

To: Winston Rall
R6 Health & Safety
September 20, 2008

Hello Danger-Tree Group:

We are still planning to meet for part of a day sometime in Oct or Nov during the week of the FHP annual meeting in the RO which is yet to be determined. In the meantime, here are some data on failure rates of firs and pines burned and killed in the 2003 Link Fire on the Sisters RD:

- 1) 26% (24 of 92 trees) of the killed white firs failed (broke) in 3 years.
- 2) Mean percentage of total tree height broken was 67% in 3 years (only 33% was left standing)
- 3) 70% (64 of 92) of the killed white firs failed in 5 years.
- 4) Mean percentage of height broken was 71% in 5 years.
- 5) Dbh or height didn't seem to matter except for the 5-15 in. dbh trees which tended not to break as frequently.
- 6) 29% (6 of 21) of the killed ponderosa pines failed in 3 years.
- 7) Mean percentage of height broken was 78% in 3 years.
- 8) 52% (11 of 21) of the killed ponderosa pines failed in 5 years.
- 9) Mean percentage of height broken was 74% in 5 years.

Although almost no trees failed at the base (root collar or uprooted), they are "chunking down" but in big chunks (67 to 78% of their total height). It appears that our "imminent failure potential" call for old dead trees (>5 years) is a good call, especially for fire-killed white fir. This is only one look in one area, but it is a start.

Greg Filip
USDA Forest Service
Forest Health Protection
P.O. Box 3623
Portland, OR 97208-3623
503-808-2997
Fax: 503-808-2469
gmfilip@fs.fed.us
www.fs.fed.us/r6/nr/fid