Dry Forest II: Applying New Knowledge to Manage Fuels and Habitats in Eastside Forests

Perspectives Panel "How are we doing?"

Okanogan Wenatchee National Forests

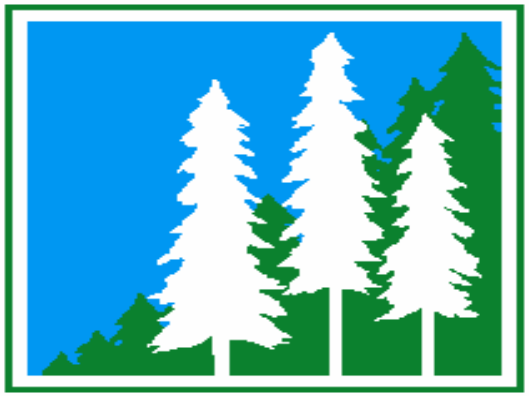
Wenatchee, Washington

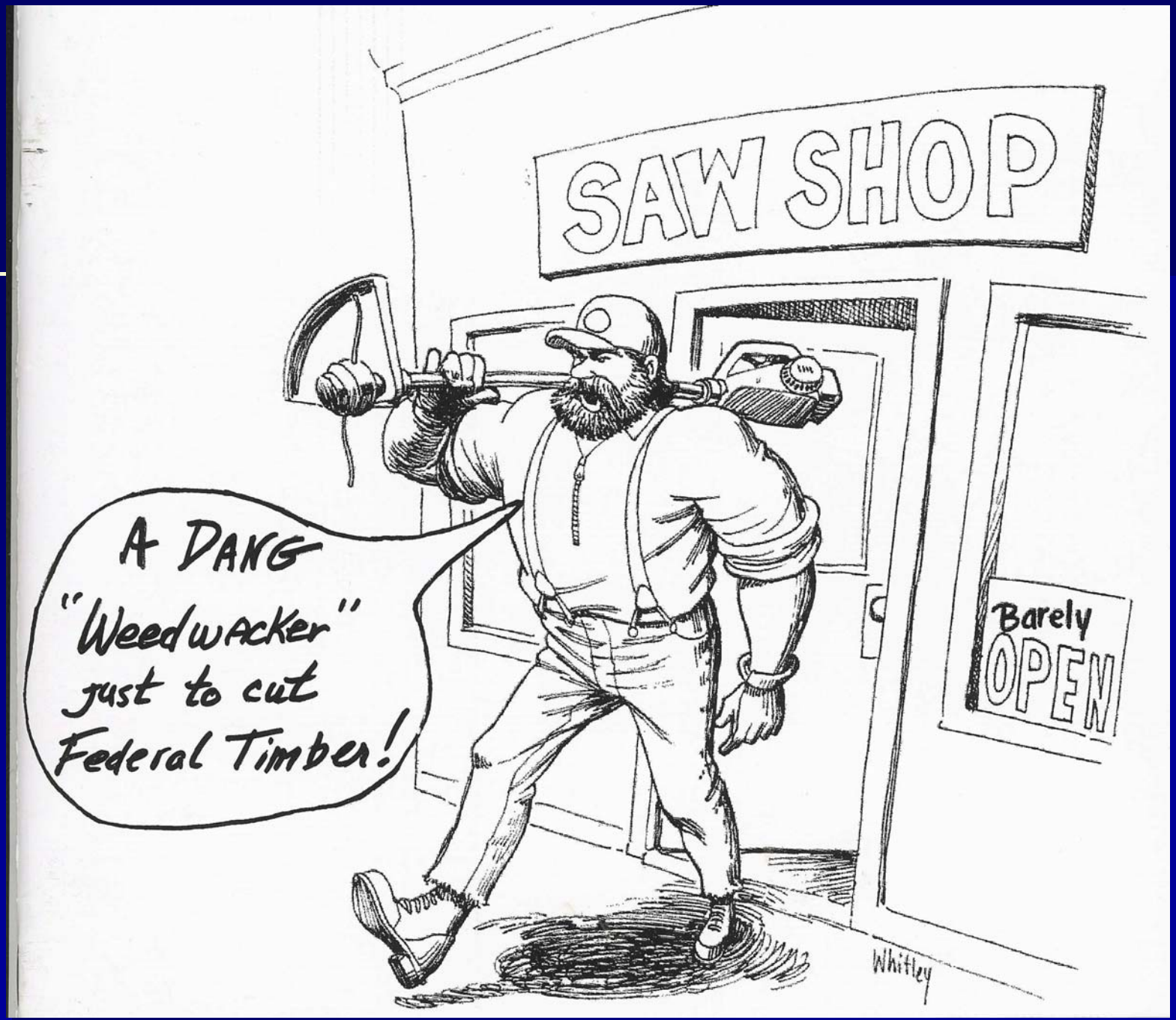
Philip S. Aune Consulting Forester

American Forest Resource Council

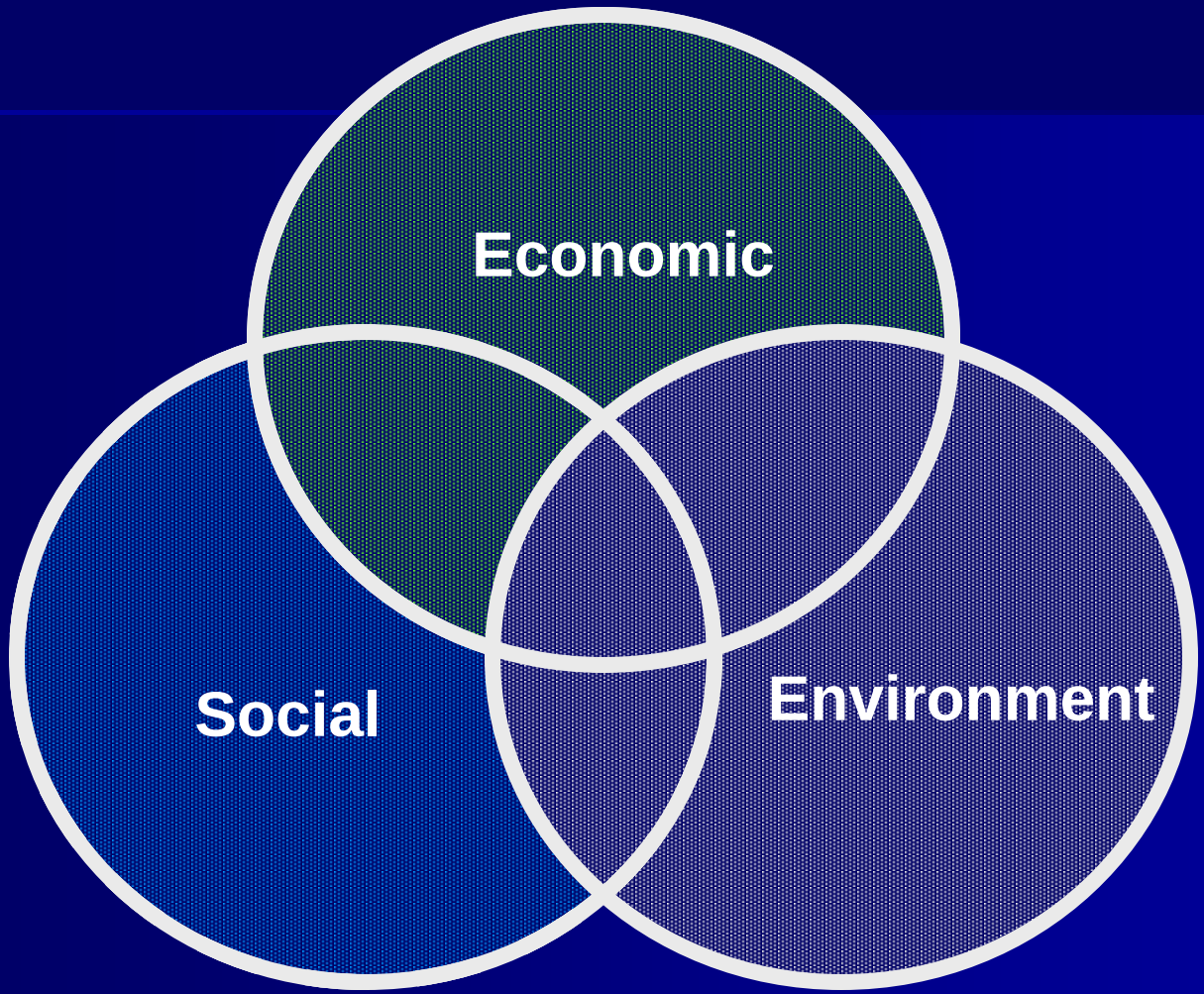
Retired California Forestry Association/USFS

