



**EXECUTIVE OFFICER’S REPORT • February 2021**  
 Covers December 16, 2020 – January 15, 2021

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*State and Regional*

**1. Personnel Report – *Eric Shay***

**New Hires** – None

**Vacancies**

- C.E.A. (Career Executive Assignment) to serve as the Region’s Assistant Executive Officer.
- Scientific Aid, Planning & Assessment Unit, South Lake Tahoe. This position helps the SWAMP program collect and process water quality samples and ensure data quality. The position supports the TMDL and Basin Planning programs through mapping and data analysis, outreach, and reporting.
- 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.
- Environmental Scientist, Regulatory and Enforcement Unit, South Lake Tahoe. The position is being considered for reclassification to Water Resource Control Engineer to provide support for Wastewater and NPDES permitting work.

- 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.

**Departures** – None

*North Lahontan Region*

(No articles this period from North Lahontan Region.)

*South Lahontan Region*

**2. Cal Fire Pilot Rock Conservation Camp, Crestline CA – Closure and Wastewater Treatment Plant Operations – Mark Lemus**

The California Department of Corrections and Rehabilitation (CDCR) closed eight of its 43 conservation camps at the end of 2020. This closure included the Pilot Rock Conservation Camp (Camp) in Crestline, next to Lake Silverwood Reservoir. The Camp housed low-risk inmates who assisted the California Department of Forestry and Fire Protection (Cal Fire) in responses to wildfires, other emergencies, and engagement in conservation related work. The Camp will be temporary closed while undergoing a remodel and will be reactivated sometime in 2021 to support another form of fire-fighting crew.

There has always been fluctuation in the number of inmate workers and supervisory staff based on firefighting needs, however, the Camp was fully depopulated of inmates and CDCR staff by December 18, 2020. The Camp currently houses only five Cal Fire staff during this closure. Water Board staff have been in contact with Camp staff as they placed the wastewater treatment plant in a holding status.

The Camp operates an onsite 10,000 gallon per day package wastewater treatment plant (Plant), which has been regulated by waste discharge requirements (WDRs) from the Lahontan Water Board since 1995 (Board Order No. 6-00-72). The Plant's effluent is conveyed to the Crestline Sanitation District's (District's) outfall pipeline and collected sludge from the Plant is conveyed via truck to the District's Hudson Creek Plant. The Camp staff are working with the District to pump nearly 6,000 gallons of activated sludge from the Plant via truck. The tanks within the Plant will be operated at a lower depth with continued use of aeration to keep odors down and keep the biology within the tanks as healthy as possible while only minimal waste is collected from the Camp's reduced crew.

Because of the small volume of wastewater that will continue to be collected by the Plant, the Camp staff believe that there will be no discharge of effluent during this temporary closure. Camp staff have indicated that December 11, 2020 was the last date of discharge from the Plant. Camp staff believe once the remodeling is complete and the Camp has been repopulated, there will be sufficient flow to place the Plant fully online. The Camp must still comply with the WDRs and monitoring and reporting program while the Plant is operated in a minimal capacity. Water Board staff will be in regular communication with Camp staff regarding the status of the Camp and Plant.

### 3. Status of Wastewater Treatment Plants to Sample for Per- and Polyfluoroalkyl Substances – Sergio Alonso

The State Water Resources Control Board (State Water Board) issued a 13267 Investigative Order (Order) to publicly owned wastewater treatment works (POTWs) throughout the state with a design flow of greater than one million gallons per day (1 MGD) requiring sampling for PFAS. The PFAS Order applies to 17 facilities in Region 6 (both north and south Lahontan basins) and was provided to each discharger following its adoption on June 9, 2020. The PFAS Order requires sampling of influent, effluent, biosolids, and groundwater monitoring wells. Per the PFAS Order, sampling is required to begin no earlier than the fourth quarter of 2020 and continue for a one-year period as shown in the table below with data uploaded to the State Water Board’s GeoTracker system. Dischargers may submit a request for other arrangements regarding sampling through Water Board staff.

