



EXECUTIVE OFFICER’S REPORT
October 1, 2023 – October 31, 2023

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1. Personnel Report – *Sandra Lopez*

Promotions

- Amber Wike, Associate Governmental Program Analyst, Administrative Unit, South Lake Tahoe. This position serves as the region’s Document Accessibility Project Lead, overseeing various accessibility projects as well as managing and resolving difficult ADA document compliance issues. This position also serves as the California Integrated Water Quality System (CIWQS) Coordinator, Fee Coordinator, Records Management Coordinator, and Fleet Coordinator.

New Hires – none

Vacancies

- Engineering Geologist, Land Disposal Unit, Victorville. This position will oversee waste discharges to land and site investigation/cleanup at various types of regulated and unregulated facilities including landfills, mines, composting facilities, cement plants, and site clean-up sites.
- Engineering Geologist, Department of Defense Unit, Victorville. This position will oversee site investigations and cleanups at Department of Defense sites in the South Lahontan area and respond to spills and complaints, as necessary.

- Senior Water Resource Control Engineer (Supervisor), South Lake Tahoe. This position will oversee the Regulatory and Enforcement unit. The unit is responsible for implementing the Water Board's regulatory and compliance programs within the North Lahontan Region and, under certain circumstances, throughout the Lahontan Region (e.g., National Pollutant Discharge Elimination System (NPDES) Program for Fish Hatcheries, Aquatic Pesticides application).

2. Highlights from Geology Symposium (GeoSym) – Fall 2023 – Anna Garcia

The purpose of this article is to provide the Lahontan Water Board with highlights from the GeoSym – Fall 2023 virtual symposium held on October 25, 2023. The Geology Symposium Mission is to improve communication and consistency in the application of geologic and hydrogeologic data by providing state geologists opportunities to share experiences, information, and resources. This symposium was hosted by the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board, San Francisco Bay.

Rick Cramer, of [Burns & McDonnell](#), presented on Environmental Sequence Stratigraphy (ESS): Geology-Focused Conceptual Site Models as a New State-Of-The-Science Best Practice for Groundwater and Geotechnical Projects. Mr. Cramer noted that the most challenging element of any groundwater or geotechnical project is the geologic uncertainty of the subsurface and that this heterogeneity has confounded the progress, delayed remediation goals, and caused project-budget overruns for many remediation efforts at contaminated-soil and -groundwater sites worldwide. Applying the concepts of ESS, or stratigraphic analysis, to a Conceptual Site Model (CSM) is key for resolving the challenges of geologic heterogeneity. ESS methods are described in the U.S. Environmental Protection Agency's 2017 [Best Practices for Environmental Site Management: A Practical Guide for Applying Environmental Sequence Stratigraphy to Improve Conceptual Site Models](#).

Noah Heller, President of [BESST, Inc.](#), a groundwater technology and services company that specializes in groundwater wells and exploratory boreholes, presented on Tracing the Path: Profiling Long-Screened Test Wells to Unearth Naturally Occurring and Anthropogenic Contaminants to Develop New Groundwater Supplies. The Long-Screened Test Well (LSTW) method developed by BESST, Inc. includes the installation of a temporary fiberglass well casing to collect zone specific water quality samples using a well packer system and well pump sampling equipment. Mr. Heller noted that the LSTW method provides flexibility to efficiently query the chemistry close to permeability boundaries such as clays and sands where elevated concentrations of metals, semimetals, radionuclides, salts, and volatile organic compounds (VOCs) are commonly detected. The data can then be used to improve well design and the temporary fiberglass is removed by over drilling the borehole during the well installation and construction phase.

Jeanine Jones, Interstate Resources Manager for the California Department of Water Resources (DWR), presented on California Hydrology: Drought and Floods. Ms. Jones noted that California's hydrology is defined by high variability, which is now being intensified by global climate warming, and that skillfully predicting precipitation beyond a 7-day weather forecast is beyond present scientific ability. Ms. Jones indicated "this isn't your grandparents' climate but we're still using our grandparents' forecasting technology" and that funding to improve longer-lead precipitation prediction and forecasting would support water agencies' current operations and provide a climate change adaptation tool. As indicated in [Water Year 2023: Weather Whiplash, From Drought To Deluge \(ca.gov\)](#), improving the ability to make seasonal precipitation predictions is critically needed to support more efficient water management.