May 1, 2007




SAW SHOP
A DANG "Weedwacker" just to cut Federal Timber!
Barely OPEN
Whitley

Building Economics into the Partnership Decisions



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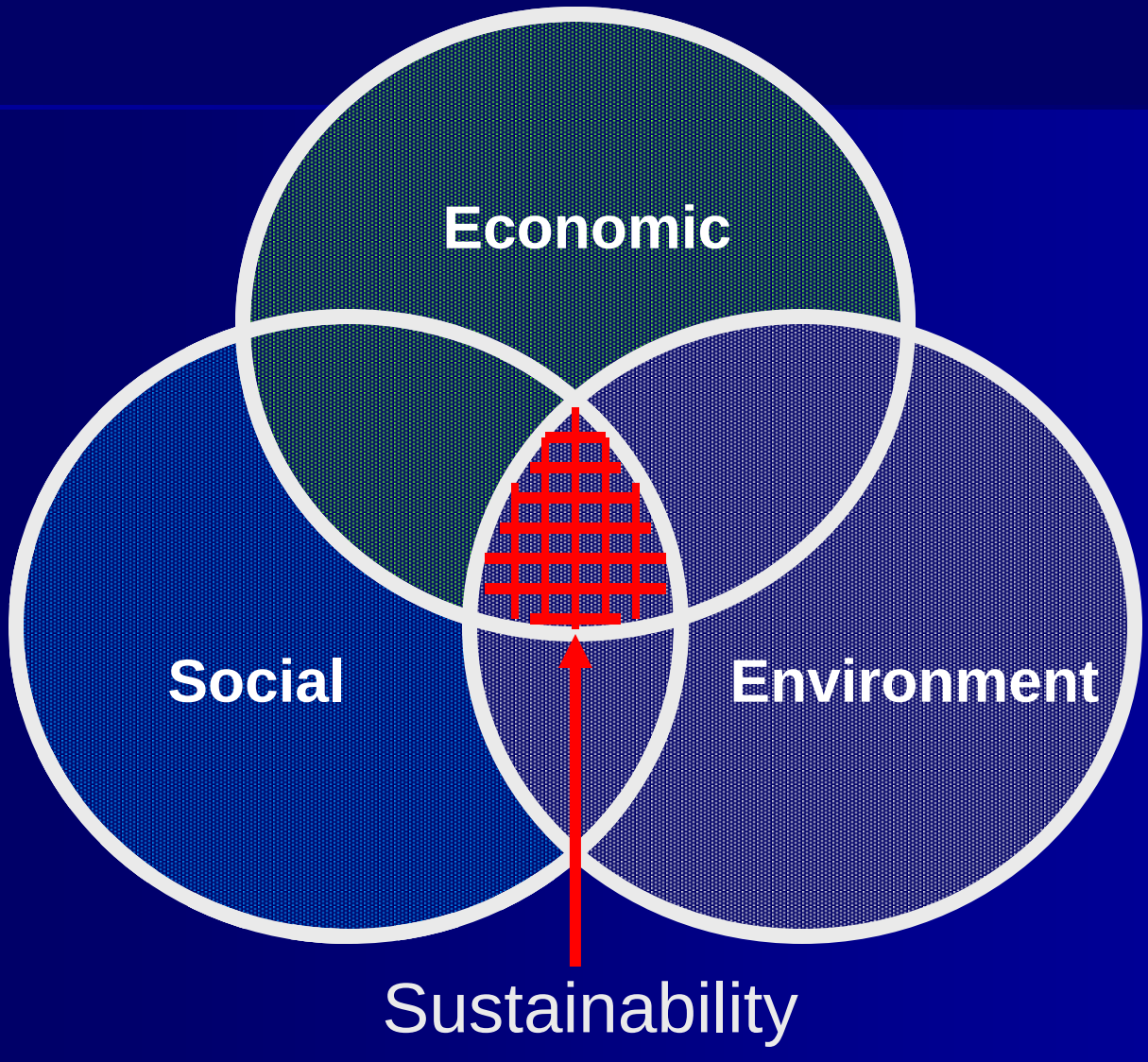

