

A photograph of a forest landscape. In the foreground, there is a grassy slope with several young, vibrant green pine trees. The middle ground shows a mix of these young trees and some taller, more established ones. The background is filled with a dense forest of tall, mature pine trees. The sky is overcast and grey.

Long Term Forest Health Challenges

A Rural County Perspective

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Siskiyou County

Why Are Our Forests in Peril?

A Combination of:

- Climate Change
- Ecological Dysfunction
- Historic Management Practices
- Antiquated Environmental Law
- NF Budget and Personnel Shifts
- Litigation

What is happening to our Forests?

100 years of changing conditions

Climate and Ecology

- We ended a 100 year wet climate cycle in about 1975 headed toward our normal 500 year dryer cycle.
- Stand densities are above “carrying capacity” with tree species compositions conducive of wetter climate cycles.
- Second growth stands must be managed or stand collapse begins.
- Fire has been extirpated from the landscape in CA’s fire adapted landscapes.
- High densities of white fir have invaded the Ponderosa Pine Range.
- Warming and drying trends continue

Management and Policy

- Harvest levels are well below historic levels on public lands, now at 1962 levels.
- Management of public lands is in a general legal gridlock.
- Laws are antiquated and stand in opposition to modern ecological principles.
- Sawmill and processing facilities are at record historic low capacities.
- Fire borrowing from management funds is preventing proactive forest work at sufficient scales.

Need for Policy Changes

Static or Dynamic Management?

The Agency Legal Gridlock

Laws Designed by 1960's Science

Endangered Species Act

- Attempts to hold habitat static in perpetuity.
- All human impact is a negative effect.

Clean Water Act

- Sediments in streams are negative effects without regard to geomorphology.

NEPA

- Actions are weighed in negative (significance) terms, all degrade the environment. No action has, no consequence??????

EAJA

- Has no foundation in science yet predominates scientific decision thought processes

Clean Air Act

- Preempts small scale management smoke emissions while not considering uncontrolled wildfire releases of same

Resultant Static Forest Policy

Land management Plans

- Rigid for periods of 10-20 years with significant costs for revision.
- Do not allow for new science or emerging issues in responsive timeframes.

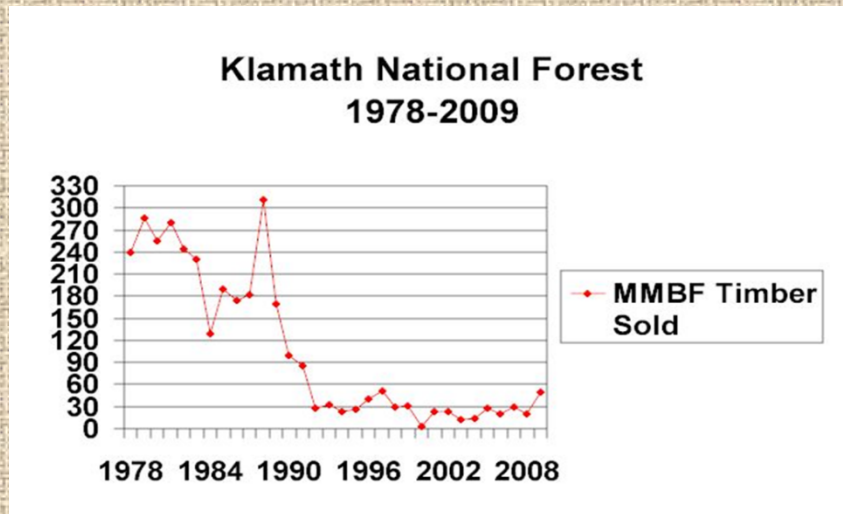
Northwest Forest Plan

- Does not respect ecosystem function
- Sets one species above another to determine function
- Geographically too large to address ecosystem differences
- Stasis predisposes landscapes to rapid ecosystem retrogression

