Attachment A to Resolution No. R16-005

Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate Groundwater Quality Management Measures for Salts and Nutrients in the Malibu Valley Groundwater Basin

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Adopted by the California Regional Water Quality Control Board, Los Angeles Region on [insert date].

Approved by:

The State Water Resources Control Board on [Insert Date].
The Office of Administrative Law on [Insert Date].

The program of implementation[1] described below is based on the Salt and Nutrient Management Plan for the Malibu Valley Groundwater Basin developed by the City of Malibu in consultation with Los Angeles County Waterworks District 29 and other basin stakeholders. The Salt and Nutrient Management Plan and this program of implementation satisfy the Recycled Water Policy requirements for Salt and Nutrient Management Plans.

The overarching goal of the Malibu Valley Basin Salt and Nutrient Management Plan (SNMP) is to manage, protect and enhance basin groundwater in order to sustain the beneficial uses of this resource. In developing the SNMP, the City of Malibu and the Malibu Valley Basin stakeholders aimed to achieve the following objectives:

- Improve the technical understanding of the groundwater basin's hydrogeology, the implications of the overlying land uses on the underlying groundwater quality, and groundwater-surface water interactions.
- Develop a forum and collaborative process for defining issues and identifying and implementing actions to manage the groundwater resource (both quality and supply).
- Define implementation measures as necessary to ensure the long-term sustainability of the groundwater resource.
- Develop a groundwater monitoring program to coordinate ongoing and future data collection efforts and to facilitate analysis of water quality trends into the future.
- Provide a framework for adaptively managing the groundwater basin and implementing future management actions.

[1] The Recycled Water Policy refers to "revised implementation plans" for adoption into regional basin plans pursuant to Water Code section 13242. Water Code section 13242 uses the term "program of implementation." Pursuant to Water Code section 13242, "[t]he program of implementation for achieving water quality objectives shall include, but not be limited to:
(a) A description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private.
(b) A time schedule for the actions to be taken.
(c) A description of surveillance to be undertaken to determine compliance with objectives."

The Malibu Valley Groundwater Basin SNMP has been developed to support these goals and objectives.

The following summarizes the essential elements of the Salt and Nutrient Management Plan for the Malibu Valley Groundwater Basin. Further details may be found in the full document at: http://www.waterboards.ca.gov/losangeles/water_issues/programs/salt_and_nutrient_management/index.shtml

Background

The Malibu Valley Groundwater Basin is a small alluvial basin located in southwestern Los Angeles County, along the coastline. It is bounded by the Pacific Ocean on the south and by the Santa Monica Mountains on all remaining sides (Figure 8.3-1). The basin covers an area of approximately 613 acres (0.96 square miles) and is flanked on both sides by canyons - the Sweetwater Canyon to the east, and the Winter Canyon to the west. The valley is drained by Malibu Creek to the Pacific Ocean. The Malibu Coast Fault runs across the basin in an east-west direction but does not create a groundwater barrier.[2]

In general, there are four hydrostratigraphic units within the Malibu Valley Groundwater Basin (from shallowest to deepest): shallow alluvium, a low permeability zone that covers most of the groundwater basin, Civic Center Gravels, and bedrock. Bedrock is at or near land surface in the upland areas, and beneath the unconsolidated sediments that are present in the Civic Center Area along Malibu Creek and Lagoon. Groundwater moves south towards the Pacific Ocean.

Infiltration of stream flow is a common source of recharge to the alluvial aquifers. Recharge occurs as streams flow from steep upland areas, which are predominantly bedrock, onto more permeable, relatively flat, alluvial deposits. The rate of recharge is controlled by the difference in head between the stream and the underlying groundwater and the permeability of the streambed and underlying alluvial deposits.

Development overlying the groundwater basin is predominantly urban in nature, and includes a significant amount of residential development and undeveloped land. Historical groundwater use was from the shallow alluvium, which has a hydraulic connection to Malibu Creek and the Pacific Ocean. However, at present, the groundwater basin is not used for local potable water supplies.

Basin Management

The Malibu Valley Basin is actively managed by the City of Malibu, as the approving agency for Coastal Development Permits required by their certified Local Coastal Program, and the Los Angeles County Department of Public Health (LACDPH) Environmental Health Division,

[2] California Department of Water Resources (DWR). 1975. *Sea-Water Intrusion in California: Inventory of Coastal Ground Water Basins*. Bulletin 63-5.