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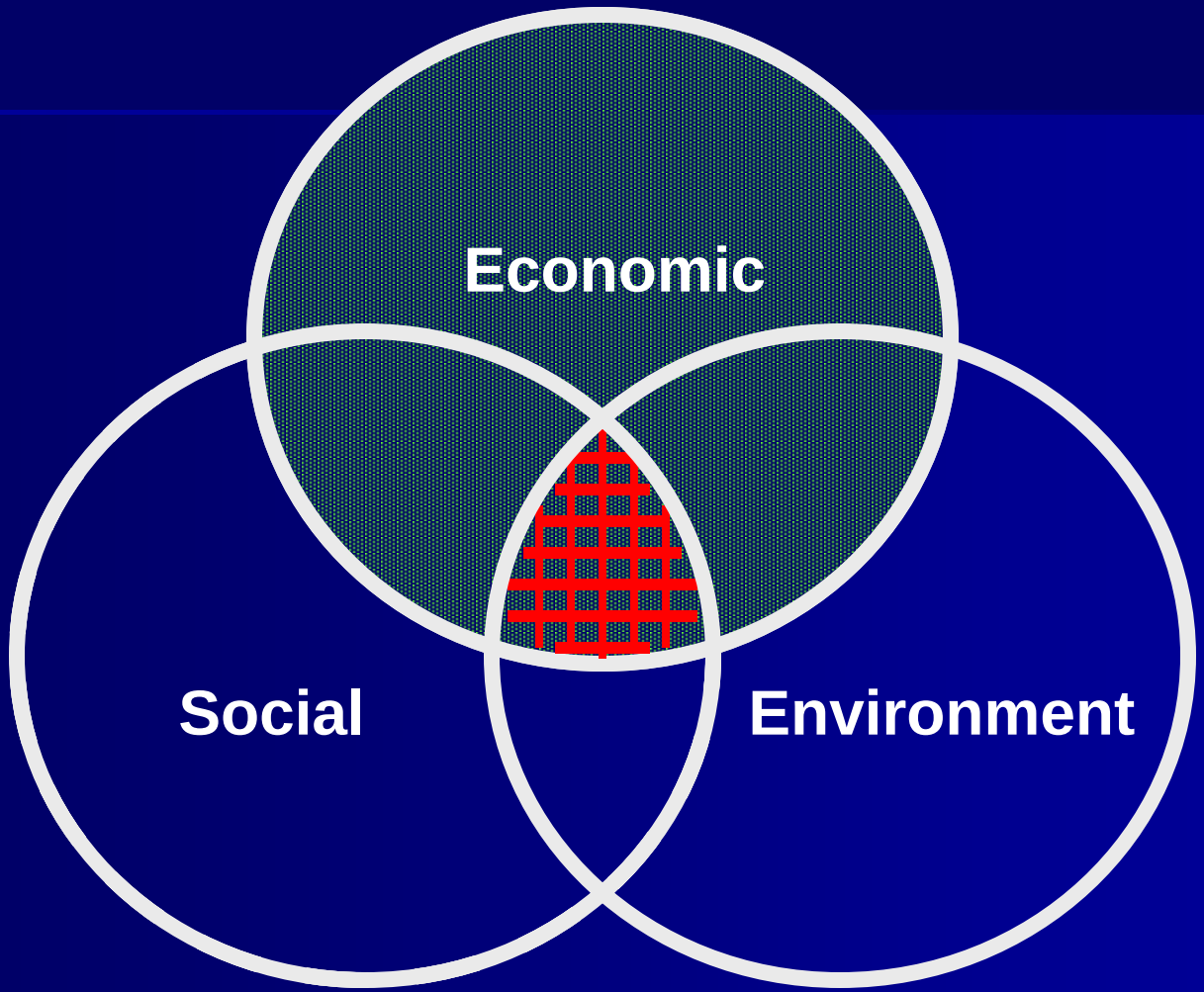
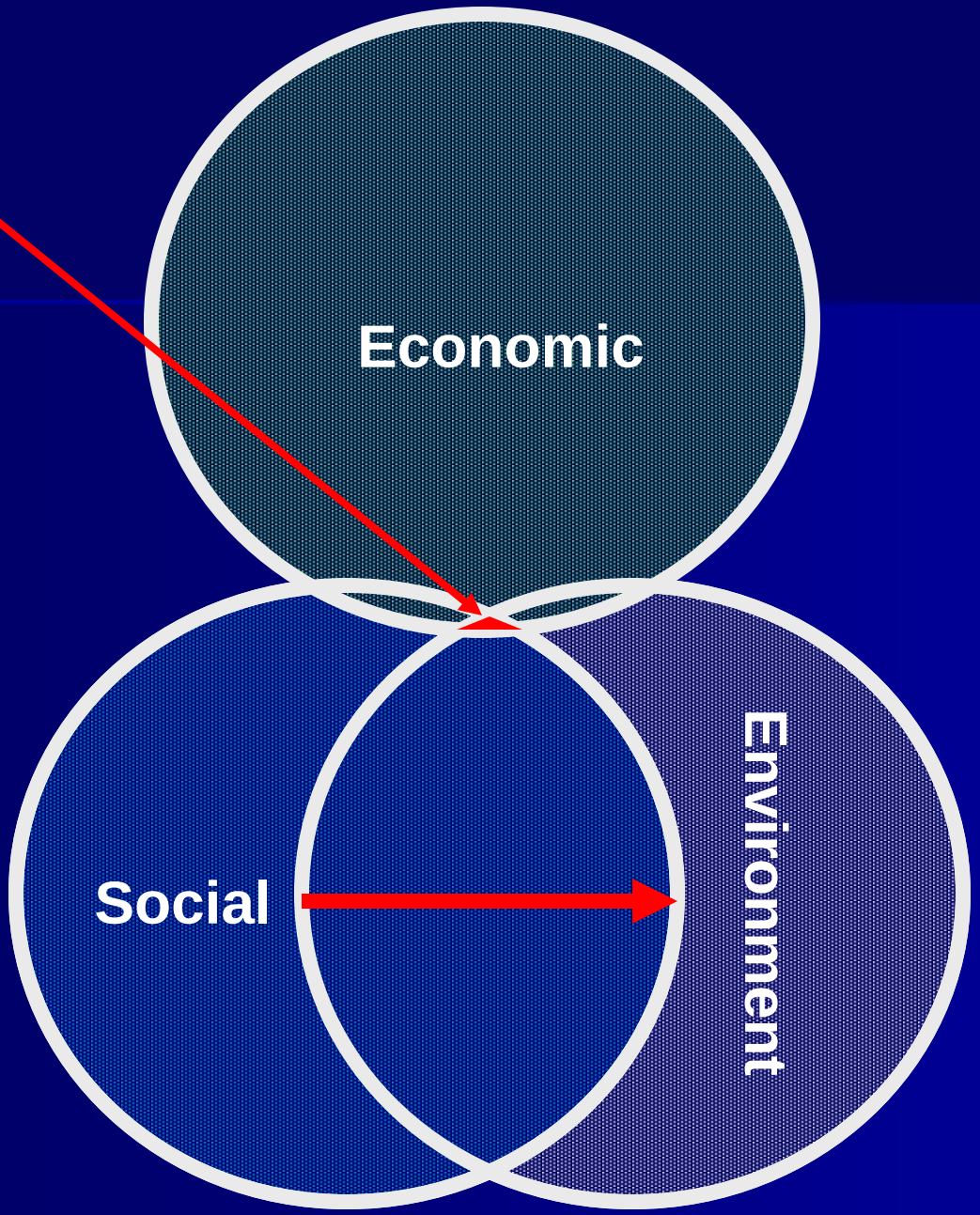


Reality of Current Decision Process



RPA National Forecast – Solid Wood

Demand Side

- US lumber demand will increase: *bigger* houses, *more* houses, *more* rebuilding even though non-lumber substitutes will grow.