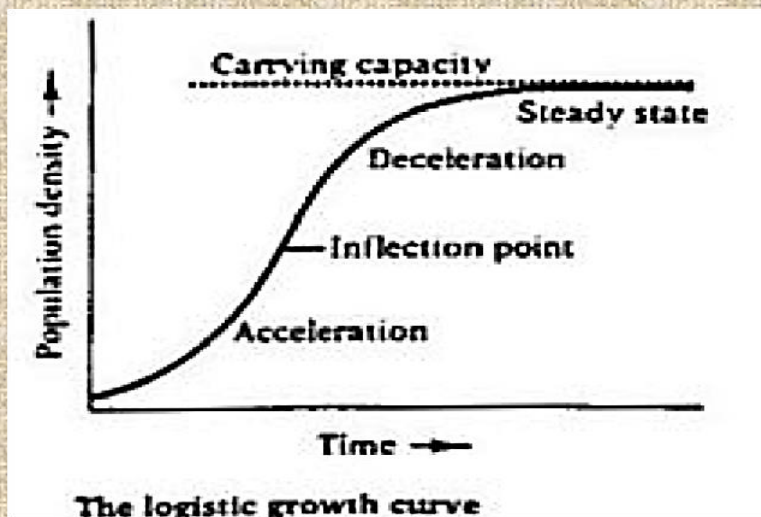
Landscapes Predisposed to Catastrophic Failure by the Rigidity of Laws/Northwest Forest Plan

- The average harvest rate on Plan Forests since 1990 has been 295 million board feet per year or a loss of 1.03 billion board feet per year.
- 20 years of annual growth has dramatically increased tree density with a reduction in water yield.
- Removal of 7 percent of annual growth increases wildfire trends. Since 2001 CA's NF's, have lost 558,000 acres/yr. to wildfire.
- Large landscapes in Oregon and northern California have been destroyed by insect and disease spread at an abnormal frequency and scale.
- The plan mandates dense stands above the carrying capacity in fire adapted landscapes regardless of ecological function or slope position.

Litigation and Local Listing of NSO Forest Effects



- Collapsed Economies in rural counties
- Decreased Forest Resilience already predisposed by previous management practice
- NSO habitat requirements prohibit forest gaps necessary for proper watershed function

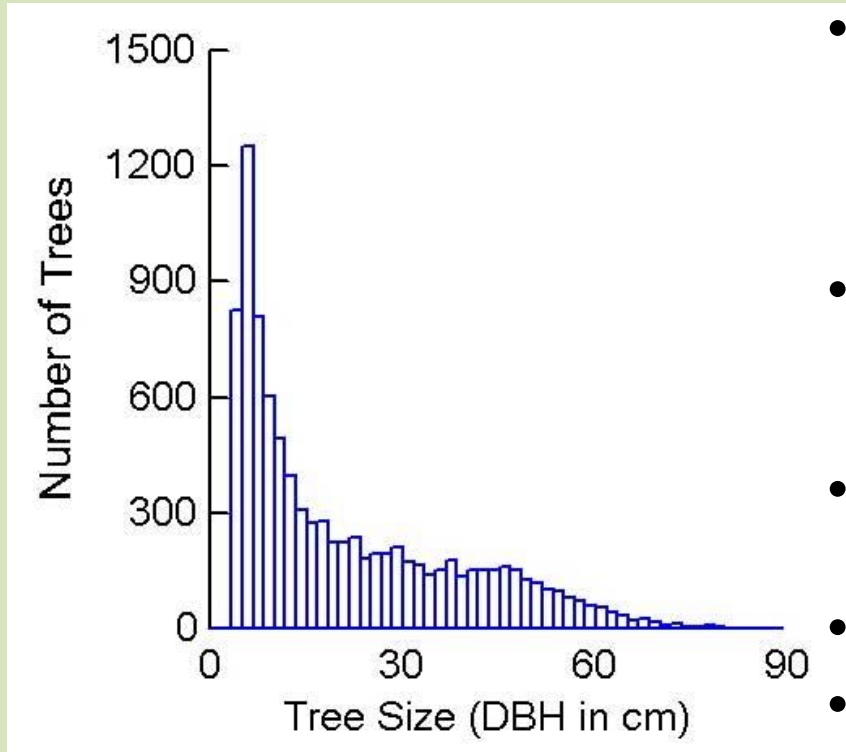


- Stopped Managing rapid growing second growth forests.

