Tahoe National Forest Aspen Restoration: A 20-year Journey



Overview

- 1995 2001: Summary of Truckee RD aspen treatments
- 1991-1992 : lesson learned from Region 4 Humboldt-Toiyabe NF, Bridgeport RD.
- 1996 Present: Summary Sierraville RD aspen treatments, as well as other Forest Aspen Projects
- Summary of future planned aspen projects
- What shapes aspen treatments, issues, and controversy over aspen treatments

WHY TREAT ASPEN?

PERPETUATE ASPEN

Ecological Integrity

Biological Values

Aesthetic Values

Cultural Values

Recreational Values

TREATMENT CONSTRAINTS

Removing large conifers

Riparian areas, streamshade, soil disturbance, fens, meadows...

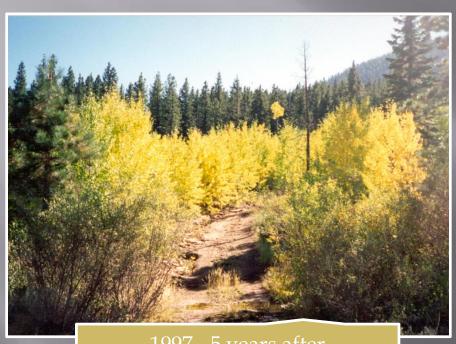
Visual Quality/Archeology

Cutting aspen taboo (arbor glyphs, cavity nesting birds,...

Prescribed burning (limited use)

UNCERTAINTLY- creates tension and sometimes causes inaction

Pre-Tahoe NF Aspen Treatment Lesson: Mill Canyon Aspen 1991-1992 Humboldt-Toiyable NF



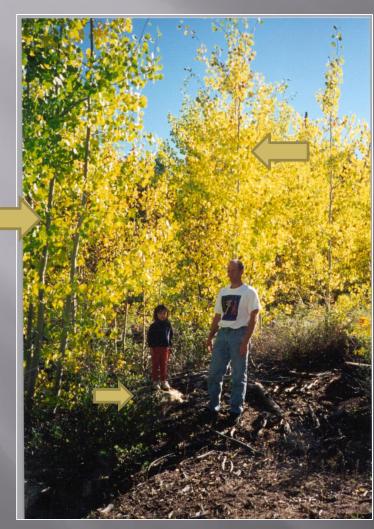




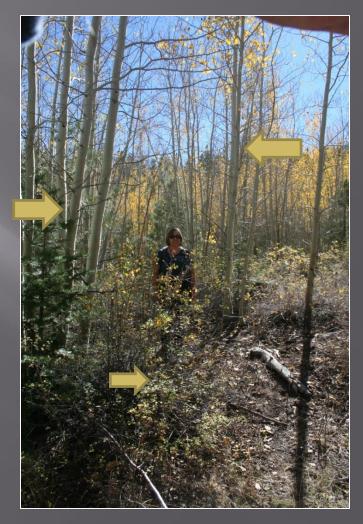
2014 -23 years after

- Clearcut: Removed large conifers with a commercial timber sale
- Handcut Christmas trees with volunteers
- Removed overstory aspen with commercial fuelwood sale

Mill Canyon Aspen



1997 **-** 6 YEARS AFTER



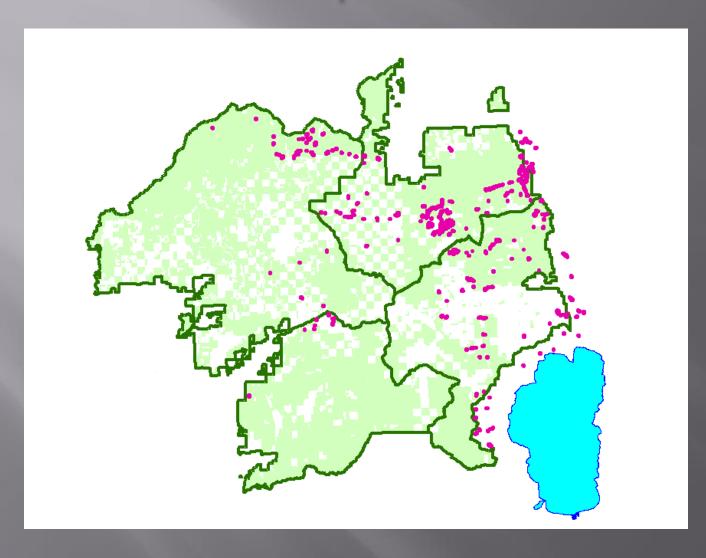
2014 – 23 YEARS AFTER

Mill Canyon - October 2014



Aspens now 40-50 feet with 3-4 inch dbh stems

Tahoe NF Aspen Distribution and Status



Most aspen on eastside (SVRD, TKRD, followed by YRRD and ARRD)

~1,600 - 2,000 ac (<0.25% TNF landscape)

Majority of untreated stands at high risk of loss

Initial Aspen Activities

1996 – Dr. Wayne Sheppard, Rocky Mtn. Research Station, invited to Truckee RD to assist with aspen ecology, which inspired some of the initial aspen treatments

Initial aspen treatments were small and conservative

- Hand treatments limited to <12 inch dbh
- Treatments associated with commercial timber sales limited to <24 inch dbh
- Retained overstory aspen
- Retained larger conifers
- · Concern about harvesting in riparian areas

2000 – Conducted aspen assessments using (Bartos and Campbell 1998) land prepared a programmatic Decision Memo to treat several aspen stands on the Truckee RD

2001 – TNF sponsored first Regional Aspen Workshop with Dr. Dale Bartos and Dr. Wayne Sheppard. Workshop was a catalyst for aspen condition assessments and accelerating treatments across the Region as well as other agencies. The Aspen Delineation Project spearheaded by David Burton was one of the outcomes.