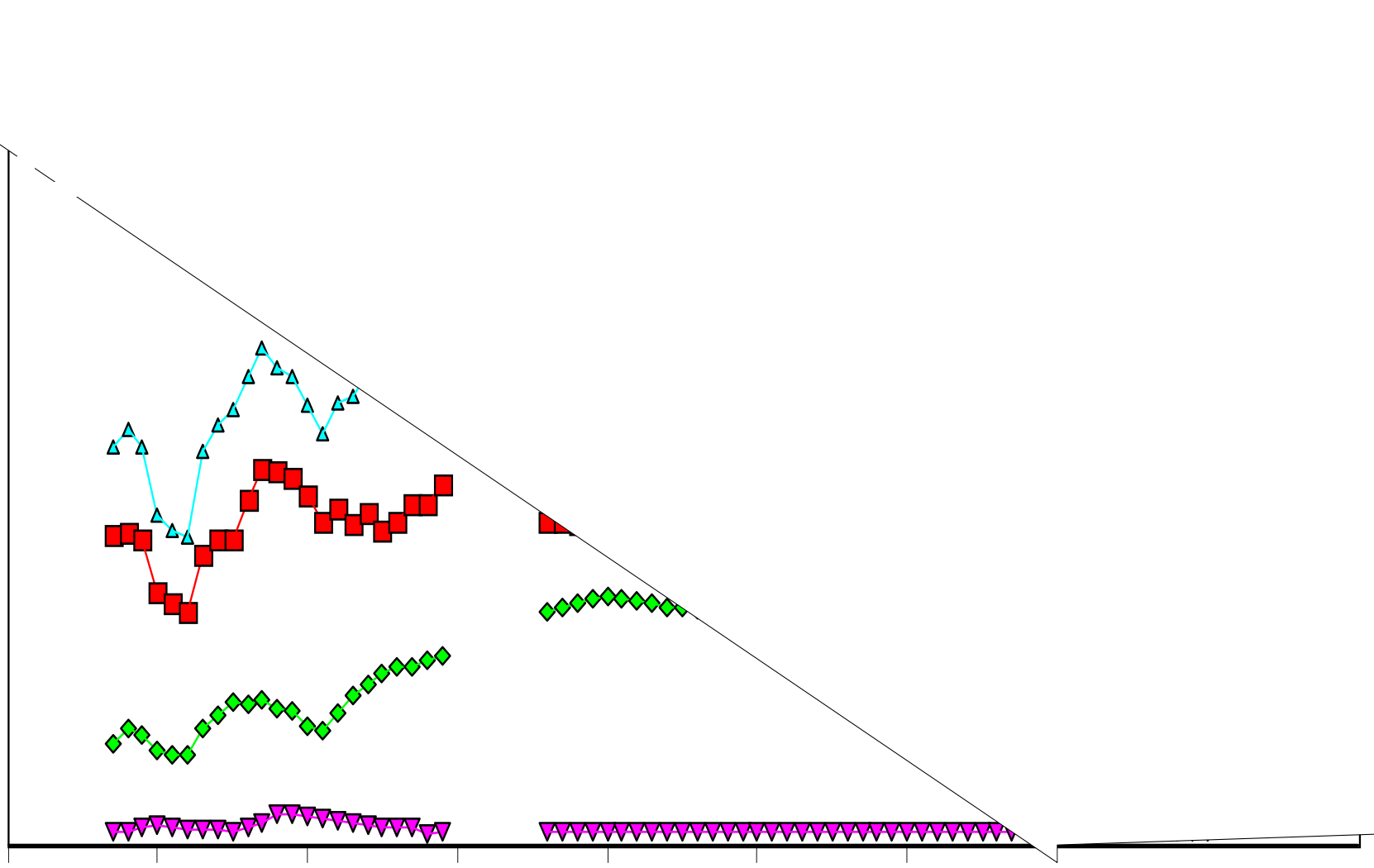
2004 61.8 billion board feet

- **2005 63.6 billion board feet +3%**

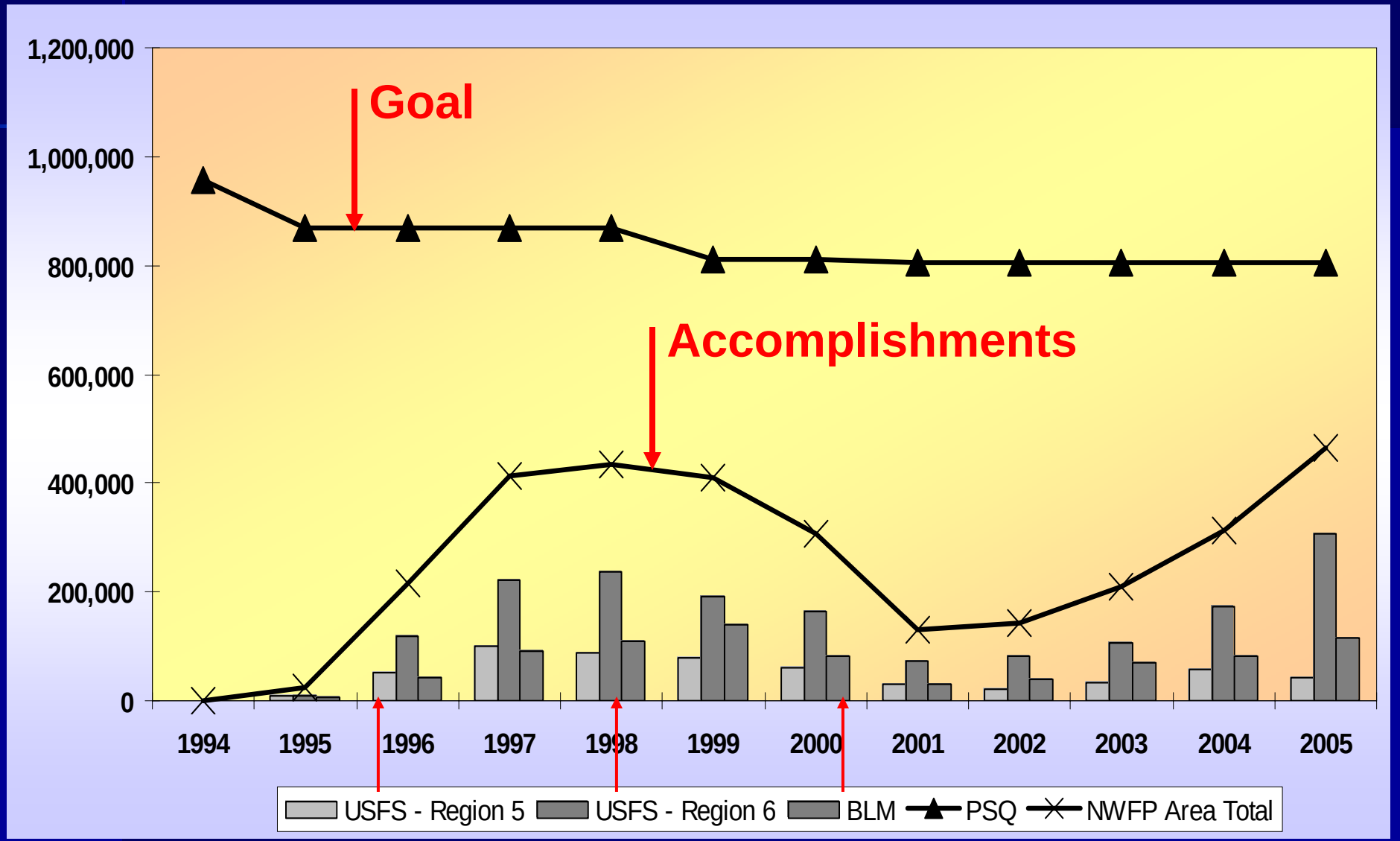
  Imports 25 billion board feet +3.4%
  Non Canadian 3 billion board feet

- **2006 62.4 billion board feet – 2%**

US Softwood Lumber



Effects of the Northwest Forest Plan



Effects of the Northwest Forest Plan

Only 30% of what was promised under the NWFP has actually reached sawmills during the first 12 years of the Plan.

Pace and Scale of the Problem

- Roughly 2,100,000 acres in the OKWE National Forests and 1/3 of the land available for treatments or 700,000 acres
- Of that 700,00 acres, 2/3 National Fire Plan Condition Class II and III or 525,000 acres
- How many acres per year have you done?
- How many acres do you need to do per year to do the initial reduction?
  - Within 10 years 52,500 acres per year
  - Within 20 years 26,250 acres per year
  - Within 30 years 17,500 acres per year

Pace and Scale of the Problem

- Wildfires have vastly exceeded fuels reduction accomplishments by orders of magnitude
- Your forests are now recognized as part of the global climate change problem

Wildfire effects

In a high fire year, roughly 900,000 to 1 million tons of particulate matter are emitted into the air

Compare this with the approximately 2.2 million tons per year of particulates that all other combustion sources (fuel combustion, industrial processes, transportation sources) produce.

Source EPA

Carbon & Fire Summary
(25 yr phase in treatment to reduce fires)

- No Action (NA) on ONF: 5 million tonnes carbon released from burning, another 5 from decomposition
- BA45: 12 million tonnes more total carbon than NA from ONF;
  - 16 more tonnes per acre end of period
  - 26% more carbon than NA on average
  - 38% more from 2025 to 2050
  - 50% more by 2050

