



EXECUTIVE OFFICER'S REPORT • January 2020
Covers November 16, 2019 – December 15, 2019

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State and Regional

1. Personnel Report – Eric Shay

New Hires

- Sarah Newcomb, Scientific Aid, Planning & Assessment Unit, South Lake Tahoe. This position assists with the collection, preparation, and chemical analysis of water samples; creates maps to display and analyze data; updates TMDL reporting products; and assists staff with data management and analysis tasks.
- Tom Gavigan, Engineering Geologist, Forestry Unit, South Lake Tahoe. This position will be focused on implementing the Water Board's elements of recent legislation (SB 901) related to increasing the pace and scale of forest fuels treatments.
- Adam Henriques, Environmental Scientist, Forestry Unit, South Lake Tahoe. This position will be focused on implementing the Water Board's elements of recent legislation (SB 901) related to increasing the pace and scale of forest fuels treatments.

Transfers

- Amanda Lopez, Engineering Geologist, transfer from Department of Defense / Site Cleanup Program Unit to Land Disposal Unit, Victorville. This position will be part of a team that provides regulatory oversight for the land disposal, site cleanup, storm water, and dredge/fill programs in the South Lahontan Basin.

Vacancies – We are currently recruiting for the following positions:

- Scientific Aid, Cleanup/Site Investigation & Enforcement Unit, South Lake Tahoe. This position assists staff with administering the site cleanup, underground storage tank, land disposal, and enforcement programs; reviewing reports, and maintaining databases; reviews self-monitoring reports for cases, permits and enforcement actions; reviews project files and water quality data to prepare for field inspections and permit updates; assists with field inspections; and reviews California Environmental Quality Act documents.
- Water Resource Control Engineer, Forestry Unit, South Lake Tahoe. This position will be focused on implementing the Water Board’s elements of recent legislation (SB 901) related to increasing the pace and scale of forest fuels treatments.
- Senior Environmental Scientist (Supervisor). This position oversees the Non-Point Source Unit, whose tasks include issues such as grazing, harmful algal blooms, 319(h) grants, Lake Tahoe Total Maximum Daily Load (TMDL), Lake Tahoe nearshore, Mono Lake, and management of our in-house laboratory.
- Engineering Geologist, Department of Defense / Site Cleanup Program Unit, Victorville. This position analyzes threat of pollutants to groundwater and surface waters, reviews technical reports for cleanup strategies, reviews site investigation results, reviews proposed cleanup alternatives to ensure compliance with water quality objectives, prepares enforcement orders, investigates spills, and conducts inspections of cleanup sites and facilities.

Departures

- Lisa Dernbach, Sr. Engineering Geologist (Specialist), South Regulatory Division.

North Lahontan Region

2. Standing Item - Leviathan Mine, Alpine County – *Cathe Pool*

Water Board staff continues coordinating with United States Environmental Protection Agency (USEPA) and Atlantic Richfield Company (AR) for the completion of current and proposed site work at Leviathan Mine.

2019 Summer Pond Water Treatment Plant Operations

On an annual basis since 1999, the Water Board conducts summer treatment of the fluids stored in the onsite evaporation ponds. This treatment effort typically commences in early-July and finishes in mid-September. The purpose of the summertime treatment effort is to create capacity to contain acid mine drainage (AMD) and direct rain/snow that enters the pond system from approximately October 1 through June 1. The Water Board’s summer treatment program creates storage capacity in the ponds by removing fluids from the ponds, treating those fluids to meet USEPA discharge criteria, and then discharging the treated fluids to Leviathan Creek. The Water Board’s Pond Water Treatment (PWT) system is a lime treatment facility located adjacent to one of the evaporation ponds. The PWT system draws fluids from the adjacent pond, mixes lime with the pond fluids, separates the solids that precipitate out of the mixture in the Pit Clarifier shown below, and then decants the treated fluid to Leviathan Creek.

The Water Board’s PWT contractor Spectrum Services Group, began operations on July 25, 2019. PWT operations continued through October 4, 2019. Spectrum Services Group operated the PWT system 24 hours per day, 7 days per week with few exceptions. The PWT system was shut down for the year on October 4, 2019 after treating and discharging

approximately 11.8 million gallons of AMD. Additionally, approximately 828 tons of waste sludge generated by PWT operations in 2018 and 39 tons of waste sludge generated by Emergency Spring Treatment operations in 2019 were disposed of offsite.



Figure 2.1 - Sludge Removal from the Pit Clarifier, July 2019

The Water Board's 2019 PWT effort, combined with natural evaporation, resulted in restoring nearly all the upper pond system's approximately 13 million-gallon storage capacity. PWT system operations continued until the upper pond system was essentially empty.

Site Characterization Report: Under order from USEPA, AR submitted a Site Characterization Report (SCR) for the Leviathan Mine Site on December 31, 2017. Water Board staff reviewed the SCR and provided comments to the USEPA by letter dated August 7, 2018. In the letter, Water Board staff explained several concerns regarding the data evaluation statistical process used in the SCR. All the issues raised by the Water Board were largely supported by statistical experts Anita Singh, PhD (who wrote the proUCL statistical software) and Shahrokh Rouhani, Ph.D., P.E. who were hired by AR to review Water Board comments and assist in resolving the issues related to statistical analysis. The AR consultants newly proposed statistical process requires recalculation of all Reference Threshold Values (RTV) presented in the 2017 SCR. USEPA has indicated that the new RTV's will be presented in the sitewide Remedial Investigation Report. USEPA is currently reassessing the schedule for completing the sitewide Remedial Investigation Report and Feasibility Study, taking into consideration the current effort to develop an Early Final Remedial Action for treating the mine site's primary AMD sources.

