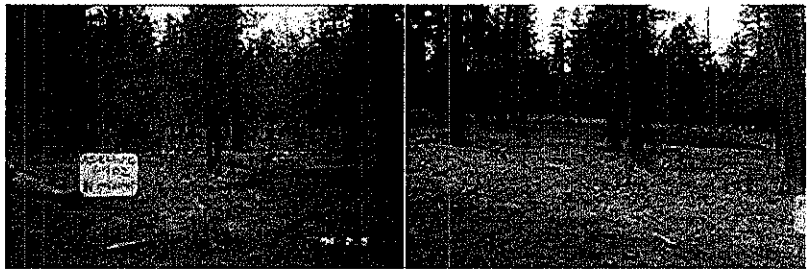
1. Resilient Landscapes.
2. Fire Adapted Communities.
3. Safe and Effective Wildfire Response.

Vision: *To safely and effectively extinguish fire when needed; use fire where allowable; manage our natural resources; and as a nation, to live with wildland fire.*

Forest Restoration

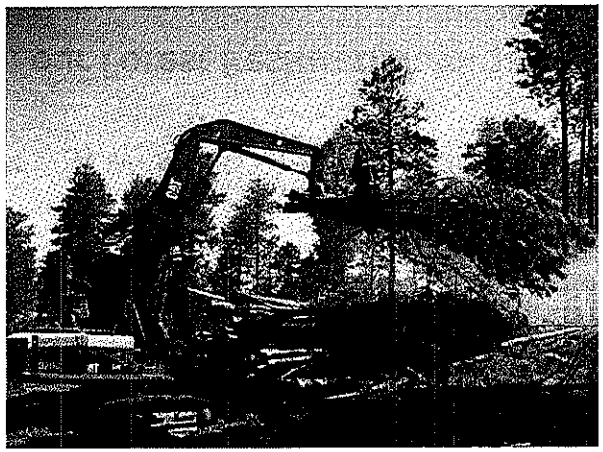
- Restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.

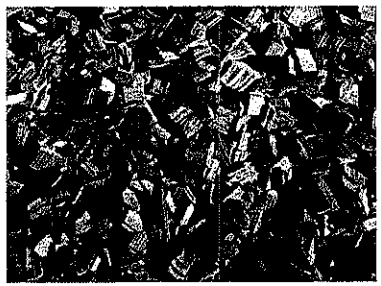


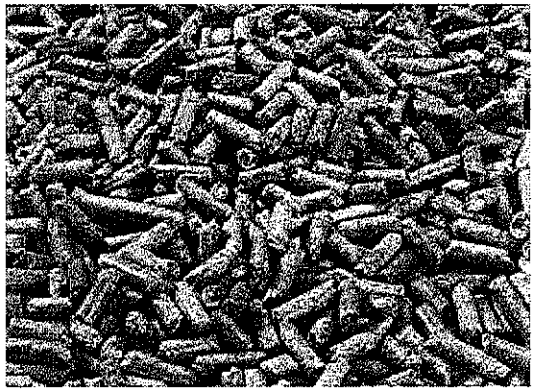


All Hands, All Lands

- Solving Arizona's forestry issues requires an *all hands, all lands* approach.
- Public/private partnerships are essential to our efforts to protect and enhance ecosystem services and protect our soil, water, and air.
- We need to operate at a scale sufficient to address our forestry challenges. A vibrant forest industry in Arizona is necessary for long term success.







Restoration Projects

Bob-Fry Timber Project

- Will demonstrate to the Forest Service and other partners designation by prescription, tablet technology, and cutter select harvest methods.
- It will also make additional logs available for local forest industries in northern Arizona.

Four Forest Restoration Initiative (4FRI)

- Collaborative, landscape-scale initiative designed to restore fire-adapted ecosystems in the Kaibab, Coconino, Apache-Sitgreaves and Tonto national forests.
- The overall goals of the Four Forest Restoration Initiative (4FRI) is to restore the structure, pattern, composition, and health of fire-adapted ponderosa pine ecosystems; reduce fuels and the risk of unnaturally severe wildfires; and provide for wildlife and plant diversity.

