



EXECUTIVE OFFICER'S REPORT MAY 2021
Covers March 16, 2021 – April 15, 2021

Contents

1. Personnel Report – *Eric Shay*..... 1

2. Standing Item – Salt and Nutrient Management Plans Update in the Lahontan Region – *Anna Garcia*..... 2

3. The Upper Owens River Watershed Mercury Investigation – *Alanna Misico and Ed Hancock* 4

4. Bear Valley Cleaners – *Todd Battey*..... 8

5. Onsite Wastewater Treatment System Program Review for City of Adelanto – *Molina Hauv*..... 9

State and Regional

1. Personnel Report – *Eric Shay*

New Hires

- Jennifer Callahan, Environmental Scientist, Forestry / Dredge & Fill Unit, South Lake Tahoe. This position will engage in permit development and/or enrollments under the Lahontan Timber Waiver, Clean Water Act section 401 Water Certification for activities in Waters of the U.S., dredge and fill permits for Waters of the State, environmental document preparation or compliance for projects where the LRWQCB is a lead or responsible agency under CEQA, and regulatory actions as needed.

Promotions

- Sabrina Rice, Environmental Scientist, Non-Point Source Unit, South Lake Tahoe. This position will assist with the implementation of the Freshwater and Estuarine Harmful Algal Bloom Program to satisfy a legislative mandate related to harmful algal blooms (HABs). The incumbent will work closely with waterbody operators/owners, county environmental health department staff and public health officers, tribes, non-governmental groups, and the public to respond to HABs; develop ongoing monitoring programs; post health advisories at recreational waterbodies; and increase community awareness of HABs.
- Molina Hauv, Engineering Geologist, Wastewater & Agricultural Operations Unit, Victorville. This is a new position authorized under SB 1215 (Hertzberg) legislation passed in 2018. The incumbent will work with economically disadvantaged communities that have onsite wastewater treatment systems (OWTS, or septic systems) that could be connected to a sewer system if they are

within three miles of a system. The incumbent will also work with other small rural communities in need of upgrading their wastewater treatment systems.

Vacancies

- C.E.A. (Career Executive Assignment) to serve as the Region's Assistant Executive Officer.
- Water Resource Control Engineer, Regulatory and Enforcement Unit, South Lake Tahoe. The position will provide support for Wastewater and NPDES permitting work.
- Water Resource Control Engineer, Wastewater & Agricultural Operations Unit, Victorville. This position provides regulatory compliance oversight to dairies and wastewater treatment plants located in the South Lahontan Basin.
- Environmental Scientist, Land Disposal Unit, Victorville. This position will provide regulatory oversight of dredge and fill permitting and compliance of Caltrans projects regionwide.
- Scientific Aid, Wastewater & Agricultural Operations Unit, Victorville. This position supports staff primarily through review of submitted self-monitoring reports, along with other special projects.

Departures – None

2. Standing Item – Salt and Nutrient Management Plans Update in the Lahontan Region – *Anna Garcia*

This item is a regular update on the progress of Salt and Nutrient Management Plan (SNMP) development in the Lahontan Region. The State Water Board's *Water Quality Control Policy for Recycled Water* (Recycled Water Policy) was adopted in 2009, amended in 2013, and updated in 2018 requiring local stakeholders to develop SNMPs for groundwater basins in the state. The updated Recycled Water Policy took effect on April 8, 2019 and changes the SNMP process as summarized below.

- By **April 8, 2021**, the Water Board must evaluate each basin or subbasin and identify through resolution or Executive Officer determination where salts and/or nutrients are a water quality threat and need management planning. This review must reoccur **every five years**. Reviews completed prior to **April 8, 2019**, may be used to satisfy this requirement if the prior review satisfies the Recycled Water Policy objectives. To date, Water Board staff has yet to tackle this requirement; however, a SNMP strategy is being developed to address this and will be brought to the board in the near future.
- The groundwater basins or subbasins identified through the process described above must have a SNMP. The Recycled Water Policy encourages collaboration between salt and nutrient management planning groups, the agricultural community, Water Boards, Integrated Regional Water Management groups, and groundwater sustainability agencies formed under the Sustainable Groundwater Management Act (SGMA).
- By **April 8, 2024**, SNMPs adopted as an amendment to Water Quality Control Plans (Basin Plans) or accepted by the Water Board prior to April 8, 2019, shall be evaluated for an assessment and review of all data collected in that basin or

subbasin for trend analysis, monitoring network adequacy, data gaps, groundwater quality impacts, available assimilative capacity, and new projects that are reasonably foreseeable that were not evaluated when the SNMP was prepared, and use the results of this assessment to update the SNMP, as warranted.