Media	Sampling Frequency and Reporting Starts
<b>Within 60-days prior to conducting groundwater monitoring well sampling</b>	Submit a rationale for selecting a minimum of three groundwater monitoring wells to sample with a map of the groundwater monitoring well network.
<b>Biosolids and groundwater</b>	One time <sup>1</sup> - No sooner than 4 <sup>th</sup> Quarter 2020, upload data within <b>30 days</b> of receiving analytical data report.
<b>Influent and effluent</b>	Quarterly - No sooner than 4 <sup>th</sup> Quarter 2020, upload data within <b>30 days</b> of receiving analytical data report.
<b>Final Report</b>	Narrative final report must be submitted to the Water Board no later than 60 days following the receipt of the last analytical laboratory report; final report must also be uploaded to GeoTracker.

<sup>1</sup> Facilities with design flow of greater than 5 MGD must sample biosolids quarterly.

Since the adoption of the PFAS Order, POTWs have begun submitting sampling work plans for Water Board staff acceptance. After acceptance, POTWs have begun sampling events. Groundwater monitoring well sampling is required for a minimum of three wells. Discharger work plans must include a rationale for the wells they have selected to sample during the upcoming year. Water Board staff have been in contact with POTWs to discuss the appropriate sample locations and provide recommendations for which groundwater monitoring wells to sample. As of mid-January 2021, only 12 facilities have submitted a sampling plan. Water Board staff are working with the remaining five POTWs that have not yet submitted sampling work plans.

Sampling results are expected to be submitted within the next few weeks for sampling collected during fourth quarter 2020 and Water Board staff will work collaboratively with dischargers to aid them in complying with the PFAS Order.

#### **4. Standing Item—Confined Animal Facility Status Report – John Morales and TJ Middlemis-Clark**

The Water Board has tracked and, in some cases, regulated the groundwater quality impact of confined animal facilities (CAFs) since 1983. In the intervening time, Water Board staff have developed and presented strategies and items for board adoption to deal with the potential or recognized water quality impact to groundwater. For the purposes of these projects, Water Board staff have considered any facility housing either more than 50 animal units (AUs, defined as 1,000 pounds of animal weight) or 500 or more animals, whichever is fewer, to be a CAF.

The Water Board currently regulates seven bovine-related CAFs using two different methods (details in Table 4.2, 4.3, and 4.4). Other unregulated existing CAFs may be enrolled under the CAFs Order (non-bovine facilities, see Table 4.5). The number, size, and location of all non-bovine CAFs within the Lahontan Region are not known at this time. Individual waste discharge requirements (WDRs) are used to regulate four of these CAFs: three as active milking dairies and one as a closed dairy. To address affected nearby residential drinking water wells, individual cleanup and abatement orders (CAOs) and settlement agreements are used to regulate five CAFs: two of these five CAFs also regulated by WDRs as well as CAOs. Water Board staff are currently in the process of developing a general order to regulate animal-related waste discharges from all CAFs within the region, in accordance with guidance provided by the Water Board.

##### *Dairy Strategy Implementation*

In the February 2020 Executive Officer's Report, Standing Item 7, we summarized the Water Board's May 2010 recommended strategy for addressing groundwater pollution impacts from large CAFs. The strategy contains four prioritized components, which are summarized in the following subsections.

##### *Priority 1—Assess and address risk to downgradient [drinking water] receptors from exposure to polluted groundwater.*

To address CAF facilities that had impacted neighboring residential wells, the Water Board adopted CAOs or settlement agreements where residential wells showed elevated nitrate or total dissolved solids (TDS, e.g. salt) over the drinking water standard.

These orders contain the following mitigation measures:

- Sampling TDS and nitrate concentrations from residential wells within a defined area adjacent to the facility every nine months.
- Providing replacement drinking water to any residence shown to have nitrate or TDS concentrations close to and/or over the primary or secondary drinking water standards.
- Reporting the sampling and replacement water results.

Currently, about 31 residences are receiving replacement water because of these actions.

Water Board staff are addressing issues related to the replacement water program at the N & M and Ryken dairies.

- In October 2020, the owner of the N & M Dairy requested removing the requirement established in CAO R6V-2013-0103 to sample a group of wells that have demonstrated a decreasing nitrate concentration trend below the drinking

water maximum contaminant level (MCL). Furthermore, this discharger requested the Water Board to rescind the WDRs regulating the facility, as it is closed. Water Board staff are evaluating the request to modify the replacement water CAO. Rescission of WDRs is pending the discharger's completion of remaining waste manage unit closure activities.

