

**Burned Area Emergency Response  
Front Country Fires  
Fisheries Summary for Inclusion in Form 2500-8**

**Noble Fire (Lime – USFS, and SHU Lightning areas)**

Cottonwood Creek is the largest undammed tributary in the northern Central Valley. Approximately 130 miles of anadromous fish habitat provide important spawning and rearing areas for listed species including spring-run Chinook salmon (*Oncorhynchus tshawytscha*, federal and state listed as Threatened), Central Valley steelhead (*O. mykiss*, federally listed as Threatened), as well as fall- and late-fall run Chinook salmon (federally listed as Species of Concern). According to the CALFED Ecosystem Restoration Program, Cottonwood Creek is the primary source of spawning gravel for the Sacramento River, providing almost 85% of the gravel introduced between Redding and Red Bluff.

Adult spring-run Chinook salmon over-summer in the Beegum Gorge area of Beegum Creek and the rest of Cottonwood Creek is generally not suitable for anadromous salmonids during the summer and early fall. The primary area of emergency concern identified by field visits was Beegum Creek, above Highway 36. We observed several areas of moderate to high severity burn within direct proximity of Beegum Creek and primary tributary drainages. We also observed steep slopes, historic hillslope instability and undersized culverts and drainage features along the Beegum Gorge Road in this area. The section of Beegum Creek upstream of the South Fork confluence showed generally moderate to high burn severity from the upper watersheds continuing in many areas all the way to their confluences with Beegum Creek. This upper section shows a high potential to deliver sediment directly to Beegum Creek, this would likely negatively impact resident and anadromous fish and their habitat.

Forest Road 29N06 – Beegum Gorge Road (including BLM and USFS sections) poses an immediate threat to fisheries and aquatic habitat in Beegum Creek. This road intercepts and directs overland flow directly to the creek. Individual treatments for specific road sections will need to be designed and proposed by the proper resource specialists (i.e. hydrology, soils and engineering). A range of generalized treatments that would minimize impacts to aquatic resources follows: 1) temporarily close road for first wet season, 2) provide adequate road drainage features (i.e. rolling dips, critical dips, armoring, outsloping, appropriately sized culverts, removal of berm on outside/downhill side of road), 3) storm patrol during precipitation events for 1-3 seasons following the fire, 4) proper signage of road indicating closure or, hazards if road is not completely closed and, 5) possibly mulch identified areas of appropriate slope. These proposed road treatments are not meant to be mutually exclusive, rather they are meant to provide a range of alternative treatment combinations with differing levels of protection for aquatic resources. The most protective option will include specific elements of all the points listed above, at appropriate locations. A straw mulching treatment area was identified in two tributary watersheds on the north side of Beegum Creek, directly upstream from the South Fork confluence. This area is mainly on lands administered by BLM. This treatment was developed by the soils specialist and fisheries concerns were incorporated into the design (see Soils specialist report for specific treatment proposal). It is recommended that the BLM immediately consider funding this proposed treatment to address the concerns of increased sediment impacts to spring-run Chinook salmon in Beegum Creek.