

US EPA ARCHIVE DOCUMENT

Unattainable Designations

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In the arid Central Valley of California, roughly fifty POTWs discharge effluent to effluent dominated waters. In recent permits, NPDES regulators have decided that municipal (MUN) and other uses that have never actually existed are now designated uses. Because of lack of dilution, strict criteria promulgated for the uses are applied as end-of-pipe effluent limits, requiring advanced treatment beyond tertiary.

In 2001, the City of Vacaville became the first discharger to receive such limits. Its permit, which would triple residential fees and quadruple connection fees, is the subject of a state administrative appeal. No one has ever successfully de-designated a use in California. The Vacaville circumstances illustrate the need for efficient de-designation of mistaken uses administratively designated without regard for attainability.

Vacaville operates the Easterly Wastewater Treatment Plant. The plant discharges secondary treated effluent to a ditch that also carries agricultural return flow in the summer, leading to constructed drains and ultimately to natural channels and the Sacramento-San Joaquin Delta. The nearest municipal intake is 23 miles downstream, after greater than 100:1 dilution. Vacaville's permit contains effluent limits based on adopted MUN criteria (among others), including numerical criteria promulgated by EPA in the California Toxics Rule. The MUN based effluent limits include ammonia, antimony, arsenic, copper, lindane, mercury, nitrates, and trihalomethanes. Engineering experts determined that attaining these limits will require tertiary filtration, microfiltration, reverse osmosis, effluent oxygenation, ultraviolet disinfection, and other advanced processes exceeding \$7.00/gallon in capital costs.

Vacaville's permit includes MUN and COLD designations based on the "tributary rule." Adopted in the 1970s, the rule provides that all designated uses of a downstream waterbody apply its tributaries. In 1994, the state recognized the rule was being misused to establish criteria. The rule was clarified to provide that while downstream designated uses generally apply to tributaries, the state should apply a case-by-case evaluation to waters without specified designated uses. In 2000 EPA disapproved this clarification, but the rule was not further amended. Now, contrary to the clarification, the state is applying the designated uses of downstream waters to upstream tributaries without a case-by-case evaluation ever occurring.

MUN is also based on the 1988 Sources of Drinking Water Policy, which states all surface waters in California should be designated MUN, with some exceptions including agricultural drains. This policy was developed to implement Proposition 65, a separate regulatory scheme that specifically does not apply to POTWs. Nonetheless, the application of this policy has been expanded, and the exceptions disregarded, resulting in the blanket designation of MUN.

Where a use is "designated" due to misapplication of a policy or mistake as to the consequences of a policy, a burdensome UAA should not be necessary to reconcile the mistake. Designations unsupported by the facts should not be applied when achieving them requires extremely costly improvements.

Vacaville's administrative appeal of its permit proposes various alternatives to alleviate the burdensome permit limits that result from these designated uses, but the new discovery that uses were designated unknowingly is the root of the problem.