



Water Quality Authority

ANNUAL 2020-2021 REPORT

San Gabriel Basin Water Quality Authority



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DIGITAL EDITION



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who we are

Over its 28-year history, the San Gabriel Basin Water Quality Authority (WQA) has worked with its partners to clean up 1.8 million acre-feet of contaminated groundwater – enough to meet the water needs of Basin customers for almost six years.

what we do

COORDINATE Groundwater Cleanup

INFORM the Public

CHARACTERIZE Groundwater Contamination

ASSIST Cooperating Respondents

PREVENT or Minimize Migration of Contamination

REMOVE Contamination Quickly and Efficiently

PROTECT Groundwater Resources

FUND WQA Projects and Programs with Outside Funding Sources

staff

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Executive Director

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Senior Project Manager

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A MESSAGE FROM OUR EXECUTIVE DIRECTOR

The COVID-19 pandemic was the backdrop for another challenging year. It caused many agencies to re-evaluate how to effectively staff their offices and facilities. Like others, San Gabriel Basin water purveyors adapted and persevered with the changing, uncertain conditions caused by the pandemic. This allowed groundwater cleanup operations to continue while ensuring the drinking water needs of the Basin residents were met. The San Gabriel Basin Water Quality Authority found its own footing among the ever-changing landscape of pandemic-driven communications and meeting formats. Our Board and



committee meetings were held online the entire year while staff worked diligently from the office and various remote locations as the prevailing health orders would allow. To continue our communications and outreach we created a new webinar series directed at city council members and their staffs. This webinar format has provided a new avenue to deliver timely information and updates about the Authority's mission to city leaders. Staff also remained vigilant on the COVID-altered state and federal government workings and were successful in pursuing funding opportunities, nevertheless. These actions are examples of how we kept moving forward toward our ultimate goal: the completed cleanup and restoration of the San Gabriel Basin.

Finding Sources of Contamination

Finishing the job means continued operation of existing treatment plants coupled with finding remaining sources of contamination. On these fronts, WQA made significant strides. We were awarded \$35 million from California Proposition 68 funds to operate 21 treatment plants in the basin for several years. Also, work started on our Proposition 1 planning grant to investigate twelve high priority sites in South El Monte for sources of contamination. We also completed our Prop 1-funded Whitmore Street Groundwater Remediation Facility Expanded Site Investigation and will now pursue additional funding from the state and responsible parties. This is important work as there are hundreds of areas where the source of the contamination is yet to be determined.

Keeping Treatment Plants Running

There are 33 active groundwater treatment plants in the San Gabriel Basin. The WQA has coordinated cleanup efforts that have resulted in the treatment of more than 1.8 million acre-feet of water. Treatment plant operators keep these facilities operating efficiently; however, we must continue to upgrade technology as necessary. Our ability to continue cleanup efforts in the San Gabriel Basin is dependent upon the support of state and federal funding. More than \$994 million has been raised yet an additional \$570 million is needed.

Progress Requires Outreach and Funding

We have expanded our public outreach and education efforts with a stronger social media presence across several platforms, an improved website with a subscription option, and informational city webinars. We are striving to increase awareness and knowledge to better serve all our member cities and agencies as well as the 1.4 million people of the San Gabriel Valley. Our success will ensure a clean water basin for today and for future generations.

A handwritten signature in black ink that reads "Randy Schoellerman".

Randy Schoellerman, P.E.
Executive Director

Securing Grants and Moving Forward

WQA continues to engage in contaminant source investigations and advanced remediation processes as the cleanup of the San Gabriel Valley groundwater Basin advances. The groundwater Basin is one of the most contaminated in the nation and it is a primary source of drinking water for more than 1.4 million people. Since its inception in 1993, WQA has sponsored projects that have removed nearly 98 tons of contaminants from the Basin. WQA has worked with the responsible parties, water agencies, state and federal authorities and the public to build 33 treatment facilities operating throughout the Basin. The cleanup has many years to go and WQA continues to seek funds to take the burden off ratepayers. WQA secured another state grant this fiscal year, and continues to pursue federal funding for the San Gabriel Basin Restoration Fund.

