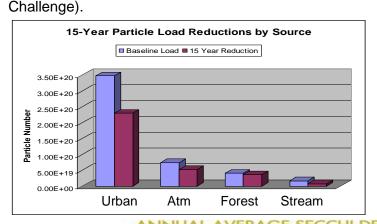
Water Quality Report Card		Sediment in Lake Tahoe		
Regional Water Board:	Lahontan, Region 6		☑ Conditions Improving	
Beneficial Uses Affected:	REC-2	STATUS	☐ Data Inconclusive	
			☐ Improvement Needed	
			☐ Targets Achieved/Water Body Delisted	
Implemented Through:	Municipal NPDES Stormwater Permits, land and stream restoration projects, and TRPA transportation policy	<b>Pollutant Type</b> : ☐ Point Source ☑ Nonpoint Source ☐ Legacy		
		Pollutant Source:	Urban Storm Water	Non-Point Source
			Runoff	Runoff
Effective Date:	April 19, 2011		Atmospheric	
			Deposition	
Attainment Date:	2025			

## **Water Quality Improvement Strategy**

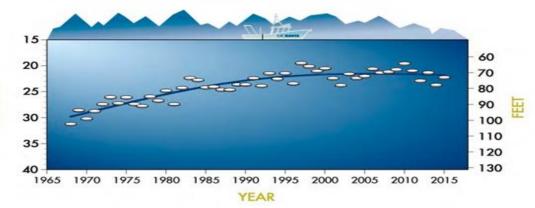
Declining clarity in Lake Tahoe is attributed to both the increase in fine sediment particles (FSP), which refract light, and the increase in algae production from inputs of nitrogen and phosphorus. Urban runoff is the largest FSP source, contributing 72% of the FSP load. Other FSP sources include atmospheric deposition (ATM), disturbed forest areas, and stream channel erosion. To halt the decline in, and measurably improve clarity, the Lahontan Water Board adopted a TMDL for sediment and nutrients in Lake Tahoe that was approved by the U.S. EPA in April 2011. The TMDL calls for reducing FSP loading by 65% to improve clarity, and reducing total nitrogen (TN) and total phosphorus (TP) loading by 10% and 35%, respectively, to limit algal growth. TMDL implementation measures focus on reducing FSP loading from urban stormwater sources, particularly roadways, and restoring streams and disturbed forest areas. The TMDL implementation schedule calls for achieving the interim goal of 78.7 feet of measured clarity by 2025 (Clarity





## **Water Quality Outcomes**

- Lake Tahoe's clarity continues a long term improvement trend since 2010.
- 2015 had an average annual clarity level of 73.1 feet, a 2.2 foot decline from 2012 attributed to a lower than normal snow-to-rain ratio. Annual average clarity has improved since the lowest average of 64.1 feet in 1997.
- Local government and state highway departments achieved the first 5-year load reduction milestone, a 10% reduction in fine sediment particles.



## **Water Quality**

A Secchi disk is a circular plate attached to a rope. The disk is lowered into the water until it is no longer visible. Secchi disk depth is a measure of water clarity. A higher Secchi reading means more rope was let out before the disk disappeared from sight and indicates clearer water. Lower readings indicate turbid or colored water.

See more at <u>UC Davis Tahoe</u> <u>Environmental Research Center</u>