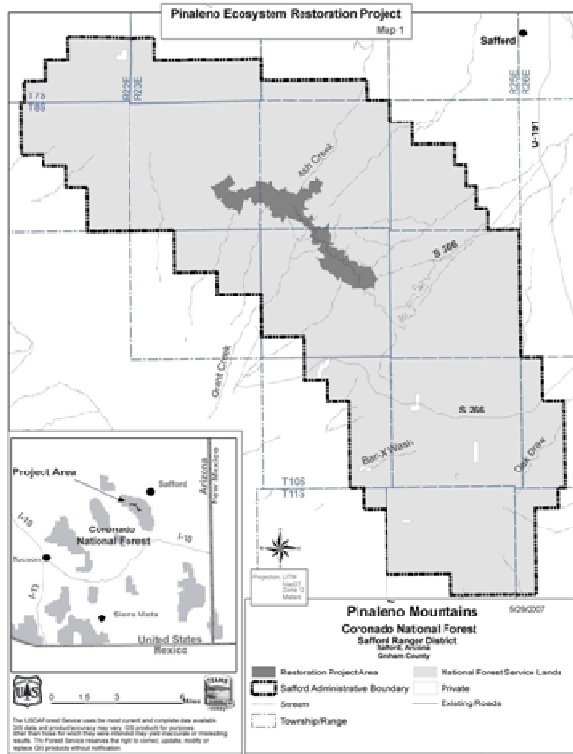


Pinaleno Ecosystem Restoration Project (PERP)

DEIS released June 2009, FEIS/ROD winter 2010
 Project Purpose and Need

- Initiate forest restoration following MGRS Recovery Plan guidelines
- Restore ecological processes, including natural fire regimes
- Improve overstory tree resiliency to insect and disease
- Reduce risk of stand-replacing fire and risk to MGRS habitat
- Protect late-successional forest conditions
- Improve firefighter safety



Historical Perspective



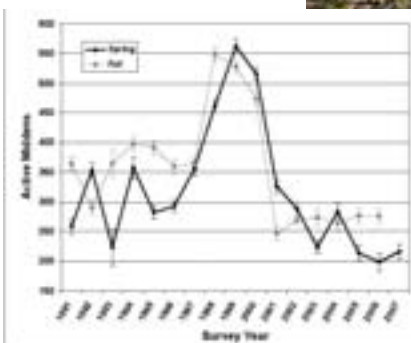
Mt. Graham, Ariz. 1925. Alfred P. Jahn. Douglas-fir. Altitude about 9,500 ft. USFS Photo Collection No. 194562

Mt Graham Experimental Forest was established in 1932 by Gus Pearson for the high quality of the timber resource of both the mixed-conifer and spruce fir forests. It was disestablished in 1967 after it proved to be too isolated for current research needs.

Goudy Research Natural Area is within the PERP project analysis area but no treatment is proposed within RNA. This RNA was established to study southwestern white pine. Much of this RNA was burned over in the 1996 Clark Peak Incident

Fire history studies by the LTRR indicated that the fire regimes have been disrupted since 1879 from early grazing, logging and active fire suppression (Swetnam etal. 2003). They reported that fires historically occurred at least once per decade, higher than reported for other mixed-conifer sites.

Mt. Graham Red Squirrel (MGRS) decline from loss of habitat due to fire and insect.

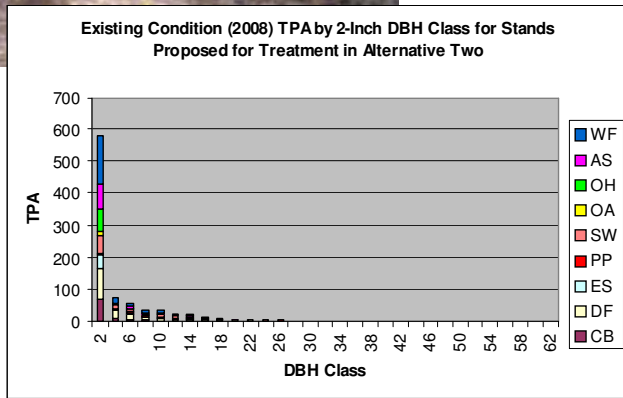


PERP represent the majority of MGRS remaining habitat.