- The Water Board may find that a groundwater management plan for a groundwater basin or subbasin is functionally equivalent to a SNMP.
- If the Water Board determines that a SNMP does not trigger a Basin Plan amendment to modify water quality objectives, beneficial uses, or implementation programs, then that SNMP is a technical document supporting future Water Board decisions.
- The Water Board has three choices for submitted SNMPS: 1) determine it does not satisfy the Recycled Water Policy and provide specific comments and recommendations, 2) determine the SNMP is satisfactory and accept it through resolution or Executive Officer determination, or 3) determine the SNMP is satisfactory but a Basin Plan change is needed and begin that process.

To date, our SNMP efforts focused on ten groundwater basins that in 2003 were determined to be priority basins under the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program. In early 2019, the Department of Water Resources (DWR) revised basin priorities throughout the state. In the Lahontan Region, this revision looked at priority for the ten basins previously identified (out of our more than 345 basins and numerous sub-basins). Due to the DWR revision, we now have only eight priority basins. These eight basins are listed below along with a brief statement on the status of SNMP development for each basin. Rationale is also given for the two basins that were lowered in priority (to very low). More detailed status information is in the table that follows.

Completed SNMPS and Water Board acceptance dates:

- Antelope Valley (adjudicated) – November 2014
- Mojave Region (adjudicated) – February 2016
- Fort Irwin – January 2017
- Indian Wells Valley – April 2018
- Fremont Valley – January 2019

In accordance with the 2019 Recycled Water Policy Amendment, SNMPS accepted by a Regional Water Board prior to April 8, 2019, shall be evaluated for a data assessment by April 8, 2024. Lahontan Water Board staff will work with local stakeholders to review monitoring data including water quality trends in comparison with predicted trends, review monitoring networks to provide adequate coverage for basin characterization, evaluate potential data gap areas, evaluate groundwater quality predicted in the SNMP based on the most recent water quality trends, and evaluate reasonably foreseeable projects that were not included in the previous update of the SNMP.

SNMPs in progress:

- Inyo/Mono (Owens) – The Owens Valley Groundwater Basin was identified as a low-priority basin through the 2019 Sustainable Groundwater Management Act (SGMA) Basin Prioritization process. A Groundwater Sustainability Agency (GSA), the Owens Valley Groundwater Authority, was formed in 2018 to manage the basin and develop a Groundwater Sustainability Plan (GSP). This planning effort may help inform the future development of a SNMP for the Owens Valley;
- Tahoe South – Despite low use of overall groundwater supply, a final plan is in progress for this medium-priority basin to address tetrachloroethene (PCE) contamination in the drinking water aquifer. The South Tahoe Public Utility District GSA and the El Dorado County Water Agency GSA formed to cooperatively manage the basin. An update of the groundwater management plan for this basin is underway. This planning effort may help inform the future development of a SNMP for the Tahoe South Basin; and
- Honey Lake (Lahontan) Valley – Draft plan completed in December 2015. Stakeholders are considering an update to the SNMP for this low-priority basin.

SNMPs no longer needed:

- Martis Valley – Priority classification changed to very low based on low use of overall groundwater supply; and
- Tehachapi Valley East – Draft plan completed in February 2010. Despite a priority classification change to very low based on low use of overall groundwater supply, a revised draft is still in progress using a previously issued DWR grant award.

The State Water Board maintains a geographic information system (GIS) map web application depicting statewide SNMP coverage of groundwater basins. A link to the State Water Board's SNMP GIS map is found on the SNMP webpage, from the *Recycled Water Policy* webpage. Links to accepted SNMP documents are located on the Lahontan Water Board's webpage under Programs.