Historic Forest Management Practices

Management focused on:

- Removal of large wood
- Removal of Dominate Pine and Douglas Fir Species accelerating species conversions to True Fir
- Protected understories often suppressed trees with low vigor
- Creating even aged classes on the land
- Planted forest gaps
- An eye toward management of the second growth and conversion of OG mills to small log mills.



Changes in Stand Density

Local Klamath NF Example

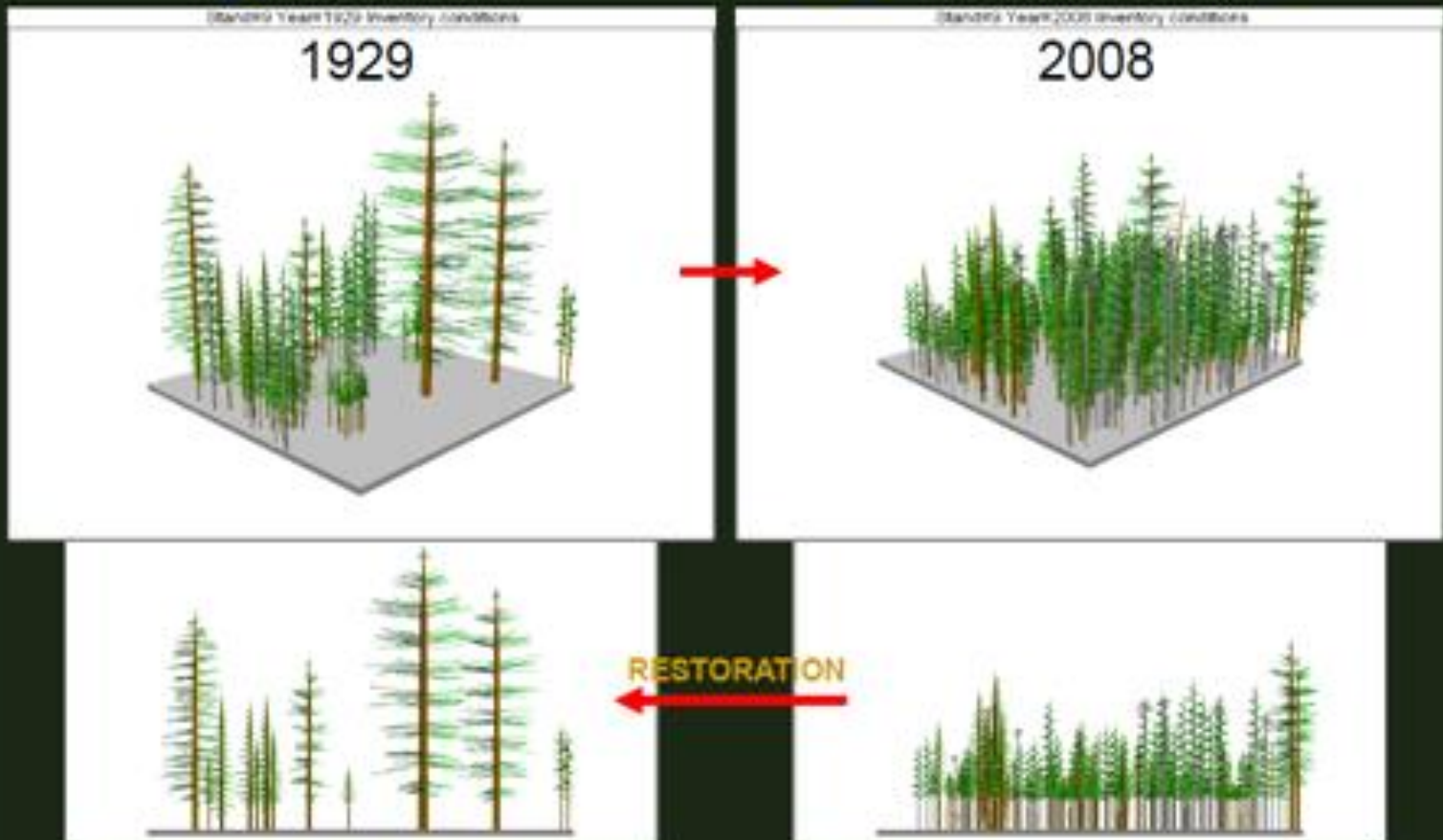
Forest Management

- ❖ Pre 1952 harvesting limited to mining and subsistence cutting.
- ❖ In Scott Valley the first commercial timber sale occurred in 1952.
- ❖ 1952-1975, Saw increases of cutting but still well below the annual growth of the forest
- ❖ 1975-1992, Increased management to about 50% of annual growth
- ❖ 1992, Harvesting collapsed, NSO listed, Litigation against sales ensued.
- ❖ 1992 to present - harvest levels average 25MMBF/yr. on a forest growing approximately 600MMBF/yr. net growth. Rapid biomass accumulations predisposed to disease and fire.
- ❖ Current thinning from below creates a monoculture of trees with interlocking crowns. We are shifting the fuel biomass from the ground to the canopy with more lethal effect.

Combination of Structural Changes

Duncan Dunning/Eric Knapp Research

Change in structural variability (trees > 4 inches)