- In March 2016, the consultant for the former DVD Heifer Ranch requested amending CAO R6V-2011-0057-A1, to remove certain private supply wells from the drinking replacement water program. The request includes changing the TDS concentration at which replacement drinking water is provided from 500 mg/L to 1,000 mg/L because some upgradient wells contain TDS concentrations greater than 500 mg/L and are unaffected by the facility. Internal discussions between staff and the enforcement unit are underway to respond to this request and will likely incur a resolution that will amend the CAO.

Priority 2—Identify appropriate source controls and require phased implementation of suitable waste minimization, control, and disposal practices under WDRs or a Conditional Waiver.

Water Board staff have worked with CAF operators to achieve significant improvements by voluntarily implementing best management practices (BMPs)/best practicable treatment controls (BPTCs) to protect receiving groundwater quality. Figure 4.1 shows an example of a machine being used at a dairy to separate manure solids from liquids as a BMP



Figure 4.1: This machine, as a BMP, is used for separating manure solids from liquids. The liquids will be reused and applied as crop irrigation and fertilization water, increasing removal of nitrogen through crop uptake and decreasing nitrogen available for transport to groundwater.

A general order of waste discharge requirements (general order) is being prepared and is intended to regulate animal-related waste collection and discharge at all CAFs within the Lahontan Region. As currently written, a tentative draft general order, referred to as the tentative CAFs Order, includes requirements for source controls and appropriate waste control and disposal practices. Additionally, the tentative CAFs Order contains phased milestones for BMP implementation, requiring significant staff resources for oversight. The development approach for the CAFs Order is outlined in Table 4.1.

**Table 4.1: CAFs Order Development Approach**

Step	Status
1. Conduct initial focused outreach <ul style="list-style-type: none"> <li>a. Send Fact sheets to stakeholders</li> <li>b. Send letters to native American tribes (AB52)</li> <li>c. Hold meetings with dairy operators, Western United Dairymen, National Resources Conservation Service, Mojave Desert Resources Conservation District, Pacific Gas &amp; Electric, Kern County, and San Bernardino County</li> <li>d. Hold discussions with a technical advisory committee</li> </ul>	Completed between 2013 and 2018
2. Prepare California Environmental Quality Act (CEQA) documentation <ul style="list-style-type: none"> <li>a. Determine need for CEQA scoping</li> <li>b. Draft, review, and revise CEQA Initial Study and complete environmental impact determination</li> <li>c. Approve a final document</li> </ul>	In progress
3. Prepare tentative CAFs Order <ul style="list-style-type: none"> <li>a. Draft, review, and revise CAFs Order and attachments</li> <li>b. Send administrative draft requirements to the CA Department of Food and Agriculture for a 30-day review</li> </ul>	In progress
4. Conduct additional focused outreach with stakeholders to review administrative draft <ul style="list-style-type: none"> <li>a. Hold briefings and/or mailings for interested tribes</li> <li>b. Conduct a listening session with dairies, public agency representatives, and other stakeholders regarding their concern and suggestions related to the draft CAFs Order</li> <li>c. Conduct site visits to non-dairy CAFs for orientation (pending lifting of the COVID restrictions)</li> </ul>	To be scheduled
5. Complete tentative draft public comment period <ul style="list-style-type: none"> <li>a. Tentative CAFs Order posted and sent to interested parties</li> <li>b. Tentative CAFs CEQA documents posted and sent to State Clearing House</li> </ul>	To be scheduled
6. Water Board to consider adoption of the CAFs Order and CEQA document at a future board meeting agenda	To be scheduled

*Priority 3—Ensure adequate monitoring to evaluate the extent of affected groundwater and effectiveness of the source control measures implemented.*

The CAFs regulated by individual WDRs submit periodic self-monitoring reports regarding onsite practices and water quality sampling data, as applicable. Also, CAFs regulated by

drinking water replacement orders submit routine monitoring reports. Additionally, staff complete inspections, as able, at both regulated and unregulated sites. Staff were able to complete 4 dairy inspections in 2020. When COVID pandemic restrictions are lifted, staff intend to complete additional inspections and less formal site visits to discuss the tentative CAFs Order.