North Lahontan Region

3. The Upper Owens River Watershed Mercury Investigation – *Alanna Misico and Ed Hancock*

Mercury (Hg) concentrations exceeding water quality and fish tissue objectives have been detected in samples collected from surface waters in the Upper Owens River Watershed (UORW). Affected waters include Mammoth Creek (Twin Lakes Outlet to Old Mammoth Road), Mammoth Creek (Old Mammoth Road to Highway 395), Hot Creek (Mono County), Crowley Lake Reservoir, and Mill City Tributary (tributary to Mammoth Creek—Twin Lakes outlet to Old Mammoth Road). Existing sampling data supports five 303(d) listings in the UORW. 303(d) Listings are described in Table 3.1.

A sufficient amount of mercury data has been collected to determine beneficial use impairment in surface waters described in Table 3.1. However, the extent of mercury contamination in the UORW is currently unknown because mercury pollution has not

been investigated uniformly across all surface waters listed in Table 3.1 and has not been investigated in the other tributary surface waters that contribute to Crowley Lake Reservoir. Beginning in May 2021, Water Board staff will collect stream sediment samples from surface streams not previously sampled, and from surface streams listed in Table 3.1. Based on initial sample events, water quality monitoring may be added as well. Water quality, fish tissue, and lake-sediment samples will be collected from Crowley Lake Reservoir. The sampling protocol is designed to characterize the extent of the mercury contamination issue in the UORW, both in surface waters which have been previously sampled and in surface waters where no information exists, and the data gathered during sampling will be used to inform next steps for the investigation. Data generated from Crowley Lake Reservoir sampling may also be used to develop a fish tissue consumption advisory for the waterbody.

Table 3.1: 303(d) listings for mercury in the UORW

Waterbody Name	Waterbody Identification Number (WBID)	Sample Matrix	Year 303(d) Listed	Beneficial Use (BU) Impaired	Max Sampled Hg.: water ug/L; tissue mg/Kg	CTR Water Quality Objective Hg water ug/L; COMM Water Quality Objective tissue mg/Kg
Mammoth Creek (Twin Lakes Outlet to Old Mammoth Rd)	CAR603100512 0080816102743	Water; Tissue	2006	MUN COMM WILD	H ₂ O: 0.08 Tissue: 0.29	H ₂ O: 0.05 Tissue: 0.20
Mammoth Creek (Old Mammoth Rd to HWY 395)	CAR603100532 0080816102036	Water; Tissue	2006	MUN COMM WILD	H ₂ O: 0.14 Tissue: 0.42	H ₂ O: 0.05 Tissue: 0.20
Mill City Tributary ¹	CAR603100512 0080630162428	Water	2010	MUN	H ₂ O: 0.30	H ₂ O: 0.05 Tissue: 0.20
Hot Creek (Mono County)	CAR603100402 0170721056270	Water; Tissue	2018	MUN COMM WILD	H ₂ O: 0.13 Tissue: 0.20	H ₂ O: 0.05 Tissue: 0.20
Crowley Lake Reservoir	CAL603100901 9980806103521	Tissue	2018	COMM WILD	Tissue: 0.62	H ₂ O: 0.05 Tissue: 0.20

Investigating mercury pollution in the UORW is a priority because mercury is a potent neurotoxin which can cause neurological and reproductive harm to people and animals. The UORW is a recreation destination beneficially used for Water Contact Recreation (REC-1) and Commercial and Sport Fishing (COMM). The watershed supports a premier Eastern Sierra trout fishery and a variety of other water-based recreational

activities. Such activities increase the likelihood of people becoming exposed to potentially hazardous mercury pollution. Additionally, the UORW supports Municipal and Domestic Supply (MUN) and agricultural uses that are susceptible to mercury-polluted surface waters.

A conceptual model of mercury contamination is shown in Figure 3.1.