Drinking Water Program, as the entity primarily responsible for well construction and destruction permits and the regulation of small community onsite wastewater treatment systems.

The Malibu Valley Basin has been critically over-drafted in the past. Seawater intrusion occurred through the 1950s and 1960s when seawater advanced over a half mile inland.[3] In response to this situation, Los Angeles County Waterworks District 29 (WD29) was established as a special district in 1959 by a public election that authorized the formation of the district.[4] Once established, WD29 constructed water distribution systems in Malibu between 1962 and 1970 and started distribution of imported potable water into the basin. All known private and commercial potable supply wells were subsequently abandoned.

[3] California Department of Water Resources. 2003. *California's Ground Water*. Bulletin 118.
[4] http://dpw.lacounty.gov/wwd/web/About/Overview.aspx

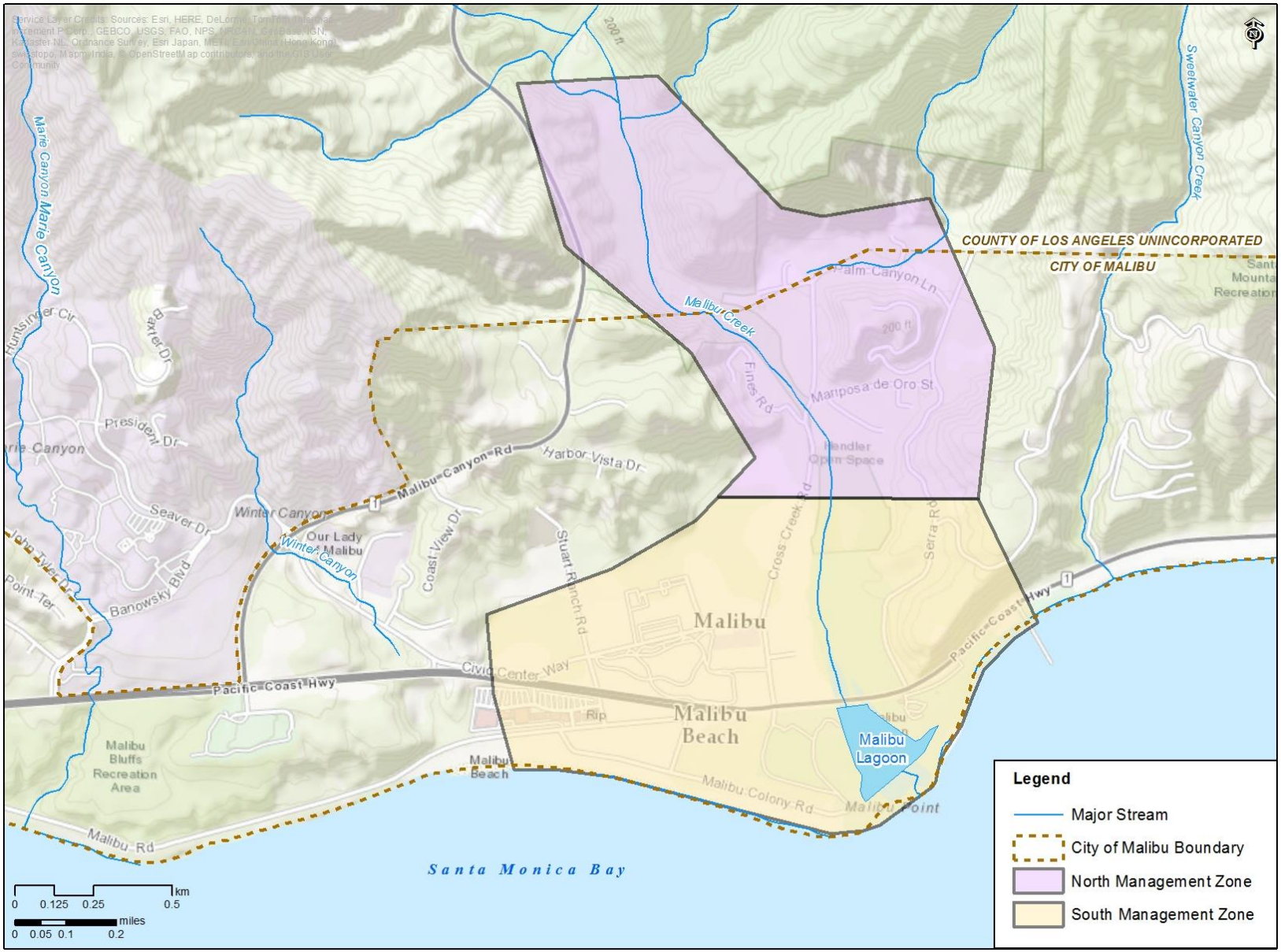

Figure 8.3-1. The Malibu Valley Basin's Salt and Nutrient Management Plan Area.

Participating Agencies

In addition to the City of Malibu as the lead agency, two stakeholder groups participated in the development of the Malibu Valley Basin SNMP. The primary stakeholder group was a Technical Advisory Committee (TAC) that included representatives from the City of Malibu, Los Angeles County Department of Public Works, Heal the Bay, Santa Monica Bay Restoration Commission, Regional and State Water Board staff, and various consultants. The other group was a public stakeholder group that included area residents and businesses, other environmental groups, and representatives of the Planning Commission and local school districts, in addition to the TAC members and other interested entities.

Sources of Water in the Malibu Valley Basin

Water supply within the Malibu area is provided by the Los Angeles County Waterworks District 29 from imported sources. Imported water recharges the basin directly through irrigation, and indirectly through onsite wastewater treatment system discharges in the area. Other sources of basin recharge include stream infiltration, mountain front recharge, and precipitation.

TABLE 8.3-1: CONTRIBUTIONS OF SOURCE WATERS TO THE MALIBU VALLEY BASIN

TYPE	SOURCE	CONTRIBUTION TO GROUNDWATER