Proposed Early Final Remedial Action (EFRA): Water Board staff has been meeting regularly with USEPA and AR regarding the possibility of implementing an EFRA at Leviathan Mine. The proposed EFRA would encompass year-round capture and treatment of the five main sources of AMD for purposes of reducing metals loading to Leviathan Creek. The discussions regarding the EFRA are ongoing, but AR has already presented an aggressive conceptual implementation schedule leading to a Record of Decision for the EFRA, and subsequently design, construction, and year-round operation of AMD capture, conveyance, and treatment systems. To inform the selection of a treatment process and selection of effluent discharge limits, AR has agreed to conduct a pilot project this treatment season. The pilot project will use AMD direct from the five AMD sources without influence from precipitation or evaporation affects seen in the ponds. The Treatability

Workplan is expected to be received in the first quarter 2020. Under the Settlement Agreement between the Water Board and AR, the Water Board would be responsible for the design, construction, of the EFRA. Water Board staff will continue to work with USEPA and AR in this process to ensure that the process is compliant with CERCLA, including requirements regarding Applicable, Appropriate, and Relevant Requirements (ARARs) of the State of California.

Settlement Agreement Activities: Water Board staff has continued its efforts to review quarterly cost reports submitted by AR for Remedial Investigation and Feasibility Study (RI/FS) activities AR has conducted. Since the time of Water Board staff's last EO's Report in July 2019, Water Board staff has reviewed AR's cost reports and supplemental information for the first, second, and third quarters of 2019. Issues remain with AR's cost reports for the second and third quarters of 2019, but staff anticipates these issues will be satisfactorily resolved. Staff's review of ARC's RI/FS costs will continue for the next several years and is a critical element of a complex cost-sharing and accounting system established by the Settlement Agreement between the Water Board and AR.

The Settlement Agreement provides that for every dollar AR spends for RI/FS work over \$11 million, AR is to receive a 40-cent credit from the Water Board towards the amount AR will have to pay for construction of the final Remedial Action for Leviathan Mine. Through the first quarter of 2019, Water Board staff and ARC have come to agreement that AR has spent nearly \$48.6 million in RI/FS costs, putting the credit due to AR for Remedial Action construction costs at approximately \$15 million.

Site Tours: Water Board staff provided or participated in several Leviathan Mine site visits/tours this year including site visits by the following parties:

- staff of the State Water Board's Division of Financial Assistance and Office of Chief Counsel, Lahontan Water Board, State Water Board members, and members of the public;
- German Environmental Exchange students hosted by USEPA;
- Alpine County staff, Alpine Watershed Group staff, and other local interested parties;
- California Department of General Services (DGS) staff who will be assisting Water Board staff in securing contracts for site maintenance and engineering services,
- Washoe Tribe of Nevada and California including the new Chairman, Tribal Council Members, and staff; and
- Central Valley Water Board staff responsible for overseeing the Iron Mountain Mine Superfund site, Chief of Groundwater Unit, Mines Program Manager, Kate Burger.

Site Improvements: This year Water Board staff successfully installed a new construction office complete with A/C, heat, power (through onsite portable generator) and satellite phone and internet. The new construction office will significantly improve staff working conditions during summer treatment season and winter site inspections. Satellite internet and phone service vastly improves staff accessibility for routine as well as emergency communications.



Figure 2.2 - New Water Board Construction Office.

3. Site Tour at Iron Mountain Mine Superfund Site for Leviathan Mine Staff – Hannah Bartholomew

On November 14, 2019, Leviathan Mine staff attended a tour of the Iron Mountain Mine Superfund site near Redding hosted by United States Environmental Protection Agency – Region 9 and Central Valley Regional Water Quality Control Board staff. Leviathan Mine staff was particularly interested in the Minnesota Flats Treatment Plant, which treats acid mine drainage (AMD) at Iron Mountain Mine. The Minnesota Flats Treatment Plant, in operation for decades, uses a high-density sludge treatment process, similar to processes being evaluated for treating AMD at Leviathan Mine. The magnitude of AMD flow fluctuations at Iron Mountain Mine is significant and the plant treatment capacity of 6,500 gallons per minute is impressive, especially compared to the Water Board’s Leviathan Mine Pond Water Treatment Plant’s maximum flow rate of 200 gallons per minute.



Figure 3.1 - Minnesota Flats Treatment Plant Clarifier

In addition to a tour of the Minnesota Flats Treatment Plant, sludge generation, handling, and disposal were discussed. The tour included a stop at the onsite sludge disposal facility located in the former mine pit called Brick Flat Pit.

The tour also included driving up the Boulder Creek basin and visiting the Spring Creek Clean Water Diversion, Boulder Creek Landslide, Richmond Portal, and the Slickrock Creek Dam. The Slickrock Creek Dam captures AMD from the south side of Iron Mountain and transports it by a pipeline to the Minnesota Flats Treatment Plant.