Sea level and groundwater rise are set to disproportionately affect the San Francisco Bay Area and the communities and cleanup sites that surround the Bay in Region 2. Staff from Region 2, Alyx Karpowicz, EG in the Groundwater Protection Division, and Rachel Lim, EG in the Toxic Cleanup Division presented their Sea Level Rise / Ground Water Rise Vulnerability Assessment Framework. Region 2 convened a cross-divisional team to identify areas potentially vulnerable to sea level and groundwater rise and develop an internal framework for caseworkers to use when evaluating sites in these areas. The framework lays out site-specific considerations to help in determining when a vulnerability assessment is warranted. A Vulnerability Assessment (VA) evaluates the potential risk of adverse effects at cleanup sites caused by sea level and/or groundwater rise, such as increased leaching and mobilization of pollutants and increased vapor intrusion potential. Development of a vulnerability assessment process to consider impacts to infrastructure associated with groundwater level rise could potentially be considered in relation to our Climate Change Mitigation and Adaptation Action Plan for the Lahontan Region.

3. Fall 2023 Soil Disturbance Prohibition Variances – *Jim Carolan*

The Water Board grants variances to the soil disturbance prohibition for projects and activities occurring between October 15 and May 1 in the Lake Tahoe Basin, provided adequate controls are in place to protect water quality. The soil disturbance prohibition was established by the Water Quality Control Plan for the Lahontan Region and is included in the Lake Tahoe Basin NPDES Storm Water Construction General Permit. The soil disturbance prohibition has also been added to other Water Board Orders for some projects outside of the Lake Tahoe Basin in similarly high elevations (e.g., Truckee, Mammoth Lakes). The following represents a progress report of projects that received soil disturbance prohibition variances in October 2023 (the first two weeks of the approximately 28 week soil disturbance prohibition period). Additional soil disturbance variances may be granted through April 2024:

Infrastructure/Maintenance Projects

- Caltrans District 9, Conway Ranch Shoulders (09-36640). Issued for October 16 – October 26.
- Caltrans, Mountain County Bridge Rails Project. Issued for October 16 – October 22.
- El Dorado County Department of Transportation, San Bernardino Class I Bike Path. Three (3) variances were issued for October 16 – November 3.
- City of South Lake Tahoe, Tahoe Valley Stormwater and Greenbelt Improvement Project, Phase 1. Two (2) variances were issued for October 16 – October 27.
- Tahoe City Public Utility District, West Lake Tahoe Regional Water Treatment Plant. Issued for October 16 – October 20.
- Meyers Stream Environment Zone Erosion Control Project, El Dorado County Department of Transportation. Two (2) variances were issued for October 16 – October 31.

Construction Projects

- Lake Tahoe Community College, Lake Tahoe Community College Bond Projects. Two (2) variances were issued for October 16 – October 21 and October 27 – November 5.
- Sugar Pine Housing Partners LP, Sugar Pine Village Phase 1. Two (2) variances were issued for October 17 – October 27.
- Golden Range LLC, 2340 & 2360 Sunnyside. Issued for October 16 – November 3.

Site Cleanup Projects

- Azad Amiri and Sarbjit Singh Kang, Swiss Mart. Issued for October 16 – October 23.

Ski Resorts

- Tahoe Palisades at Alpine Meadows, Alpine Meadows Ski Resort WDRs. Two (2) variances were issued for October 16 – October 30.
- Northstar California Resort, Northstar California Resort Minor Earth Disturbance. Issued for October 19 – October 25.
- Tahoe Palisades, Squaw Valley Resort, LLC WDRs. Issued for October 16 – October 23.
- Alterra Mountain Company, Squaw Valley to Alpine Meadows Base to Base Gondola. Two (2) variances were issued for October 16 – October 30.

401 Certification Order Projects

- Truckee River Watershed Council, Boca Unit Restoration. Issued for October 16 – October 23.
- Heavenly Mountain Resort, Heavenly Mountain Resort Winter Preparedness Vegetation Removal. Issued for October 27 – November 1.
- Town of Truckee, Truckee Legacy Trail Phase 4a. Three (3) variances were issued for October 16 – November 1.
- Al Tahoe Lakeview Townhouses HOA, Al Tahoe Seawall Reconstruction Project, Issued for October 18 – October 30.
- Echo Conduit Emergency Replacement Project, El Dorado Irrigation District. Two (2) variances were issued for October 16 – November 4.