State Proposition 68: In June 2018, California voters passed this \$4.1 billion bond measure called the “California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018.” It authorized funding for state and local parks, environmental protection projects, flood protection projects, and water infrastructure projects focusing on groundwater recharge and cleanup, flood protection, safe drinking water, and water recycling. Specifically, \$74 million was to be spent on projects that reduce or prevent groundwater contamination and provide drinking water. WQA secured a \$35 million grant in September 2020 to help 21 existing treatment facilities over the next 4.5 years. The WQA's Proposition 68 money goes to local cities and water producers to fund portions of the cleanup including: Alhambra, Arcadia, El Monte, Monterey Park, Monrovia, and South Pasadena; and Valley County Water District, San Gabriel Valley Water Company, Golden State Water Company, and the WQA. This grant was the largest ever received by WQA from the state.

State Proposition 1: This 2014 voter-approved proposition authorizes \$7.545 billion in general obligation bonds to fund ecosystems and watershed protection and restoration, water supply infrastructure projects, including surface and groundwater storage, and drinking water protection. Of that total, about \$720 million is designated to clean up groundwater for public consumption. Proposition 1 funds supported the completion this year of the Whitmore Street Groundwater Remediation Facility Expanded Site Investigation Planning Project. The project involved using Hydropunch and monitoring wells to characterize a known area of contamination. The data collected helped define the source of contamination so WQA can pursue funds from the responsible parties. Another Proposition 1 grant is helping to fund the investigation of 12 high priority sites with identified contamination near small businesses in South El Monte. WQA is working closely with the Los Angeles Regional Water Quality Control Board to gain access to the sites and conduct detailed soil, soil gas, and groundwater testing to determine if the site has contaminants that continue to threaten the groundwater. To date, WQA has received \$2.3M in Proposition 1 funds.





CLEANUP BY THE NUMBERS

1,824,323

Acre-feet of groundwater treated in San Gabriel Basin as of June 30, 2021.

325,851

The amount of water in gallons in just one acre-foot.

6,700

The number of times you could fill the Rose Bowl with the 1.8 million acre-feet of treated water.

196,980

The amount in pounds of contaminants removed as of June 30, 2021.

21

The number of elephants equal to the weight of the contaminants removed.

28

Years WQA has been coordinating the cleanup effort.

33

Active groundwater treatment facilities in the San Gabriel Basin.

2

New treatment plants are under construction.

Our History in San Gabriel Basin

After severe groundwater contamination was detected in the San Gabriel Basin the EPA designated four Superfund sites in the area, a plan of action was needed. The WQA has coordinated the cleanup efforts since its creation more than 28 years ago. As a result, 1.8 million acre-feet of water has been treated, thus making the region less dependent upon imported water.

2021 WQA Secures \$35M in Proposition 68 funding.

2020 WQA secures additional \$2.2M in Proposition 1 funding.

2019 Construction begins on the first reverse osmosis treatment system in the San Gabriel Valley.

2018 WQA advocates for the passage of Proposition 68.

2014 WQA acquires the General Discharge Permit needed to continue the cleanup.

2012 WQA secures \$10 million in state funding for four projects.

2009 WQA obtains additional \$50 million for WQA Restoration Fund. H.R. 910, which established the San Gabriel Basin Restoration Fund to facilitate groundwater cleanup, became Public Law 106-554.

2002 The first 15-year BPOU project agreement is executed.

1999 WQA spearheads legislation for \$75 million in federal funding.

1995 WQA's first treatment facility is completed in Monrovia.

1994 WQA adopts a consensus approach to integrating water supply and cleanup programs.

1993 WQA is established by the California State legislature.

1983 The US Environmental Protection Agency (USEPA) declares four Superfund sites in portions of the Main San Gabriel Basin.

