



The Next 100 Years  
**Stewardship**

Report on Accomplishments 2025



SAN  
BERNARDINO  
VALLEY  
WATER CONSERVATION  
DISTRICT

# General Manager's Letter

At the District, we believe that policy gains purpose through the discipline of execution. Our work transforms vision into action by delivering measurable results that strengthen our communities through the science of stewardship—a data-driven approach to managing water and land, guided by the wisdom that progress must sustain both people and place.

In 2025, that philosophy came to life. Despite a below-average year for rainfall and snowmelt, the District recharged 41,773 acre-feet of water—more than 13.6 billion gallons—into the Bunker Hill aquifer. This total included 15,697 acre-feet from the State Water Project and 2,100 acre-feet from in-river recharge, ensuring that every available drop supported the long term health of our groundwater system. Since 1912, we have captured more than 492 billion gallons, investing each season's storms back into the Valley's future.

We also celebrated the construction of the Santa Ana River Enhanced Recharge Project with the San Bernardino Valley Municipal Water District, Western Water, and the City of Riverside Public Utilities. By each contributing to the whole, this partnership delivered infrastructure that more than doubles regional recharge capacity—an achievement born of technical excellence, shared purpose, and mutual trust.

This year brought another milestone: completion of the Program for the Expansion of Recharge Capacity (PERC) Feasibility Study, a multi-basin effort that translates science into strategy for the next generation of groundwater recharge. The four-volume study applies rigorous hydrologic modeling and geotechnical analysis to identify ten projects capable of adding over 13,000 acre-feet of new annual recharge, advancing the science of stewardship through practical, data-driven innovation.



The year ahead invites our Board of Directors, our talented team, and our partners to continue this work: to align science with service and ensure that every decision is based on the wisdom and dedication that defines public stewardship at its best.

Betsy Miller Vixie  
General Manager

## Current Board Members

### Division 1:

Richard Corneille  
Term of office expires:  
December 09, 2028

### Division 2:

Mark E. Falcone  
Term of office expires:  
December 11, 2026

### Division 3:

Robert Stewart  
Vice President  
Term of office expires:  
December 11, 2028

### Division 4:

John Longville  
Term of office expires:  
December 14, 2026

### Division 5:

Melody McDonald  
President  
Term of office expires:  
December 14, 2026

# PERC Feasibility Study Completed



Water flows through the Bunker Hill aquifer. Photo Credit: SBVWCD

This year the District completed the Program for the Expansion of Recharge Capacity (PERC) Feasibility Study, a multi-basin effort that translates science into strategy for the next generation of groundwater recharge across the upper Santa Ana River watershed. This multi-year effort builds upon our existing century of groundwater recharge, exemplifying the rigor and collaboration required to turn complex hydrologic modeling and geotechnical analysis into clear, actionable priorities. The study looked at ten water infiltration alternatives across six different sites, representing

a mix of new basin construction, grading modifications, and operational improvements. Benefits included habitat improvements for threatened and endangered species as well as how quickly projects could be implemented, thereby increasing recharge capacity sooner.

“Finishing the feasibility study is a major milestone for these projects and takes the objective decision-making process and makes it visible,” said District General Manager Betsy Miller Vixie. “We give credit to all of the regional agencies who participated in the different review processes and provided invaluable input to ensure this work will be optimized to meet the needs of the community. We especially want to acknowledge the current and past District board members and staff, as well as the PERC Policy Committee.”

In addition to the Conservation District, PERC partners include the San Bernardino Valley Municipal Water District and Western Municipal Water District with support from other agencies including the City of Riverside Public Works.

## Completion of Santa Ana River Enhanced Recharge Project

On February 20, 2025, we joined our partners to celebrate completion of the Santa Ana River Enhanced Recharge Phase 1-B Project construction—an impressive effort led by the San Bernardino Valley Municipal Water District, Western Water, and the City of Riverside Public Utilities. The \$55 million infrastructure investment, built on District lands and operated by District staff, will significantly enhance the resilience of the regional water supply by more than doubling local groundwater recharge capacity. “The Enhanced Recharge Phase 1B project builds upon existing recharge facilities,” said District Board President Melody McDonald in a speech addressed to attendees. “These include basins to spread water, levees, inter-basin pipelines and connectors, and flow control structures. Paired with established resources, the work of Phase 1B will boost water supply reliability and water quality protection and also continue a commitment to ecosystem restoration

and environmental improvement.” To secure key state and federal permits, areas between the recharge basins will be restored and preserved for endangered species habitat, including the San Bernardino kangaroo rat.



