

Central Valley Regional Water Quality Control Board

17 December 2025

Stan Gryczko
City of Davis
1717 5th Street
Davis, CA 95616

Sherry Kimura
City of Davis
1717 Fifth Street
Davis CA 95616

Sent via email:
sgryczko@cityofdavis.org

Sent via email:
skimura@cityofdavis.org

REVISED NOTICE OF APPLICABILITY

**WATER QUALITY ORDER 2012-0010-DWQ
AQUIFER STORAGE AND RECOVER PROJECTS THAT INJECT
DRINKING WATER INTO GROUNDWATER
FOR
CITY OF DAVIS
AQUIFER STORAGE AND RECOVERY PILOT TEST AT WELL 27
YOLO COUNTY**

On 29 September 2025, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a Notice of Intent (NOI) submitted on behalf of the City of Davis (hereby, City or Discharger), to update its 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). This update pertains to the City's ASR Pilot Test at Well 27, which was previously issued a Notice of Applicability (NOA) on 8 March 2021 and assigned enrollee number WQ 2012-0010-DWQ-RB5S-0006. The NOI included a Form 200 and Technical Report, documentation of CEQA exemption, and documentation of well registration with the US Environmental Protection Agency Underground Injection Control Program.

Based on the information provided in the NOI, the proposed updates to the ASR pilot test meet the required conditions for continued coverage under the General Order. This NOA serves as formal notice that the General Order remains applicable to the ASR pilot test as described herein. The discharge is assigned **WQ 2012-0010-DWQ-RB5S-0006 Rev1**. Please include this number on all correspondence related to this discharge. A

NICHOLAS AVDIS, CHAIR | PATRICK PULUPA, EXECUTIVE OFFICER

copy of the General Order WQ 2012-0010-DWQ 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)

You should 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) R5-2021-0801Rev1**. The facility specific MRP was developed after review of your NOI.

BACKGROUND

The City uses both groundwater and surface water resources to meet its water supply needs. Groundwater was historically produced from the Intermediate Aquifer but beginning in the 1990's, the City installed several wells in the deep aquifer. The intermediate and deep aquifers are found at depths between 200 and 700 feet below ground surface (bgs) and between 700 and 2,700 feet bgs, respectively. The deep aquifer generally has higher quality groundwater, and more groundwater is currently produced from the deep aquifer than the intermediate aquifer. Since the summer of 2016, surface water has been sourced from the Sacramento River through the Woodland-Davis Clean Water Agency (WDCWA). The WDCWA was formed between the cities of Woodland and Davis to provide surface water supply for use within each of their service areas to meet their respective water supply needs. The City's potable water supply is comprised of approximately 80 percent treated surface water from the Sacramento River and 20 percent groundwater from the City's deep aquifer wells.

ASR PILOT TEST DESCRIPTION

In 2019, the City began investigating the feasibility of implementing an ASR program to address its water supply needs during periods of peak demand and drought. In Spring 2021, an ASR pilot test was conducted on Well 27 under regulatory coverage provided by WQ 2012-0010-DWQ-RB5S-0006. Well 27 is located off Sycamore Lane just east of Highway 113 in the City of Davis. That test consisted of a 7-day recharge, a 15-day storage period, and a 2-day recovery period. Following the 2021 pilot test, it was concluded that additional testing and analysis was needed to better evaluate the results and develop technical and economic conclusions regarding the feasibility of ASR.

In February 2025, additional evaluations of ASR were conducted including groundwater and well dynamics, water quality, water-supply-demand analysis, and cost analysis. The

water quality evaluation showed that arsenic and hexavalent chromium are concerns for the City's implementation of ASR. Arsenic concentrations were observed in Well 27 during the 2021 pilot test. Hexavalent chromium concentrations are present in the intermediate aquifer.

The primary objective of this proposed ASR Pilot Test is to obtain additional information on site-specific injection rates and recovery rates and to assess potential geochemical changes in the aquifer from the introduction of potable water. This test will utilize an additional well, Well 11, in conjunction with Well 27. Potable water will be injected into the intermediate aquifer at both locations, simultaneously during the recharge phases of the study. The water will be left in the intermediate aquifer for a predetermined amount of time to simulate storage, after which it will be recovered and discharged to the stormwater system. These wells were selected to assess the feasibility of ASR using the intermediate aquifer, and not to assess the capability of these specific wells to be used for long-term implementation of ASR.

