

Using Prescribed Fire at the Ranch Scale

Lara McNicol

Brownes Meadows Ranch

Topics

- History
- Management Strategies
- Fire
- Alternatives to Fire
- Considerations

HISTORY

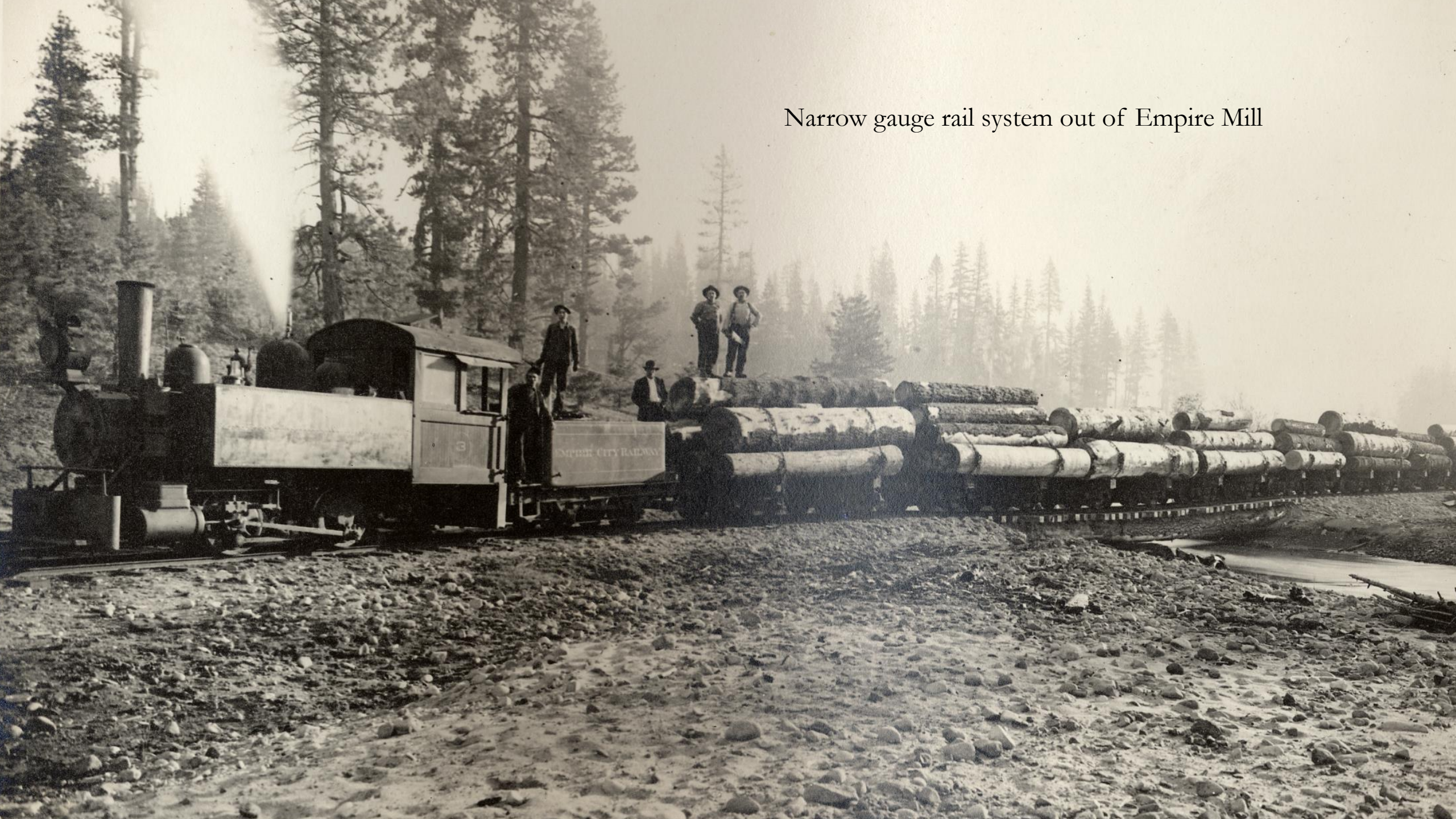
- 5th Generation
 - All descendants of homesteader from the 1850's
- All second (or third or fourth) growth
- Empire Mill
- Uneven Aged Management since 1950s

