

Salt & Nutrient Management Plans in California in Accordance with the Recycled Water Policy

Diane Barclay, State Water Resources Control Board
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Salt and Nutrient Management Plans (SNMPs)

- Intended by Recycled Water Policy
 - Augment diminishing water supplies
- Funded and developed by local stakeholders
- Includes compliance with CEQA
- Submitted by May 2014
- Possible 2-year extension
- Require Regional Water Board approval

General Elements

- Hydrogeologic overview
- Water quality
- Water balance
- Source analysis
- Salt and nutrient balance
- Assimilative capacity
- Management strategies
- Stormwater and recycled water use goals
- Monitoring program
 - Shallow/supply wells
 - Surface/gw intersections
 - CECs
- Antidegradation analysis
- Cost Analysis
- Implementation schedule



Implementation of Plans

- Consider Amending Basin Plans
 - Evaluate Water Quality Objectives (WQOs)
 - Evaluate beneficial use designations
 - Evaluate implementation measures
 - Evaluate monitoring program
- Manage salts and nutrients on a watershed basis
 - Predict future impacts
 - Verify quality trends via monitoring network



Salt and Nutrient Management Plans (SNMPs) Progress by Basin/Subbasin

- SNMPs in Progress
- No SNMPs in Progress
- GAMA Program Priority Basins
- 1-49 Basin/Subbasin Number
- DWR Hydrologic Region
- County Boundary

0 10 20 40 60 80 Miles

SNMP/BPA Summary

Region	Total SNMP Groups	Draft/Final SNMPS Received	% Number of GAMA Priority Basins Covered	% Area of GAMA Priority Basins Covered	SNMPS Expected by 2014	SNMPS Expected by 2016	BPAs Expected by 2016
North Coast	1	1	100 ¹	100 ^{1,2}	1	1	1
SF Bay	3	2	24	40 ³	3	3	0 ⁴
Central Coast	10	3	34	57	5	7	0 ⁵
Los Angeles	7	1	81	86	3	7	4
Central Valley	1	0	100 ¹	100 ¹	0	1	6

1 Regional Water Board plans to address basins not covered by SNMPS programmatically

2 Areas of Alexander subbasin and Ukiah Valley basin not available and not included in area percentage

3 Does not include volcanic aquifer

4 Board Resolution adopted or being considered

5 Central Coast and Lahontan Regional Water Boards will not be developing Basin Plan amendments from SNMPS

SNMP/BPA Summary (continued)

Region	Total SNMP Groups	Draft/ Final SNMPs Received	% Number of GAMA Priority Basins Covered	% Area of GAMA Priority Basins Covered	SNMPs Expected by 2014	SNMPs Expected by 2016	BPAs Expected by 2016
Lahontan	7	0	90	81	0	7	0 ⁵
Colorado River	5	0	100 ¹	100 ¹	0	2	1
Santa Ana	1	1	100	100	1 ⁶	1 ⁶	--
San Diego	9	8	90	88	8	9	1
TOTAL	44	16	95	91	21	38	13

1 Regional Water Board plans to address basins not covered by SNMPs programmatically

5 Central Coast and Lahontan Regional Water Boards will not be developing Basin Plan amendments from SNMPs

6 Completed in 2004

Statewide Challenges - SNMPs

- Incomplete monitoring well information
- Lack of shallow monitoring well data
- Misunderstanding of groundwater mixing
- Inappropriate antidegradation/assimilative capacity methodologies
 - Volume-weighted averaging bias toward deeper aquifers
 - Not enough emphasis given to recent data
- Establishing water quality objectives
- Ag non-participation
- Data gaps not identified and corrected
- Missed opportunities for regional monitoring networks

Statewide Challenges - BPAs

- Regional Water Board deems SNMP inadequate
 - No resulting BPA
- Regional Water Board accepts deficient SNMP
 - No or partially effective BPA
- Regional Water Board accepts adequate SNMP with no BPA
 - Underground regulation?
- Scientific Peer Review
- CEQA document preparation responsibility