

Water Quality Report Card

Sediment in the Upper Elk River Watershed

Regional Water Board:	North Coast, Region 1
Beneficial Uses Affected:	AGR, COLD, MUN, RARE, REC-1, REC-2, SPWN
Implemented Through:	Waste Discharge Requirements; Elk River Recovery Assessment; Watershed Stewardship Program
Effective Date:	2016
Attainment Date:	2031

STATUS: Data Inconclusive

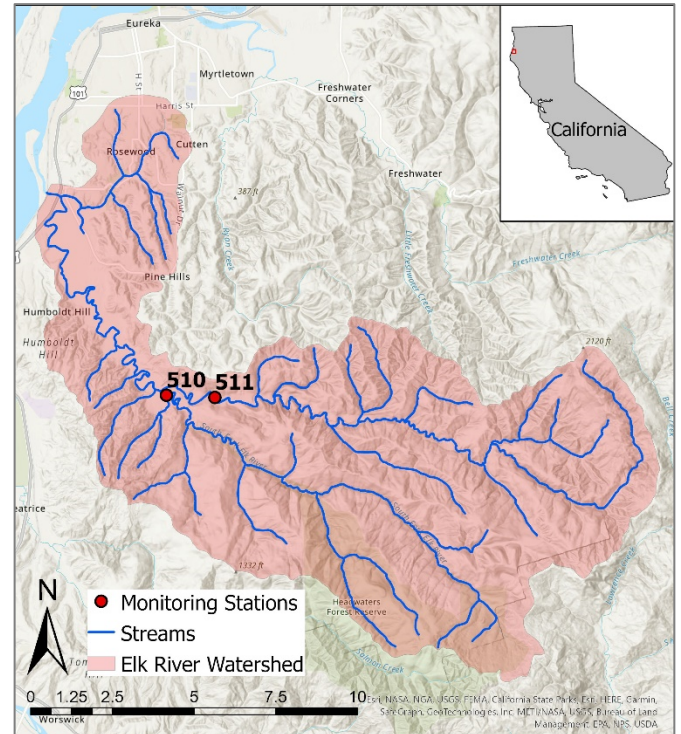
Pollutant Type: Nonpoint Source Legacy

Pollutant Source: Logging
Hydromodification

Water Quality Improvement Strategy

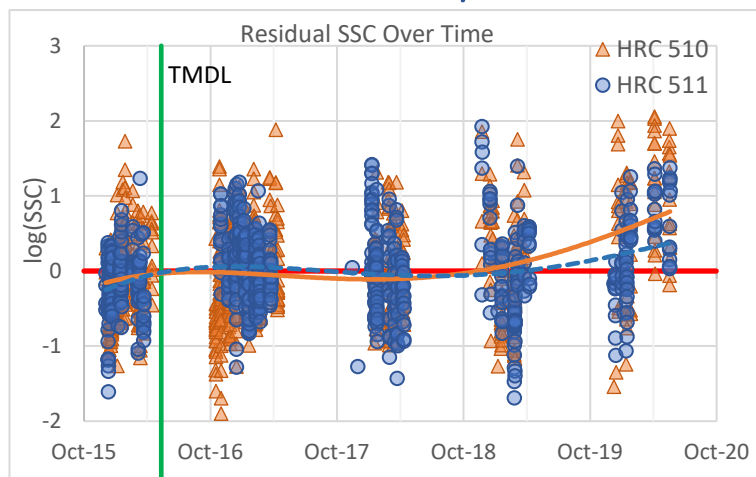
The Elk River watershed is in Humboldt County, south of the city of Eureka. Due to excessive sedimentation, the entire 58.3 mi² watershed was placed on the 303(d) list in 1998. In 2016, the North Coast Water Quality Control Board (Regional Board) approved the [Upper Elk River Sediment TMDL](#) to address this impairment in the 44.2 mi² Upper Elk River Watershed. Sediment from timberlands, and other natural and anthropogenic sources, causes exceedance of water quality objectives for sediment, suspended material, settleable matter, and turbidity, resulting in adverse impacts to the beneficial uses listed above. Sedimentation in the impacted reaches has also caused nuisance conditions including increased rates and depth of annual flooding, loss of property, loss of access to property, and risk to human health and welfare. The TMDL uses a phased approach to load allocations in which the initial phase defines a zero-load allocation. Once the loading capacity has been expanded, the Regional Board can re-evaluate and establish a second phase of the TMDL, as appropriate. Sediment loading capacity will be re-evaluated by 2031, or when water quality standards are met. The three main components of the implementation program for phase one of the TMDL include: waste discharge requirements (WDRs)/waivers, the Elk River Recovery Assessment, and a Watershed Stewardship Program. WDRs are the primary regulatory mechanism used to control nonpoint source pollution resulting from past and ongoing timber harvesting activities in the area.

Elk River Watershed Map



Residual suspended sediment concentrations (SSC) are used as a proxy for various numeric targets related to sediment discharge that require zero increase in discharge, and therefore zero increase in SSC. The graph shows residual SSC values after controlling for the influence of discharge, precipitation, and time of year. Removing the influence of these environmental variables allows for assessment of the impact of anthropogenic activity on sediment discharge.

Water Quality



Water Quality Outcomes

- Trend analysis of water years 2016-2020 shows increase in suspended sediment concentration at the lower North and South Fork Elk River above their confluence
- Increasing trend shown between 2019-2020 is weakly supported by the sparse dataset and brief timeframe and will require continued monitoring to confirm
- Next steps include continued monitoring and coordinated data collection between Regional Water Board and stakeholders.