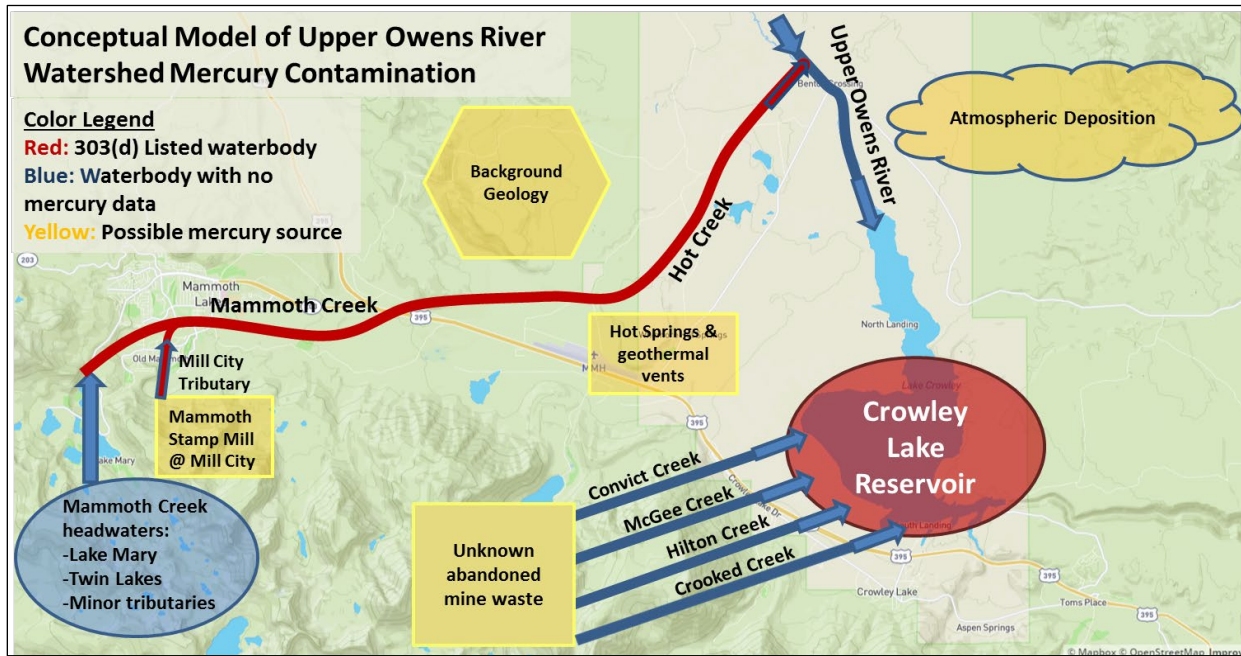
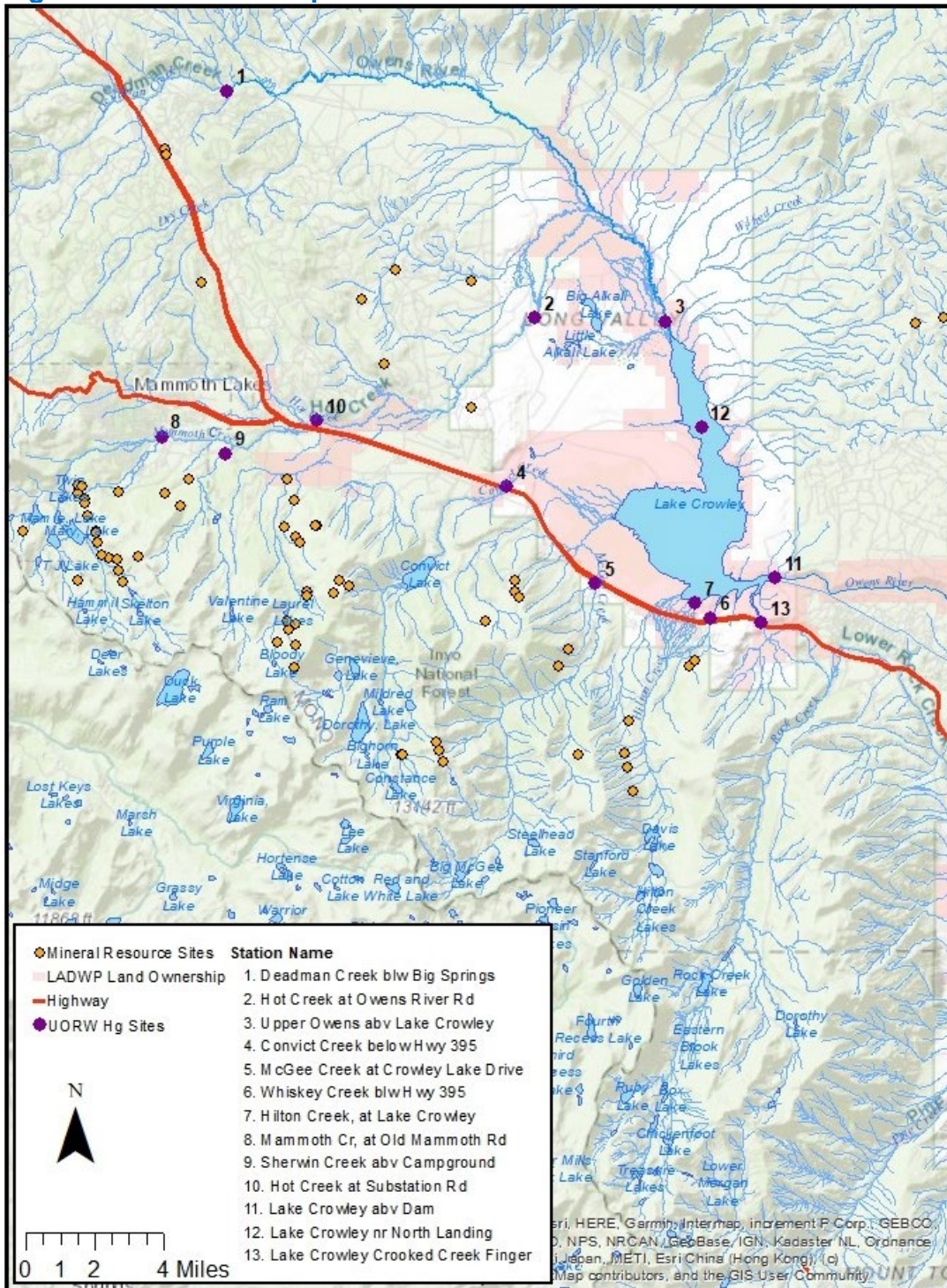