The tentative CAFs Order contains requirements for all CAFs to submit self-monitoring reports as part of a monitoring and reporting program. As part of report review and compliance inspections, staff will assess BMP/BPTC effectiveness in protecting water quality. Staff will also review groundwater data available from other sources to determine the extent of ongoing impacts to regional groundwater quality.

*Priority 4—Require groundwater remediation where beneficial uses are impaired.*

The CAOs adopted by the Water Board recognize that groundwater has already been impacted from CAF operations. The tentative CAFs Order is structured to minimize any future degradation of groundwater beneficial uses from onsite waste generation, management, or disposal practices.

Existing water quality impacts may abate with improvements to source controls and disposal methods required by the tentative CAFs Order. Evaluation and adjustment of permit requirements may be necessary to ensure protection of groundwater from future discharges. For areas with continued, demonstrable impacts to water quality originating from CAFs, Water Board staff will work cooperatively with CAF operators to develop effective groundwater remediation plans. These remediation plans may be implemented either voluntarily or through CAOs as a future requirement.

Table 4.2: Active Milking Dairy CAFs in the Lahontan Region

Facility	Regulated by WDRs / Monitoring Results	Replacement water required by CAO/SA	Groundwater Pollution?	Status as of January 2020
Harmsen Dairy	<ul style="list-style-type: none"> <li>• No WDRs.</li> <li>• No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>• CAO No. R6V-2011-0058</li> <li>• Highest residential well nitrate is 20 milligrams per Liter (mg/L) and TDS is 810 mg/L.</li> <li>• Three residences receive replacement water.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• About 350 head onsite.</li> <li>• Wash water is blended with groundwater and applied to irrigated crop land.</li> <li>• Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>• Increasing trend for nitrate and constant trend for TDS</li> </ul>
A & H Dairy	<ul style="list-style-type: none"> <li>• Board Order No. R6V-2002-0022</li> <li>• Highest monitoring well nitrate is 145 mg/L and TDS is 2,530 mg/L.</li> </ul>	<ul style="list-style-type: none"> <li>• No CAO or settlement agreement (SA).</li> <li>• No residential well sampling required.</li> <li>• Residences do not receive replacement water</li> <li>• Facility is under a groundwater monitoring requirement</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• About 3,197 head onsite.</li> <li>• Wash water is blended with groundwater and applied to irrigated crop land.</li> <li>• Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>• Increasing trend for nitrate &amp; constant trend for TDS</li> </ul>

Facility	Regulated by WDRs / Monitoring Results	Replacement water required by CAO/SA	Groundwater Pollution?	Status as of January 2020
Dutch Dairy	<ul style="list-style-type: none"> <li>• Board Order No. 6-95-0002</li> <li>• Highest monitoring well nitrate is 85 mg/L and TDS is 2,600 mg/L.</li> </ul>	<ul style="list-style-type: none"> <li>• SA as of August 24, 2016</li> <li>• Highest residential well nitrate is 29 mg/L and TDS is 2,000 mg/L.</li> <li>• One residence receives replacement water.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• About 1,250 head onsite.</li> <li>• Wash water is over applied to pastureland.</li> <li>• Dry manure is hauled offsite to irrigated cropland.</li> <li>• Constant trend for nitrate and TDS</li> </ul>
B&E Dairy	<ul style="list-style-type: none"> <li>• Board Order No. 6-96-0009</li> <li>• Highest monitoring well nitrate is 9.5 mg/L and TDS is 1500 mg/L.</li> </ul>	<ul style="list-style-type: none"> <li>• No CAO or SA.</li> <li>• No residential well sampling required.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• About 2,300 head onsite.</li> <li>• Wash water is over applied to pastureland.</li> <li>• Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>• Constant trend for nitrate &amp; TDS</li> </ul>
Van Leeuwen Dairy	<ul style="list-style-type: none"> <li>• No WDRs.</li> <li>• No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>• No CAO or SA.</li> <li>• No residential well sampling required.</li> </ul>	Unknown	<ul style="list-style-type: none"> <li>• About 1,100 head onsite.</li> <li>• Wash water is disposed to unlined percolation pond.</li> <li>• Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>• Groundwater quality data unavailable for trend analysis.</li> </ul>

