



**San Bernardino Valley
Water Conservation District**

Helping Nature Store Our Water

Collaborative Stewardship in Action

The background image shows a calm lake reflecting the surrounding mountains. In the foreground, a single yellow flower with many petals is growing in the water. The overall scene is a mix of natural beauty and environmental focus.

Annual Accomplishments Report 2020

General Manager's Letter

2020 has been a year like no other – but gratitude is what I am feeling most when I think back at all that has happened, and the accomplishments of our staff despite the many shifts in how we do business these days.

I am grateful to our employees for their diligent work effort during this COVID-impacted year. Public service is a calling they take to heart, and they are passionate about what they do. Much of what you read in these following pages is a reflection of that spirit.

I am also grateful to our many partners, who have teamed up with the District on projects that will augment local water supplies through groundwater recharge and establish new habitat for threatened and endangered species.

The San Bernardino Valley Water Conservation District is one of just 11 such entities in California. For the past 112 years, we have been tasked with storing water underground for use when our community needs it most. Over that time, we have returned 420 billion gallons to the Bunker Hill Groundwater Basin. And, as we continue to seek innovative and collaborative ways to increase our annual recharge totals, that number will continue to climb significantly in the years ahead.

We are committed to the economic and environmental stewardship of the valley, as evidenced by the Upper Santa Ana River Wash Plan Habitat Conservation Plan, which kicked off this year with the help of countless partners to whom we are incredibly thankful.

The Plunge Creek Conservation Project is the first project completed as a result of that work, and together – with the help of Task Force members and stakeholders representing government, business, environment, and community – our region will enjoy the benefits of abundant water storage, a habitat preserve, construction jobs supported through mining, and community trails long into the future.

With balanced budgets every year, paying any unfunded actuarial liabilities, and a clean financial audit for the seventh year in a row in 2019-20, our fiscal health reflects the same judiciousness we apply to water recharge: Save now for when you really need it.

This year, succeeding was all about resilience – and I am humbled to work for a Board, with staff, and beside partners who care as much about the future as we do.



Daniel Cozad
General Manager

Current Board Members

Division 1:

Richard Corneille
President
Term of office expires:
December 09, 2024

Division 2:

David E. Raley
Term of office expires:
December 11, 2022

Division 3:

Robert Stewart
Term of office expires:
December 09, 2024

Division 4:

John Longville
Term of office expires:
December 11, 2022

Division 5:

Melody Henriques-McDonald
Vice President
Term of office expires:
December 11, 2022

San Bernardino Basin Groundwater Council Collaboration Grows



The San Bernardino Basin Groundwater Council grew in 2020 with the addition of West Valley Water District as its newest member.

By sharing resources, the Groundwater Council has helped to produce record levels of recharge, contributing water and/or money to purchase water that can be stored in local aquifers for the future.

It's a program recognized statewide as exemplary, having won the 2020 Innovative Project of the Year award from the California Special Districts Association. (See story on page 9.)

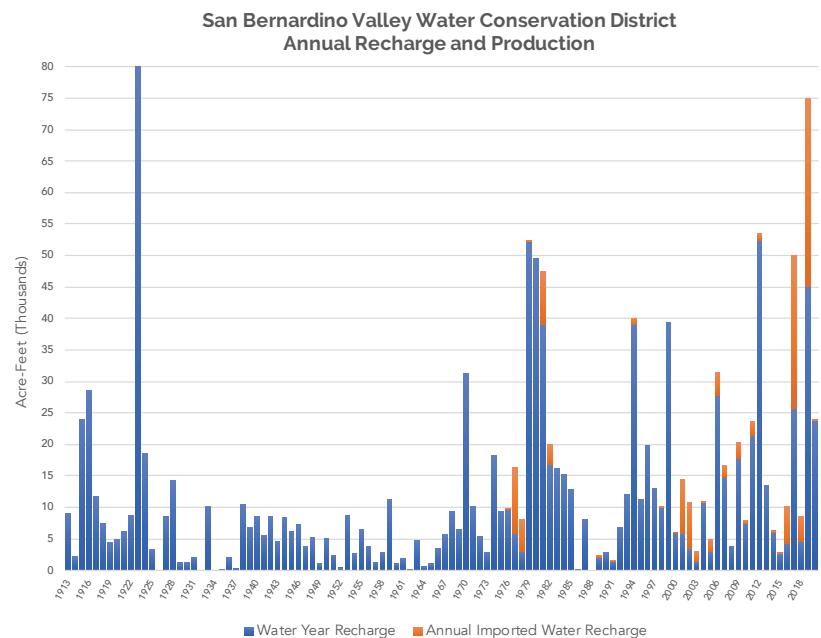
Members include: the SBVWCD in partnership with San Bernardino Valley Municipal Water District; East Valley Water District; the cities of Colton, Redlands, Loma Linda and Rialto; San Bernardino Municipal Water Department; Fontana Water Company; Western Municipal Water District; Yucaipa Valley Water District; and West Valley Water District.