Surface water	Upland areas	Recharge from infiltration of Malibu Creek into underlying alluvial deposits, which occurs when surface water flow infiltrates into permeable alluvium in the upper reaches of the creek. Surface water infiltration, which is evident in the western part of the alluvium at the artificial wetland near the intersection of Civic Center Way and Stuart Ranch Road, on what is typically referred to as the Smith Parcel.
Subsurface Municipal Wastewater	Onsite Wastewater Treatment Systems	Subsurface wastewater dispersal, which occurs within the shallow alluvium at each dispersal bed. Dispersal systems in upland areas adjacent to the alluvium can also provide indirect recharge to the basin in the form of groundwater migration into the downgradient basin.
Imported Water	Metropolitan Water District via Los Angeles County Waterworks District 29	Water supply within the Malibu Valley area Groundwater recharge from excess irrigation required to flush root zones for maintenance of turf and other vegetation Recharge to the alluvium via groundwater migration and surface water runoff from irrigation in upland areas.
Groundwater	Mountain front recharge from upland areas	Basin recharge Groundwater migration from upland areas, which recharges alluvial deposits as it flows from the upland areas to the edges of the alluvial deposits on the valley floor.
Stormwater	Precipitation from overlying areas	Infiltration of precipitation directly into the alluvium where land is not covered with impervious surfaces. Additionally, infiltration of precipitation from upland areas in the form of groundwater recharge at the basin's margins.

Groundwater outflow from the Malibu Valley groundwater basin includes natural discharge to surface waters and the ocean, evapotranspiration from riparian vegetation (where the root zone of vegetation is at or below the water table), and pumping wells used for irrigation or other water uses in the plan area.

Salt and Nutrient Loading to the Malibu Valley Basin

The mass balances (inputs and outflows) for total dissolved solids (TDS), chloride, nitrate-N, and sulfate from the various sources of water are presented below for the Malibu Valley Basin. Loads from the imported water, while not specifically listed, are reflected in the loads from stream seepage, irrigation and onsite wastewater treatment systems effluent.