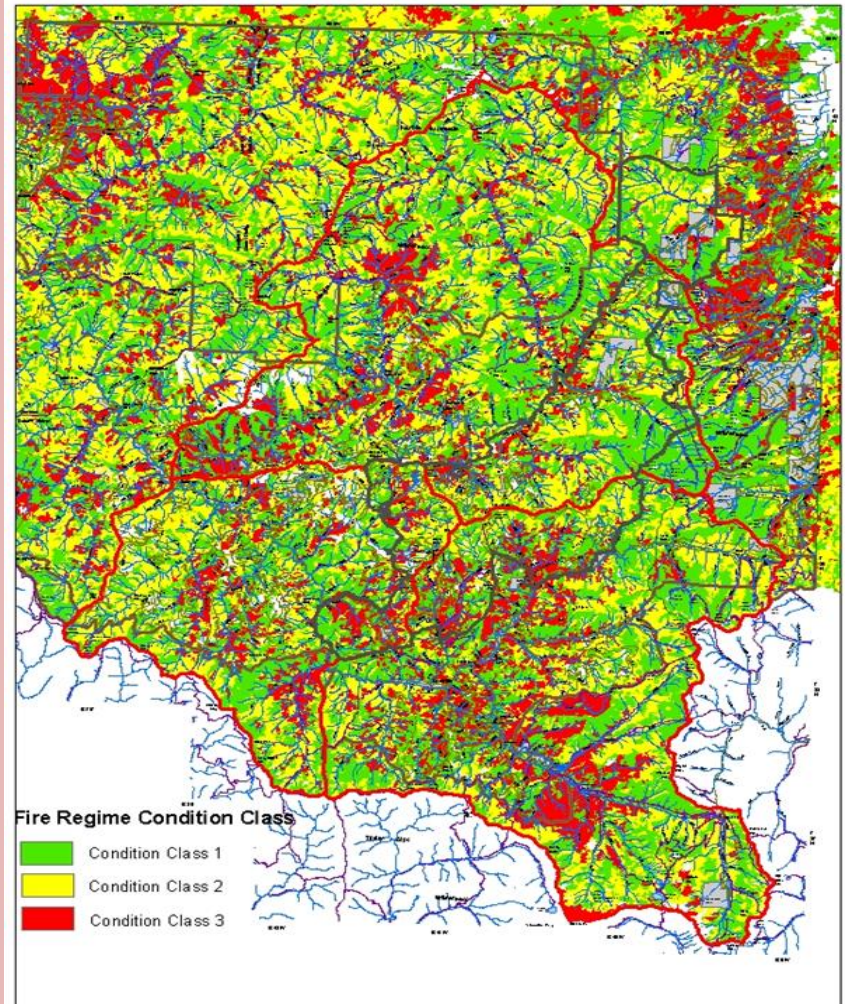
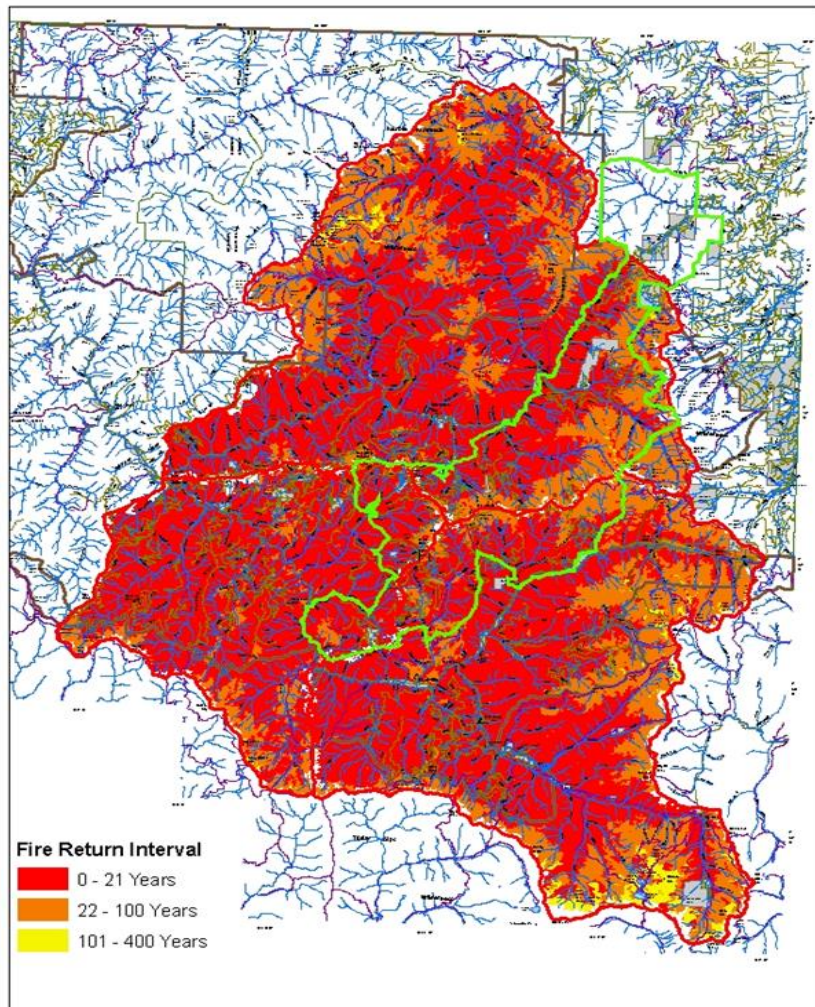


Fire On the Landscape

A Picture of Dysfunction

Fire Occurrence

Departure from Normal



Siskiyou County Wildfires

Fires in Siskiyou are increasing in severity, duration and size in recent years much elevated above any local historic reference.