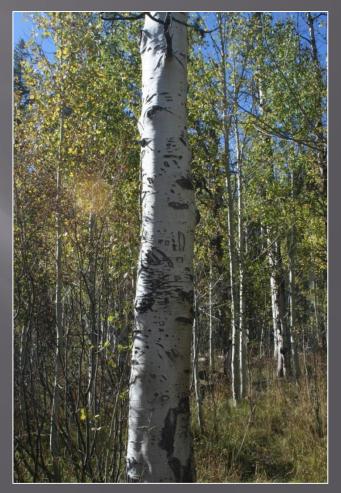
Pole Creek Aspen 1996

Removed small trees w/KV funds (<12 in dbh): handcut, pile, and burn





2001 – 5 Years After

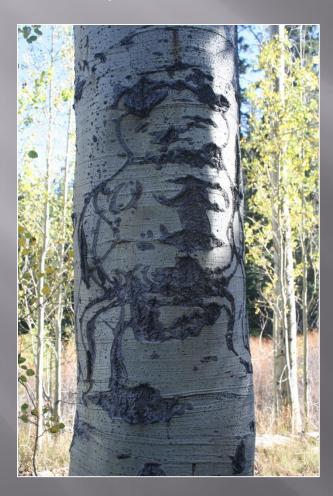


October 2014 – 13 years after

Pole Creek

BASQUE CARVING

CAVITY





Hoke Valley Aspen - 1996

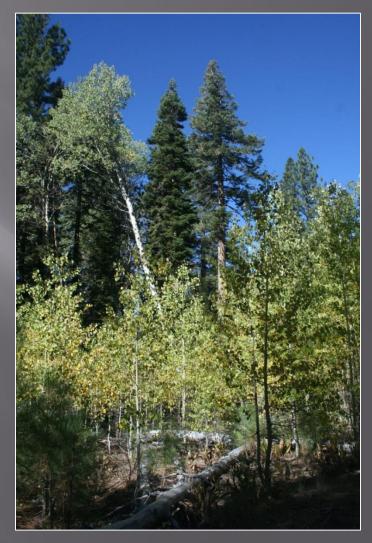
Commercial Timber Sale analyzed under the Canyons EA (salvage rider project) –5 acres)

Removed small conifers by hand cut, pile and burn

Retained larger conifers – IDT marked trees for retention

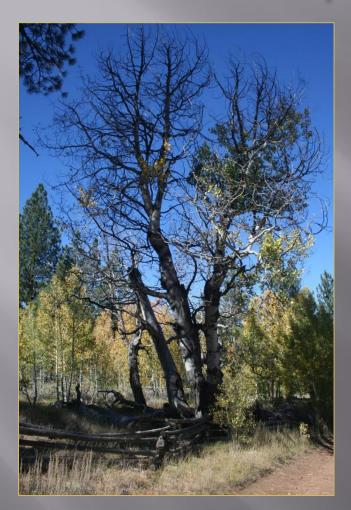
Retained some conifers along intermittent channel for streambank stability and shade

Retained overstory aspen, but many blew over after the first winter



October 2014

Hoke Valley Sheep Exclosure 1995





October 2014 – 19 years after

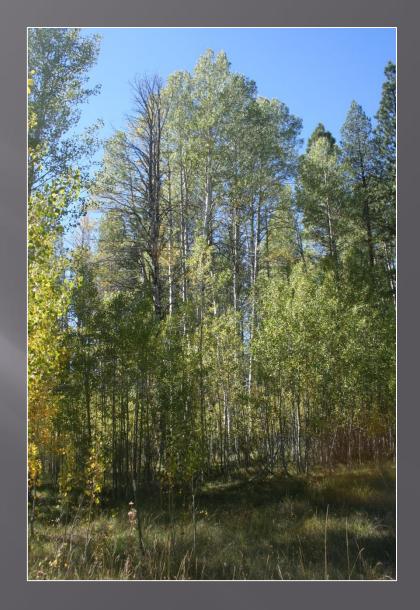
Very few decadent aspen stems were at serious risk of loss. Suckers experienced extensive browsing by sheep that were bedding at a camp

Bull Pasture Aspen - 2001

Commercial Timber Sale - Removed conifers < 24 inch dbh (5 acres)

Retained too many conifers due to concerns about impacts to fen and ephemeral channel – applied buffers

Problem with sheep browsing suckers – constructed fence



October 2014 – 13 years after

Food for thought...

Different treatment intensities/strategies yield quite different results.

Be mindful of the trade-offs by leaving conifers within and adjacent to the aspen stand.

Accept the consequences of delayed regeneration response if all the conifers aren't removed, as well as not removing parent aspen trees due to environmental, social, and political constraints.

Accept economic trade-offs to retreat aspen stands down the road