TABLE 8.3-2A: SALT AND NUTRIENT BALANCE IN THE MALIBU VALLEY BASIN

Source Water	TDS		Nitrate	
	(tons/yr)	%	(tons/yr)	%
Stream Seepage	1574.47	79.70	3.04	28.2
Onsite Wastewater Treatment Systems & Irrigation	229.28	11.60	7.57	70.2
Precipitation	0.00	0.00	0.17	1.6
Ocean Inflow	172.51	8.70	0.01	0.0
Total Inflow	**1975.28**	**100**	**10.79**	**100**
Ocean Outflow	2283.62	58.55	4.80	58.5
Stream Outflow	1616.72	41.45	3.41	41.8
Total Outflow	**3900.34**	**100**	**8.21**	**100**
Annual change in mass (tons)	**-1925.06**		**2.58**	

Groundwater Quality and Assimilative Capacity in Malibu Valley Basin

Available groundwater quality data was limited in terms of quantity and spatial representation. Monitoring data from wells in the Malibu Valley Basin from 2003 through 2011 were used to characterize current groundwater quality with regard to nitrates and TDS concentrations. Water quality data were obtained from GeoTracker—compiled from a variety of sources including monitoring and test wells installed as part of the conceptual feasibility testing for a proposed centralized wastewater treatment facility, monitoring wells at the commercial development commonly referred to as the "Lumber Yard," wells sampled by the United States Geological Survey (USGS), and wells owned by private parties whose groundwater quality data were publicly available. The median groundwater concentrations for both TDS and nitrate were developed by averaging concentrations from individual wells basin-wide (both shallow and deep wells), and then employing a spatial averaging and interpolation across the entire groundwater basin. Since no recent data for chloride or sulfates were available, water quality assessment was based on historic data from GeoTracker from 1953 to 1969.

For the purpose of groundwater quality assessment and determination of available assimilative capacity and future water quality conditions, the Malibu Valley Basin was divided into two management zones. The Northern Management Zone includes approximately the northern half of the groundwater basin and contains primarily residential properties, while the Southern Management Zone covers the southern half of the basin and contains a combination of seaside residential properties, the Civic Center commercial area, and the proposed treated effluent injection wells of the proposed Civic Center Wastewater Treatment Facility. The line dividing the two management zones was determined based on a combination of groundwater quality data, current and future land use, and the grid elements contained in the MODFLOW groundwater flow model, which provided the water balance data necessary for the analyses.

The average TDS, chloride, sulfate and nitrate-N concentrations for each of the management zones were compared to the applicable basin water quality objectives to determine the existing available

assimilative capacity (Table 8.3-3). Assimilative capacity is estimated as the difference between the water quality objectives and the existing groundwater quality for each management zone.

TABLE 8.3-3: GROUNDWATER QUALITY AND AVAILABLE ASSIMILATIVE CAPACITY IN THE MALIBU VALLEY BASIN

BASIN	SUB AREA	Water Quality Objective (mg/l)	Current Quality (mg/l)	Available Assimilative Capacity (mg/l)
Total Dissolved Solids (TDS)				
Malibu Valley	Northern Zone	2000	2000	0
	Southern Zone		2200	-200
	Basin wide		2100	-100
Nitrate - N				
Malibu Valley	Northern Zone	10	2.78	7.22
	Southern Zone		3.29	6.71
	Basin wide		3.23	6.77
Chlorides				
Malibu Valley	Northern Zone	500	170	330
	Southern Zone		244	256
	Basin wide		212	288
Sulfates				
Malibu Valley	Northern Zone	500	394	106
	Southern Zone		619	-119
	Basin wide		520	-20

Note: An "Available Assimilative Capacity" of 0 or a negative number indicates that there is no assimilative capacity available for the sub area/pollutant.

Available data showed TDS concentrations below the basins' water quality objective (i.e. less than 2,000 mg/L) throughout most of the basin; however, some areas displayed elevated TDS levels, primarily as a result of either direct connection with ocean waters and/or as a result of historical sea water intrusion. One well in particular, on the east side of the basin, showed elevated TDS concentrations (above 4,000 mg/L) and this resulted in a significant impact on the groundwater basin's spatial average. Generally, low nitrate concentrations were observed throughout most of the groundwater basin, with higher readings outside of the basin. Also, higher nitrate concentrations were found in the shallow groundwater as compared to the deeper aquifer. On average, chloride concentrations were below water quality objectives, though concentrations tended to be high near the ocean and lagoon. Finally, the water quality data showed areas of relatively low sulfate concentrations and localized areas of high concentrations exceeding 800 mg/L. The higher concentrations tended to occur near the ocean and lagoon – a possible indication of tidal and seawater influences on groundwater quality. In summary, assimilative capacity is available for chloride and nitrate in both management zones within the planning area, and for sulfate in the Northern Management Zone. There is no assimilative capacity for TDS in either zone, and none for sulfate in the Southern Management Zone.