A Glimpse at California's Future using Siskiyou County's Record

- Frequent wildfire smoke events well above healthy air quality standards inundate our communities for 4-6 months each year.
- Crop yield and economic disruption is common due to smoke and other emergency closures.
- Recreation under the NWFP was to be our new forest industry to make up the difference in timber output. Each year we watch that opportunity burn with little regard from the agency or our elected officials.
- Snag patches, close to 1 million acres in recent years limit firefighting when re-burns occur in the next decade continuing the site conversions from productive high site forest to brush.

With this trend coupled with a lack of effective agency salvage and reforestation , our communities will continue to be at risk of:

- Protracted indirect attack suppression methods
 - Prolonged smoke exposure
 - Degraded water quality
 - Increased untreated fuels threat to private timber lands
 - Increased public road operational costs
 - A Lost future for forest product economic opportunity
- About 1 million acres of Spotted Owl habitat has been destroyed or radically changed since 2000.

National Fire Borrowing

Rural County's Sucker Punch

Fire Borrowing occurs each year

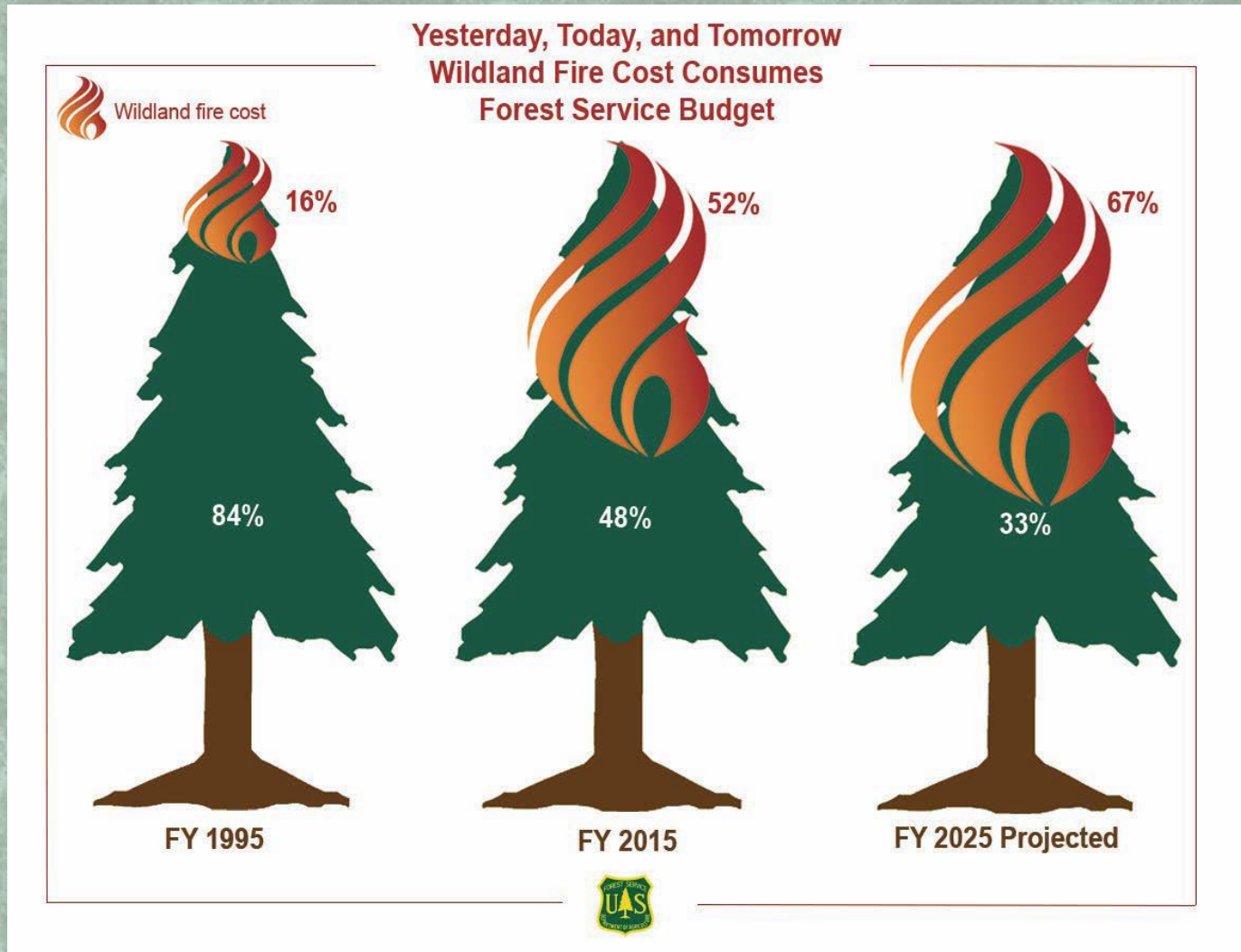
- Each year as fire suppression costs exceed Congressional Appropriation the agency must balance it's budget.