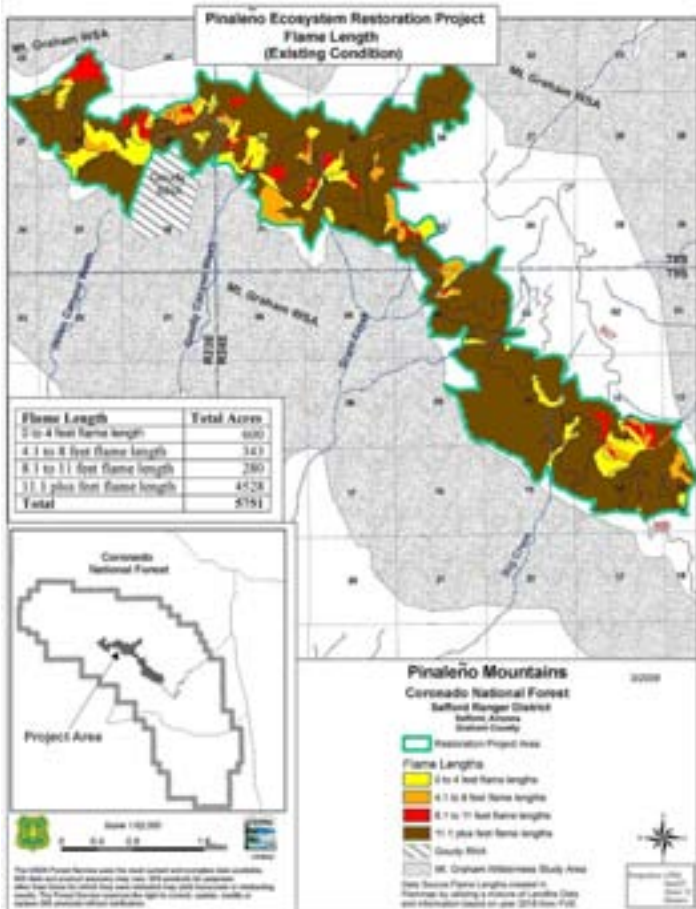
Late serial, shade tolerant and fire intolerant conifer species have become dominate on the landscape while the early serial species have become limited to the overstory canopy.



Current stand conditions have changed as a result.



Predicted flame lengths under existing conditions.

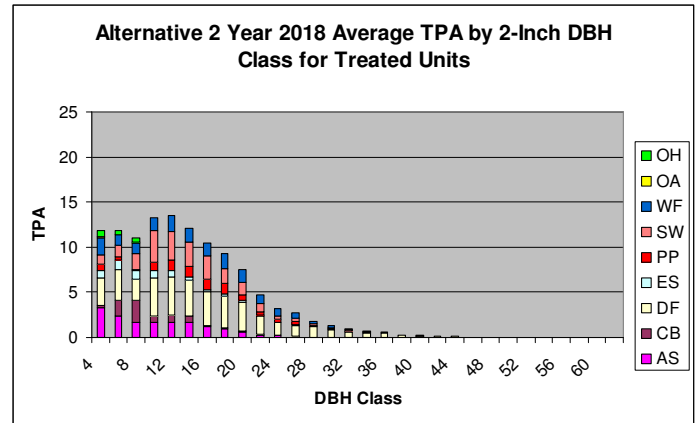


Potential for additional Insect damage in stands proposed for treatment (PERP DEIS Table 99).

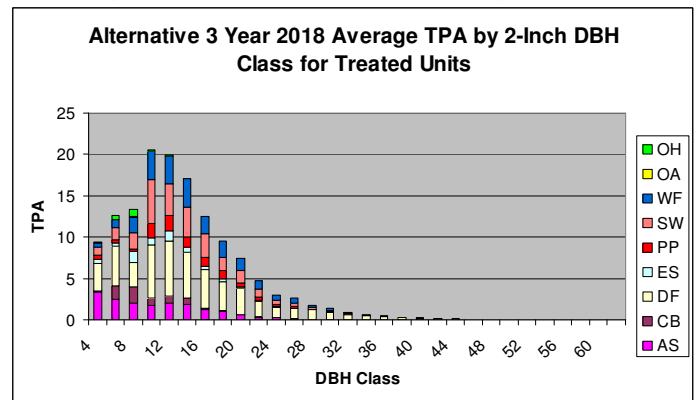
Douglas-fir Beetle Hazard	Existing Condition (Percent of Area)
Extremely Low	2
Very Low	14
Low	22
Moderate	12
High	43
Very High	7

Large Douglas-fir trees are a key habitat element for MGRS, providing midden sites, nesting and cones.