Figure 3.2 - Slickrock Creek Dam

There were also discussions related to the destructive impacts of the Carr Wildfire. In 2018, the Carr Wildfire burned through the Iron Mountain Mine site. Leviathan staff was able to discuss how the wildfire impacted the site and lessons learned.

The Iron Mountain Mine Superfund site and facilities have numerous elements in common with the Leviathan Mine Superfund site (e.g., AMD sources, conveyance, and storage; challenging terrain; high-density sludge treatment technology; wildfire threat). The tour was very informative and Leviathan Mine staff will be able to apply several of the lessons learned at Iron Mountain Mine to the technical and operational challenges of the Water Board's Leviathan Mine Superfund site.

4. Tahoe Keys Aquatic Weed Control Methods Test Project – *Russell Norman*

The Tahoe Keys Property Owners Association (TKPOA) submitted applications for an individual NPDES permit and an exemption to the Water Quality Control Plan for the Lahontan Region (Basin Plan) pesticide discharge prohibition for the Tahoe Keys Aquatic Weed Control Methods Test project (Project) in July 2017. The Project is designed to test the efficacy of several large-scale aquatic weed control methods including use of aquatic herbicides followed by several small-scale aquatic weed control methods to maintain target aquatic weed infestations at a manageable level. Project objectives include developing an integrated methods approach for bringing target aquatic plants, including

native and invasive species, under control within the test area of the Tahoe Keys West Lagoon in Lake Tahoe.

A joint California Environmental Quality Act (CEQA) Initial Study and TRPA Initial Environmental Checklist were completed in 2017, upon which a determination to conduct a full joint CEQA Environmental Impact Report (EIR) and TRPA Environmental Impact Statement (EIS) analysis was made. A joint EIR/EIS is currently being prepared for the Project. The Water Board is the lead agency for the CEQA EIR portion of the environmental analysis and documentation.

The schedule for the Project proposes to have the joint EIR/EIS environmental analysis and document completed and all required permits issued to initiate the proposed Project by spring of 2021. This timeline is still under review and subject to change.

A facilitation services company, Zephyr Collaboration, was selected by TKPOA, TRPA, Tahoe Water Suppliers Association, and the League to Save Lake Tahoe with recommendations by Lahontan Water Board staff. The first steps of the collaborative process for environmental review and permitting have been implemented with Project Scoping, initial stakeholder and public collaboration meetings completed, and release of a Project Scoping Report on October 31, 2019.

The table, below, summarizes the initial Project scoping and outreach activities completed to date:

Date	Activity
June 5, 2019	Public Website Launch; Public Workshops Announced
June 17, 2019	Official Joint EIR/EIS Scoping Begins with Release of Joint EIR/EIS Notice of Preparation
June 25, 2019	Lahontan Water Board CEQA EIR Scoping Meeting and Public Workshop 1 in South Lake Tahoe held at the Lahontan Water Board Annex
June 26, 2019	TRPA EIS Scoping Meeting 1 in Stateline, Nevada held at TRPA Governing Board Public Hearing
June 27, 2019	Stakeholder Consultation Circle (SCC) Meeting
July 16, 2019	Lahontan Water Board CEQA EIR Scoping Meeting and Public Workshop 2 in Kings Beach held at the North Tahoe Event Center
July 17, 2019	Responsible Agencies Deadline to Respond to the Joint EIR/EIS Notice of Preparation (30 Days After Receiving the Notice of Preparation)
July 24, 2019	TRPA EIS Scoping Meeting 2 held in the Tahoe Keys at a TRPA Governing Board Field Trip and Public Hearing
August 2, 2019	Close of Joint EIR/EIS Scoping Period; All Comments Due
October 31, 2019	Final Joint EIR/ EIS Project Scoping Report Released

Scoping comments were solicited via comment cards at scoping meetings, verbal comments at the scoping meetings, and comment letters and emails submitted in response to the public notice for the scoping meetings. A total of 316 individual scoping comments were received from 44 commenters with many commenters including more than one comment. Comment submission included four (4) commenters who used the

comment cards at the scoping meetings, and 40 commenters who submitted comment letters or email messages. Additionally, 44 verbal comments were recorded from 26 attendees at the June 25, 2019 public workshop, 37 verbal comments were recorded from the 10 attendees at the July 16, 2019 public workshop, and 26 verbal comments were recorded from the Stakeholder Consultation Circle (SCC) Meeting. The comment themes receiving the most comments include: Alternatives Analysis/Test Protocol (88 Comments), Alternatives – Non-Chemical Alternatives (77 Comments), Anti-Degradation Analysis/Test Analysis (69 Comments), Alternatives – Chemical Alternatives/Herbicides (58 Comments) and Alternatives – Proposed Tahoe Keys Modifications (36 Comments). All other comment themes received 30 comments or less in the Project scoping. A full summary of scoping activities and comments received can be referenced in the October 31, 2019 Final Project Scoping Report.

5. White Wolf Subdivision, Placer County – Anne Holden

The proposed White Wolf Subdivision project would create an approximately 275-acre private resort subdivision consisting of 38 single-family custom home lots, fourteen guest units and six employee lodging units. Also proposed are roads, trails, and onsite parking areas, common areas and amenities for residents and guests, including a clubhouse/lodge, ski resort facilities, equestrian facilities, pool, ice skating rink, tennis courts and a ski lift. The project site is in the Bear Creek Valley on the east side of Alpine Meadows Road (see Figure 5.1), in Placer County.