Salt and Nutrient Management Measures in the Malibu Valley Basin

Existing salt and nutrient management measures in the Malibu Valley Basin include actions/programs that manage groundwater quality, protect and enhance groundwater recharge, and promote onsite stormwater capture and retention. These existing management measures are summarized in Table 8.3-4A.

TABLE 8.3-4A: EXISTING SALT AND NUTRIENT MANAGEMENT MEASURES IN THE MALIBU VALLEY BASIN

Category	Program/Project	Description
Groundwater Management and Adaptation	Water Quality Mitigation Plan (WQMP)	For projects that require a Coastal Development Permit and fall into one of 8 pre-defined categories, a WQMP must be prepared to show how treatment control BMPs and/or structural BMPs will be used to minimize or prevent the discharge of polluted runoff after construction.
	Well construction/destruction permits	Los Angeles County Department of Public Health issues permits for groundwater well construction and destruction.
	Total Maximum Daily Loads (TMDLs)	As a result of surface water-groundwater interactions between Malibu Creek/Lagoon and the Malibu Valley Basin, efforts to meet TMDL requirements for Malibu Creek/Lagoon will aid in protecting groundwater quality.
	Groundwater Management Ordinance	Manage groundwater extractions from existing wells and installation and extraction from new wells
Protect/Enhance Groundwater Recharge	Land development approvals	Manage development to protect key basin recharge areas
	Stormwater runoff retention ordinance	New projects are to retain onsite the Storm Water Quality Design Volume (SWQDv) defined as the greater of the 85th percentile, 24-hour storm event or the 0.75 inch, 24-hour storm event.
Saline Water Intrusion Management	Groundwater Management Ordinance	Manage groundwater extractions from existing wells and installation and extraction from new wells
Stormwater Capture and Runoff Management	LID and stormwater BMPs	Promotion of green architecture (including LID techniques) through the City's Green Building Standards Code and implementation of State General Permits
	Stormwater runoff retention ordinance	New projects are to retain onsite the Storm Water Quality Design Volume (SWQDv) defined as the greater of the 85th percentile, 24-hour storm event or the 0.75 inch, 24-hour storm event.
	Stormwater Management Plans (SWMP)	All projects which require a Coastal Development Permit must include a SWMP to mitigate the effect of development on stormwater after construction and must maximize, to the extent practicable, the percentage of permeable surfaces and the retention of dry-weather runoff on the site
Public Outreach	Cooperation and coordination between water-related entities	The City currently coordinates with multiple entities in the groundwater basin on water resource-related issues, including, but not limited to, the Los Angeles Water Board, National Park Service, Resource Conservation District of the Santa Monica

Category	Program/Project	Description
		Mountains, California State Coastal Conservancy, Las Virgenes Municipal Water District, and Malibu Coastal Land Conservancy
Land Use Regulation	Landscape water conservation requirements	M.W.C. Section 9.22, City Ordinance No. 343 requires homeowners to maintain water-efficient landscapes

Planned implementation projects and programs include, among others, the construction of a centralized wastewater treatment facility (the Civic Center Wastewater Treatment Facility or CCWTF) to reduce pollutant loads from onsite wastewater treatment systems and replace imported water for irrigation. Discharge from this centralized treatment system will be injected into the groundwater aquifer to curtail seawater intrusion. Details of such measures are provided in Table 8.3-4B.

TABLE 8.3-4B: PLANNED SALT AND NUTRIENT MANAGEMENT MEASURES IN THE MALIBU VALLEY BASIN

Category	Program/Project	Description
Protect/Enhance Groundwater Recharge	Mapping of basin recharge areas	Recharge zones for the groundwater basin will be mapped and used in consideration of land use approvals
Saline Water Intrusion Management	Recycled water injection as part of CCWTF	Injection will establish a partial recharge barrier against future saline water intrusion
Wastewater Salinity/Nutrient Control	CCWTF construction and operation	Wastewater collection and nitrogen treatment
	Regenerative salt-based water softeners ordinance	Control loading of salts in wastewater to reduce salts in recycled water
Groundwater Monitoring	Groundwater elevation and water quality monitoring program	Groundwater monitoring will be required as part of the Water Reclamation Requirements (WRR)/Waste Discharge Requirements (WDR) for the CCWTF
	SNMP monitoring program	A supplemental monitoring program will be implemented, building on the WDR monitoring program, to provide necessary information for SNMP implementation
	MOU monitoring program	A supplemental monitoring program will be implemented, building on the WDR monitoring program, to provide necessary information for evaluating the impacts of CCWTF implementation on the shallow alluvium per MOU requirements