Figure 3.1: Conceptual Model of the UORW Mercury Contamination Issue

To compliment Water Board resources, staff have partnered with several external organizations to collect the necessary data to determine the extent of the mercury issues in the UORW. In April 2018, staff began engaging with U.S. Forest Service (USFS) regarding future work activities to address the Mammoth Stamp Mill site in the headwaters area of the Mammoth Creek sub-watershed. The Mammoth Stamp Mill site is suspected as a source of mercury affecting downstream waterbodies because the site used mercury to separate gold and silver from stamp mill-crushed ore and contains several legacy mill waste piles that contain elevated concentrations of mercury. Through erosion, the mercury has been distributed across the site Mammoth Stamp Mill site affecting site soils, surface water runoff, recreational activities, and use of USFS summer cabins. The contamination at the Mammoth Stamp Mill site poses a human health risk to recreational visitors and cabin occupants and site has been closed to such uses since 2017. To date, the lateral and vertical extent of contamination in soil has not been fully defined and proposed removal action activities have not been implemented. Water Board staff are trying to work collaboratively with the USFS to ensure future investigation activities are adequate to evaluate the risk contamination poses on downstream receptors. Additionally, the Water Board has contracted Moss Landing Marine Laboratories (MLML) to sample Crowley Lake Reservoir. MLML will collect fish tissue, sediment, and water quality samples from the reservoir during Summer 2021. Reservoir sampling may continue in 2022 depending on the results of 2021 sampling.

Figure 3.2: UORW Sample Locations



Beginning in May 2021, Water Board staff will be collecting stream sediment samples from ten tributary streams to Crowley Lake Reservoir. Eight field visits are planned for the 2021 field season, and stream sediment sampling will continue into the 2022 field season. Sampling in 2022 will be adaptively managed based on a review of the data generated during 2021. The 2021 monitoring plan is in Quality Assurance (QA) review

and will be finalized by the end of April 2021. Stream sediment sample locations are shown in Figure 3.2.

Data generated by the 2021-2022 investigations will inform future monitoring activities in the UORW. Future monitoring may include targeted water quality, tissue, or sediment sampling at “hotspot” sites in the watershed, Xray Florescence (XRF) to help determine mercury contamination in upland soils, or isotope analyses to inform a source attribution analysis. Future monitoring activities may support a Total Maximum Daily Load (TMDL) or other regulatory program to address the mercury impairments in the UORW, and Water Board project staff will communicate findings to staff colleagues. Staff will provide updates on this project as results become available.

South Lahontan Region

4. Bear Valley Cleaners – Todd Battey

Bear Valley Cleaners is a commercial dry-cleaning facility located at 16200 Bear Valley Road in Victorville. Tetrachloroethene (PCE) has been released at the site to a depth of at least 250 feet below grade and has been detected in soil vapor at adjacent businesses located in the shopping center and in the residential neighborhood to the north.

