

# ANGORA FIRE

## BAER Report for Aquatic Resources

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### Resource Condition Assessment

Within the boundary of the Angora Fire is Angora Creek, a perennial tributary to the Upper Truckee River. Field observations of Angora Creek indicate that the bed substrate is dominated by gravels and sand. The stream reach above Lake Tahoe Boulevard is highly incised with downed large woody debris in the riparian area. During the Angora Fire riparian vegetation was almost completely consumed causing concern for potential increased sedimentation into the Angora Creek watershed and undesired channel adjustment/erosion. With respect to the immediate post-fire current conditions there is potential for suspended ash and sediment in Angora Creek, which may be delivered into Lake Tahoe effecting water clarity.

A fish rescue and relocation project conducted on July 12<sup>th</sup> and 13<sup>th</sup> 2006 observed the following fish species present in Angora Creek 1400 feet above View Circle Road and 800 feet below View Circle Road, brook trout (*Salvelinus fontinalis*), brown trout (*Salmo trutta*), rainbow trout (*Oncorhynchus mykiss*), Paiute sculpin (*Cottus beldingi*), lahontan speckled dace (*Rhinichthys osculus*) and crayfish (species unknown). Also within the fire boundary is Seneca Pond, with an average depth of 1.5 meters and the max depth of 2.5m. The average length is 50m and the average width is 30m. Predominant vegetation includes moss, algae and carex. Bank vegetation includes alder, willow, lodgepole and jeffery pine. No fish species were observed in the pond. Species

found in a survey by H. Tretten and M. Kalisher on 06/20/2006 included 10 bullfrogs (*Rana catesbeiana*) and 1 pacific tree frog (*Pseudacris regilla*). While in the field on 07/04/2007 1 western aquatic garter (*Thamnophis couchii*) was also observed in Seneca Pond.

#### Emergency Determination

No emergency determination in regard to BAER policy and direction was identified for the aquatic resource. This determination was made due to no threatened or endangered species within the fire boundary. It is expected that areas where non-native brook trout, brown trout, rainbow trout and native sculpin and speckled dace were affected will recovery via adjacent source populations.

#### Recommendations

While no emergency determination was identified for the aquatic resource, land treatments to reduce sedimentation and ash from going into stream channels will be implemented and can be found in the 2500-08 report. Large woody debris in the channel and along floodplains from the fire will be left in the channel to act as sediment traps and natural grade control.

Apart from BAER funding it is recommended that the forest implement a Stream Condition Inventory (SCI) or other aquatic habitat survey on Angora Creek to monitor channel response to fire effects and overall stream health. An aquatic inventory should also include the examination of benthic macroinvertebrate community's response to fire in the watershed as an indicator of community health and recovery. If possible this field season would be the preferred time to gather pre-storm data followed by an additional survey in 2008 to compare results.