Timber Harvest

- U.S. Forest Service Lake Tahoe Basin Management Unit, Carnelian Fuels Reduction. Three (3) variances were issued for October 16 – November 3.
- U.S. Forest Service Lake Tahoe Basin Management Unit, Liberty 625 Line Whole Tree Project. Three (3) variances were issued for October 16 – November 3.
- U.S. Forest Service Lake Tahoe Basin Management Unit, South Shore Fuels Reduction and Healthy Forest Restoration project. Issued for October 31 – November 3.

4. Kelso Wash Train Derailment Cleanup Response Actions Complete

– Tiara Crucius

The Kelso Train Derailment occurred on March 23, 2023. Two locomotives and 55 hopper cars carrying iron ore derailed and landed in Kelso Wash, located within both Union Pacific Railroad (UPRR) right of way and the National Park Service (NPS) Mojave National Preserve wilderness area boundaries. According to the initial California Office of Emergency Services spill report, the derailment resulted in the release of 5,700 gallons of diesel fuel and hydraulic oil in Kelso Wash. Diesel and hydraulic oil were carried approximately 1800 yards northwest-west within Kelso Wash after one of the locomotives severed an irrigation line used to maintain a row of tamarisk that line the railroad boundary. Water Board staff coordinated with the Unified Command consisting of the California Department of Fish and Wildlife's Office of Spill Prevention and Response (OSPR), NPS, and UPRR for status updates on cleanup efforts.

Site cleanup conformed to the ***Guidelines for Emergency Response Phase Cleanup Endpoints and Inspection Procedures***, prepared, and approved by the UC. Removal of diesel impacted soil was conducted in accordance with the *Excavation Plan* and the *Endpoint Plan*, signed and approved by the UC. Excavators and railcars were brought in to remove iron ore and oil-stained soil from the site. Diesel contaminated soil and iron-

ore impacted soil was loaded and transported to ECDC Landfill in East Carbon, Utah. OSPR completed the emergency response and sent out the final liaison update on April 25, 2023. The *Incident Response Summary Report* prepared by Arcadis was submitted to Water Board staff on August 30, 2023.

The *Incident Response Summary Report*, submitted by UPPR, reported approximately 1,976.6 gallons (gal) of TPH was recovered from Kelso Wash. Soil samples were collected at depths ranging from 2 feet to 5 feet below ground surface (bgs), from 13 different locations, collected at 100-foot intervals along the wash. A photoionizing detector (PID) was used at the top of the boreholes to take a field measurement of the vapor concentrations and determine the need for sample collection. When PID field readings were greater than 50 parts per million (ppm), samples were collected and sent to the lab to be analyzed for total petroleum hydrocarbons (TPH) (diesel range organics and oil range organics).

Soil analytical data for samples collected were compared to the 50 mg/kg TPH cleanup concentration approved by OSPR, NPS, and UPPR. Soil with TPH concentrations greater than 50 mg/kg (Figure 3.1) was excavated 1 to 5 feet bgs in accordance with the *Excavation Plan*. The *Excavation Plan* states onsite soil is classified as Class “C” and is subject to immediate collapse. Shoring, not permitted onsite by NPS and OSPR to minimize disturbance, would have been required for excavations deeper than 5 feet bgs; therefore, for safety and permitting reasons excavation and additional soil sampling could not occur at depths greater than 5 to 6 feet bgs. PID measurements were taken along the sidewalls and bottoms of each excavated area, with most results not exceeding 50 ppm.

Water Board staff inspected the site on multiple occasions prior to, during, and after the cleanup response. Based on Water Board staffs’ final site inspection on August 10, 2023, and review of the *Incident Response Summary Report*, TPH removal has been performed to the extent practicable. It is unknown what soil concentrations are at depths below 5 to 6 feet bgs due to excavation limitations for the cleanup response; however, it is expected that any remaining TPH will naturally attenuate in the environment. Any additional cleanup would create a further disturbance to the surrounding area and environment. The closest supply well is an NPS well approximately 2 miles upgradient from the site and depth to groundwater in the area is estimated to be approximately 700-foot bgs. It has been reported that no wildlife has been impacted by this incident. At this time, Water Board staff are not requiring any additional cleanup investigations or actions beyond what was required by the Unified Command.