San Bernardino Valley Water Conservation District's Board President Melody McDonald at the ribbon-cutting for the completion of the Santa Ana River Enhanced Recharge Project. The project will allow up to an additional 80,000 acre-feet of stormwater per year to be captured and stored in the local aquifer, creating a critical supply of groundwater for future drought years. Photo Credit: SBVWCD

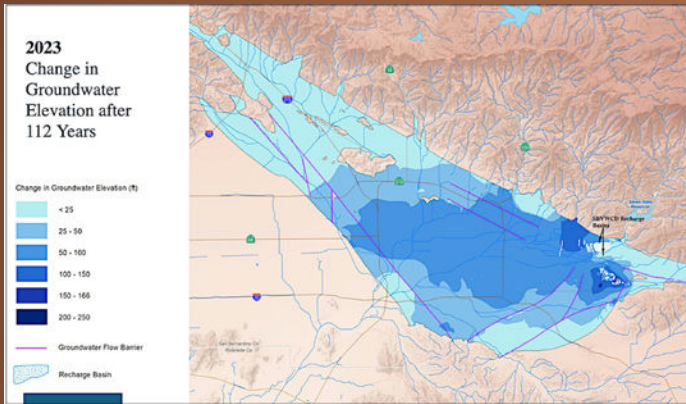
# Stewarding The Next Century

In 2025, the District completed a computer modeling project to assess our recharge operations from 1912 to 2023. We wanted to measure the long-term hydrological benefits of a century of groundwater management in the San Bernardino Basin and also calculate the repercussions if we had not been diverting and recharging water. The results revealed that our managed surface water recharge efforts have substantially increased both groundwater storage and elevation throughout the basin (see page 3).

The findings also showed our operations have contributed to offsetting regional pumping impacts and increased long-term aquifer stability. This underscores the effectiveness of sustained, cost-effective, data-informed groundwater management to improve water reliability and security. This data will help guide the District's recharge efforts as we move into the next 100 years of stewardship.

A yucca plant greets the dawn in the San Bernardino Valley. Photo Credit: Stephen Readmond

# Clair A. Hill Award Recognition



This slide from the District's presentation at the ACWA 2025 conference shows the impact of groundwater conservation efforts for the past 100 years. Photo Credit: SBVWCD

In 2025, the District was recognized as an award finalist for its innovative groundwater modeling project. The prestigious Clair A. Hill Award for Excellence invited General Manager Betsy Miller Vixie to present at the Association of California Water Agencies' (ACWA) spring conference in Monterey, CA.

The Clair A. Hill Award for Excellence recognizes exemplary programs developed by ACWA member agencies. Award recipients are selected based on demonstrated success in creatively addressing water industry issues, commitment to water use efficiency and conservation, leadership in broad water-related issues, and excellence in agency management and operations.

In addition to showcasing the data-proven impact of the District's work over the past 100+ years, it was also a significant opportunity for Miller Vixie to share the results with water district managers, board members, and staff from across California.

## Water Increase Tracked



After seasonal rains, stormwater sinks into the district's catchment basins. Photo Credit: SBVWCD

The District's computer modeling project revealed that the District's recharge from 1912 – 2023 resulted in increased aquifer levels of:

- 25+ feet over an area of 75 square miles
- 50+ feet over an area of 40 square miles
- 100-300 feet near the District's recharge facilities

Without recharge, 188 of the aquifer's production wells (22%) would have run dry. Thanks to our efforts, modest increases in groundwater levels in adjacent basins were also recorded.

## COLLABORATION

# Cal Poly Pomona Studies PERC Project



Students from Cal Poly Pomona conduct a survey at the proposed Oak Creek recharge site assisted by the Westland Group engineering firm. Photo Credit: Oak Creek Water Conservation Group

For the second year we partnered with Cal Poly Pomona for their Civil Engineering Department's class senior project. Working with Professor Dr. Seema C. Shah-Fairbank, the students experienced what it is like to work for a professional engineering firm. Last year, the students helped evaluate the PERC Plunge Creek alternative and conducted project design with input from District staff. This year, they prepared a design for the PERC Oak Creek alternative in Highland, California. The students were divided into consulting firm project teams and presented their proposal to District staff and consultants. "This is an invaluable experience for Cal Poly students that has real-world career implications," said Professor Shah-Fairbank. "We are grateful for the opportunity to partner with the District again to offer our class a complete engineering project experience."

# SB County Museum

The District's board of directors approved a partnership with the County of San Bernardino to design, install, and maintain a waterwise garden at the San Bernardino County Museum. Known as xeriscaping or drought-tolerant gardening, the museum's waterwise garden will feature California native plants that require less moisture. Other typical features of waterwise gardens include mulch and applying compost to improve the soil's nutrient level and water-holding capacity.