The duration of this proposed ASR Pilot Test is expected to last a total of four months. Testing will include three cycles. Each cycle will include a recharge, storage, and recovery phase of progressively longer durations. The estimated duration of each cycle and recharge, storage, and recovery phase is presented in Table 1 below. Data collected will be used to support the City's assessment of ASR as a viable supplemental source of drinking water.

Table 1. Duration of ASR Pilot Testing Cycles in Days

| Cycle | Recharge | Storage | Recover | Total |
|--------------|-----------------|----------------|----------------|--------------|
| 1 | 5 | 7 | 3 | 15 |
| 2 | 10 | 15 | 5 | 30 |
| 3 | 25 | 30 | 13 | 68 |

Two nearby wells will be monitored during the pilot test. Well 7, an inactive municipal well, is located approximately 1,000 feet southeast of Well 11. Observation well OW-27, a triple-nested observation well installed prior to the 2021 pilot test, is located 45 feet north of Well 27. All testing and monitoring wells are owned by the City and located on City property.

Recovered water will be discharged to the stormwater system via an onsite storm drain inlet at each well site. All discharges to the stormwater system will be in accordance with the City's Municipal Separate Storm Sewer System (MS4) Permit, 2013-0001-DWQ (*National Pollutant Discharge Elimination System (NPDES) General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems*). The City is responsible for ensuring that all recovered water is

pollutant free prior to discharge, in compliance with the Discharge Prohibitions outlined in WQ Order 2013-0001-DWQ. Extracted water will be collected for laboratory analysis in accordance with MRP R5-2021-0801Rev1.

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 treated and delivered to the injection well consistent with the requirements of a California Department of Public Health domestic water supply permit.
2. Existing Well 11 and Well 27 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. On 1 July 2025, the City of Davis filed a Notice of Exemption with the Yolo County Clerk-Recorder and the State Clearinghouse (SCH) seeking a categorical exemption Class 6, Section 15306.

MONITORING AND REPORTING PROGRAM

The City shall comply with the monitoring and reporting program requirements prescribed in the attached MRP R5-2021-0801Rev1. The construction of any proposed monitoring well(s) shall meet the local agency well standards. Permits for all new wells and any well abandonment work must be obtained from the local agency environmental health department.

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 R5-2021-0801 Rev1.

GENERAL INFORMATION AND REQUIREMENTS

This revised NOA authorizes implementation of the proposed ASR Pilot Test under Order 2012-0010-DWQ for Well 11 and Well 27 cited 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 beyond **24 months** from the date this NOA is issued.

The City 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 revised 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 R5-2021-0801Rev1, 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.

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: | City of Davis ASR Pilot Test at Well 27, Yolo County |
| Program: | Non-15 Compliance |
| Order: | WQ 2012-0010-DWQ-RB5S-0006Rev1 |
| CIWQS Place ID: | CW-871533 |

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 revised Notice of Applicability has been issued, the Board's Compliance and Enforcement section will take over management of your case. Brendan Kenny 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, Brendan will direct you

to the appropriate Permitting staff. You may contact Brendan at (916) 464-4635 or by email at brendan.kenny@waterboards.ca.gov.

for Patrick Pulupa
Executive Office

Attachment: Attachment A – Location Map

Enclosures:

Monitoring and Reporting Program R5-2021-0801Rev1
WQ 2012-0010-DWQ (Discharger only)
SPRRs (Discharger only)

Cc via email:

Yolo County Environmental Health
Lauren Gordon, West Yost
Ken Loy, West Yost
Brendan Kenny, Central Valley Water Board, Compliance and Enforcement
Howard Hold, Central Valley Water Board, Compliance and Enforcement
Elizabeth Lee, Central Valley Water Board, Point Source Permitting
Anne Walters, Central Valley Water Board, Point Source Permitting

ATTACHMENT A

