

ANGORA FIRE RESTORATION PROJECT
OVERVIEW OF ISSUES
May 22, 2008

The U.S. Forest Service Lake Tahoe Basin Management Unit (LTBMU) is seeking comments on opportunities, described below, to restore the Angora Fire Area. This information and detailed maps may be found on the LTBMU website at <http://www.fs.fed.us/r5/ltbmu/>, or at the Forest Supervisor's Office front desk at 35 College Drive, South Lake Tahoe, California.

Input during this part of the process will be most helpful if received by June 23, 2008. Written comments may be submitted via mail or fax addressed to Terri Marceron, Lake Tahoe Basin Management Unit Supervisor's Office, 35 College Drive, South Lake Tahoe, CA 96150; FAX (530) 543-2693; or email comments-pacificsouthwest-ltbmu@fs.fed.us using Subject: Angora Fire Restoration Project. Oral comments may be directed to project leader, Duncan Leao at (530) 543-2660. The LTBMU will post comments received on its website under the link for Angora restoration. This opportunity to provide input is in advance of the National Environmental Policy Act process. Once a proposal for restoration is developed, there will be additional opportunities for comment during the environmental analysis.

Watershed and Aquatic Biological Resources

- Stream, wetland and meadow ecosystems within the Angora Fire area function as habitat for a diverse group of aquatic and terrestrial (land-based) species and influence the quality and quantity of water in the Upper Truckee River.
- Historic management along Angora Creek and its tributaries has caused streams to downcut into associated valleys and current channel locations, increasing the supply of fine sediment downstream and causing the loss of both quality and quantity of aquatic habitat and the degradation of meadow and wetland ecosystems. Effects from the Angora Fire resulting from high intense burn severities exacerbated these conditions.
- Aquatic biologists and hydrologists have identified a suite of stream, meadow and wetland restoration opportunities to reclaim channel form/function, improve water quality and restore aquatic habitat and riparian/wetland vegetation. For restoring channels, options include abandoning the current channel and constructing a new one, designing features to improve the channel in its current location, or allowing the channel to stabilize on its own. The first two options provide more aquatic habitat in a shorter amount of time. The third option may take longer to provide habitat improvements and produce increased levels of sediment until stabilization occurs.

Wildlife

- Restored aspen stands and riparian corridors (a river or stream and its surrounding environment) would benefit aquatic and terrestrial wildlife species-richness and abundance, water quality, and geomorphic processes (physical and chemical interactions that alter landforms including stream channels). Options for aspen management include removing conifers, including both standing and fallen trees, as well as other coarse woody debris, to accelerate aspen regrowth. Whether, when, where and how aggressively to remove other vegetation are the key questions.

- Retaining some burned areas would increase wildlife habitat diversity on the forest and benefit species that prefer burned areas such as the black-backed woodpecker.
- Planting trees in some burned areas would contribute, in the long term, toward replacing spotted owl and goshawk habitat lost in the fire. Suitable habitat around the burned area is being monitored for these species.

Invasive Weeds

- There are existing invasive weed occurrences within and adjacent to the burn area, including Tall whitetop, Dalmatian toadflax, St. John's wort, and Bull thistle.
- Currently we are treating these species by hand pulling. Our goal is to eradicate them, or at least contain their spread.
- These invasive species are opportunistic competitors. When introduced or preexisting near or in disturbed areas, they can expand their populations, displacing native plants and causing changes in the natural environment.

Forest Fuels

- All the National Forest System lands in the fire area are considered Wildland Urban Interface (WUI). Right now, the amount of fuel, in the form of downed trees, grasses, forbs, and shrub species, is low at less than 5 tons/acre in most areas of the fire. Fuels accumulation is expected to increase over the next 20 years as dead trees fall and other fuels such as grass, brush, and trees grow back (60-90 tons/acre in some areas). The target fuel loading for most FS fuels reduction projects across the basin in the WUI defense zone is less than 15 tons/acre on the average.
- Excessive large woody debris (generally greater than 20 tons/acre) provides a source for firebrands that can carry a fire (spotting). It can also slow fireline construction rates and make it more difficult to suppress future wildfires
- If we wish to use prescribed fire for ecosystem health and fuels reduction in the future, we must first reduce the density and loading of dead trees and some downed wood, while balancing soil and wildlife needs.
- Treatment to reduce fuel accumulation will provide an environment where natural disturbance regimes (such as the natural occurrence of fire) can retain or reestablish some of their historical influence in maintaining the diversity and productivity of the regional landscapes
- Treating 100% of the dead fuels (trees) is not necessary in order to meet desired conditions for fire behavior and fireline construction over the long term.

Vegetation (Trees)

- Approximately 2000 acres of forest burned with high vegetation severity, resulting in a deforested condition

- It is expected that natural reforestation of trees and understory plants would occur in many areas of the fire. In high severity burned areas, minimal to no natural reforestation of conifers is expected because of a consumed seed bank and a lack of nearby seed sources (within 100-200 ft).
- In some areas of the fire where shrub species dominate the site, reforestation could take 50-100 years without some active management. This is because brush species are expected to establish and make it difficult for tree seedlings to grow in a competitive environment for resources (soil, water, light).
- The early establishment of native conifers through reforestation will expedite forest regeneration and allow conifers to out compete regenerating shrubs for light, soil and water. We would plant native species that are shade-intolerant and drought tolerant: Jeffrey and sugar pines and incense cedar.

Transportation/Recreation

- Approximately 6.5 miles of native surface road and 25 miles of trails currently exist within the Angora Burn Area. Approximately 3.5 miles of the roads and 12 miles of the trails are managed, Forest Service system roads and trails.
- Some areas of the transportation system are susceptible to erosion and movement of fine sediment. The project could address erosion from roads and trails that have the potential to impact water quality in streams and wetlands. Possible Best Management Practices (BMPs) that could be used include: water bars, recontouring to restore natural drainage, mulching, and revegetation.
- There is a need to provide sufficient access for future FS administrative needs and public recreation. The project could adopt some non-system roads and trails as system trails and upgrade with BMPs, and obliterate others. A thoughtfully planned road and trail system should reduce the occurrence of user created trails and reduce maintenance needs. Many user created trails within the Angora Burn Area lack Forest Service design standards and cause concern for resource protection.
- Other restoration activities may require the development and use of temporary vehicle access to remove fuel and construct restoration improvements where Forest Service system roads do not currently exist. The project could provide temporary vehicle access and, when the work is complete, either mitigate the temporary access by using BMPs or restoring it to natural conditions in sensitive resource areas.