Signal Thinning

Eagle Lake Ranger District

Lassen National Forest

Signal Thinning

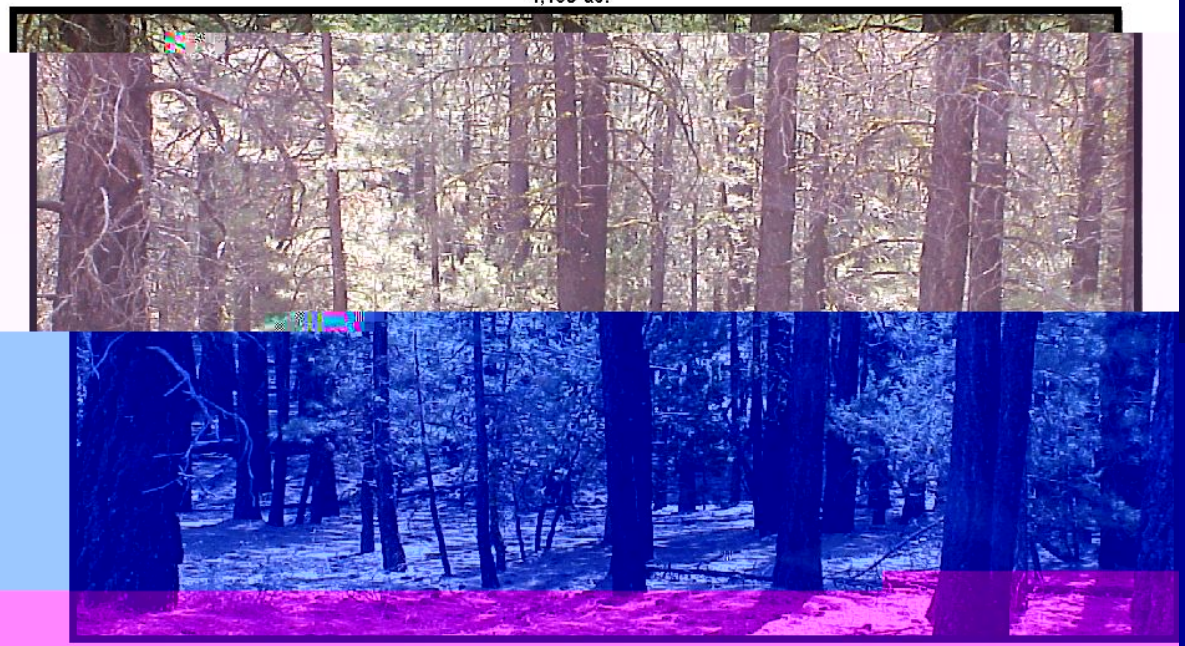
Eagle Lake Ranger District

Lassen National Forest

- **DFPZ thinning**
- **Thinning from below**
- **Reduced fuel loading**

Signal Thin DFPZ Timber Sale (HFQLG)

1,189 ac.



Eastside Pine prior to harvesting (2002) Strata - E2G (approx. 300+ Trees Per Ac.)

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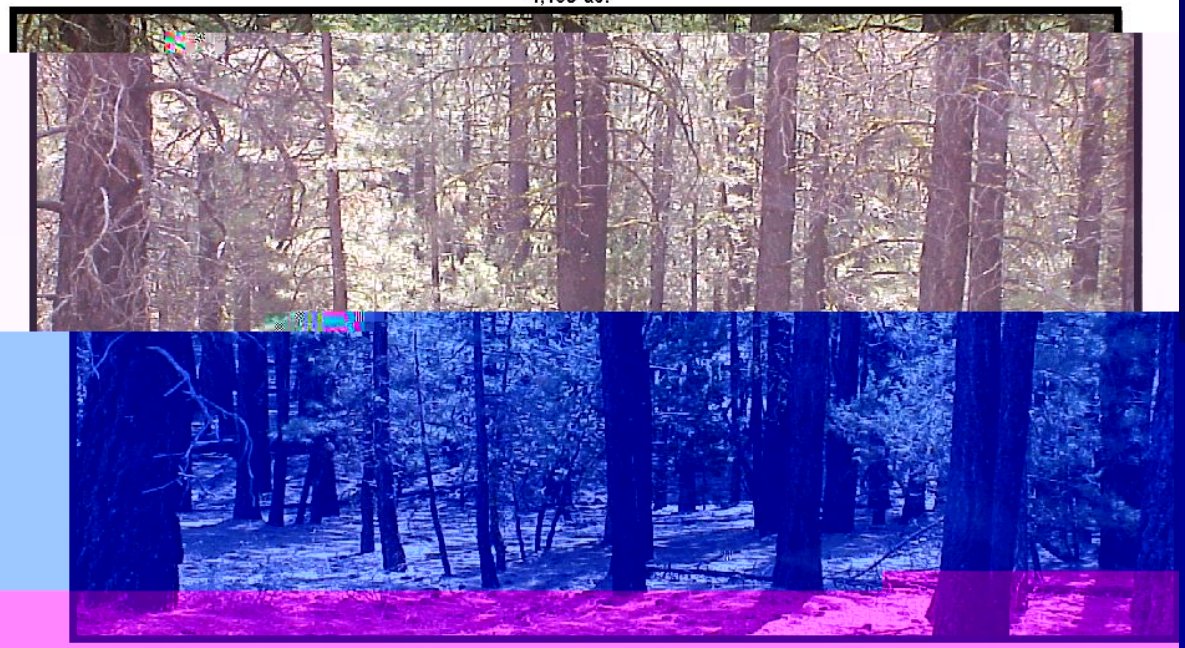

Eastside Pine prior to harvesting (2002) Strata - E2G (approx. 300+ Trees Per Ac.)

Eastside Pine after harvesting (2002) Strata - E3N (approx. 90-110 Trees Per A

c.)

Signal Thinning

Eagle Lake Ranger District

Lassen National Forest

- **Removed 28.5 green tons per acre**
  - **17.1 tons of biomass chips**
  - **11.4 tons of sawlogs**

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- **Reduced fuel loading on 1,189 acres**
- **Net Revenue $74,183 -83 $10 67 / er acre**

Mower GMA - Old Growth Sale

Eagle Lake Ranger District

Lassen National Forest

Mower GMA - Old Growth Sale

Eagle Lake Ranger District

Lassen National Forest

- **Goshawk and old growth thinning**
- **24 inch upper diameter limit**
- **Enhance old growth objectives**
- **Reduce fuel loads**

Mowers Grove: Plot #8. Pine. Harvey Valley - W.