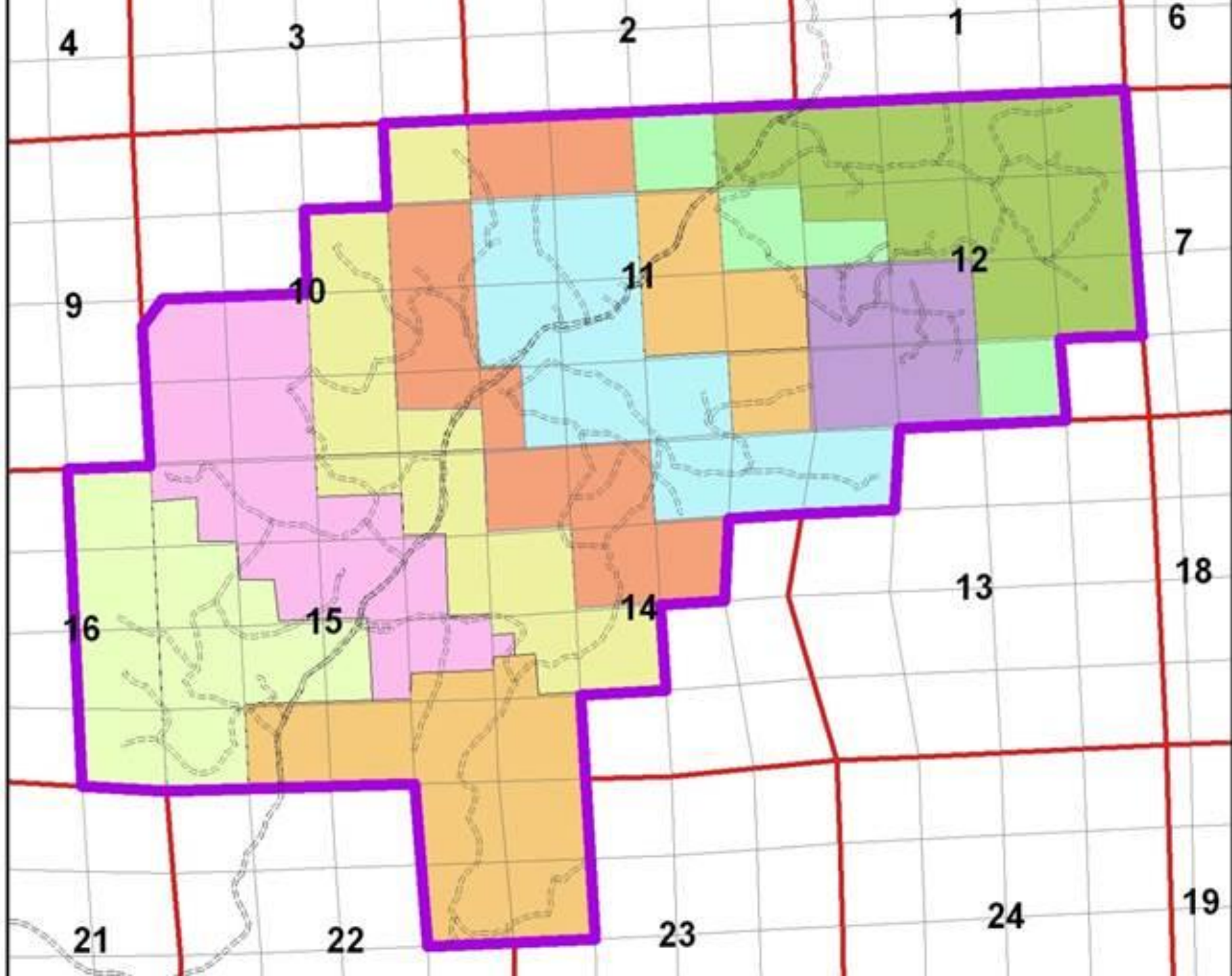


Empire Mill



Narrow gauge rail system out of Empire Mill



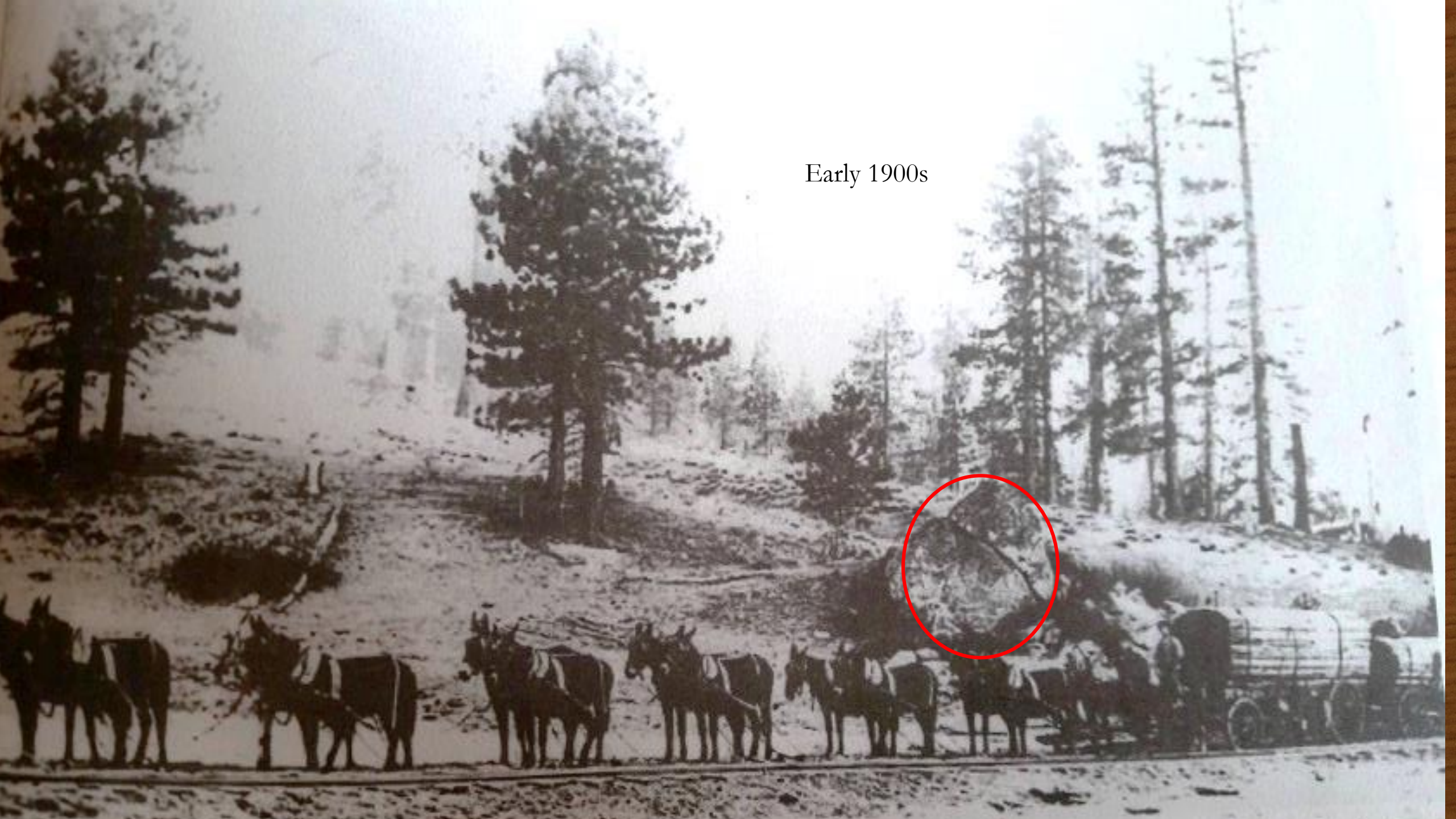


2012
Ownership

Legend
Ranch Parcels 2012



Early 1900s



1980s





Oct. 2, 2016

MANAGEMENT STRATEGIES

- NTMP
- Incentive Programs
- Family and Friends