Facility	Regulated by WDRs / Monitoring Results	Replacement water required by CAO/SA	Groundwater Pollution?	Status as of January 2020
Hinkley Dairy	<ul style="list-style-type: none"> <li>• No WDRs.</li> <li>• No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>• CAO No. R6V-2011-0059</li> <li>• Highest residential well nitrate is 40.1 mg/L and TDS is 764 mg/L.</li> <li>• Five residences receive replacement water.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• About 1,260 head onsite.</li> <li>• Wash water is blended with groundwater and applied to irrigated crop land.</li> <li>• Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>• Decreasing trend for nitrate and TDS</li> </ul>
High Desert Dairy	<ul style="list-style-type: none"> <li>• No WDRs.</li> <li>• No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>• No CAO or SA.</li> <li>• No residential well sampling required.</li> </ul>	Unknown	<ul style="list-style-type: none"> <li>• About 7,000 head onsite.</li> <li>• Little to no wash water is produced.</li> <li>• Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>• Groundwater quality data unavailable for trend analysis.</li> </ul>

Table 4.3: Active Non-milking CAFs in the Lahontan Region

Facility	Regulated by WDRs / Monitoring Results	Replacement water required by CAO/SA	Groundwater Pollution?	Status as of January 2020
DVD Heifer Ranch	<ul style="list-style-type: none"> <li>No WDRs.</li> <li>No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>CAO No. R6V-2008-0034</li> <li>Highest residential well nitrate is 7.1 mg/L and TDS is 560 mg/L.</li> <li>No residences receive replacement water.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>About 70 head onsite.</li> <li>No wash water is generated.</li> <li>Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>Groundwater quality data unavailable for trend analysis.</li> </ul>
Green Valley Farm	<ul style="list-style-type: none"> <li>No WDRs.</li> <li>No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>No CAO or SA.</li> <li>No residential well sampling required.</li> <li>No residences receive replacement water.</li> </ul>	Unknown	<ul style="list-style-type: none"> <li>About 1,400 head onsite.</li> <li>No wash water generated.</li> <li>Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>Groundwater quality data unavailable for trend analysis.</li> </ul>
Alamo Mocho Ranch	<ul style="list-style-type: none"> <li>No WDRs.</li> <li>No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>No CAO or SA.</li> <li>No residential well sampling required.</li> <li>No residences receive replacement water.</li> </ul>	Unknown	<ul style="list-style-type: none"> <li>About 1,000 head onsite.</li> <li>No wash water generated.</li> <li>Dry manure is used onsite or hauled offsite to irrigated cropland.</li> <li>Groundwater quality data unavailable for trend analysis.</li> </ul>

Table 4.4: Recently Closed CAFs in the Lahontan Region

Facility	Regulated by WDRs / Monitoring Results	Replacement water required by CAO/SA	Groundwater Pollution?	Status as of January 2020
N&M Dairy	<ul style="list-style-type: none"> <li>• Board Order No. 6-94-0062</li> <li>• Highest monitoring well nitrate is 9.6 mg/L and TDS is 2,960 mg/L.</li> </ul>	<ul style="list-style-type: none"> <li>• CAO No. R6V-2011-0055</li> <li>• Highest residential well nitrate is 20.5 mg/L and TDS is 1,970 mg/L.</li> <li>• Seventeen residences receive replacement water.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• Facility closed in July 2013.</li> </ul>
Meadow brook Dairy	<ul style="list-style-type: none"> <li>• No WDRs.</li> <li>• No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>• No CAO or SA.</li> <li>• No residential well sampling required.</li> </ul>	No	<ul style="list-style-type: none"> <li>• Facility closed in June 2013.</li> </ul>
DVD Heifer Ranch (former)	<ul style="list-style-type: none"> <li>• No WDRs.</li> <li>• No monitoring wells installed.</li> </ul>	<ul style="list-style-type: none"> <li>• CAO No. R6V-2011-0057</li> <li>• Highest residential well nitrate is 7.1 mg/L and TDS is 560 mg/L.</li> <li>• Five residences receive replacement water.</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• Facility closed in 1991.</li> <li>• Decreasing trends for nitrate and TDS</li> </ul>

Table 4.5: Other Existing CAFs in the Lahontan Region

Facility	Land Owner	Location
Wild horse / Burros	Bureau of Land Management	Susanville
Wild horse / Burros	Bureau of Land Management	Ridgecrest
Poultry Farms	Private	Los Angeles / San Bernardino Counties
Horse Stable Facilities	Private	Truckee