1979 Groundwater contamination is first detected in the San Gabriel Groundwater Basin.

Technology Upgrades and Expanded Treatment Areas Propel Cleanup Forward

The WQA coordinates groundwater cleanup across six operable units (OUs) in the San Gabriel Basin. These six areas are: Area Three Operable Unit (ATOU); Baldwin Park Operable Unit (BPOU); El Monte Operable Unit (EMOU); Puente Valley Operable Unit (PVOU); South El Monte Operable Unit (SEMOU); and Whittier Narrows Operable Unit (WNOU). The largest in geographic size and most significant in terms of the severity of contamination is the BPOU. Progress continues in all the OUs with significant new developments in the PVOU and ATOU.

PUENTE VALLEY OPERABLE UNIT

Treatment Plant Construction Continues

Construction activities on the intermediate zone remedy continued in 2021. All treatment equipment has been installed on site and all remedial pipelines have been constructed. Startup testing is scheduled to begin in early 2022. Northrop Grumman has made tremendous progress in construction activities associated with the shallow zone south remedy. Two extraction wells have been installed and construction of the treatment facility is underway. La Puente Valley County Water District will operate and maintain the intermediate zone remedy and distribute the treated water to its customers.

As of June 30, 2021, other PVOU facilities have treated more than 97,582 acre-feet of water and removed approximately 5,268 lbs. of VOCs.



Carrier Engages in Shallow Remediation

Carrier is responsible for shallow zone north remedy and continues to make progress. Activities include the installation of additional monitoring wells as part of its pre-design activities. Additional well will be required to properly delineate the shallow groundwater plume. The United States Environmental Protection Agency (USEPA) will be issuing an Explanation of Significant Differences in fall of 2021 that will allow Carrier to re-inject the treated water as a discharge option. It is anticipated that Carrier will start the Remedial Design of the shallow zone north remedy in 2022. WQA will continue to help facilitate and coordinated with state and federal agencies to ensure shallow zone remediate stays on track.



AREA THREE OPERABLE UNIT

Treatment Expansion

In 2021, the City of South Pasadena continues to operate its Wilson Treatment Facility and recently finished construction of its Graves Treatment Facility. The City of Alhambra continues to operate its water treatment facilities. USEPA is finishing an investigation on the extent of groundwater contamination for Area 3. A report on the investigation will be published in 2021.

As of June 30, 2021, the ATOU facilities have treated more than 47,354 acre-feet of water and removed approximately 2,009 lbs. of VOCs.



BALDWIN PARK OPERABLE UNIT

Innovation Continues

Coming up on halfway through a historic 10-year agreement to clean up contaminants in the BPOU, WQA reports continued success. The five treatment plants continue to operate. Recently, the San Gabriel Valley Water Company finished construction of a more efficient 3rd generation UVFlex treatment system utilizing ultra-violet (UV) light technology at its Plant B6. The new treatment completed the Division of Drinking Water required testing and has received approval. The cost of the demonstration project was funded via a State Water Resources Control Board Proposition 1 grant.

The BPOU facilities have treated 967,319 acre-feet of water and removed approximately 115,896 lbs. of VOCs as of June 30, 2021.

EL MONTE OPERABLE UNIT

Investigations and Enhancements Underway

The parties responsible for the westside shallow zone remedy have constructed additional extraction wells to enhance containment of the contaminant plume and are working closely with USEPA to ensure remedial objectives. The work party is also investigating solutions to enhance the intermediate zone remedy to ensure compliance. In addition, an EMOU stakeholder sub-group has been formed to work in conjunction with local regulators to formally track the progress of site cleanup activities at known source properties within the OU.

The City of El Monte continues to operate a series of wells and treatment facilities built with the assistance of WQA federal funds.

The EMOU facilities have treated 75,449 acre-feet of water as of June 30, 2021 and removed approximately 2,561 lbs. of VOCs.

SOUTH EL MONTE OPERABLE UNIT

Partnerships Showing Progress

In 2021, WQA utilized a Proposition 1 grant to conduct expanded site investigation activities upgradient of the Whitmore Street Groundwater Remediation Facility (WSGRF). Based on the results, WQA will submit an additional application for future Proposition 1 funding to enhance current extraction in and around the WSGRF. In addition, WQA in partnership with the local Regional Water Quality Control Board was awarded an additional Proposition 1 grant in the amount of \$2,000,000 to conduct regional site investigations within the SEMOU at 12 high priority properties. WQA has recently completed the investigation at the first site.