Projected Impacts of Future Projects on Water Quality

Groundwater quality concentrations for TDS and nitrate were simulated for two scenarios using a spreadsheet-based analytical mixing model. This mixing model was developed in Microsoft Excel and is a set of linked spreadsheets used to represent 'instantaneously mixed' groundwater volumes. This mixing model, combined with the loading analysis, was designed to account for current groundwater volumes and salt/nutrient masses in storage in the Malibu Valley Basin, and to track the loading/unloading of salts and nutrients through various major groundwater sources and sinks under baseline (current) and future land and water use scenarios (based on the City's General Plan for future development through build-out). Concentration estimates were based on water and mass inflows and outflows (balances), mixed with the volume of water in storage in the groundwater basin and the average ambient groundwater quality. The water balance components are based upon a MODFLOW groundwater flow model developed and used to simulate future impacts to the groundwater basin, and are further extrapolated such that the future groundwater quality analysis simulates the period of 2010 to 2039. In the absence of sufficient data on chloride and sulfate, the analysis was limited to TDS and nitrate.

The two scenarios evaluated in this analysis were: (1) a No Project scenario that assumes continued use of o systems in the planning area and projected land use at build-out per the City's General Plan; and (2) implementation of the CCWTF[5] Project. Under this second scenario, once fully implemented, the CCWTF Project will be the only recycled water project in the Malibu Valley Basin and the recycled water produced by the CCWTF will be used for irrigation with any unused recycled water injected into the groundwater basin. Results of this analysis are presented in Tables 8.3-5A and 8.3-5B.

Projected Future Assimilative Capacity Use for Total Dissolved Solids (TDS) and Nitrate

Results from the model indicate that future changes in land use and implementation of the proposed CCWTF Project will not result in significant adverse changes to TDS loading to the groundwater basin. The TDS concentration of recycled water to be injected into the Malibu Valley Basin will be less than existing ambient groundwater concentrations (estimated to be 2,000 mg/L in the Northern Zone and 2,200 mg/L in the Southern Zone). Consequently, the proposed recycled water injection project will result in improvements to groundwater quality with respect to TDS in the injection area, eventually lowering TDS concentrations well below the water quality objective.

Based on the model, nitrate-N concentrations are projected to increase basin-wide by 13% over a 25-year period. However, water quality will still be maintained below the nitrate-N water quality objective of 10 mg/l. The centralized treatment plant is estimated to account for about 7% of the nitrate-N assimilative capacity use, while the balance is projected to be utilized by future land uses, which would occur under either of the two scenarios evaluated (i.e., development of currently vacant lands and changes to existing land uses).

These projections are based on conservative assumptions for the impact analysis (e.g., all nitrogen loading is converted to nitrate-N, there is no in-basin denitrification, no advection, dispersion or

[5] CCWTF Project Scenario – This scenario assumes recycled water irrigation and injection with centralized wastewater treatment/recycled water generation resulting in a total nitrogen concentration of 8 mg/L.

diffusion within the groundwater basin, and no salt is removed from the basin once loading occurs), and may therefore overestimate the actual TDS and nitrate-N loadings to the Malibu Valley Basin and the projected impacts on basin water quality.

TABLE 8.3-5A: PROJECTED IMPACT OF DIFFERENT PROJECT SCENARIOS ON ASSIMILATIVE CAPACITY FOR TDS

MALIBU VALLEY BASIN/SUB AREA	CURRENT WATER QUALITY	NO PROJECT SCENARIO		CCWTF PROJECT SCENARIO	
	2015	2040			
	TDS (mg/l)	TDS (mg/l)	Assimilative Capacity created (%)	TDS (mg/l)	Assimilative Capacity created (%)
Northern Management Zone	2000	1097	**+45**	1105	**+45**
Southern Management Zone	2200	1096	**+55**	1115	**+54**
Basin wide	2100	936	**+53**	934	**+53**