Placer County is the lead agency for the project in accordance with the California Environmental Quality Act (CEQA) and circulated a Notice of Preparation (NOP) of an Environmental Impact Report. The Water Board, acting as a responsible agency, provided comments on the NOP to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines. If the project is approved, the Water Board will issue permits for the projects such as Clean Water Act section 401 water quality certification and Basin Plan prohibition exemptions.

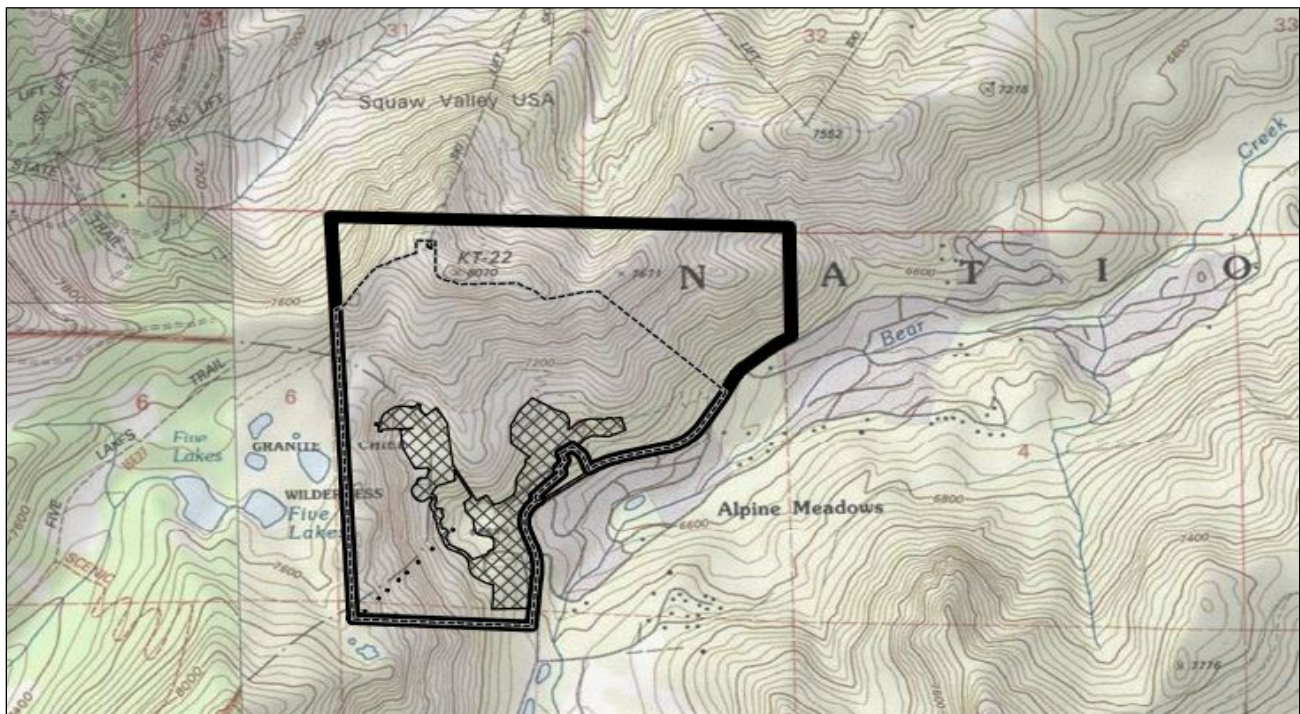


Figure 5.1 - Map of proposed project area. Crosshatch area indicates project development site; dark black boundary is EIR project area.

An Initial Study was included with the NOP and discloses that potentially significant impacts may occur to several environmental resource areas within our jurisdiction, including to biological resources, hydrology and water quality, utilities and services, and cumulative environmental impacts. Hydrologic features identified within the project site includes perennial, intermittent and ephemeral streams, wet meadows, seasonal wetlands, seeps, and a man-made pond. The project would require tree removal for grading and construction of various project components. Due to the steepness of portions of the site, substantial grading would be required for proposed roadways and structures. The project would also require trenching and backfill for construction of utilities. These activities have the potential to negatively impact waters of the state and waters of United States. The Truckee River, of which Bear Creek is a tributary, is the subject of a Total Maximum Daily Load for excessive sediment, adopted by the Water Board in 2008.

Staff comments to the Initial Study and NOP encouraged Placer County to develop and analyze project alternatives which would avoid surface waters and 100-year floodplains to the extent practicable and ensure that all applicable control and mitigation measures are incorporated to minimize potential adverse impacts to water quality and beneficial uses. Staff will continue to review and comment on the project as it moves through the environmental analysis phase and be prepared to issue necessary permits for the projects (i.e., Clean Water Act section 401 water quality certification and Basin Plan prohibition exemptions) to ensure that water quality impacts are minimized during any subsequent permitting and project implementation phases.