Photo Credit: SoCalMuseums.org

# Groundwater Coalition

In the month of March, Betsy Miller Vixie joined members of the California Groundwater Coalition in Sacramento to meet with legislators. The group educated the lawmakers on the importance of groundwater, including sustainable replenishment. While continued dialogue will be essential, the discussions were productive, with legislators expressing strong interest in engaging further on these issues.



## Redlands Earth Day

Earth Day 2025 brought the District to the annual Redlands' celebration where we co-hosted a workshop titled, "Growing Wildfire Resilience" with the San Bernardino County Museum. The talk explored the natural role that fire plays in California's watersheds and how we can better coexist with this powerful force. Presenter Briana Boaz discussed the science behind wildfire resilience, the benefits of fire for our local ecology, and strategies for sustainable water and land management. The research-driven talk also shared wildfire's place in California's ecosystems along with ways to protect our communities and landscapes. We also partnered with the Inland Empire Resource Conservation District and hosted an outreach table to share our work with the community.



Left-Right) Anna Frey (SBVWCD), Gabriela Preciado (Inland Empire Resource Conservation District), Yesenia Yangin (SBVWCD), and Aliza Olmos (SBVWCD). Photo Credit: SBVWCD



## Water Education

To support our work to educate the public about the water cycle and the importance of water conservation, the District reached 418 students from the cities of Highland, Redlands, and San Bernardino through our partnership with the educational team at Inland Empire Resources Conservation District (IERCD). The students represented eight different regional elementary schools and included kindergartners to 5th graders. Twenty-one programs of "Know Your Water!" instruction took place in addition to field trips that partnered with the San Bernardino County Museum.

Kindergartners from Belvedere Elementary School in Highland created water cycle bracelets to help underscore the meaning behind the "Hydro the Water Drop" story. The program was part of the District's community outreach efforts, which also served as a conversation starter at home. Photo Credit: IERCD

## AWARDS

# \$400K Grant to Study Increasing Groundwater Recharge



Mill Creek with the Seven Oaks Dam in the distance.  
Photo Credit: Stephen Readmond

The District received a \$400,000 WaterSMART Planning and Design grant from the U.S. Bureau of Reclamation to prepare 65% of design plans for the Mill Creek PERC alternative. The proposed design will increase the existing facility's capacity and operational flexibility to promote additional recharge. "This project showcases the San Bernardino Valley Water Conservation District's commitment to apply our century of expertise in groundwater recharge to develop innovative, data-driven solutions for tomorrow's water challenges," said General Manager Betsy Miller Vixie. "This collaborative effort ensures our aquifer remains a reliable and sustainable resource for our community forever. We are especially grateful to Congressman Aguilar for his unwavering support of this vital initiative."

# Cal OES Infrastructure Grant Awarded



The District was selected for a technical infrastructure grant through the Program of the California Governor's Office of Emergency Services (Cal OES). Funding from Cal OES will support technology upgrades related to cyber security preparedness at the District to enhance responsiveness during emergencies.

Cal OES serves as the state's leadership hub during all major emergencies and disasters, this includes responding, directing, and coordinating state and federal resources and mutual aid assets across all regions to support the diverse communities across the state.

## Welcome New Staff



Christian Collier  
Photo Credit: Stephen Readmond

The District extends a warm welcome to Christian Collier, our new Field Specialist. Christian served four years in the U.S. Marine Corps as a diesel mechanic and now works on the 20 newly constructed water catchment basins made possible through our partnership with the San Bernardino Valley Municipal Water District.

Aliza Olmos is our new Assistant Engineer. As a recent graduate, Aliza is applying her expertise to engineering projects and helping create a positive impact on the environment. The District's focus on teamwork and collaboration pairs well with Aliza's belief that great things happen when people come together to work towards a common goal.



Aliza Olmos  
Photo Credit: Stephen Readmond

Aaron Rueda is our new Administrative Analyst. He works with Senior Administrative Analyst Angie Quiroga to support the District's long-term commitment to maintain strong financial practices and compliance with applicable regulations.

Jason Wolf is our new Principal Engineer. Jason began his career in the private sector before going to work for government water agencies seven years ago. At the SBVWCD he collaborates with local agency partners to provide thoughtful stewardship of our precious local resources. Welcome Christian, Aliza, Aaron, and Jason!