A Good Water Year, Despite Dry Weather

The District recorded above-average levels of groundwater storage for the 2019-20 water year, despite a relatively dry period with precipitation levels at 25% below average during that time.

Totals for the 2019-20 water year, which runs annually from Oct. 1 to Sept. 30, reflect groundwater replenishment levels in the top 15% of more than a century of water years, with a total of 30,894 acre feet, or 10 billion gallons, recharged underground.

That's enough water to serve about 227,700 people in the region for one year.



Fire in the Wash

When brush fires in 2020 scorched portions of the Wash, SBVWCD collaborated with the Bureau of Land Management (BLM) to capture ash and charred debris before it caused harm to local ecosystems and watersheds. It also established an agreement with BLM after the event to send scientists to study the site as soon as it was safe to do so. Research on the effects of fire on endangered kangaroo rats and local ecosystems is forthcoming.

Nature removes nitrates and sediment caused from fire through plant absorption and filtration as water seeps underground, but a little help from SBVWCD provides an added level of protection.



The top photo, taken after a previous fire, illustrates the effect of charred debris in a shaken and settled glass of water.

At left, fire crews keep watch over a brush fire in the wash.

Ensuring Safety During COVID-19

The San Bernardino Valley Water Conservation District responded to the novel Coronavirus pandemic with a business retention plan that protected the safety of staff and community while maintaining productivity.

Staff members worked remotely whenever possible, in compliance with the governor's COVID response plan. Those working in the field or office followed proper protocols with recommended distancing and proper personal protection equipment.

The Board has adapted to changes in public meetings, which are now held online, and they offered a payment plan to support the businesses which are tenants of District property. "We're getting pretty good at this," Director Longville noted during one online meeting.

"I am appreciative of staff for working so productively through the COVID-19 challenge."

Daniel Cozad, SBVWCD General Manager

New Dump Truck Aids Wash Work

To accommodate the expansion of work associated with the Plunge Creek Conservation Project and other projects, the District secured a new Chevrolet Diesel 6500 dump truck. It replaces a 20 year old truck and provides air-conditioning for work done during the hot summer months.



A Great Year for Outreach

Accomplishments in 2020 provided exceptional opportunities to create new tools for public outreach and engagement. These new approaches proved to be not only effective, but extremely useful during the pandemic.

We turned to video to explain the many concepts behind the Upper Santa Ana River Wash Habitat Conservation Plan, and to take viewers out into the field to follow the important work being done to restore Plunge Creek habitat and protect the San Bernardino kangaroo rat and other threatened or endangered species.



The District's Wash Plan was also selected for the Regional HCP Spotlight presentation at the National Habitat Conservation Planning Coalition's annual conference. Assistant General Manager Betsy Miller gave an engaging presentation to approximately 300 attendees.

We partnered with other agencies on the placement of 61 informational kiosks set up throughout the Wash, and created presentations that were used extensively in outreach done in person and virtually during COVID-19.

The District also continued its partnership with Inland Empire Resource Conservation District on outreach to students and a new school garden project. Plans for events were halted during the pandemic, but virtual instruction opportunities were created to support at-home learning and to share content online.



Video helped bring the year's biggest projects to life with engaging footage, interviews with experts and detailed information about each program. Follow our You tube Channel at <https://bit.ly/SBVWCDvideos>

Clarifying Policy to Protect Operations

The District assisted in securing an exemption in new state regulations to support the continued recharge of high-quality water from the upper watershed to other areas downstream.

Proposed changes to the state wetland definition and procedures for discharges into Waters of the United States (like the Santa Ana River) now support groundwater recharge activities conducted to meet California's sustainable groundwater targets, allowing the District to continue managing its basins in accordance with our mission.