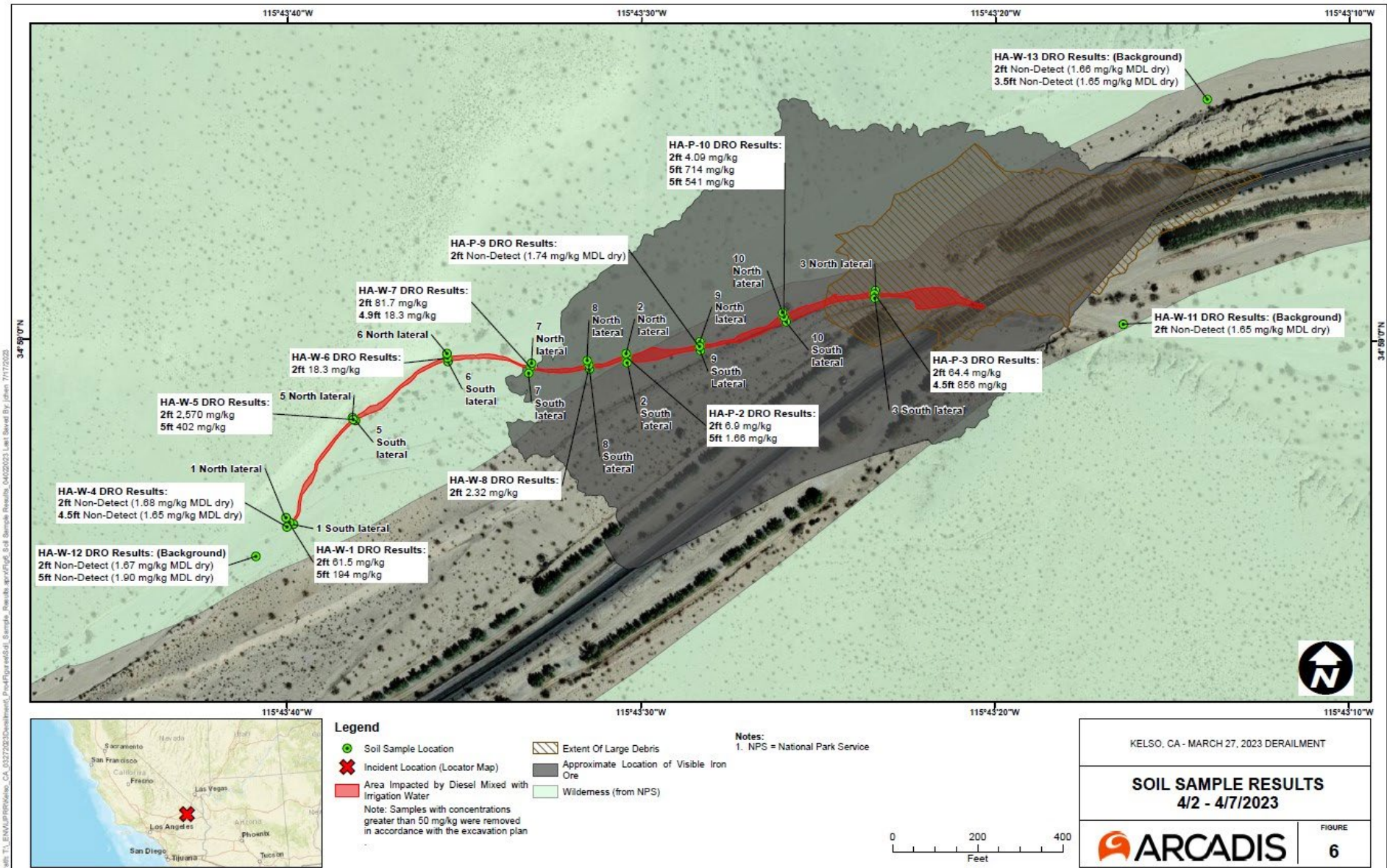


Figure 3.1: Soil sample results along Kelso Wash. Arcadis, 2023.