As of June 30, 2021, the SEMOU facilities have treated more than 237,343 acre-feet and removed approximately 29,171 lbs. of VOCs.

WHITTIER NARROWS OPERABLE UNIT

Public/Private Partnerships

The Department of Toxic Substances Control continues progress on the required infrastructure to return the WNOU intermediate zone remedy back into a potable water supply project. The project is funded via public and private partnerships included Proposition 1 grant funds.

The WNOU facilities have treated 91,974 acre-feet of water and removed approximately 3,505 lbs. of VOCs as of June 30, 2021.



The San Gabriel Basin Water Quality Authority extends its sincere gratitude to our hundreds of on-site and remote operators who kept 33 treatment plants running despite unprecedented challenges posed by the COVID-19 pandemic. Safety and wellness measures were implemented efficiently and followed properly to ensure safe workplaces for all. Operators and staff members, alike, pivoted seamlessly to ensure progress was not lost in the ongoing Basin cleanup.

Thank you to all!



Making and Keeping Connections

The WQA is staying connected to the communities and people we serve. Our refreshed website features up-to-date information in an easy-to-navigate format with the added ability to subscribe for updates. We have also bolstered our social media presence across Twitter, Facebook

and Instagram. We are using these platforms to inform the public and highlight sponsored accomplishments. To directly assist and inform city officials, we began offering webinars with timely updates about ongoing water issues, remediation projects and funding. This community outreach is vital to our continued success as it aids efforts to secure more state and federal funding.

San Gabriel Basin Water Quality Authority
Hosts Special Online Update for Local City Officials

By Amy McElroy, Special Services Director

The San Gabriel Basin is an event. Right now that event has been impacted by contamination and we are working to restore it. About 80 percent of our groundwater that we drink in the Basin comes from there as it's a very valuable asset, especially in light of the drought situation.

Randy Schellerman
Executive Director
San Gabriel Basin Water Quality Authority

San Gabriel Basin Water Quality Authority
SPECIAL UPDATE FOR CITY OFFICIALS
THURSDAY, MARCH 4, 2021 10:00 AM

Board Members

Groundbreaking Sept. 2018

July 2020

June 2021

Jan. 2021

PVOU Construction Update

Water Quality Authority

Keeping Our Water Clean
Water Quality Authority Sustains Water Supply by Finding, Clearing Contaminants

Over its 27-year history, the San Gabriel Basin Water Quality Authority (WQA) has worked with its partners to clean up 1.7 million acres-foot of contaminated groundwater – enough to meet the water needs of Basin customers for almost six years.

what we do

- COMMITTEE: Groundwater, Groundwater, Groundwater
- PREVENT: Groundwater, Groundwater, Groundwater
- REMOVE: Groundwater, Groundwater, Groundwater
- RESTORE: Groundwater, Groundwater, Groundwater
- PROTECT: Groundwater, Groundwater, Groundwater

cleanup by the numbers

- 1,733,968 Gallons of groundwater cleaned up
- 325,851 Gallons of groundwater cleaned up
- 6,700 Gallons of groundwater cleaned up
- 8,500,000 Gallons of groundwater cleaned up
- 188,215 Gallons of groundwater cleaned up

Board Members

WQA also informs the general public about the ongoing cleanup effort through a variety of means throughout the year:

- Advertorials on WQA progress and happenings are distributed via special sections in area newspapers that reach more than 200,000 readers.
- Spanish and Chinese advertorials are also run in various newspapers.
- Joint sponsorship of the San Gabriel Valley Water Forum.
- Sponsors EcoVoices, an award-winning water science curriculum offered to area K-12 students.

Stay Connected with us!

DO YOU WANT TO RECEIVE UPDATES ON WQA BOARD & COMMITTEE MEETINGS?