Proposed Alternative – MGRS RP Prioritized. Diameter caps relaxed in PACs to increase diversity to forest structure with variable density thinning (2 inch diameter class not shown).



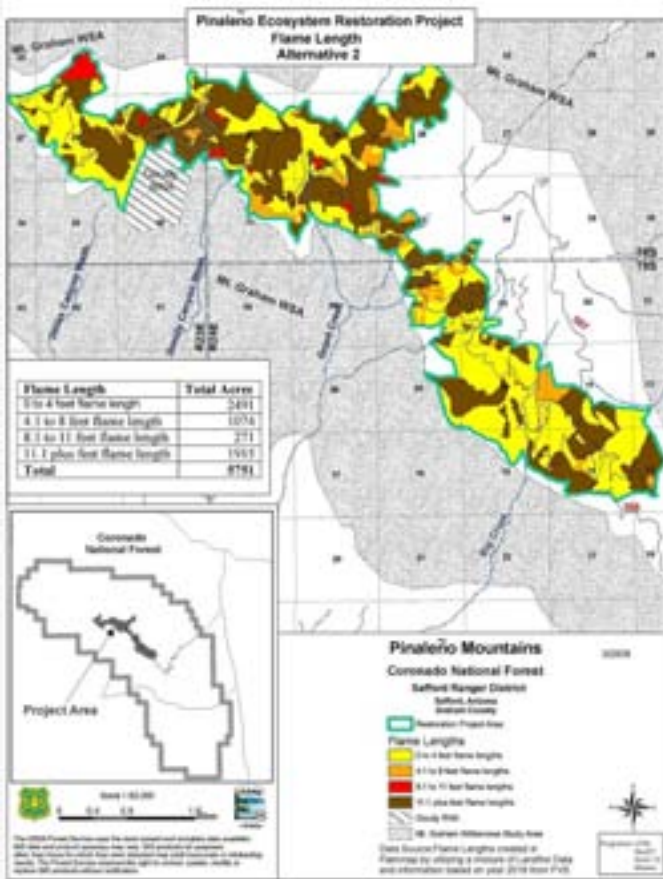
Mexican Spotted Owl Alternative MSO protocol strictly followed. Diameter caps 9 inches dbh in PACs, no action in cores (2 inch diameter class not shown)..



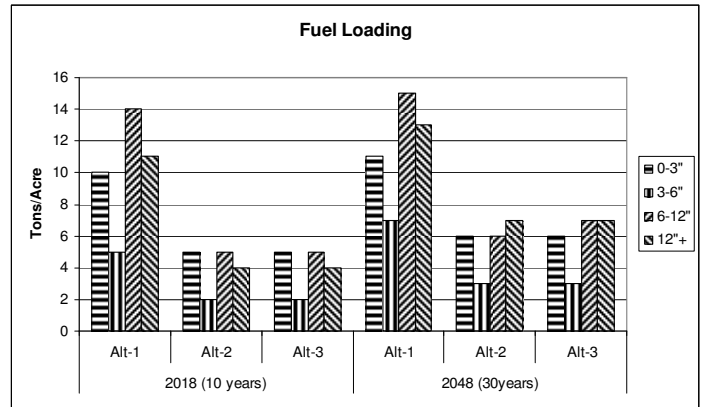
Follow-up Fuels Treatments – Proposed Alternative MSO Alternative is similar

Fuels Treatment Activity	Acres
Lop and scatter	3,092
Hand cut, pile, and burn	1,741
Masticate	461
Underburn	2,642

Predicted flame lengths after proposed treatment.



