

North Fork Matilija Creek Adult Steelhead Below Ojai Quarry Barriers

March 30, 2010

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Following the recent good news and video of two adult steelhead migrating up the fish ladder at Robles Diversion Dam many local scientists and watershed groups immediately worried about the impacts of the Ojai Quarry migration barriers in the North Fork of Matilija Creek. Near the mouth of the North Fork several boulder jam barriers, caused by the discarding and accumulation of large boulders, occur at the Ojai Quarry.

On March 30, 2010, these concerns were realized as two large sea-run adult steelhead measuring between 22-25 inches in length were observed immediately downstream of the quarry barriers where they appeared to be prevented from being able to migrate into the several miles of excellent habitat upstream. The male had a damaged and dysfunctional right eye and highly scared head that was consistent with multiple unsuccessful jumps at the boulder quarry barrier immediately upstream. The below images were taken of the larger (male) steelhead observed. The other, smaller adult immediately hid in a deep undercut and was unable to be photographed.



Approximately 24-25 inch male steelhead with damaged right eye.



Head scarring possibly caused by attempting to jump quarry barriers.



Approximately 7-inch juvenile steelhead next to the large adult.

In addition, two steelhead measuring approximately 14 and 15 inches in length were observed below the Ojai Quarry barriers and in spawning behavior. It is unknown if these steelhead migrated upstream from a short period in the ocean or lagoon, but coloration and physical characteristics suggest the larger trout may have completed a short, coastal or lagoon residency. Several dozen juvenile steelhead were also observed. In addition to the migration barriers caused by the Ojai Quarry, a large hose was observed in the creek and going to a generator at the quarry where water diversions were assumed to be taking place.



Approximately 14-15 inch steelhead observed in spawning behavior.

With a multi-million dollar fish passage facility at the Robles Diversion Dam passing steelhead upstream and Matilija Dam removal at least a few years away, providing effective upstream migration into the North Fork of Matilija Creek is critical. Almost the entire North Fork and several miles of high quality habitat are effectively blocked to steelhead migration by the continued operations and migration barriers at the Ojai Quarry.

The below images are from July 2009 and show the large boulders being discarded from the quarry, at just one of the discard sites, and forming one of the migration barriers on the North Fork. In addition to being migration barriers to all life stages of endangered steelhead, the Ojai Quarry boulder jams have smothered streamside vegetation and caused surface flows to disappear and go underneath the boulder jam during low summer flows.



This below Ojai Quarry boulder slide has created a steelhead migration barrier as well as flows to go subsurface at the upstream side of the barrier during lower summer flows. The image is looking downstream at disappearing surface flows above the boulder barriers. This is the only location on the North Fork where summer flows were observed to go subsurface during summer of 2009 observations. This condition was observed to be caused by the quarry slide and high permeability of the discarded material.



Resource agencies have known about this Ojai Quarry steelhead migration barrier problem for several years and have been in contact with the owner. Immediate enforcement action is needed to require the elimination of these steelhead barriers and restoration of a natural, free-flowing North Fork. The survival and recovery of Ventura River steelhead depend on it.

Thanks in advance to those involved that will see that this issue is addressed adequately.

-Matt Stoecker