SUBSCRIBE TO OUR WEBSITE BY SCROLLING TO THE BOTTOM OF OUR HOME PAGE TO ENTER YOUR INFORMATION.

www.wqa.com

@SGBWQA

Long-Term Funding Challenges Continue

To date, WQA has raised \$994 million toward the cleanup effort. The money has primarily covered facility construction, which represents only a fraction of the overall funding requirements. Long-term costs for treatment and remediation account for 75 percent of the total Basin cleanup cost. WQA estimates another \$570 million is needed to complete their mission as an organization.

On the federal level, Congress lifted the ban on earmarks in early 2021, allowing for “community project funding” and “member directed funding” requests to the House and Senate appropriations committees, respectively. The San Gabriel Basin Restoration Fund would receive \$10 million toward the cleanup if approved. Congress has authorized \$125 million to WQA but has not appropriated the funds for a decade. So far, the WQA has received \$70.5 million of the authorization. The remaining \$54.5 million is needed to complete the task of operating existing facilities as well as cleaning up the many sites that have been identified as potential sources of contamination. Without additional federal funding soon, rate payers will shoulder a portion of the burden of groundwater cleanup in the San Gabriel Valley while some projects could be forced to shut down, which would jeopardize efforts to contain the contaminant plumes and reduce a much-needed water supply.



An Efficient Use of Assessments

After needing to raise the prescriptive pumping rights assessment in 2019, the WQA held the assessment at \$12 per acre-foot of prescriptive pumping rights this year. The WQA Enabling Act – Section 605 grants the ability to impose an annual pumping right assessment on prescriptive pumping rights. There are 197,610 acre feet of prescriptive pumping rights in the Main San Gabriel Basin. Previously, the assessment had been held at \$10 for 5 years.

A portion of assessment funds are used for groundwater cleanup projects, including the Whitmore Street Groundwater Remediation Facility. In addition, when WQA secures project grants from the state they have a matching funds requirements and assessment monies are used for that purpose as well. WQA estimates that implementing these projects will require annual additional assessments ranging from \$320,000 to \$575,000 per year, or \$2.2 million for the next five years.



Thank You, Ken Manning!

At the start of the fiscal year, we transitioned to new leadership when Executive Director Kenneth R. "Ken" Manning retired and Randy Schoellerman, P.E. stepped up. The extraordinary circumstances brought on by the pandemic prevented us from having a proper send-off for Manning.

"The Board of Directors sincerely thank Ken Manning for his many years of service," said Chairwoman Valerie Munoz. "His leadership and expertise were instrumental in our ability to clean the San Gabriel Basin and better serve all of our communities."

Manning served as Executive Director from March 2011 through June 2020. He also served as a member of the Board of Directors from 1992 through 2005. Manning was one of the primary architects of the plan to clean up the Basin and pioneered the use of recycled water to many of the large water users in the San Gabriel Valley. He also championed programs to educate the public about the cleanup. In 2019, we received a National

Groundwater Association Award for their education and outreach efforts.

"Having known Ken for over 30 years, he has done a tremendous job advancing water quality and water conservation throughout the San Gabriel Valley. I commend him, especially, on his tireless work to protect the aquifer and his collaborative efforts toward developing a healthy, sustainable water supply for our region," said Congresswoman Grace Napolitano, whose 32nd District covers much of the San Gabriel Valley.

Prior to 2011, Manning served as CEO of the Chino Basin Watermaster. He also was a leader for several water interests including serving as a Board Member of the Upper San Gabriel Valley Municipal Water District for 13 years, and served on the Boards for the Association of Groundwater Agencies (AGWA) and the California Groundwater Coalition (CGC).

"Many thanks for all of your years of service to our communities, Ken," said Napolitano. "I wish you the best of luck in your well-deserved retirement."





Water Quality Authority

San Gabriel Basin Water Quality Authority

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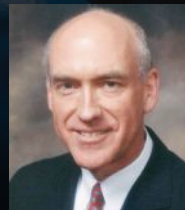
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