Drake Pinyon Juniper Biomass/Watershed Improvement Project

- Innovative biomass harvesting method.

Arizona State Forestry Division

Thank You

Contact information:

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jeffwhitney@azsf.gov

www.azsf.gov

HOUSE OF REPRESENTATIVES

HB 2325

environment; water quality amendments
Prime Sponsor: Representative Pratt, LD 8

X Committee on Energy, Environment and Natural Resources

Caucus and COW

House Engrossed

OVERVIEW

HB 2325 requires fees collected for wastewater and drinking water operator certification to be deposited in the Water Quality Fee Fund and conforms statute to federal law relating to the allowable lead content in pipes and plumbing fixtures.

PROVISIONS

1. Requires fees collected for wastewater and drinking water operator certification to be deposited in the Water Quality Fee Fund (Fund).
   a. Adds that monies in the Fund are to be used for operator certification, in addition to other statutory uses.
2. Changes the allowable lead content for pipes and pipe fittings, including plumbing fittings and fixtures, to a weighted average of .25%
   a. Exempts pipes and plumbing fixtures used for water that is not anticipated for human consumption, as well as other specified products, from the lead content requirement.
3. Provides the calculation formula for determining the weighted average lead content of pipes and plumbing fixtures.
4. Makes technical and conforming changes.

CURRENT LAW

Lead Content

The Reduction of Lead in Drinking Water Act (P.L 111-380), enacted on January 4, 2011, amended the Safe Drinking Water Act by reducing the allowable lead content in pipes and plumbing fixtures used for drinking water from 8% to a weighted average of .25% and exempted pipes and plumbing fixtures used for water that is not intended to be used for human consumption, as well other specified products, from the lead content requirement. The law became effective on January 4, 2014, which prohibited the sale and installation of any products not in compliance with the .25% lead limit, unless otherwise exempted from the prohibition.

Current statute caps the allowable lead content for pipes and pipe fittings at 8% (A.R.S. § 49-353).

Operator Certification Fees

Current statute requires wastewater and drinking water operator certification fees collected to be deposited in the General Fund (A.R.S. § 49-352, § 49-361).

ARIZONA HOUSE OF REPRESENTATIVES
Fifty-second Legislature - Second Regular Session

ROLL CALL VOTE

COMMITTEE ON ENERGY, ENVIRONMENT AND NATURAL RESOURCES BILL NO. HB 2325

DATE January 25, 2016 MOTION: dp

	PASS	AYE	NAY	PRESENT	ABSENT
Mrs. Barton		✓			
Mrs. Carter		✓			
Mr. Clark		✓			
Mr. Finchem		✓			
Mr. Kopec		✓			
Mr. Leach		✓			
Mr. Saldate		✓			
Mr. Bowers, Vice-Chairman		✓			
Mr. Pratt, Chairman		✓			
		9	0	0	0

Patty Wisner
COMMITTEE SECRETARY

APPROVED:
Franklin M. Pratt
FRANKLIN M. PRATT, Chairman
RUSSELL BOWERS, Vice-Chairman

ATTACHMENT 5

ARIZONA STATE LEGISLATURE

Fifty-second Legislature - Second Regular Session

COMMITTEE ATTENDANCE RECORD

COMMITTEE ON **ENERGY, ENVIRONMENT AND NATURAL RESOURCES**

CHAIRMAN: Franklin M. Pratt VICE-CHAIRMAN: Russell Bowers

DATE	1/25/16	/16	/16	/16	/16
CONVENED	2:04pm	m	m	m	m
RECESSED					
RECONVENED	3:11 pm				
ADJOURNED					
MEMBERS					
Mrs. Barton	✓				
Mrs. Carter	✓				
Mr. Clark	✓				
Mr. Finchem	✓				
Mr. Kopec	✓				
Mr. Leach	✓				
Mr. Saldate	✓				
Mr. Bowers, Vice-Chairman	✓				
Mr. Pratt, Chairman	✓				

√ Present --- Absent exc Excused

Attachment 6