Water Quality Report Card

Sediment in Gualala River

Regional Water Board:	**North Coast, Region 1**
Beneficial Uses Affected:	**COLD, COMM, EST, MIGR, RARE, SPWN**
STATUS	**Improvement Needed**
Implemented Through:	Existing prohibitions, permitting, enforcement actions, non-regulatory actions, grant funding, active stakeholder engagement
Pollutant Type:	Nonpoint Source
Effective Date:	December 20, 2001
Pollutant Source:	Construction/Land Development, Erosion/Siltation, Irrigated Crop Production, Logging
Attainment Date:	**Varies by parameter**

Water Quality Improvement Strategy

The Gualala River watershed, in Northern California, is comprised of mostly mountainous and rugged terrain. In 1993, the USEPA listed the Gualala River on its federal Clean Water Act §303(d) list due to declines in anadromous salmonids from excessive sedimentation. High amounts of precipitation make this watershed sensitive to land practices promoting erosion. The primary sources of sediment delivery are road-related processes, timber harvesting, agricultural activities, and rural residential development. Median particle size is a critical metric in determining habitat conditions for salmonids. When streambed particle sizes are too small, fine sediment has the potential to clog small spaces between the rocks used by salmonids for spawning. These spaces allow for water to flow through the rocks and provide dissolved oxygen to growing embryos. To address the sediment impairment, USEPA established a TMDL for sediment in Gualala River in 2001 based on the North Coast Regional Water Board's technical support document.

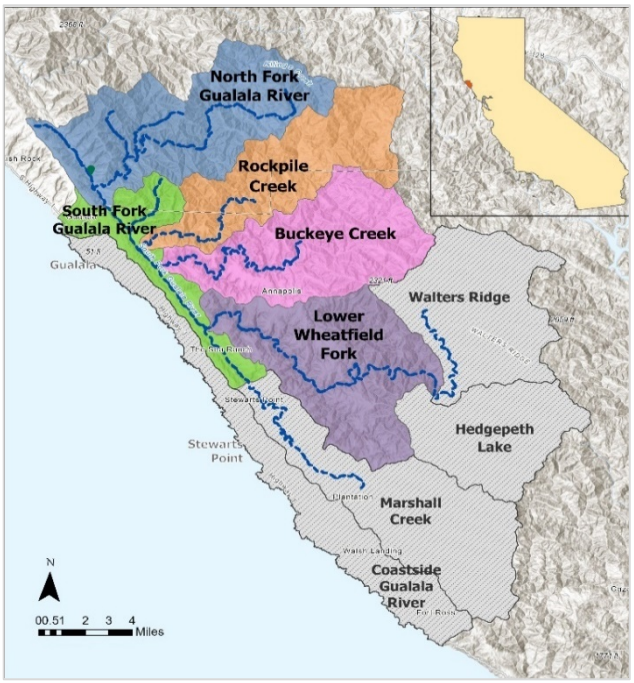
TMDL Load Allocations

The TMDL calls for sediment discharge reductions from road-related sources by 95%, and timber harvest-related sources by 86%.

Water Quality Outcomes

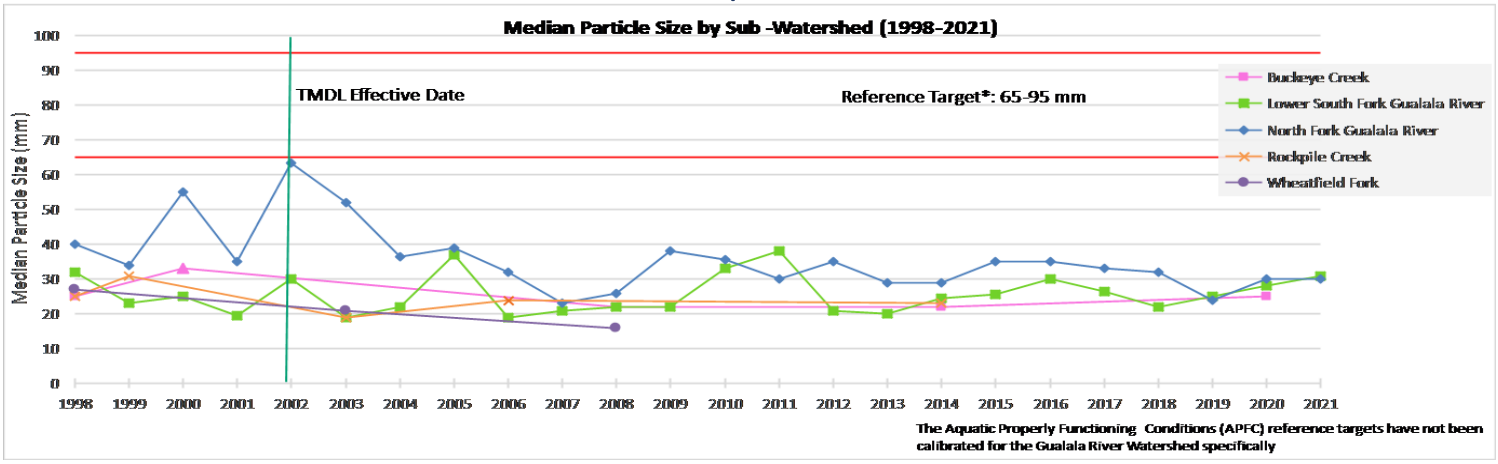
- *Sediment delivery has been reduced through extensive road projects and upgrades, as well as the Gualala River Watershed Council "Large Wood in the Stream Program".*

Gualala River Watershed



- *Median sediment particle size, one of several sediment loading metrics, is decreasing, and not meeting the reference target of 65-95 mm (approximately between the size of a tennis ball and a softball).*
- *Assessment of additional instream metrics and landscape scale conditions (such as turbidity, substrate composition, and large woody debris) is underway and may provide insight into decreasing particle size observations.*

Water Quality



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