Water Quality Report Card		Sediment in Van Duzen River	
Regional Water Board:	North Coast, Region 1	STATUS	Conditions Improving
Beneficial Uses Affected:	COLD, WARM, SPWN, MIGR, RARE		Data Inconclusive
Implemented Through:	319 Grant, NPS Permit		Improvement Needed
Effective Date:	December 16, 1999		Targets Achieved/Waterbody Delisted
Attainment Date:	2049	Pollutant Type:	🗆 Point Source 🗹 Nonpoint Source 🗹 Legacy

Water Quality Improvement Strategy

The Van Duzen River, including Yager Creek, are major tributaries to the Eel River. Located southeast of the City of Eureka, the 429 square mile watershed includes some of the most erodible terrain in the U.S. In 1992, both the Van Duzen River and Yager Creek were added to the 303(d) list due to impacts of excessive sedimentation on fish (primarily anadromous salmon and steelhead). Land use practices such as road construction, road maintenance, and intensive timber management in sensitive watershed areas accelerated sediment delivery processes. To address the impairment, USEPA established the Van Duzen River and Yager Creek TMDL for Sediment in December 1999. The TMDL requires a 15 percent reduction in sediment loading. Implementation activities taken since 1999 include issuing permits to control sediment from: roads in two counties, private timber harvesting activities, timberland roads, and activities in national forests. Additionally, as part of an Aquatic Habitat Conservation Plan, road improvement is occurring on private timberland. Yager/Van Duzen Environmental Stewards (YES) Friends of the Eel River, and other stakeholder groups have implemented road sediment control projects and collected data.

Sediment TMDL Loading Allocations



Rainbow Bridge Monitoring Site Van Duzen River Major Tributaries Watershed Boundary Van Duzen River Watershed Boundary Van Duzen River Van Duzen

Van Duzen River Watershed

Water Quality Outcomes

- The TMDL calls for a 15 percent reduction in the total sediment load. While bedload sediment data are not available, 2006-2008 data demonstrate that suspended sediment load by average flow year has decreased by 67 percent from pre-TMDL loads, indicating that conditions are improving.
- Timber companies are implementing road improvements to reduce sediment delivery to streams. Humboldt Redwood Co. has started a <u>comprehensive road program</u>; <u>Green Diamond</u> Resource Co. reports improvement on 73 percent of their roads.
- YES reports that voluntarily private road improvements have prevented delivery of 133,000 cubic yards of sediment to streams.



Van Duzen River Suspended Sediment at the Rainbow Bridge Monitoring Site

^a Pre-TMDL loading estimates (1955-1967) were calculated using <u>USGS flow and suspended sediment data</u>.

^b Includes suspended and settleable/bedload sediment loading.

^c Post-TMDL (2006-2008) monitoring data were collected as part of a special Proposition 40 grant-funded monitoring study.

^d Trendlines show a 71 percent reduction when comparing the blue pre-TMDL line to the purple post-TMDL line. There is no

TMDL target for the suspended sediment rating curve.

^e There are no concentration-based targets established by this TMDL.