Funds are diverted from:

- Timber Program
- Recreation Program
- Watershed Program
- Fuels Program

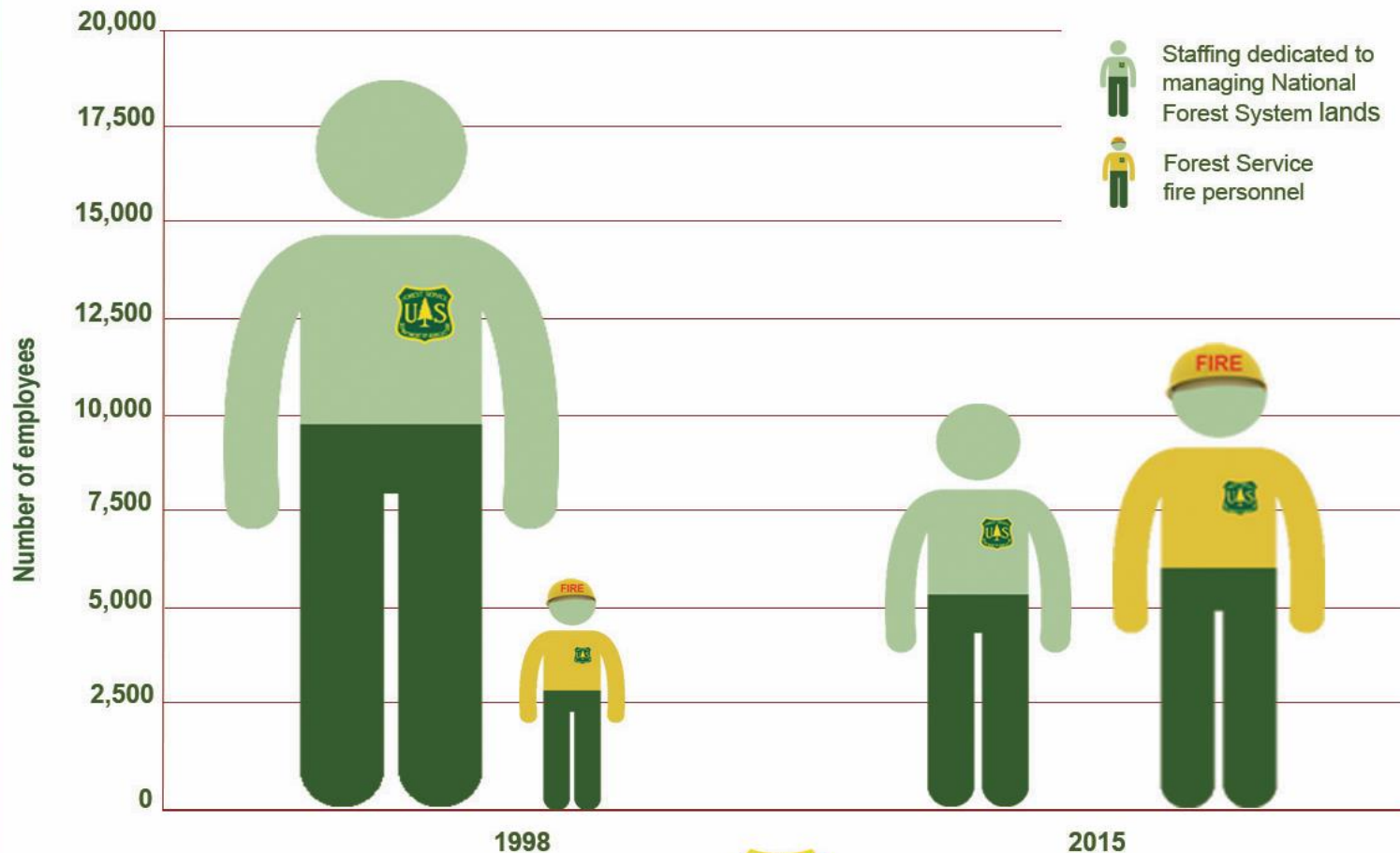
When funds are diverted, outputs are reduced and subsequent reductions in non-fire personnel occur.