Non-Industrial Timber Management Plan

Long term management

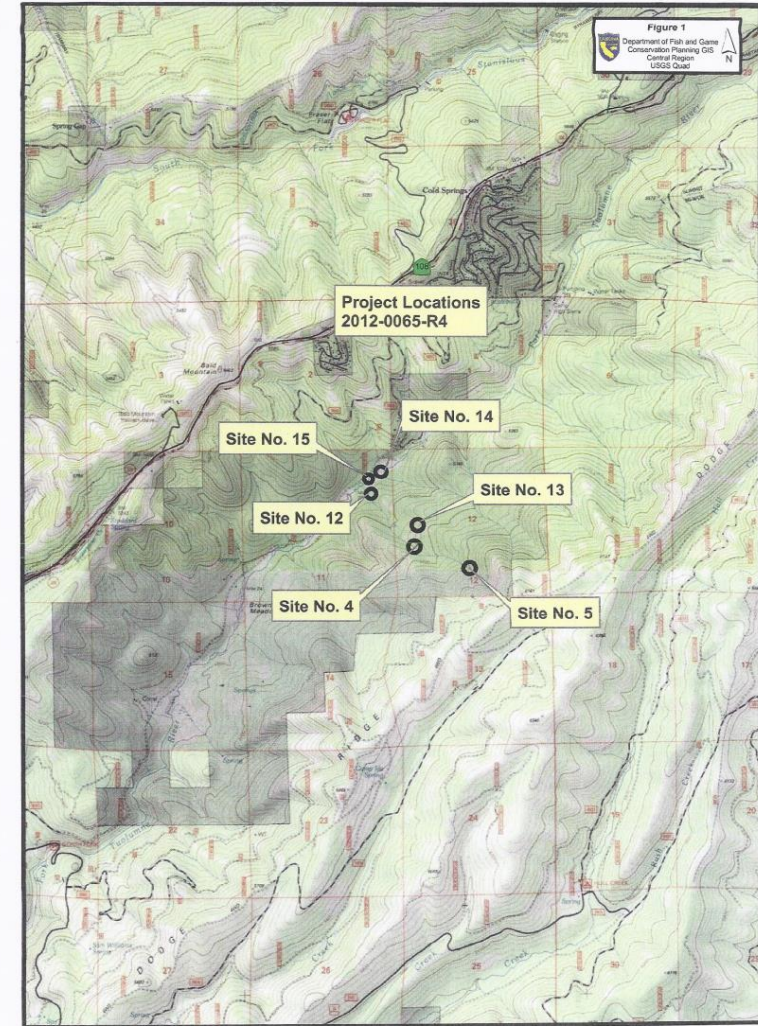
Meets CEQA requirement

Follows the California Forest Practice Rules

Allows for flexibility

Allows for continual work

Worked for us thus far



Cost Share Programs

- Natural Resource Conservation Service
 - Environmental Quality Incentive Program (EQIP)
 - Wildlife Habitat Incentive Program (WHIP)
 - Several projects over the years
- Cal Fire
 - California Forest Improvement Program
 - Adjacent Landowners

Family and Friends

- Work parties
- College Students
- Neighbors
- Cousins

- “Come burn piles for pizza and beer!”