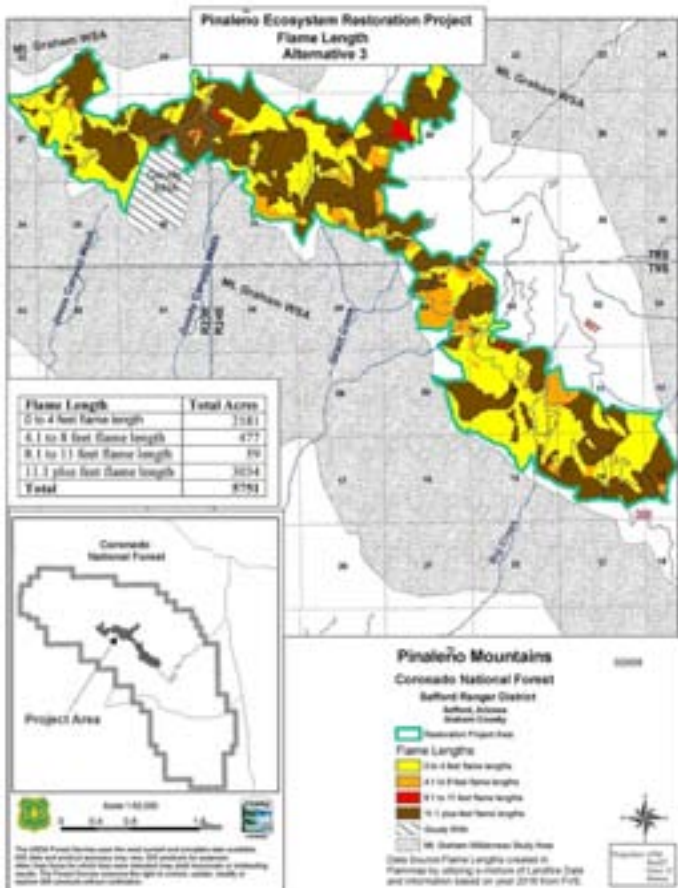
Fuel loading comparisons of Alternatives



Comparison of alternatives.

Activity	Alternative 2	Alternative 3
Silvicultural treatments (tree thinning) acres	3,016	2,793
Forest restoration prescriptions (acres)	2,155	0
Important wildlife area prescriptions (acres)	861	2,793
Fuel reduction treatments	3,705	3,431
Lop and scatter	3,092*	2,949*
Hand cut, pile, and burn	1,741*	1,532*
Masticate	461*	385*
Underburn	2,642*	2,503*
Hand cut < 6" d.b.h. trees, acres	1,740*	1,660
Prune acres	475*	475
Tree removal activities		
Hand fell > 6" d.b.h. acres (removal)	1,038	822
Ground-based skid acres	1,256	917
Cable skid acres	77	54
Skyline yard acres	1,076	845
Tractor swing skid acres	228	172
Swing haul slash tons	1,514	790
Transportation needs		
Haul road improvements and maintenance miles	22.22	21.81
Temporary road construction miles	4.5	3.5
Swift Trail road maintenance miles	6.25	6.25
Removal volumes		
Sawlogs CCF	10,451	0
ES house logs CCF	502	0
Small round wood CCF	10,249	10,432
Chips tons	14,333	5,881