In January 2020, Water Board staff was contacted by a consultant working for the Woodmont Company regarding how they could enter into the state of California’s cost recovery program to eventually remediate and close the site. The Woodmont Company entered into a cost recovery agreement with the Lahontan Water Board in April 2020. The property that includes the Bear Valley Cleaners is in receivership and the agreement was signed by the Receiver, Fredrick Meno. Previous unregulated phases of work date back to at least 2017. A deep borehole was advanced to 300 feet below grade immediately north of the Bear Valley Cleaners facility. Soil-gas samples were collected to the total depth of the borehole, and PCE soil gas concentrations generally diminished with depth. PCE was not detected in soil-gas samples collected at 280 and 300 feet below grade. Groundwater was not encountered during the drilling of this borehole (total depth 300 feet below grade), and it is currently unknown whether groundwater has been impacted by the PCE release. The first groundwater monitoring well was installed and sampled in April 2021. The analytical results for collected groundwater samples are pending.

The soil types encountered during the drilling at the site include loose sand and gravel to approximately 25 feet, underlain by sandy clay and silty sand to 300 feet. Based on the permeable soils at the site, soil vapor extraction (SVE) has been recommended to address the PCE in soil gas by multiple consultants including EBI Consulting (EBI), who conducted an SVE pilot test in 2020. Water Board staff has requested that EBI submit their SVE pilot test report and proceed with installation of the remediation system as soon as possible.

Due to concerns about indoor air exposure to PCE vapors, Water Board staff issued a Proposition 65 notification to the Hazmat Division of the San Bernardino County Fire Department (the designated San Bernardino County Proposition 65 lead) and the San

Bernardino County Board of Supervisor's office, as required on March 10, 2021. A fact sheet for the public was prepared in coordination with the Office of Public Participation (OPP) and the Office of Environmental Health Hazard Assessment (OEHHA) for distribution to the public in both English and Spanish. The fact sheet was mailed in April 2021 to businesses near the Bear Valley Cleaners and to residences of Tokay Street located north of the cleaners. The fact sheet provides the businesses and residents with basic information concerning this cleanup site and with contact information for Water Board staff. If members of the public express interest in learning more about the Bear Valley Cleaners cleanup site, Water Board staff and the State Water Board's Office of Public Participation staff will conduct a public workshop in the future.

5. Onsite Wastewater Treatment System Program Review for City of Adelanto – *Molina Hauv*

As part of an ongoing effort to meet with local agencies and discuss Onsite Wastewater Treatment System (OWTS) permitting issues, Lahontan Water Board staff met with City of Adelanto (City) staff on April 12, 2021 to discuss improvements to the City's program for approving OWTS or septic systems. The City is one of two local agencies, along with the City of Victorville, using the OWTS Policy Tier 1 criteria for OWTS approval. The discussion included the City Manager, Director of Development Services, Contract City Engineer, and the Director of Operations from the Adelanto Wastewater Treatment Plant.

In March 1989, the City and the Water Board signed a Memorandum of Understanding describing how the City would approve OWTS, incorporating the Water Board's Basin Plan septic tank guidelines. However, the State Water Board's OWTS Policy, effective as of May 12, 2013, supersedes the Basin Plan septic guidelines. Water Board staff informed the City that we intend to terminate the Memorandum of Understanding.

Water Board staff reiterated to the City that their permitting approach must conform to the OWTS Policy, Tier 1 criteria. Additionally, the City has not previously submitted annual reports, as required by the OWTS Policy. Water Board staff explained these reporting requirements to the City and provided guidance documents to aid in uploading these reports to the GeoTracker database. GeoTracker serves as the repository database for annual reports submitted by local agencies.

Water Board staff requested the City address these action items:

- Establish Field Sampling Points (FSPs) in GeoTracker for wastewater treatment plant groundwater monitoring wells and upload all monitoring data associated with the FSPs.
- Upload OWTS annual reports to GeoTracker, including all required information outlined in the OWTS Policy, Section 3.3. Water Board staff recommended the City's annual report include other factors such as geographic coordinates parcel numbers, design flow, tank size, and parcel size.
- Verify City codes, ordinances, and policies for OWTS permitting to ensure adherence to the OWTS Policy, Tier 1 criteria.