South Lahontan Region

6. 2019 California Building Code Update Short Course – Jeff Fitzsimmons

Water Board staff member, Jeff Fitzsimmons, attended a one-day short course which included new and updated seismic components of the 2019 California Building Code (CBC) that will become effective January 2020 as the new “current industry-wide practices.” The 2019 CBC consists of the 2018 International Building Code with California Amendments. The short course focused on the application of the 2019 CBC to new facilities or upgrades to existing facilities designated as essential. Essential facilities are defined by CBC 2016, Title 24, Part 2, Volume 1, Chapter 2, as “Buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes.” The information presented in the short course has direct application to waste management facility design characteristics and provided the opportunity for Water Board staff to remain current and prepared for reviews of new waste management unit designs and/or upgrades of existing waste management units.

Over 100 attendees were present for the short course, which was held in Pomona, Los Angeles County. Lecturers and attendees included engineers and geologists licensed by the State of California from private practice or corporations and government agencies. Lecturers included Mr. Brian Olson and Mr. Chase White, State of California Geological Survey (CGS); Dr. Jorge Meneses, RMA Consultants; and Mr. Jim Pearson, Brandow and Johnson. Mr. Olson and Mr. White provided an overview of the CGS geological, seismological, geotechnical review process, CGS Note 48, and 2019 CBC provisions. Dr. Meneses addressed the seismic components of the 2019 CBC and Mr. Pearson discussed the structural engineering aspects of the 2019 CBC.

The short course provided an excellent opportunity for Water Board staff to remain informed and to begin preparing for the implementation of the new “current industry-wide practices” that will be implemented January 2020.

7. December 2019 Update on Edwards AFB Operable Unit 4/9 Arroyos Dispute

– *Alonzo Poach*

The Edwards Air Force Base Arroyos Record of Decision (ROD) dispute was initiated in November 2014 by the Department of Toxic Substances Control (DTSC) and United States Environmental Protection Agency (USEPA), Region 9. USEPA, Lahontan Regional Water Quality Control Board, and DTSC are all parties to this dispute. The dispute is currently with the Dispute Resolution Committee (DRC), as defined in the Edwards Air Force Base Federal Facilities Agreement (FFA). The dispute focuses on eleven disputed items in the Arroyos ROD, primarily focusing on various risk management and toxicity criteria issues.

Eight of the eleven issues have been conceptually resolved through the DRC, at the remedial project manager level during Technical Working Group (TWG) meetings. Over a series of TWG meetings in 2017, members of the DRC from all agencies agreed to work through remaining items, using the informal dispute process outlined in the FFA (at staff level; i.e., Remedial Project Manager representatives from each agency). Three remaining issues regarding appropriate toxicity criteria and proper application of the risk management range (10^{-4} to 10^{-6} risk range) remain outstanding.

The Air Force asserts that Federal Toxicity criteria (typically established by USEPA) takes a higher hierarchy when both Federal and State criteria exist regardless of which value is more stringent (i.e., more protective). Also, the Air Force asserts that the risk triggers within the risk range are acceptable without mitigation or institutional controls.

In a letter dated October 2, 2019, the Air Force stated that from their standpoint, working the issues through the TWGs is no longer the most efficient way of settling the Arroyos disputed items. The October letter also called for a DRC meeting to discuss the next steps with the DRC members.

In November 2019, staff from all agencies collaboratively developed a dispute status summary and proposed a path forward. Each agency provided said summary to their respective DRC member. A meeting of the DRC was scheduled for December 2019, but, due to conflicting schedules, it was deferred to January 2020. If the DRC cannot reach agreement on the remaining items, the dispute will be elevated to the Senior Executive Committee.

8. US EPA Biosolids Webinar Incineration and Anaerobic Digestion – *Sergio Alonso*

On December 4, 2019, Water Board staff attended the second in a multipart series of webinars focusing on biosolids hosted by the United States Environmental Protection Agency (USEPA). The webinar focuses on the biosolids treatment at the Lewiston Auburn Water Pollution Control Authority's (LAWPCA's) wastewater treatment plant in Lewiston, Maine. Although in a different environment, this facility is similar in many respects to the largest wastewater treatment plants in the South Lahontan Basin, including the Victor Valley Wastewater Reclamation Authority and the County Sanitation Districts of Los Angeles County Plants in Lancaster and Palmdale.

The Lewiston Auburn wastewater treatment plant treats an average flow of 10 million gallons per day (MGD) and serves 20 industrial users. As part of their biosolids management, the plant has a compost facility that's been in operation since 1993, a farmland application program since 1987, and accepts outside septage and food waste. The biosolids treatment process uses anaerobic digestors that feed into biogas and digested sludge storage areas prior to subsequent processing. The biosolids flow schematic is shown in figure 8.1 below.

