Central Valley Regional Water Quality Control Board

30 October 2026

Greg Norris
Carmichael Water District
7837 Fair Oaks Blvd
Carmichael, CA 95608

Sent via email:
engineering@carmichaelwd.org

NOTICE OF APPLICABILITY

WATER QUALITY ORDER 2012-0010-DWQ
AQUIFER STORAGE AND RECOVERY PROJECTS THAT INJECT DRINKING WATER INTO GROUNDWATER
FOR
CARMICHAEL WATER DISTRICT
AQUIFER STORAGE AND RECOVERY PILOT TEST AT LA SIERRA WELL
SACRAMENTO COUNTY

On 21 April 2026, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a Notice of Intent (NOI) from the Carmichael Water District (CWD or Discharger) requesting regulatory coverage under *General Waste Discharge Requirements for Aquifer Storage and Recovery (ASR) Projects That Inject Drinking Water into Groundwater*, Water Quality Order WQ 2012-0010-DWQ, (General Order). The Discharger proposes to conduct a pilot aquifer storage and recovery test at the La Sierra Well. The NOI submittal included a Form 200, a Technical Report prepared by GEI Consultants, documentation of a Notice of Determination for a Mitigated Negative Declaration for California Environmental Quality Act (CEQA) compliance, and documentation of well registration with the U.S. Environmental Protection Agency (EPA) Underground Injection Control Program.

Based on the information provided in the NOI, the proposed ASR pilot test meets the conditions for coverage under the General Order. This NOA serves as formal notice that the General Order is applicable to the ASR pilot test as described herein. The discharge is assigned **WQ 2012-0010-DWQ-RB5S-0010**. Please reference this number in all correspondence related to this discharge. A copy of the General Order is enclosed and also available on the State Water Boards Adopted Orders webpage.

(https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2012/wqo2012_0010_with%20signed%20mrp.pdf)

Please familiarize yourself with the entire General Order and its attachments enclosed with this letter. The ASR pilot test must be operated in accordance with the requirements contained in the General Order; Standard Provisions and Reporting Requirements for Waste Discharge Requirements (SPRRs) dated 1 March 1991 (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/std_provisions/wdr-mar1991.pdf); and with the information submitted in the NOI. Sampling, monitoring, and reporting requirements must be completed in accordance with the attached **Monitoring and Reporting Program (MRP) R5-2026-0816**. The facility specific MRP was developed after review of your NOI.

BACKGROUND

CWD supplies water to customers in Sacramento County using a combination of treated surface water and groundwater, which serve municipal, commercial, and irrigation demands. Its primary source of supply is the American River, from three radial collector wells located adjacent to the river. CWD also operates a network of groundwater production wells throughout its service area. Groundwater is used to supplement surface water supplies during periods of high demand or when river flows are limited, such as during drought conditions.

The La Sierra Well was constructed in 2023 as part of CWD's long-term water supply resiliency strategy, to provide a backup water supply when surface water supplies are reduced during drought conditions. The well is located on property owned by the San Juan Unified School District, near Garfield Avenue and Engle Drive in Carmichael, within the North American subbasin (5-021.64). It was drilled to a depth of 630 feet (ft) below ground surface (bgs) and completed to a depth at 560 ft bgs. The screen intervals include 250 to 270, 290 to 300, 360 to 370, and 440 to 550 ft bgs. The well has not yet been used as a water supply source.

ASR PILOT TEST DESCRIPTION

The La Sierra Well sits in a deep geologic layer called the Mehrten Formation, which consists mostly of sand and gravel, ideal for water movement and storage. The well can pump up to about 2,200 gallons per minute (gpm) and is expected to accept up to 1,000 gpm during recharge.

The pilot test consists of three recharge, storage, and recovery cycles to be conducted during the winter/early spring months when surface water supplies are most available. Its purpose is to evaluate recharge performance, aquifer response, water quality changes, and operational practicality under real conditions. The test is planned for a single season, with recharge occurring between January and March, followed by a short storage period and a controlled recovery phase for each cycle.

Recharge durations increase through the cycles to progressively stress the aquifer and evaluate operational limits. The longest recharge period is proposed at 21 days, corresponding to the final cycle, and used in hydraulic modeling. Recharge will occur at

approximately 1,000 gpm, although this rate will be validated and possibly adjusted following pre-test checkout procedures.

Following each recharge period, a storage period of about 28 days is planned to evaluate the movement and mixing of recharge water in the aquifer. Modeling indicates a groundwater velocity of roughly 1 foot per day, resulting in limited lateral migration (around 27 feet during storage).

Recovery pumping duration varies by cycle and will be sufficient to remove most of the stored recharge water. For Cycle 1, recovery water will be discharged to a storm drain under an existing National Pollutant Discharge Elimination System (NPDES) permit. If Cycle 1 recovered water meets potable standards, recovered water from Cycles 2 and 3 may be returned to the CWD distribution system, avoiding waste.