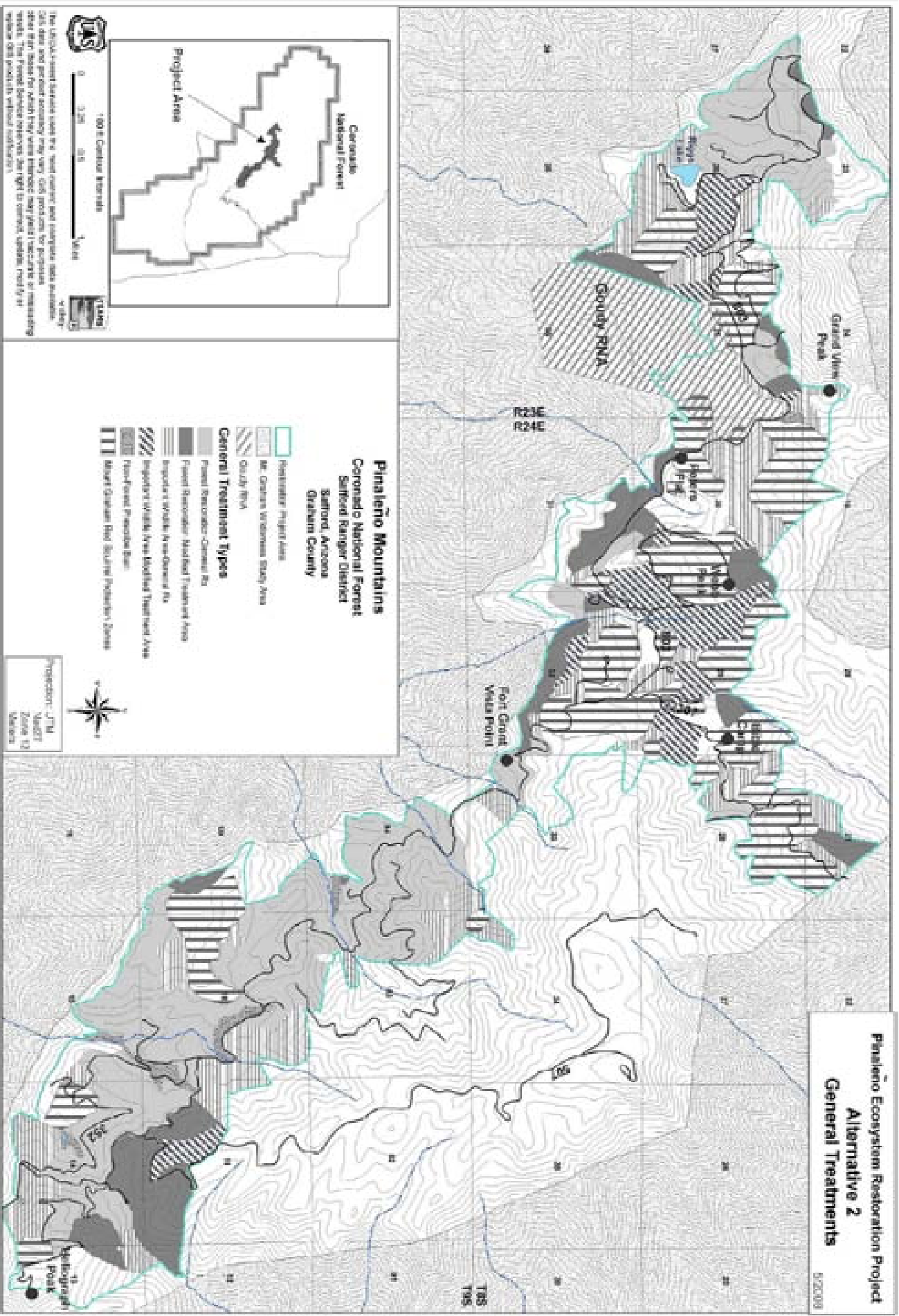
Predicted flame lengths after MSO Alternative.



Swetnam, T. W., Baisan, C. H. and Grissino-Mayer H. D., 2003 Tree-Ring Perspectives on Fire Regimes and Forest Dynamics in Mixed-Conifer and Spruce-Fir Forests on Mount Graham. Proceedings of Mount Graham Red Squirrel Symposium, May 20-21, 2003, Safford, AZ. University of Arizona

**Pinaleno Ecosystem Restoration Project
Alternative 2
General Treatments**

5/2/2009

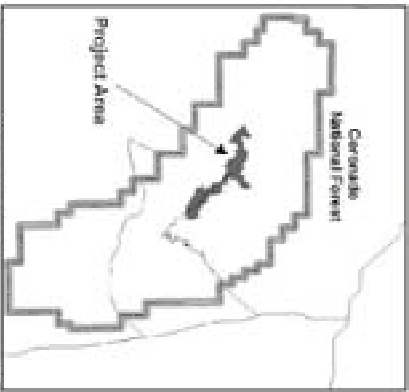


**Pinaleno Mountains
Coronado National Forest
Safford Ranger District
Graham County**

- Pinaleno Riparian Area
- Grand View Wetland Study Area
- Grand View
- General Treatment Types**
- Forest Restoration - Clearcut
- Forest Restoration - Modified Treatment Area
- Riparian Wetland - No-Grass
- Riparian Wetland - Modified Treatment Area
- Riparian Wetland - Modified Treatment Area
- Short-Grass and Shrubland Production Zones



Projection: JTL4
Zone: 12
Units: Meters



The USGS's contour intervals used in this map may not correspond with other maps of the area. The USGS's contour intervals may vary (500 foot) in some areas. The USGS's contour intervals may vary (500 foot) in some areas. The USGS's contour intervals may vary (500 foot) in some areas. The USGS's contour intervals may vary (500 foot) in some areas.