

Fact Sheet Technical Report - Errata

ENVIRONMENTAL CONSIDERATIONS

The Orange County Stormwater Program has measured a broad suite of contaminants and other measures of receiving water condition (i.e. toxicity, bioassessment) over many years. Based upon an analysis of the frequency and magnitude of the exceedances of regulatory standards, fecal indicator bacteria, dissolved solids, and nutrients have been identified as the Program's priority water quality constituents of concern.

Bacterial contamination is very low during dry weather and has dropped steadily over time; beach report card grades are consistently high. The sources of bacterial contamination have been reduced through targeted actions such as diversion and disinfection and remaining issues are localized and very likely have wildlife components. Contamination is more widespread during wet weather due to the much wider range of bacterial sources in the landscape, compared to dry weather, and higher flows. The Program has identified that consistently attaining current recreational standards in wet weather may be infeasible.

Total dissolved solids (TDS) consistently exceed the Basin Plan Objective and are at levels that create the potential for detrimental ecosystem impacts. Indeed, TDS is currently implicated as a causal factor in poor benthic macroinvertebrate community condition. Local geology, notably the presence of marine sedimentary formations, is the primary reason south Orange County creeks exhibit elevated level TDS.

Nutrient levels in south Orange County streams and channels frequently exceed regulatory thresholds suggesting a prevalence of nutrient impacts. In contrast, there are much less frequent occurrences of such impacts as nuisance algal growth. Leaching of nutrients from soils overlying marine sedimentary and shallow groundwater exfiltration is considered the major nutrient source.

Toxicity in south Orange County's freshwater channels in all conditions (aquatic, sediment, wet and dry weather) occurs at low levels and is sporadic, occurring at different locations at different times and varying unpredictably across test species. Aquatic toxicity in dry weather occurs in open (undeveloped) areas at levels equivalent to those in urban areas. The primary source of toxicity appears to be pesticides, with evidence that pyrethroids contribute to sediment toxicity. Metals, except for localized instances of elevated copper, are at low levels and do appear to contribute to aquatic toxicity in freshwater.

P. F-69

D. Monitoring and Assessment Program

(4) Inform the Copermittees, the San Diego Water Board and the public on the efficacy of NPDES Permit No. CAS010266 in achieving (1) and (2) during future reauthorizations.