

California's North Coast Regional Water Quality Control Board Develops Water Quality Vineyard Program to Protect Salmon Fisheries on California's North Coast

In the year 2,000, the North Coast Regional Water Quality Control Board began receiving 319 funding to develop a water quality vineyard program. The program consisted of outreach, education and enforcement. At the time, vineyard developments had increased significantly in Sonoma and Mendocino counties with many new and existing vineyards lacking proper drainage and erosion control which resulted in significant sediment inputs into the streams of the Russian, Navarro, Gualala and Eel Rivers. The NCRWQCB was receiving hundreds of phone calls per year from the public and other agencies regarding vineyard erosion and sediment/turbid water discharges into streams.

All four Rivers are listed on the Federal Clean Water Act 303(d) list as impaired with excessive amounts of sediment, which is known to be detrimental to salmon and steelhead spawning and rearing success. TMDLs required under the Clean Water Act are being developed by the USEPA and the NCRWQCB to reduce sediment loads in the rivers. Chinook salmon, coho salmon, and steelhead trout are all listed under the State and Federal Endangered Species Act due to the dwindling fish stocks in these rivers.

NCRWQCB staff began working with grape grower associations, the Natural Resource Conservation Service, Resource Conservation Districts and Agricultural Commissioners Offices and others to educate growers on water quality protection and erosion control. Many advances in vineyard management and water quality protection occurred since the initiation of the program thanks to the growers new found interest in protecting the water quality of streams near their vineyards. The State Timber Harvest Review Team now requires all timberland-to-vineyard conversion permits to include erosion control plans as a result of the vineyard program. NCRWQCB staff worked with growers and Sonoma County to develop a vineyard erosion control ordinance.

As part of the program, NCRWQCB staff also initiated a Water Quality Vineyard Enforcement Task Force consisting of the Department of Fish and Game, National Oceanic and Atmospheric Administration Office of Law Enforcement, Sonoma and Mendocino County District Attorney's Offices, California Attorney General's Office, California Department of Forestry, and local government enforcement/permitting agencies. In the first few years of the vineyard program the NCRWQCB issued numerous enforcement orders to vineyard owners who failed to comply with water quality discharge prohibitions. This included Cleanup and Abatement Orders, Water Code Section 13267 Orders (requiring vineyard erosion control plans), and Administrative Civil Liability Orders with penalties up to \$250,000 for vineyard owners who failed to comply with water quality laws.

Many cases were also referred to the Sonoma County District Attorney's Office or the California Attorney General's Office for prosecution. The DA and AG provided global settlements for Water Code, Fish and Game Code and Endangered Species Act Violations.

Numerous vineyard owners were required to install erosion control and prevent sediment discharges into streams. Many were fined heavily which was reported in local newspapers. NCRWQCB staff believes this was a tremendous deterrent that led to improved vineyard water quality practices. During the past three rainy seasons, the North Coast Region has not uncovered any new vineyard pollution cases and has not had to issue any new vineyard enforcement orders. The NCRWQCB's Non-Point Source Unit phones have quieted with few public complaints received regarding vineyard pollution in the past few years.



Eroding vineyard development located in the Eel River Watershed in Mendocino County, California. NCRWQCB fined the landowner \$250,000 for sediment discharges that buried salmon spawning grounds.

Photo courtesy of NOAA Fisheries



Salmon spawning stream buried in sediment from above pictured vineyard development.

Photos courtesy of NOAA Fisheries

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