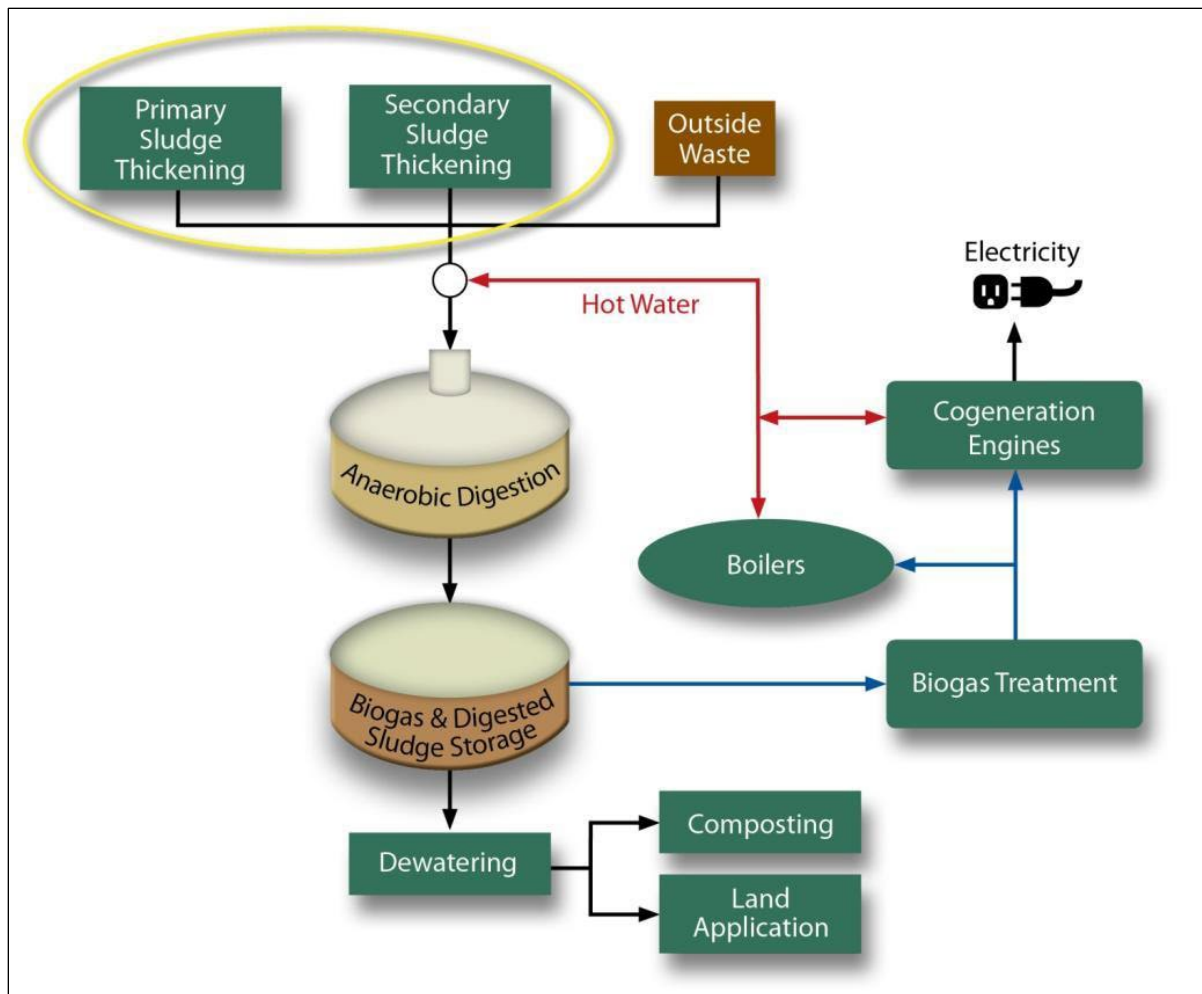


Figure 8.1 – Biosolids processing schematic for the Lewiston Auburn wastewater treatment plant.

An aerobic digestion breaks down sludge that has been removed from treated wastewater resulting in the creation of biogas and digestate. Biogas is treated to remove impurities such as moisture and hydrogen sulfide and is used for fuel in engines to produce electricity or hot water in boilers. The produced hot water is used to keep the digesters functional at efficient temperatures. The benefits of anaerobic digestion and the production of biogas include the reductions of carbon dioxide emissions, biosolids management costs by 80%, and plant-wide purchased power by 55%.

Digestate is the material that is left over following the anaerobic digestion process. Digestates are dewatered using belt-filter presses. These biosolids have been used as fertilizers on area farms for over 30 years.

Based on the benefits of biosolids treatment that LAWPCA has experienced at their wastewater treatment plant, dischargers that operate wastewater treatment plants in the Lahontan region should consider the use of anaerobic digestion and biogas treatment. Future webinars in the series will highlight more developments in the production and use of biosolids.

9. Mammoth Mountain Ski Area Raw Sewage Disposal Ponds Tentative Closure Schedule – Jehiel Cass

Located in the Town of Mammoth Lakes, Mono County, the Mammoth Mountain Ski Area (MMSA) operates a ski resort on over 3,500 acres under a special permit from the United States Forest Service, Inyo National Forest. Water Board staff have identified the MMSA Main Lodge wastewater disposal ponds as one of the few remaining raw sewage disposal ponds in our region. The wastewater facility, regulated under waste discharge requirements, Board Order R6V-2000-0017, authorizes raw sewage disposal into five unlined percolation ponds located north of the MMSA Main Lodge, along State Highway 203 (Figure 9.1).