Aaron Rueda  
Photo Credit: Stephen Readmond



Jason Wolf  
Photo Credit: Stephen Readmond

## SBVWCD 2025 By The Numbers:

- 5 Wash HCP-Covered Species Protected and Managed
- 492.04 Billion Gallons Stored to Date
- 88 Groundwater Recharge Basins
- 9 Full-time Staff Members
- 4,892 Acres Conserved for Habitat
- \$5.47M Annual Budget
- \$4.8M Capital Improvement Budget

## SBVWCD IN THE FIELD

### Operations Team

To prepare for winter rains, the District's Operations Team keeps a close watch on water quality during storms to ensure that water directed through the District's basins consistently meets our high standards. According to SBVWCD's Field Supervisor Manuel Colunga, as part of the District's ongoing maintenance efforts, he and his crew have been scraping the basins to move out sediment loads. Debris, like that from the recent Line Fire, has also been diverted from the recharge basins.



Sediment in the wash.  
Photo Credit: SBVWCD

### Natural Resources Team

The District's biologists have been hard at work fulfilling permitting requirements for the Upper Santa Ana River Wash Habitat Conservation Plan which permits water recharge and other activities under the Federal Endangered Species Act. The Conservation Plan's requirements include surveying 141 locations in the Santa Ana Wash and the District's Mill Creek Facility for the endangered San Bernardino kangaroo rat as well as propagating endangered slender-horned spineflower plants. Over the last two years, more than a million spineflower seeds have been collected from plants grown by the California Botanic Garden for restoration efforts.



A local San Bernardino kangaroo rat at night in the Bunker Hill Basin. Photo Credit: Stephen Readmond

### Air Quality Commitment

Exemplifying the District's commitment to sustainability and local air quality, the Field Team is piloting an electric vehicle for the fleet and also switched its trucks and large equipment from fossil-derived diesel to non-petroleum renewable diesel, a form of biodiesel. Renewable diesel is considered a "drop-in" fuel and can be used interchangeably with fossil diesel because it is a pure hydrocarbon. It burns cleaner, is processed the same as conventional diesel, and reuses something considered a waste—recycled cooking oil and grease pumped from fast food restaurants as well vegetable and soybean oil. "I use the renewable diesel in my work truck, excavator, and when we rent equipment such as a skid loader," says District Field Operations Specialist, Tommy Purvis. "Because it has the same chemical structure, it's okay to swap out diesel fuel and it has a lot of benefits to the air quality and local habitat too."



The District's trucks and equipment use non-petroleum diesel processed from vegetable oil, soybean oil, and restaurant grease.  
Photo Credit: Tommy Purvis

### Invasive Species Eradication

The District's staff regularly works to remove invasive plants to help mitigate the many problems they can cause, including increasing fuel loads, blocking the flow of water in washes and canals, out-competing native vegetation, and contributing to flooding. Many of these plants are also toxic to humans and animals. Managing invasive plants on District land is required under state and federal regulations and also supports water conservation, limits fire risk, and encourages habitat for endangered species. There are currently nine invasive plants under management due to their impact on the surrounding environment as well as their spread and infestation potential on District land. To learn about invasive plants and grasses in the region, check out our [Noxious Nine](#) report.



## SBVWCD – Our Values

We embody integrity through fiscal responsibility in public service by holding ourselves accountable to our partners and community at large.

We continue to build our community of employees, partners, businesses, and neighbors who drive our mission. Our success depends on responsive collaboration and transparent communication.

We are stewards of the water, land, and environment and are committed to sustainable practices that will ensure a resilient future.

We are ethical and respect both people and the environment to serve our community's diverse values.

We balance innovation and time-tested pragmatism to advance professional excellence, continually improving to meet the evolving priorities of today and a changing world tomorrow.

We are resilient. We adapt to address future climate impacts and ensure the District's next 100 years with our continued humble, flexible, and curious approach to water and the natural world.

## Summary of Fiscal Stewardship

- Approved a balanced budget for Fiscal Year 2025-26, including capital projects funded under multi-year capital budget. Of the approved \$4.8M capital improvement budget, \$2.5M is expected to be utilized.
- Contributed general and aggregate management funding to reserves.
- Both funded and used District reserves for capital projects under 2024 Reserve Policy.
- Fully funded annual OPEB (retiree health benefit) Trust and CalPERS actuarial liability for District staff pension.

**From the field to the board room we foster excellence, sustainable outcomes, and diverse perspectives while working to solve shared challenges and deliver the results our communities deserve.**

# What Drives Us...and Why

## MISSION

As one of California's first sustainable groundwater replenishment agencies, the District proactively recharges water, improving supply for the benefit of water users, local businesses, and native flora and fauna in a financially responsible way.

The District leverages our unparalleled expertise as stewards of the water and land, responsibly innovating in water and habitat conservation, harmonizing and enhancing working landscapes, and enriching open space as a community asset.



Coyote footprints in the Santa Ana Wash.  
Photo Credit: Stephen Readmond



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