



Draft Summary of Consensus Recommendations from CV-SALTS Policy Discussions in 2012

- 1) Consistent with the requirements set forth in the State Water Resource Control Board's Recycled Water Policy (RWP), the primary focus on the Salt and Nitrate Management Plan (SNMP) will be on ground water. However, it should be noted that the larger CV-SALTS mission includes developing strategies for sustainable salt management in both ground waters and surface waters.
- 2) The RWP presumes that ground waterbodies (aquifers) are already well-defined and that beneficial uses and appropriate water quality objectives have already been assigned to each of these waterbodies. While it is true that a number of water quality standards (uses and objectives) apply by default to nearly all groundwaters in the Central Valley, it is rare that these standards were assigned based on the characteristic of the basis. Consequently, reasonable implementation of any SNMP will require careful review and, where necessary, revision of these standards to better reflect the existing and potential uses likely to occur.
- 3) The absence of detailed data to characterize existing groundwater quality makes it difficult to determine whether a given aquifer is meeting water quality standards or not. Specifically, without a clear understanding of the amount of assimilative capacity available, and the degree to which new discharges may consume that assimilative capacity, state authorities generally require such discharges to meet water quality standards at "first encountered groundwater." Greater regulatory flexibility may be available if we could better describe existing groundwater quality (including relevant spatial and temporal variability). To this end, the CV-SALTS Executive Committee has been formulating standardized definitions for groundwater basins, sub-basins, existing water quality, assimilative capacity and other key terms in the RWP.
- 4) Waste Discharge Requirements for groundwater should be derived so as to ensure beneficial uses will be protected within the discharger's "Zone-of Influence" (ZOI). And, that ZOI should be projected based on the fate and transport that is expected to occur for (at least) the 20-year period following discharge. Such projections should also take into consideration the probable changes in groundwater quality that are already expected to occur as a result of prior loadings to the vadose zone so that the incremental impact on water quality, of any new discharge, can be assessed at the margin.
- 5) In some cases, existing groundwater quality and prior loads to the vadose zone may make it infeasible to achieve water quality standards within a reasonable time period regardless of what regulatory limitations are imposed on new discharges to groundwater. In such instances, it may be prudent to focus the available resources on resolving the use impairment through well-head treatment or alternative water supplies. In order to implement such a strategy, the CV-SALTS Executive Committee has been developing procedures to better relate the "point-of-compliance" to the "point-of-use."

- 6) All groundwaters of the state are, in the absence of clear evidence to the contrary, presumed capable of supporting the MUN (domestic water supply) use. The SNMP will be developed so as to ensure protection of this use especially where it already exists. Therefore, the CV-SALTS Executive Committee does not intend to propose any changes to the current water quality objectives needed to protect drinking water supplies (e.g. <10 mg/L nitrate-nitrogen). However, as noted above, where it is infeasible to attain the standard, the NSMP should provide the regulatory mechanisms necessary to ensure protection of the actual beneficial use by alternative means.
- 7) The Secondary Maximum Contaminant Levels (MCLs) are non-enforceable guidelines intended to protect certain aesthetic water quality conditions (e.g. taste, odor, scaling and staining, etc.). It was inappropriate to adopt the Secondary MCLs as enforceable water quality objectives and the Basin Plan should be revised to better reflect the advisory nature of these guidelines.
- 8) Protecting the AGR use is complicated by a large number of factors, other than water quality, that directly affect the economic viability of commercial agriculture. These factors include, but are not limited to: soil type, climate conditions, water supply availability, market constraints, etc. Many of the crops presently grown in the Central Valley are supported by large volumes of high quality imported water. In some cases, these same crops could not be grown cost-effectively with existing groundwater water supplies. As such, it is inappropriate to set water quality standards for local aquifers based on the assumption that these groundwaters must be capable of growing the same crops now supported by imported water.
- 8) The Regional Board presently uses a narrative objective to protect AGR uses from potential adverse effects associated with excess salinity. Electrical conductivity is commonly restricted to <700 uS/cm in order to protect the most salt-sensitive crops while making several worst-case assumptions about the ability of the agricultural operators to employ adaptive practices designed to minimize such adverse effects. Greater flexibility can be gained by knowing which crops are grown in which areas so that water quality regulations can be tailored to protect actual AGR uses rather than assuming that the most salt-sensitive crops are or will be grown everywhere in the Central Valley. Similarly, "reasonable protection" of the AGR use should not be based on a zero-risk metric but, rather, should seek to ensure that excess salinity will not reduce yields by more than 5% in more than 5% of the dominant crops in more than 5% of the years. The CV-SALTS Executive Committee is working to develop thresholds defining what constitute "reasonable protection" based on a multi-parameter statement (like the one above) to describe maximum compound risk.
- 9) Where existing conditions (poor groundwater quality, prior vadose zone loading) or technological/economic factors make it infeasible to meet relevant water quality standards it may be appropriate to enact a variance policy that allows certain discharges to continue provided that discharges make best efforts best management practice or best practicable treatment or control to reduce new pollutant discharges to the maximum extent practicable. Such variances must be reviewed periodically and cannot be renewed unless the discharger demonstrates that reasonable progress is being made to attain the water quality objective. Variances may provide a strong incentive to encourage development of alternative water supply strategies to mitigate existing use impairments (particularly for economically-disadvantaged communities).