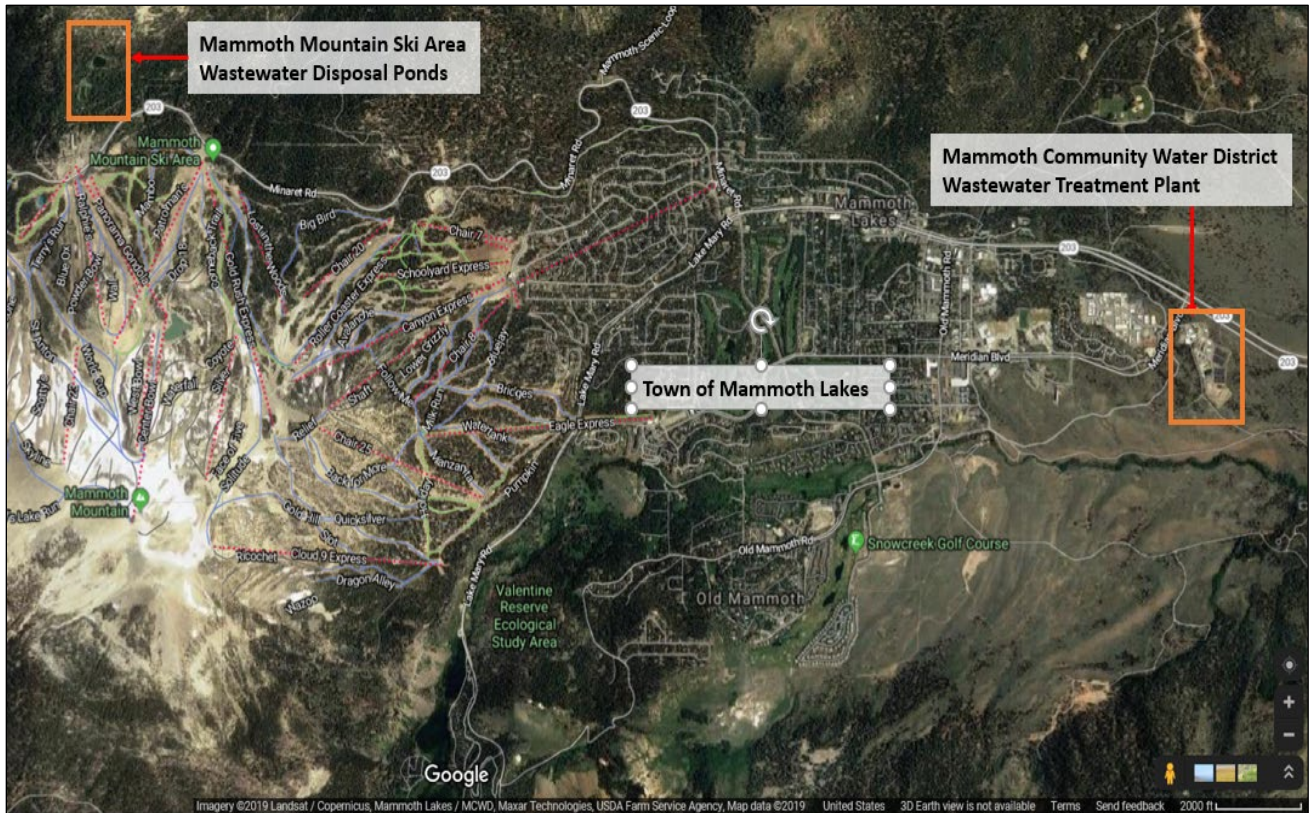


Figure 9.1 – Satellite view of the Town of Mammoth Lakes, MMSA Wastewater Ponds, and Mammoth Community Water District Wastewater Treatment Plant.

The existing MMSA ponds are unlined and percolate waste directly to groundwater that has a high organic load and nutrient concentration, including nitrate. The MMSA laundry services wastewater is also disposed to these ponds. Water Board staff have requested MMSA to propose alternatives to upgrade treatment and eliminate the discharge of raw sewage to unlined ponds. One of the sewage ponds is shown on Figure 9.2.



Figure 9.2 – MMSA raw sewage disposal pond. Green color indicates excessive algae growth caused, in part, by elevated nutrients in the effluent. Floating sewage debris is removed by hand using the rake shown, collected, and disposed offsite.

Also, within the last few years MMSA has developed long-range plans to improve the resort amenities, to include expanding, or replacing, the Main Lodge facilities with additional lodging, restaurants, and shops. To complete this project, MMSA is working with the US Forest Service, Inyo National Forest, to complete a land exchange that will result, in part, in MMSA acquiring 36 acres. This includes the Main Lodge parcel of 20.5 acres and the existing sewage disposal ponds of 15.5 acres as shown on Figure 9.3.

