

Total Maximum Daily Load Progress Report		Indian Creek Reservoir Phosphorus TMDL	
Regional Water Board	Lahontan, Region 6	STATUS	<input checked="" type="checkbox"/> Conditions Improving
Beneficial uses affected:	COLD, COMM, REC-1, REC-2		<input type="checkbox"/> Data Inconclusive
Pollutant(s) addressed:	Phosphorus		<input type="checkbox"/> Improvement Needed
Implemented through:	CWA 319(h) Non-Point Source Grant		<input type="checkbox"/> TMDL Achieved/Waterbody Delisted
Approval date:	July 1, 2003		

TMDL Summary

Indian Creek Reservoir (ICR) is a manmade reservoir that has been impacted by eutrophication since the 1970s. Phosphorus has been identified as the primary nutrient contributing to eutrophication. Since 1989 the make-up of ICR has been provided by fresh water diversions from Indian Creek and the West Fork of the Carson River. Responsible parties are South Tahoe Public Utility District (STPUD), the U.S. Bureau of Land Management, Alpine County, and other owners and land managers in the watershed. The Lahontan Regional Board completed the [ICR TMDL for Phosphorus](#) which was approved by the U.S. EPA in July 2003.

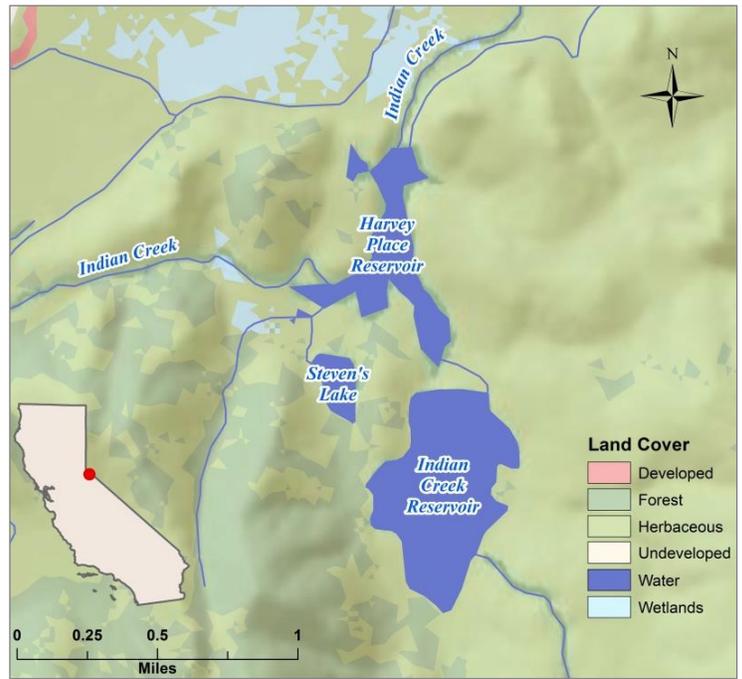
The TMDL is implemented through a Clean Water Act 319(h) Non-Point Source Implementation Grant. The grant was administered for (1) the purpose of reducing internal loading of Phosphorus into ICR from sediment and (2) to optimize reservoir management for protection and enhancement of aquatic life and recreational use. In December 2008, the Hypolimnetic Oxygenation System (HOS) was installed in the deepest portion of the ICR, as part of the TMDL mitigation project. The TMDL implementation schedule calls for achieving the long-term phosphorus target by 2024.

Estimated 2003 Phosphorus Loads to Indian Creek Reservoir

Source	Phosphorus Load (lb/yr)
External Load Sources	
Precipitation	3
Direct Surface Runoff	68
Tributary Inflow	43
Internal Load Sources	
Sediment	354
Total Load Sources	468
Loss in Reservoir Outflow	137
Net Water Column Load^a	331

^a Net Water Column Load = Total Sources – Loss in Reservoir Outflow

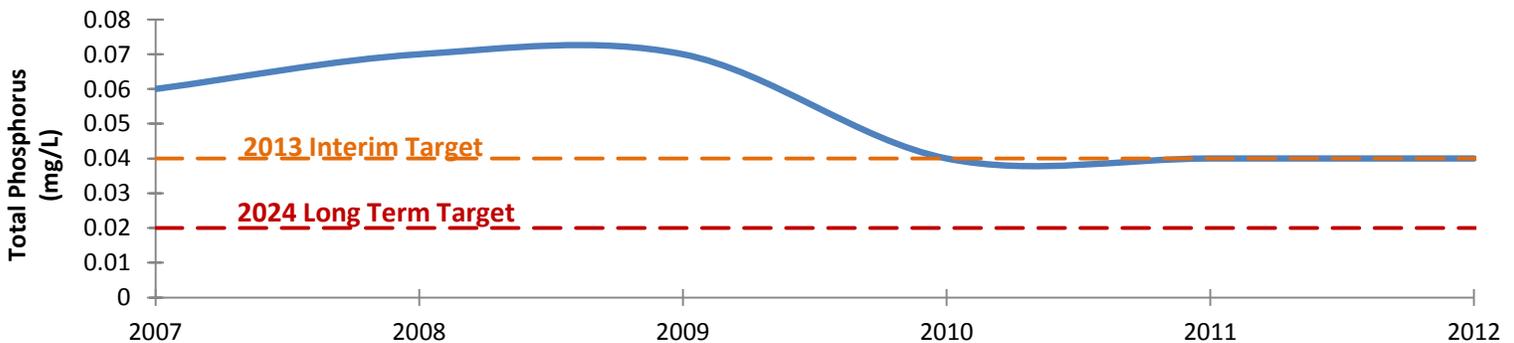
Indian Creek Reservoir



Water Quality Outcomes

- Water quality data show annual mean phosphorus concentrations have met the interim target since 2010.
- Annual mean Total Phosphorus concentrations have generally declined since HOS installation in 2009.
- Interim Total Phosphorus targets have been met; however, Indian Creek Reservoir remains impacted by eutrophication.
- Continue implementation actions to achieve long term Total Phosphorus targets.

Indian Creek Reservoir Water Quality



For more information on the current status of the ICR TMDL see the [2012 TMDL Implementation Status Report](#).