The Technical Report identified 27 wells within the same section M09N06E17; regional N-Nitrosodiumethylamine (NDMA) contamination north of the American River; and 30 potentially contaminating activities (PCA) within one mile, including leaking underground storage tanks, permitted underground storage tanks, small spills, and cleanup sites. Given the short duration of the ASR pilot test and the deeper interval of planned recharge, no impacts to groundwater levels, water quality, and nearby wells are anticipated. Due to the limited test footprint, distance and depth separation from the NDMA plume and shallow nature of the PCA sites, ASR operations are not expected to affect these sites nor those sites expected to influence ASR operations.

ELIGIBILITY

Based on information included in the Technical Report, the proposed ASR pilot test is consistent with the requirements set forth in Attachment C of the General Order and meets the following eligibility requirements:

1. Injected water will be high-quality drinking water sourced from the CWD drinking water supply system consistent with the requirements of a California Department of Public Health domestic water supply permit.

2. La Sierra Well used for the pilot test was constructed in compliance with California Well Standards and enrolled in the U.S EPA Underground Injection Control Program.

3. Injected water for the pilot test will be of quality that will ensure compliance with the General Order.

4. The pilot test is not restricted by local ordinance, prohibition, or other law or regulation. CWD completed an Initial Study for the La Sierra Well, which resulted in a Notice of Determination (NOD) or a Mitigated Negative Declaration (MND).

MONITORING AND REPORTING PROGRAM

The City shall comply with the monitoring and reporting program requirements prescribed in the attached MRP R5-2026-0816.

ADDITIONAL TECHNICAL REPORTS FOR SUBMITTAL

The City shall submit a *Technical Addendum* no later than **90 days** after completion of the pilot test in accordance with the items presented in MRP R5-2026-0816.

GENERAL INFORMATION AND REQUIREMENTS

This NOA authorizes implementation of the proposed ASR Pilot Test under Order 2012-0010-DWQ for La Sierra Well as described in the Technical Report and discussed in this NOA. In accordance with Prohibition B.4 of the General Order, operation of a pilot test shall not exceed **24 months** from the date this NOA is issued.

CWD shall comply with the Prohibitions, Requirements, Groundwater and Surface Water Limitations, and Provisions of the General Order. All ASR functions must be operated in accordance with the requirements contained in the General Order and the NOI and supporting documentation.

Please review this NOA carefully to ensure that it completely and accurately reflects the proposed discharge. If the discharge violates the terms or conditions of the General Order, including MRP R5-2026-0816, the Central Valley Water Board may take enforcement action, including the assessment of an administrative civil liability as authorized by provisions of the California Water Code.

The required annual fee specified in the annual billing from the State Water Resources Control Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by this Order ceases so that coverage under the General Order can be terminated and to avoid unnecessary billing.

SALT AND NITRATE CONTROL PROGRAMS

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments incorporating the Salt Control Program and Nitrate Control Program at its 31 May 2018 (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020. On 10 December 2020, the Central Valley Water Board adopted revisions to the Basin Plan amendments with Resolution R5-2020-0057. (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf). Those revisions became effective on 10 November 2021.

The Discharger (CV-SALT ID: 3716) submitted a request for exemption from the Salt and Nitrate Control Programs for the Facility on 8 September 2026. Based on the information presented in the exemption request letter and the technical report submitted along with the NOI, Central Valley Water Board staff concur that the Facility qualifies for

an exemption from the Salt and Nitrate Control Program requirements for the following reasons:

1. The Facility's discharge originates from surface water with very low salinity concentrations and very low or non-detect nitrate concentrations. Through the treatment processes, the Facility does not meaningfully add salts and nitrates prior to the discharge.

2. The injection of treated surface water to drinking water standards will improve groundwater quality for salinity and nitrate.

Based on the above, exemption from the Salt and Nitrate Control Programs was issued as provided in a letter dated 22 September 2026. However, if the Central Valley Water Board finds that the Facility causes or may cause groundwater degradation of salinity or nitrate, the Facility may be subject to the requirements of the Salt and Nitrate Control Programs.

DOCUMENT SUBMITTALS

All monitoring reports and other correspondence should be converted to searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to:

centralvalleysacramento@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

Facility Name:	CWD ASR Pilot Test La Sierra Well, Sacramento County
Program:	Groundwater Quality Protection Program Compliance
Order:	WQ 2012-0010-DWQ-RB5S-0010
CIWQS Place ID:	CW-907737

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Now that this Notice of Applicability has been issued, the Board's Compliance and Enforcement section will take over management of your case. Catherine (Catt) Wesoloski is your new point of contact for questions regarding compliance with the General Order. If you find it necessary to make a change to your permitted operations,

Catt will direct you to the appropriate Permitting staff. You may contact Catt (916) 464-4708 or by email at catherine.wesoloski@waterboards.ca.gov.



Digitally signed by John J. Baum
Date: 2026.10.30 17:16:49 -07'00'

for Patrick Pulupa
Executive Office

Attachment:

Attachment A – Location Map

Enclosures:

Monitoring and Reporting Program R5-2026-0816
WQ 2012-0010-DWQ

Cc via email:

Sacramento County Environmental Health Department
Rodney Fricke, GEI Consultants
Catt Wesoloski, Central Valley Water Board, Compliance and Enforcement

ATTACHMENT A



Approximate Scale: As Noted Above N W E S	Drawing Reference: Report of Waste Discharge April 2026	**LOCATION MAP** La Sierra Well Sacramento County