TABLE 8.3-5B: PROJECTED IMPACT OF DIFFERENT PROJECT SCENARIOS ON ASSIMILATIVE CAPACITY FOR NITRATE-NITROGEN

MALIBU VALLEY BASIN/SUB AREA	CURRENT WATER QUALITY	NO PROJECT SCENARIO		CCWTF PROJECT SCENARIO	
	2015	2040			
	Nitrate-N (mg/l)	Nitrate-N (mg/l)	Assimilative Capacity used (%)	Nitrate-N (mg/l)	Assimilative Capacity used (%)
Northern Management Zone	2.78	4.31	**-21**	3.95	**-16**
Southern Management Zone	3.29	5.85	**-38**	4.91	**-24**
Basin wide	3.23	4.91	**-25**	4.1	**-13**

Salt and Nutrient Load Limits

Salt and nutrient loads to the Malibu Valley Basin will be managed with the existing and planned programs/projects discussed above, in conjunction with other existing water quality protection measures including Total Maximum Daily Loads and the prohibition on onsite wastewater treatment system discharges in the area. These measures are designed to maintain water quality that is protective of beneficial uses, preserve capacity for stormwater recharge, address elevated salt concentrations and curtail impacts from seawater intrusion.

Monitoring Program

Groundwater monitoring for salt and nutrient management plan implementation will utilize a mix of shallow and deeper monitoring wells that are spatially distributed around the Malibu Valley Basin as shown in Figure 8.3-2, and will monitor for potential impacts to the groundwater basin resulting from recycled water irrigation. In addition, the SNMP monitoring program will assess spatial and temporal changes in salt and nutrient concentrations and provide a more complete and current characterization of groundwater quality, particularly for sulfates and chlorides. Monitoring data will also be used to refine the assimilative capacity analysis using updated information. Elements of the program are laid out in Table 8.3-6.

TABLE 8.3-6: MONITORING PROGRAM ELEMENTS

<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Responsible Agency</td><td>City of Malibu</td></tr>
<tr><td>Program Origin</td><td>Waste Discharge Monitoring Requirements for the CCWTF, and other existing monitoring wells.</td></tr>
<tr><td>Parameters and Monitoring Frequency</td><td>
<table>
<tr><th>Parameter</th><th>Monitoring Frequency</th></tr>
<tr><td>Total Dissolved Solids</td><td rowspan="4">Semi-Annually</td></tr>
<tr><td>Chloride</td></tr>
<tr><td>Sulfate</td></tr>
<tr><td>Nitrate-N</td></tr>
</table>
</td></tr>
<tr><td>Monitoring locations</td><td>Shallow and deeper monitoring wells spatially distributed around the Malibu Valley Basin (Figure 8.3-2)</td></tr>
<tr><td>Reporting Requirements</td><td>Annual report of monitoring results. TDS, chloride, sulfate and nitrate-N data collected from the SNMP monitoring wells will be uploaded to the State Water Board’s online GeoTracker database.</td></tr>
<tr><td>Review Period</td><td>Data collected from the SNMP monitoring wells, and other monitoring programs, will be reviewed periodically to evaluate basin water quality conditions.</td></tr>
</table>

