Developing TDS Permitting Strategies to Promote Greater Conservation, Encourage Increased Use of Recycled Water and to Address Drought-related Compliance Issues

1) Background

a. All discharge permits in the Santa Ana region include limits on TDS primarily to protect the MUN & AGR beneficial uses in the underlying groundwater basins.

b. Many dischargers (esp. POTWs) are approaching or exceeding these limits especially during drought conditions for reasons beyond their control.

2) Core Trends

a. Increased water conservation (low flow plumbing fixtures & appliances)
b. Increased reliance on self-regenerating water softeners
c. Increased TDS in imported water supplies (due to upstream discharges)
d. Advanced wastewater treatment (disinfection, nutrient removal, odor control, etc.)

3) Cyclic Factors

a. Mandatory water conservation (temporary behavioral changes)
b. Less high quality (low TDS) State Project Water available
c. Increased reliance on higher TDS alternatives (Colo. River water & groundwater)
d. Increased TDS in imported water supplies (due to reduced upstream precipitation)

4) Implications and Concerns

a. Permit violations (increment-of-use & annual averages); MMPs
b. Potential 303(d) listings and probable TMDLs
c. Discourages increased use of recycled water for irrigation and recharge

5) Potential Permitting Strategies

a. Update or delete "increment-of-use" effluent limitations
b. Long-term rolling averages for TDS effluent limitations (esp. for MUN-exempt waters)
c. Tiered effluent limits for TDS (normal and drought conditions)
d. Compliance credits for TDS contributed advanced waste treatment
e. Recognize offset credits from dedicated stormwater recharge projects
f. Intake credits for TDS contributed by grandfathered water softeners
g. Pre-allocate available assimilative capacity for drought-induced exceedances
h. Clarify application of anti-backsliding requirements for TDS