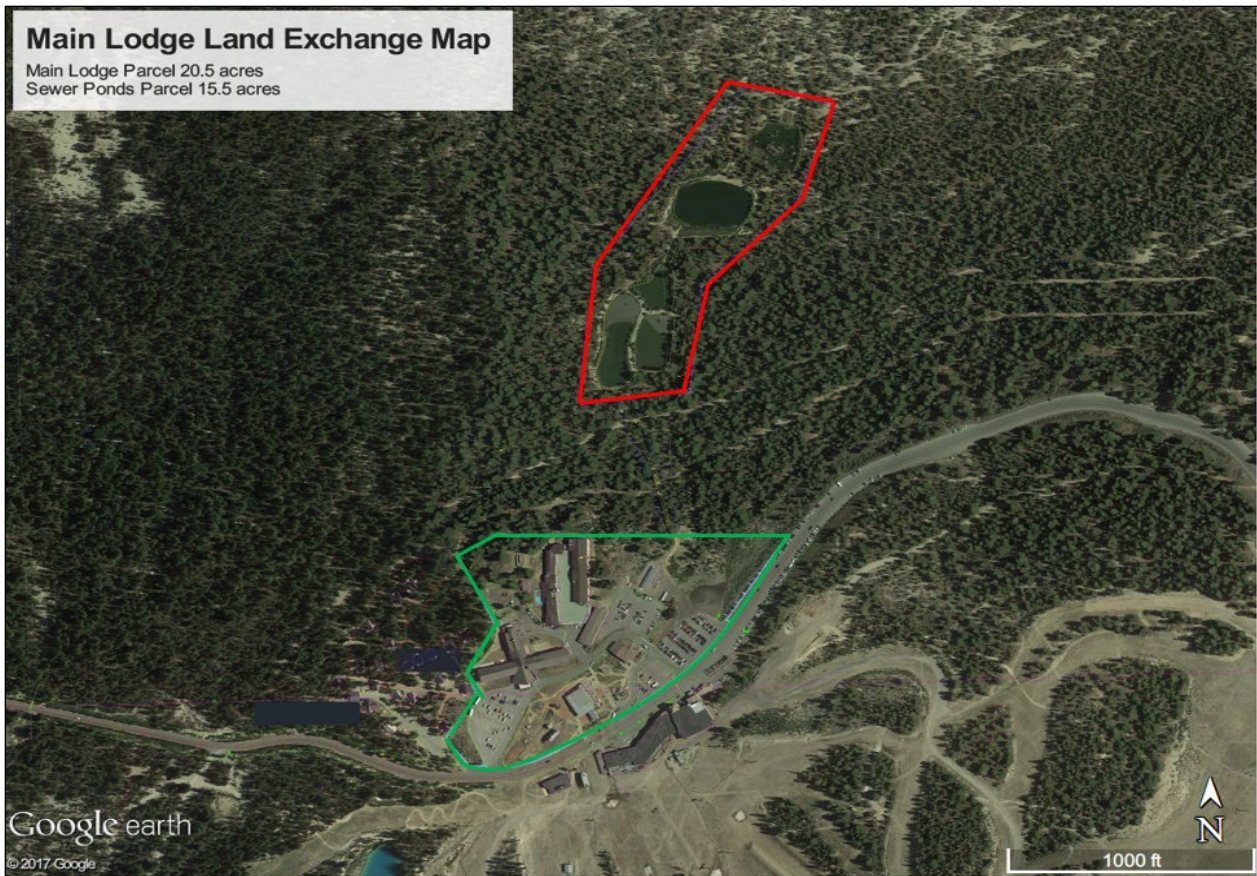


Figure 9.3 – MMSA Main Lodge and Sewage Disposal Pond parcels being transferred from the United States Forest Service to MMSA.

In a November 30, 2019, letter, MMSA indicated to Water Board staff that they intend to complete the land exchange with the US Forest Service in early 2020. Then, MMSA will work with the Mammoth Community Water District (District) to install a sewage lift station and pump all domestic sewage from the Main Lodge area to the District’s Wastewater Treatment Plant. After the land exchange is completed, MMSA will work with the Town of Mammoth Lakes to complete entitlement requests and obtain permits for the re-development of the Main Lodge area. MMSA will also work with Caltrans for a new traffic control plan. Because some facilities that are part of the re-development project will be located on Forest Service land, additional environmental review is required by the Forest Service. MMSA indicates that after obtaining approvals from the US Forest Service, Caltrans, and Town of Mammoth Lakes, the sewage construction project will begin in four phases as shown in table 9.1 below.

Phase	Task	Estimated Completion Date
1	Construct lift station and equalization tank at Chair 2.	10-31-2025
2	Construct sewer from Main Lodge to lift station.	10-31-2026
3	Construct sewer from lift station to Canyon Lodge; connect to District sewer line.	10-31-2027
4	Drain existing sewage disposal ponds; remove and dispose sludge; clean close ponds.	10-31-2028

Table 9.1 – Tentative implementation schedule to complete projects resulting in the elimination of the MMSA raw sewage disposal ponds.

The District indicates that while the MMSA and District have completed some preliminary discussions, no formal agreement or request has been made by MMSA to transfer wastewater collection and treatment responsibilities to the District. Because the MMSA is not within the District's service area, serious consideration cannot take place until a formal request is received and an official agreement made.

The Forest Service indicates they expect the land transfer to be finalized by early 2020, as indicated in the MMSA letter of November 30, 2019. They do not yet have an application from MMSA for any further environmental review actions.

Water Board staff identified the MMSA in the *Staff Report on Domestic Wastewater Sewage Treatment Plants in the Lahontan Region* and recommended upgraded treatment and the elimination of the discharge of raw untreated sewage to wastewater percolation ponds and protection of receiving water quality. It is recognized that the proposed schedule is tentative, as there are a large number of involved stakeholders with independent decision-making authority. Water Board staff will work with MMSA, and other stakeholders to achieve the tasks listed in Table 9.1 to better protect water quality.