

Salt/Nutrient Management Plan

Los Angeles County Waterworks District No. 40,
Sanitation Districts of Los Angeles County

By

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State Recycled Water Policy

On February 3, 2009, the State Water Resources Control Board adopted a Recycled Water Policy, which requires every basin and sub-basin in California to develop a Salt/Nutrient Management Plan by 2014 that is designed to protect the region's water quality.

State Recycled Water Policy Cont.

The purpose of the State Recycled Water Policy is to provide direction to the Regional Water Quality Control Boards, proponents of water use and recycled water projects, and the public regarding the appropriate criteria to be used by the State and Regional Water Boards in issuing permits for recycled water projects.

State Recycled Water Policy Cont.

The intent of the State Recycled Water Policy is to address salt/nutrient loading in an entire region through the development of a management plan by the collaborative stakeholder process rather than imposing requirements on individual recycled water projects by the regional regulating agency.

Salt Management Plan

- Required for each basin
- Developed in a collaborative process and funded by local water and wastewater entities, together with local salt/nutrient contributing stakeholders.
- Shall be tailored to address the water quality concerns in each basin and may include constituents other than salt and nutrients.

Salt Management Plan Cont.

The degree of detail and length will depend on site specific factors, such as:

- Basin size
- Basin complexity
- Stormwater recharge
- Hydrogeology
- Source water quality
- Aquifer water quality

Salt Management Plan Cont.

- Shall address and implement provisions, as appropriate, for all sources of salt and/or nutrients to groundwater basins, including recycled water irrigation projects and groundwater recharge reuse projects.
- Shall include stormwater use and recharge components (long-term sustainable use of water).

Salt Management Plan Cont.

- Shall be completed and proposed to the Regional Water Board within 5 years (due by 2/3/2014), unless the Regional Water Board finds that the stakeholders are making substantial progress towards completion of a plan. In no case shall the period for the completion of a plan exceed 7 years.

Components of the SMP

1. Basin-wide Monitoring Plan:

- Determine the scale of the monitoring plan component - to adequately provide a reasonable, cost effective means of determining whether the concentrations of salts, nutrients, and other constituents of concern are consistent with water quality objectives; depends on site-specific conditions.
- Determine appropriate monitoring locations by targeting:
 - Existing monitoring wells, to reduce costs.
 - Groundwater quality near supply wells and near large water recycling projects.
 - Groundwater and surface waters where groundwater has connectivity with adjacent surface waters, if appropriate.

Components of the SMP Cont.

Basin-wide Monitoring Plan:

- Determine frequency of monitoring
- Identify stakeholders responsible for conducting, compiling, and reporting the monitoring data.
- Monitor the salts, nutrients, and other constituents of concern that adversely affect the groundwater quality.
- Data shall be reported at least every 3 years.

Components of the SMP Cont.

2. Basin Salt and Nutrients Characterization:

- Sources and loadings of salts/nutrients
- The basin's assimilative capacity of salts/nutrients; and
- Fate and transport of salts/nutrients

Components of the SMP Cont.

3. Implementation Measures to Manage Salt/Nutrient Loadings on a Sustainable Basis
4. Antidegradation Analysis
5. Water Recycling and Stormwater Recharge/Use Goals and Objectives
6. Monitoring of Constituents of Emerging Concern (CECs)
 - Pursuant to findings of the "blue-ribbon" advisory panel

Salt Management Planning Definitions

Salts:

- Total Dissolved Solids (TDS)

Nutrients:

- Nitrogen Species (i.e. nitrate, nitrite, ammonia, organic, and TDS)

Basin and Sub-Basin Boundaries:

- Area and Depth

Current Ambient Concentrations:

- Concentrations in groundwater, taking into account historical concentrations

Salt Management Planning Definitions Cont.

Assimilative Capacity:

- Water quality objectives in the basin plan minus current ambient concentrations

Antidegradation:

- State Board Antidegradation Policy (Resolution 68-16)

Constituents of Emerging Concern:

- To be determined by the State Board, CDPH, and "Blue Ribbon" advisory panel

Salt Management Planning Definitions

Water Quality Objectives:

- Water quality limits defined in the Basin Plan intended to protect the beneficial use(s) of the groundwater

Sources:

- Imported Water
- Runoff
- Recycled Water Use
- Septic Tanks
- Agricultural Return

Next Steps

- Begin compiling available data to determine:
 - Current and historical water quality of the basin
 - Monitoring plan components
- Future stakeholder meetings

Questions?