The Wash Plan: Celebrating Year One of a Project 20 Years in the Making

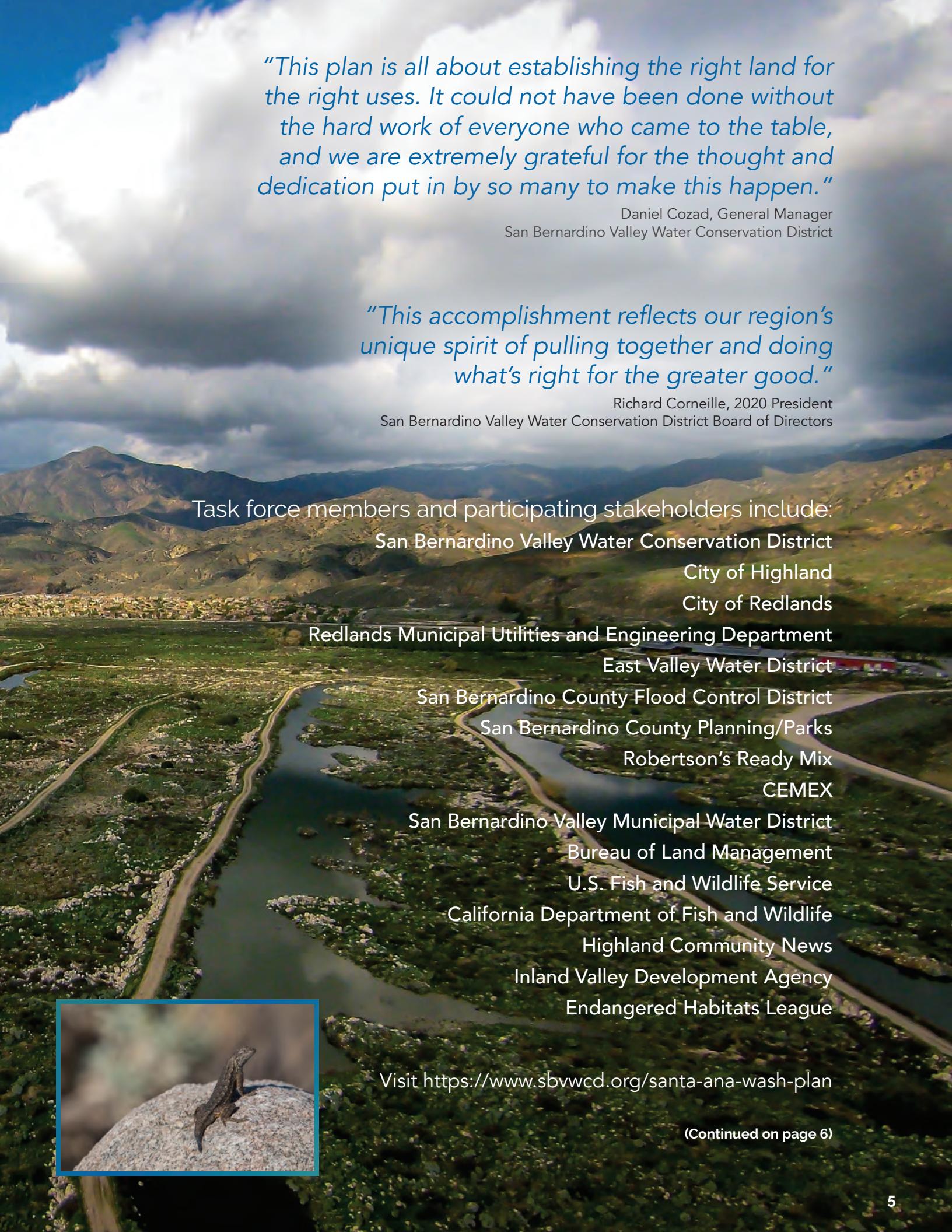
From this year forward – nature, industry, and community will live in harmony at the Upper Santa Ana River Wash.

2020 marked the start of a long-awaited plan that assigns land within the Wash for appropriate uses, so that all can thrive.

Ideal areas for nature were preserved and expanded for habitat restoration and conservation. Other locations were designated for water conservation and infrastructure, aggregate mining, transportation, flood control, agriculture, and trails.

The Upper Santa Ana River Wash Habitat Conservation Plan was more than 20 years in the making, requiring collaboration from more than a dozen task force members and stakeholders. Even an act of Congress was needed to make part of it law.





"This plan is all about establishing the right land for the right uses. It could not have been done without the hard work of everyone who came to the table, and we are extremely grateful for the thought and dedication put in by so many to make this happen."

Daniel Cozad, General Manager
San Bernardino Valley Water Conservation District

"This accomplishment reflects our region's unique spirit of pulling together and doing what's right for the greater good."