Mowers Grove: Plot #8, Pine, Harvey Valley - W.

Mower GMA - Old Growth Sale

Eagle Lake Ranger District

Lassen National Forest

- **Removed 18 green tons per acre**
  - **11.7 tons of biomass chips**
  - **6.3 tons of sawlogs**

Mower GMA - Old Growth Sale

Eagle Lake Ranger District

Lassen National Forest

- **Removed 18 green tons per acre**
  - **11.7 tons of biomass chips**
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- **Reduced fuel loading on 108 acres**

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- **Enhanced old growth-goshawk objectives**
- **Service Contract with timber sale**
  - **Service cost - $197/acre**
  - **Revenue - $3.76/green ton**

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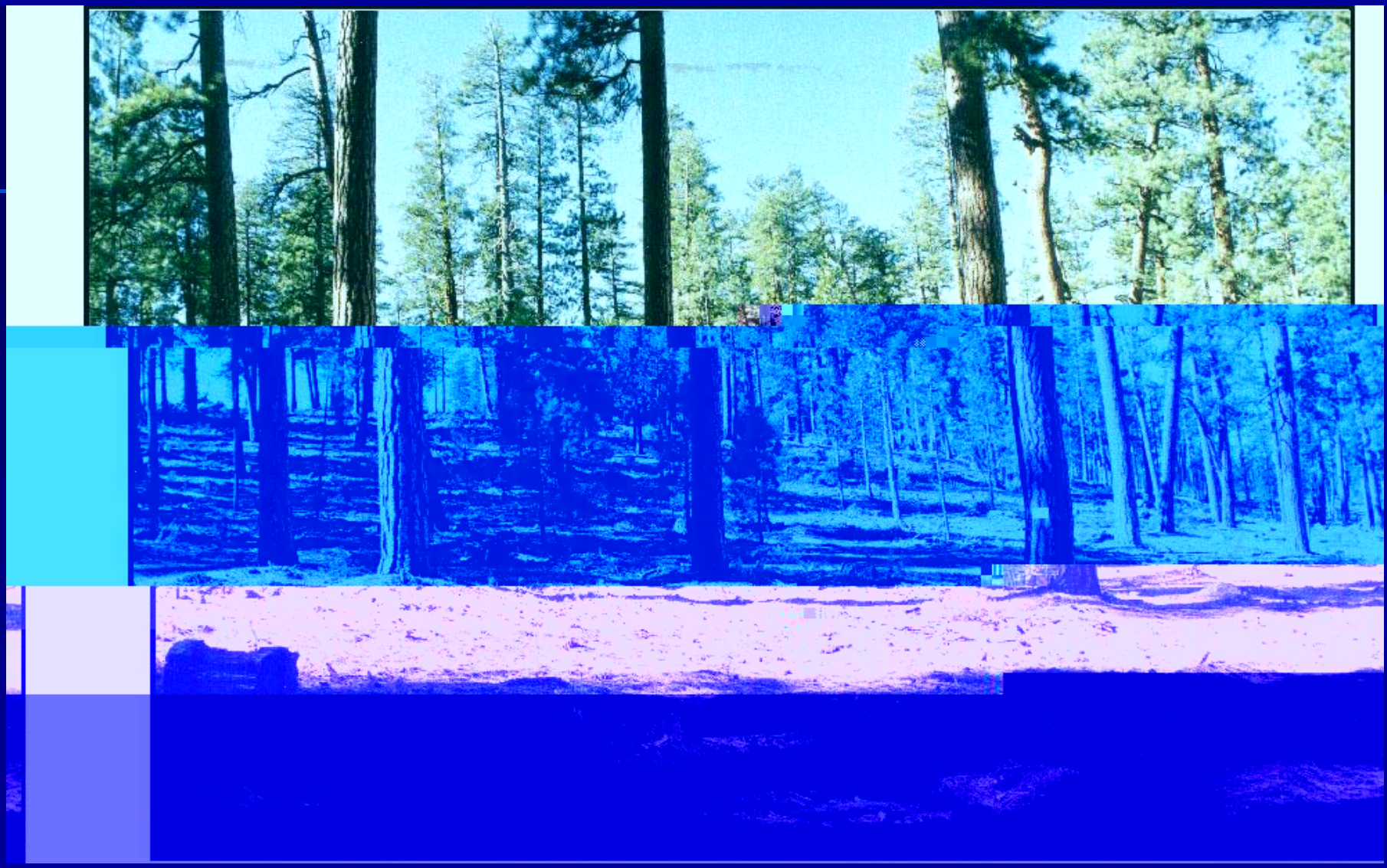
- **Reduced fuel loading on 108 acres**
- **Enhanced old growth-goshawk objectives**
- **Service Contract with timber sale**
  - **Service cost - $197/acre**
  - **Revenue - $3.76/green ton**
  - **Final cost - 129.32/acre (saving $67.98/acre)**



Conclusions

The greatest potential for real change of economic consideration is at the project level

Partnerships are the key to success

Leveraging funds is imperative

Appropriations and Grants will drop dramatically at the federal level as federal discretionary spending decreases.