

Water Quality Report Card

Sedimentation/Siltation in Middle Truckee River

Regional Water Board:	Lahontan, Region 6
Beneficial Uses Affected:	COLD, MIGR, SPWN
Implemented Through:	MS4 Stormwater NPDES Permits, Waste Discharge Requirements, Squaw Creek TMDL
Effective Date:	September 16, 2009 (TMDL)
Attainment Date:	2028

STATUS	Conditions Improving		
Pollutant Type:	Point Source	Nonpoint Source	Legacy
Pollutant Source:	Erosion/Siltation Construction/Land development Urban Stormwater Runoff		

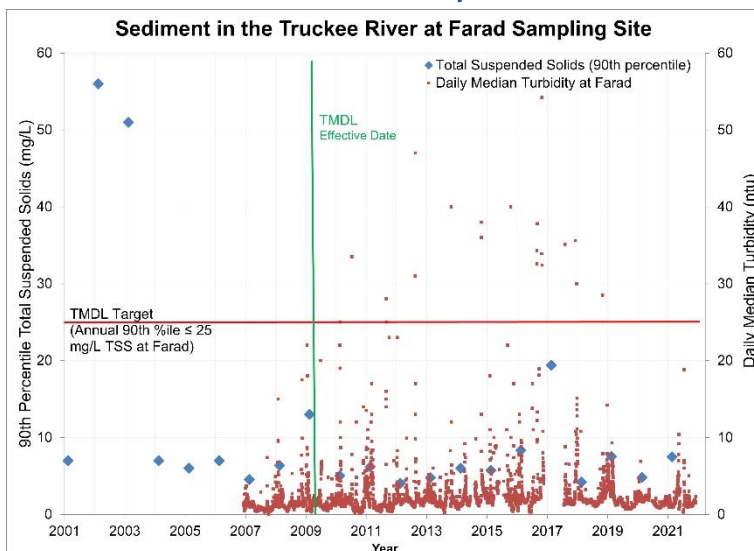
Water Quality Improvement Strategy

The Middle Truckee River, extending from the outlet of Lake Tahoe to the California/Nevada state line, was identified as impaired for sediment on the 1992 federal Clean Water Act 303(d) List, along with Gray and Bronco Creeks, tributaries to the Truckee River. The [Middle Truckee River Sediment Total Maximum Daily Load](#) (TMDL) was fully approved in 2009, with attainment of TMDL goals projected to occur in 2028. The numeric TMDL target is an annual 90th percentile value less than or equal to 25 mg/L suspended sediment measured at the U.S. Geological Survey (USGS) station on the Truckee River at Farad. The major sediment sources identified include stormwater runoff from urban areas, dirt roads, graded ski runs, and legacy sites (past land or in-stream disturbances with ongoing impacts). Implementation measures are designed to address these sediment sources. The TMDL is implemented through Waste Discharge Requirements for area ski resorts; municipal storm water permits (MS4s) issued to Caltrans, Town of Truckee, and Placer County; cooperative agreements with federal and State agencies; and assistance from local non-profits. TMDL monitoring involves tracking road sand application and recovery rates, ski area Best Management Practices (BMPs) to reduce erosion, maintenance or decommissioning of dirt roads, and legacy site restoration.

Middle Truckee River Watershed Map



Water Quality



Water Quality Outcomes

- The suspended sediment target has been met each year since TMDL approval in 2009 with no identifiable trends, however turbidity exceeded the water quality objective for some years.
- Legacy site restoration, 65 miles of dirt road rehabilitation on federal lands, and implementation of ski resort BMPs have reduced sediment discharge.
- The most recent estimate for annual sediment load was 4,065 tons in 2016, well below the TMDL loading capacity of 40,300 tons. The sharp decline in annual sediment discharge may be due to the drought conditions at the time.
- Hydrologic variability affects sediment conditions in the stream channel, with greater deposition in low flow years.
- A [2011 study](#) linked a loss of biointegrity in the benthic macroinvertebrate community to excess fine sediment (>80% coverage) at 174 of the 1000 quadrants sampled on the Truckee River.
- Next steps include updates to monitoring requirements to provide better insight into habitat conditions, biointegrity and the status of aquatic life beneficial uses.