FIRE

- History
- Expertise
- Methodology
- Projects

History

- Mixed Conifer Fire Regime
- 4800-6200'
- Mill fire 1900's
 - Mostly second growth now
- Small fires 1930 and 1990s
 - “the burn”
- Hasn't burned in hundreds of years.

Expertise

- Tradition and Family Lore
- Research
 - Blodgett Research Station
 - Stanislaus-Tuolumne Experimental Forest
 - North Labs
 - Local News Outlets during a fire
 - GIS and mapping
 - Locals and Oldtimers
- Experimentation
- Luck



Methodology

- Lop and pile
- Pile burn
- Using natural barriers
 - Rivers, roads, etc
- Small burns to barriers

Projects

Before
Treatment,
June





Before Treatment, June

-
- Pre Treatment thinning, July





Pre Treatment Thinning July



Immediately after broadcast burn, April



Immediately after broadcast burn, April



Two months after broadcast burn, June

Two Months after
Broadcast burn, June



Five Months after
Broadcast Burn,
October





Five Months after Broadcast Burn, October



5 years after burn. Next projected treatment: 10 years
(15 total)

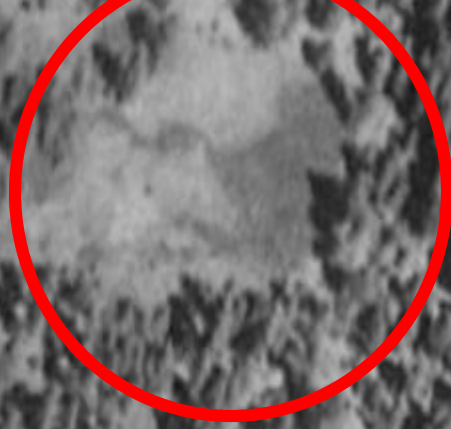


5 years after burn. Next projected treatment: 10 years
(15 total)

