

A Recommended Approach to Salt and Nutrient Management Plan Development in the Central Valley

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In responding to the request to provide markups on the “Framework document” (*A Framework for Salt and Nitrate Source Identification Studies, July 28, 2011 version*), the listed contributors have had a series of discussions regarding the overall approach to Salt and Nutrient Management Plan development in the Central Valley. Those discussions have led to the formulation of a recommended approach that is intended to be cost-effective, efficient, and consistent with the Recycled Water Policy requirements and other Salt and Nutrient Management Planning efforts in California. This brief discussion highlights the major elements of that concept and provides a context for comments offered separately on the Framework document.

The recommended first steps in the development of Salt and Nutrient Management Plans in the Central Valley are (1) to identify candidate study area boundaries based on a multi-faceted approach involving identification of existing planning entities and political boundaries, assembly and review of available mapping layers depicting watersheds and groundwater basins/sub-basins, and, most importantly, direct outreach to stakeholders in candidate study areas; (2) to assemble and map readily available land use information in GIS-format on a valley-wide basis in the Sacramento, San Joaquin and Tulare Basins, building off prior efforts, as described in the attached document prepared by John Dickey; and (3) to assemble and map readily available groundwater basin information for the Sacramento, San Joaquin and Tulare basins, building off work performed by Luhdorff and Scalmanini, and others, to characterize aquifers and depict various groundwater attributes, including known problem areas, depth-dependent groundwater quality, depth to groundwater, soil permeability, and recharge potential. These steps can and should be performed in parallel to economize on time.

The information developed in these first steps should then be used to finalize study area boundary determinations as a critical next step. With the study area delineations established, the information developed in these first steps should be used in combination with existing GIS layers depicting beneficial uses and existing water quality objectives and criteria in the Central Valley (developed by Kennedy Jenks for CV-SALTS), to develop information needed to implement a Salt and Nutrient Management Planning

effort following the general guidelines established in the San Diego region (see attached flow diagram)[Ref: Welch, M.R. 2010. *Proposed Guidelines for Salt and Nutrient Management Planning in the San Diego Region (9)*. Prepared for Southern California Salinity Coalition and San Diego County Water Authority.]

The planning guidelines should be appropriately modified to reflect the conditions in the Central Valley and the requirements of CV-SALTS. The guidelines should be used to categorize basins/subbasins (and the associated aquifers) and study areas in the Central Valley using a tiered approach and to prioritize resource allocations to support Salt and Nutrient Management Planning in the Central Valley.