Richard Corneille, 2020 President
San Bernardino Valley Water Conservation District Board of Directors

Task force members and participating stakeholders include:

San Bernardino Valley Water Conservation District

City of Highland

City of Redlands

Redlands Municipal Utilities and Engineering Department

East Valley Water District

San Bernardino County Flood Control District

San Bernardino County Planning/Parks

Robertson's Ready Mix

CEMEX

San Bernardino Valley Municipal Water District

Bureau of Land Management

U.S. Fish and Wildlife Service

California Department of Fish and Wildlife

Highland Community News

Inland Valley Development Agency

Endangered Habitats League



Visit <https://www.sbvwcd.org/santa-ana-wash-plan>

(Continued on page 6)

The Wash Plan: Celebrating Year One

(Continued from page 5)

U.S. Representative Colonel Paul Cook (R-Apple Valley) and Pete Aguilar (D-Redlands) introduced the bipartisan Santa Ana River Wash Plan Land Exchange Act, and it was consolidated into a larger Land and Natural Resources bill that included more than 100 other pieces of legislation signed into law in 2019.

Plan benefits include:

- 1,600 acres of habitat for rare, threatened, and endangered species. Monitoring and stewardship of the preserve will be funded forever.
- Enhanced capture and storage of water to replenish groundwater storage.
- Mining uses on disturbed land areas to support more than \$36 million in construction-related payroll annually.
- An integrated trail system to promote education and appreciation of this natural resource.

The plan allows SBVWCD and its partners to successfully implement 63 identified projects in a collaborative fashion that:

- Comply with requirements of Federal Endangered Species Act section 10(a)(1)(B).
- Support local jurisdictions and businesses through provision of permits for impacts to species listed by the Federal Endangered Species Act.
- Protect the environmental provision of long-term land conservation, species monitoring, and dedicated funding for management.
- Provide a basis for obtaining other State and Federal permits.



"This plan identifies already disturbed land in the Wash for aggregate mining, while expanding on habitat conservation areas for our native, threatened, and endangered species."

U.S. Representative Colonel Paul Cook (R-Apple Valley)



Plunge Creek Conservation Project: Water Recharge Creates New Home for Endangered Species



The endangered San Bernardino kangaroo rat and endangered Santa Ana woolly star thrive in areas with frequent flooding. But decades of mining and construction restricted water flow in the Wash and made their environment unlivable.

As a part of the newly implemented Wash Plan, and with generous grant funding from the California Department of Water Resources, their habitat was being expanded and restored through the Plunge Creek Conservation Project.

The Plunge Creek project redirects water flow to restore and expand habitat, while increasing groundwater storage for the 650,000 residents that rely on that water.

In a first for Southern California, this plan received a Safe Harbor Agreement from the California Department of Fish and Wildlife to temporarily remove the kangaroo rat from its degraded habitat so the land could be restored. It also allows for the cultivation of the woolly star, which is now being planted in a new habitat area along with other native flora.

Project highlights include:

- Construction of new channels for intermittent flooding.
- Restoration of up to 94 acres of habitat.
- Relocation of kangaroo rat to new habitat.
- 10 years of kangaroo rat monitoring to determine long-term project benefits.
- Seed collection and revegetation of endangered and native plant species.
- Ongoing oversight by biologists and ecologists.

(Continued on page 8)



Plunge Conservation Creek Project: Water Recharge Creates New Home for Endangered Species

(Continued from page 7)

This project took a village – regulatory agencies, consultants, partners, contractors and staff – and we are grateful for your support through the planning, funding, permitting, construction, restoration and monitoring efforts. The Plunge Creek Conservation Project would not have been completed successfully without the following partners:

1. Santa Ana Watershed Project Authority (SAWPA) provided grant funds through Department of Water Resources (DWR)'s Safe Drinking Water, Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84).
2. Megan Jameson, John Markham and Scott Fleury at ICF supported permitting and project design.
3. Brendan Belby of ICF, and Ed Wallace and Gwyn Perry at Northwest Hydraulics modeled the project and supported design.
4. Karin Cleary-Rose and Geary Hund at U.S. Fish and Wildlife Service developed a Biological Opinion.
5. Pamela Kostka and Deanna Cummings at U.S. Army Corps of Engineers issued a Certificate of Compliance with Department of the Army Nationwide Permit.
6. Leslie McNair, Scott Wilson, Kim Freeburn and Brandy Wood at California Department of Fish and Wildlife issued an "Operation of Law" response to our notification of potential to alter a lake or streambed and a Safe Harbor Agreement.
7. Jason Bill at California Regional Water Quality Control Board – Santa Ana issued a Water Quality Certification.
8. Bryce Greenstein, Barry Greenstein, Chris Collinsworth, and Joe Collinsworth at NoHo and Colson Construction completed the earthwork excavation, splitter mounds, and berm.
9. Mike Romich, Dr. Phil Brylski, and Cesar Garcia at Origin Environmental performed project biological monitoring and translocation of SBKR.
10. Dr. Debra Shier from the San Diego Zoo Institute for Conservation Research supported efforts to track SBKR.
11. Aaron Echols and Kevin Harrington at Inland Empire Resources Conservation District prepared and implemented site restoration plans.
12. Kimberli Munkres and Deniene Rivenburg at Thunderwheel Communications supported project outreach and press.
13. San Bernardino County Flood Control District supported the project as a partner from the beginning; gratitude to Melissa Walker and current Director David Doublet.
14. We were delighted to welcome Jennifer Iyer with Southern California News Group to join our biology team in the field for a story on the SBKR telemetry work associated with the project.



Media Help Tell the Story



Late-night work with the kangaroo rats was interrupted briefly by a young rattlesnake in the middle of a meal.

"I think it's eating one of my rats," biologist Mike Romich told newspaper reporter Jennifer Iyer, who was invited along to share k-rat capturing, tagging and relocation with her readers. It was the first time that a reporter was embedded into an SBVWCD experience in real time.

While nothing could be done for that particular rodent, Iyer wrote later in her story, the work done in the Wash that evening could help many more rats.

The Plunge Creek Conservation Project received significant coverage by newspapers, magazines, and online news sites – all of which helped to tell the story of this project and the process of helping nature bring balance back to the environment.

Groundwater Council Receives Statewide Recognition

Unprecedented teamwork among local water districts to establish a regional groundwater storage program has received statewide recognition as the Innovative Project of the Year by the California Special Districts Association.

The award was presented in recognition of outstanding collaboration among San Bernardino Basin Groundwater Council members that include: the SBVWCD in partnership with San Bernardino Valley Municipal Water District; East Valley Water District; the cities of Colton, Redlands, Loma Linda and Rialto; San Bernardino Municipal Water Department; Fontana Water Company; Western Municipal Water District; Yucaipa Valley Water District; and West Valley Water District.



In the News

2020 was a banner year for media outreach, with extensive coverage on the Wash Plan and Plunge Creek projects, along with many other accomplishments.

Some highlights from the year include:

Water districts set a record year for groundwater storage (Jan. 2, Redlands Community News)

Santa Ana River plan aims to protect land and species (Jan. 17, Redlands Community News)

Regional project to dramatically boost area's water storage capacity (March 13, Redlands Community News)

Recharge totals get boost from March rains, with more to come (April 10, Redlands Community News)

Historic land swap to benefit endangered species and mining finalized (May 15, Redlands Community News)

Wash Plan benefits endangered species (June 11, Redlands Community News)

SBVWCD Granted 30-year for Complex Habitat Conservation Plan for the Santa Ana River Wash (July 16, California Department of Water Resources – California Water News)

Endangered kangaroo rats now wearing backpacks in wash (Aug. 7, Press-Enterprise (Redlands Daily Facts, SB Sun, OC Register, The Daily Bulletin))

Plunge Creek among first Santa Ana Wash Plan projects to break ground (Aug. 20, Highland Community News)

SBVWCD awarded for its collaborative water recharge efforts (Aug. 20, Highland Community News)

SBVWCD launches unique habitat plan under rare safe harbor agreement (Sept. 21, Association of California Water Agencies)

Water storage higher than normal, despite a dry year (Oct. 8, Highland Community News)

By the Numbers:

- 32 news stories
- 10 different print publications
- 8,900 video impressions
- 50% spike in website visits
- 22.6% boost in Facebook followers
- 154 online news outlet pick ups

What Drives Us...and Why

For more than a century, we have cultivated our relationship to the community, to one another, and to the land itself. We are stewards of the San Bernardino Valley water basin and the native species of the wash above it. We protect the land that cradles our region's water by being proudly scrappy and fearlessly creative. We take a fiscally prudent, pragmatic approach towards fulfilling our mission so that the water supply and the environment it depends upon will be forever protected and available for the community's use.



San Bernardino Valley Water Conservation District

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