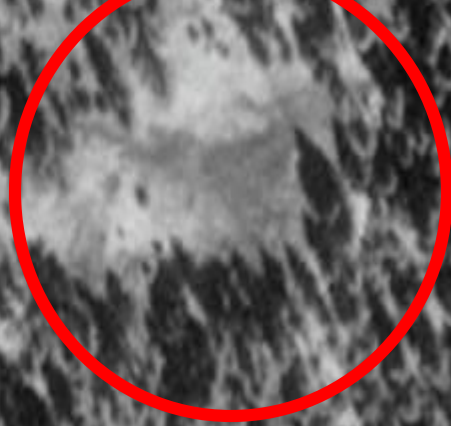
ALTERNATIVES TO FIRE

- Logging (NTMP)
- Grazing (until 1997)
- Meadowlands
- Aspen Regeneration

1993



1998



2005



2010



2014



Meadowland Restoration

- Serve as fuel breaks
- Biodiversity
- Water and carbon storage





















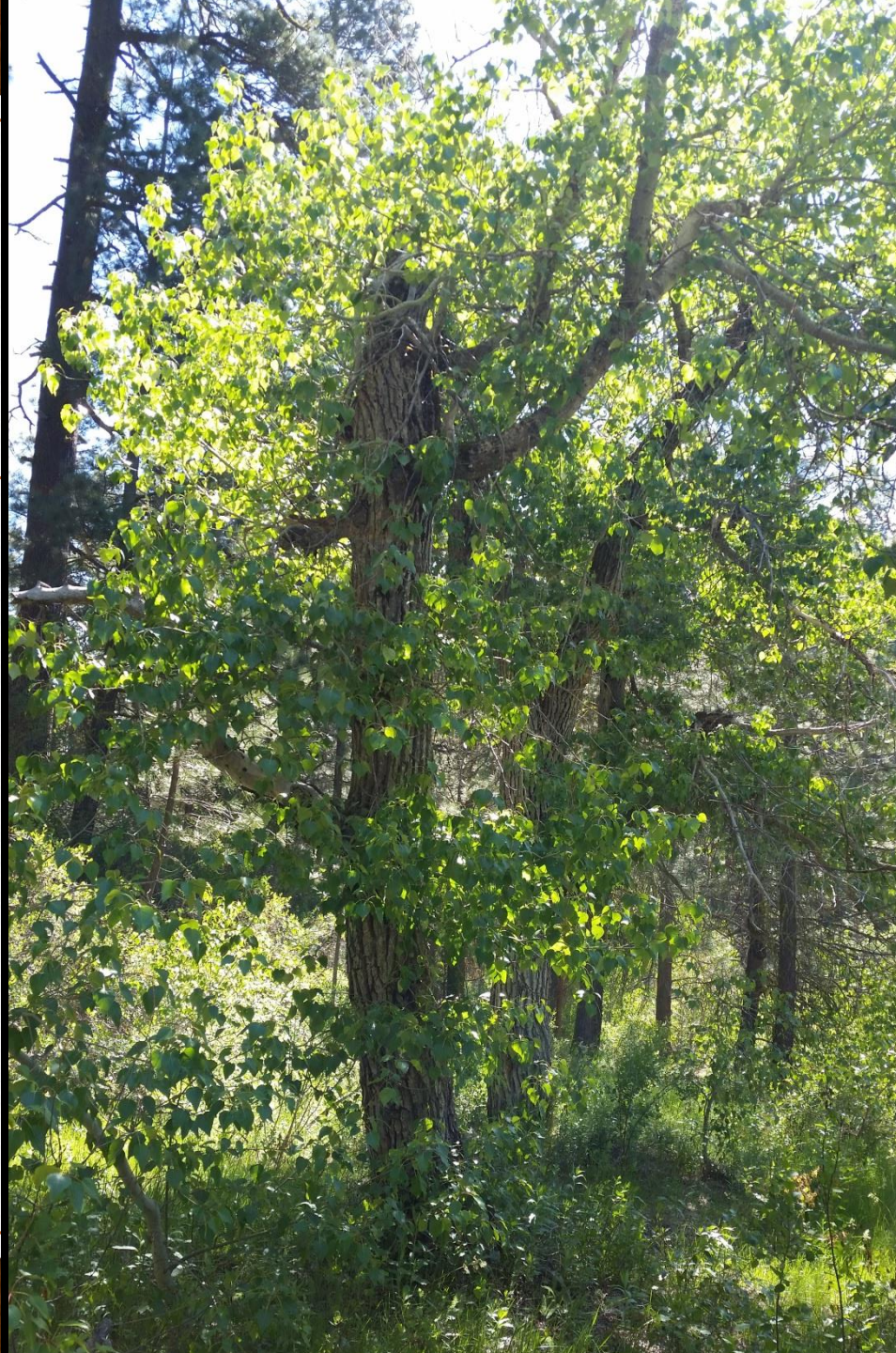




Aspen Propagation







Cottonwood Regeneration

CONSIDERATIONS

- Human Power
- Regulations and Liability
- Time frame
- Consistency

Human Power

Burn crews for Forest Landowners.

Training programs designed to assist.
TREX, Colleges, Fire Crews,
USFS, Cal Fire, etc.

Local work co-ops.



Regulations and Liability

- Small Forest Landowners are not Federally, Corporately, or State backed.
 - Still follow all of the same regulations as if we had infinite resources.
- Liability
 - Consequences of an escaped fire prevents many landowners from attempting burns
 - Potential for litigation is very high and often outweighs the potential benefits of a burn
- Flexibility
 - A separate burn permit designed just for small forest landowners.
 - More burn days available to small landowners.

Time Frame

- “We’re only 40 years behind.”
 - Small scale operation limited human power and a huge agenda.
- Burn windows
- Political and funding changes

Persistence

- A little effort goes a long way.
- Small impacts every day add up to large scale changes.
 - Ex: My mom, using a lopper and small piles has moved a meadow.