Fire Borrowing as a Percent of Budget



Forest Management Staffing Reduction 1998 to 2015

Shift in Forest Service Staffing Levels 1998-2015



Siskiyou County's Economy

Tied to Forest Management

- ✓ **63% of lands in Siskiyou County are in Federal ownership product output losses greatly reduce overall county services.**
- ✓ **Unemployment rate is 18.7%, ranking Siskiyou 50th of 56 CA counties. Some local Forest-dependent communities are at 30% .**
- ✓ **Siskiyou rated in the bottom 5 counties for unemployment, drug/alcohol dependence and domestic violence in California.**
- ✓ **Once a thriving economic engine in CA we are as a result of continued ESA listings and NWFP dysfunction one of the poorest counties in CA**

“Rural Communities remotely situated away from large metropolitan areas struggle to exist”, NWFP Review 2013

Public Lands and Counties

“Tied at the Hip”

Forest Reserve Design

25% Forest Receipt Collection

- Designed as replacement for lack of property taxes.
- Collected for support of County of Origin Roads and Schools.

Siskiyou County historically received \$8.5 million.

For every 1 MBF Harvested 16 jobs are created. At harvest levels in 1989 of 125MMBF = 2,000 jobs.

Every dollar spent in the Timber Industry multiplies 5 times in the local economy

Current Situation

25% collections are very low as outputs dwindle and products shifted to low value Biomass.

Siskiyou County currently receives \$3.5 million direct offset payments as 25% substitution.

Harvest levels currently at 25MMBF = 400 jobs, a loss of 1600 jobs from historic.

Direct Government payments do not equally multiply in the economy and do not create private sector jobs.

What Can Counties Do?

Be Proactive - Communicate

❑ New legislation Must be Passed

- ✓ Work with Federal and State Elected Officials to support legislative fixes to old laws.

❑ Budget support

- ✓ Work with Federal and State Elected Officials to pass Fire Suppression reform, Many do not support this.

❑ Support the work of your local forest programs through:

- ✓ Filing Amicus briefs on litigated projects.
- ✓ Advocate the County's position through planning processes and direct contact with agency decision makers.
- ✓ Form Collaborative working groups so there is a record before the public and court system that this work is important to your electorate and it effects them directly.
- ✓ Use your Coordination powers as a County in Planning.
- ✓ Support your local Fire Safe Councils and other advocacy groups who interface the agencies.

➤ **Hold the agency accountable**

- ✓ Review their work annually and put the record of accomplishment to them in writing.
- ✓ Get involved in the annual budget process on programs important to your county.
- ✓ Communicate the agencies successes and failures to your elected officials regularly.