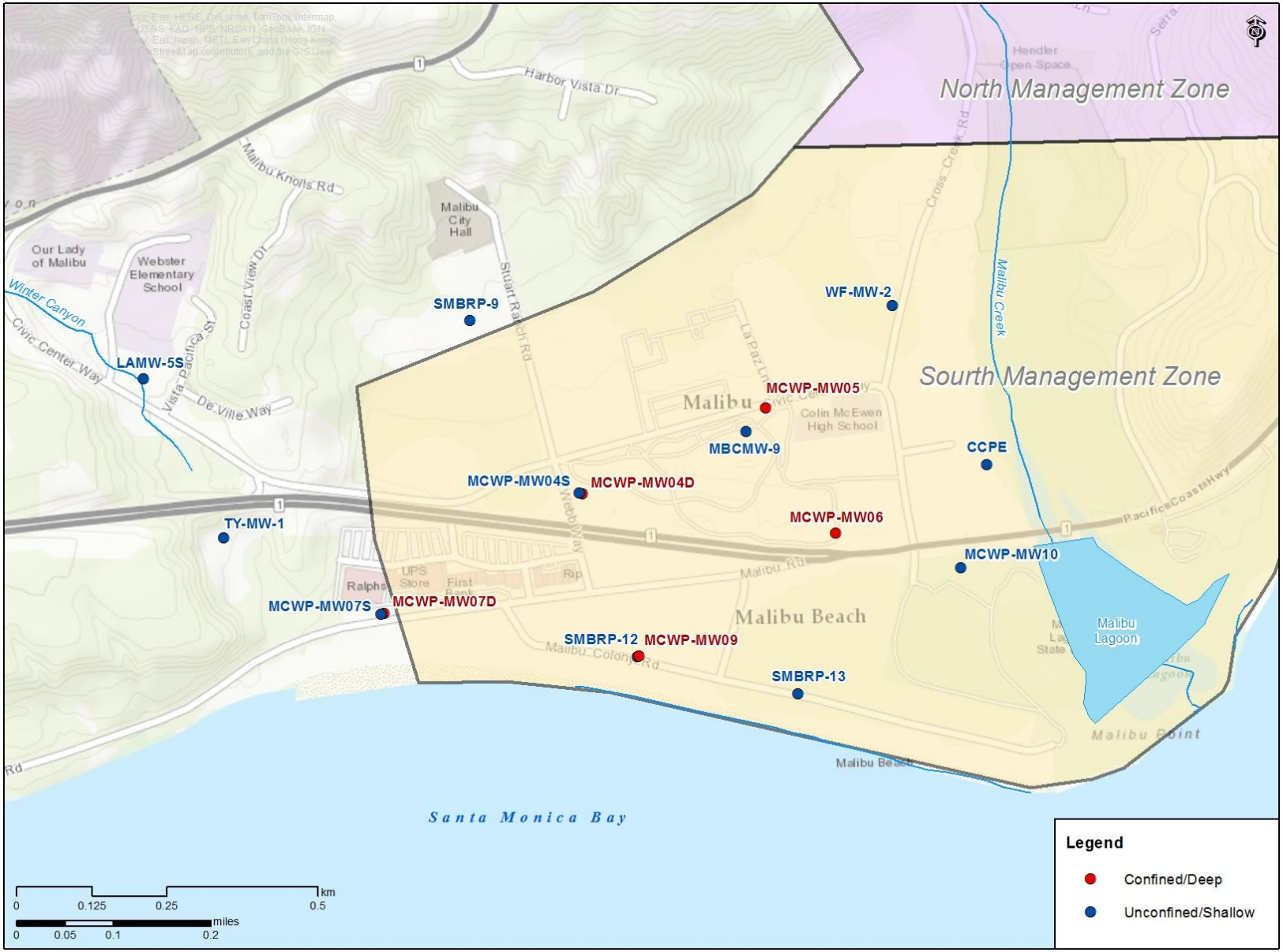

Figure 8.3-2. Location of SNMP Monitoring Wells in the Malibu Valley Basin.

Updates to the Salt and Nutrient Management Measures

Salt and nutrient management measures will be updated (i) as necessary to reflect changing conditions in the Malibu Valley Basin (e.g. drought conditions, changes in current or projected salt and nutrient loads to the basin, and/or changes in land use), (ii) where results from the SNMP Monitoring Program indicate that revisions/modifications are warranted, (iii) if needed to address modified or additional recycled water projects and/or (iv) at the end of a 10-year planning horizon.

Regulatory Implications

The salt and nutrient management strategies developed by the Malibu Valley Basin stakeholders are measures designed to maintain water quality that is protective of beneficial uses, preserve capacity for stormwater recharge, address elevated salt concentrations and curtail impacts from seawater intrusion. These strategies will be applied in conjunction with already existing water quality protection measures in the planning area (e.g. TMDLs and prohibition on onsite wastewater treatment system discharges).

Where additional projects have the potential to impact salt and/or nutrient loads to a basin, consideration will be given to water quality conditions and the corresponding assimilative capacity in localized areas during the permitting process or the development of other Regional Water Board regulatory actions.

Except for the permitting of existing and proposed facilities/projects, further Regional Water Board action pertaining to these implementation measures geared toward controlling salt and nutrient loading to these basins may only be necessary where data and/or other information indicate that the projected water quality impacts are being exceeded.