

## WINTER/SPRING 2026

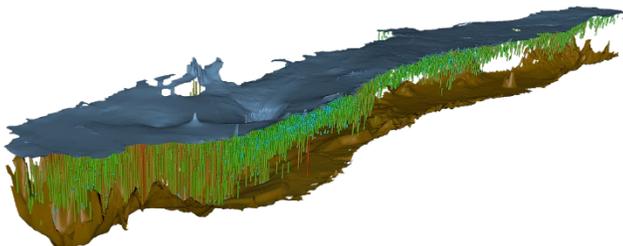
### In This Issue...

- On [March 19 at 1pm](#), a **webinar** presented the online **Central Valley Nonpoint Source Assessment Tool**. The tool and recording are available [here](#).
- **The 2026 version of the [Aquifer Risk Map](#) is available!**
- **New updates to the [GAMA Groundwater Information System](#) and the new [Aquifer Recharge and Groundwater Quality \(ARGQ\) Dashboard](#) are here!**



GAMA program staff continue working with UC Davis and LLNL to further advance special studies in assessing water quality.

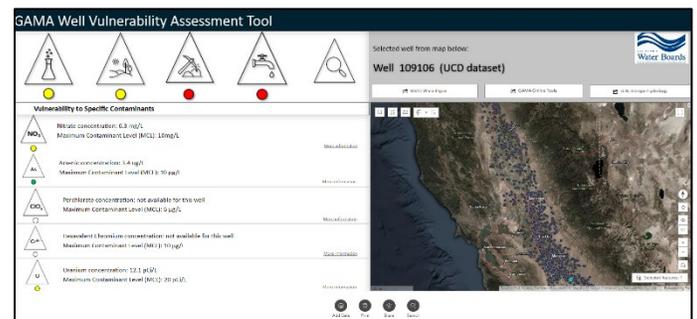
On [March 19 at 1pm](#), a webinar was hosted by the GAMA Program and U.C. Davis to present the online **Central Valley Nonpoint Source Assessment Tool (CV-NPSAT)**. CV-NPSAT is an open-source groundwater modeling framework developed by the University of California Davis to serve as an alternative, efficient approach to standard groundwater contamination models. It evaluates the fate and transport of nonpoint source (NPS) contaminants (such as nitrate and salts) leaching to groundwater from agricultural, urban, and natural land uses, in irrigation, public, and domestic supply wells through “on-the-fly” evaluations of user-defined nonpoint source contaminant leaching scenarios. The Central Valley application of NPSAT computes 400 years of future contaminant transport to 20,000 production wells and over 60,000 domestic wells in the Central Valley. It can be used by non-technical and technical stakeholders to



better understand future groundwater quality as a function of changes to nitrate load and may assist with the evaluation of potential improvements in water quality associated with changes in land use and agricultural practices.

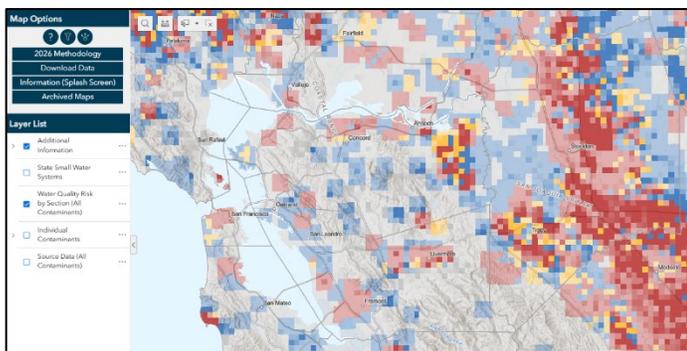


**A new online tool** to highlight the vulnerability assessment work completed by Lawrence Livermore Labs is now available. The **Well Vulnerability Assessment Tool** is intended to provide well owners and water managers possible explanations and mitigation actions for the occurrence of contaminants and to highlight potential sustainability issues based on broadly applied statistical interpretations of geochemical and isotopic tracers. These assessments can help decision makers understand area groundwater quality concerns and vulnerabilities to their resource.





The [2026 Aquifer Risk Map](#) update was released to meet the January 1, 2026 deadline. This map identifies **areas where domestic wells and state small water systems may be at risk of water quality issues**. The map is used by Safe and Affordable Funding for Equity and Resilience (SAFER) program staff to help prioritize efforts to provide safe, adequate, and affordable drinking water to all communities.



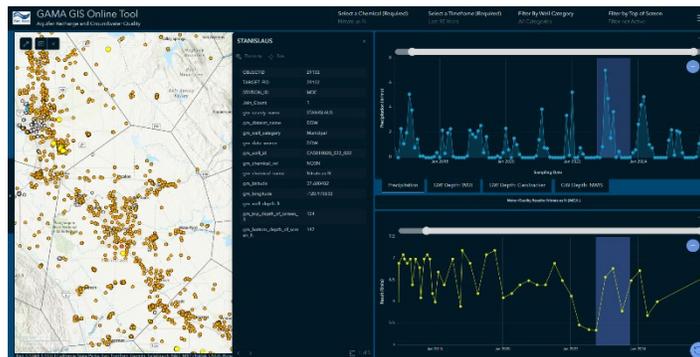
**Updates to standardize the modifier columns in the GAMA Groundwater Information System (GIS)** were completed. Analytical data modifiers can have various meanings across datasets or may not be readily translated. This new method of standardization uses clear language to indicate if a result value is “less\_than,” “equal\_to,” or “greater\_than” the value shown, or if the value shown is an “estimate.” Additional standardization helps inform users whether to use a result value as shown or if it needs to be more carefully handled.

GM_WELL_ID	GM_CHEMICAL_VW	GM_CHEMICAL_NAME	GM_RESULT_MODIFIER	GM_RESULT	GM_CHEMICAL_UNITS	GM_REPORTING_LIMIT	GM_SAMP_COLLECTION_DATE
S7-SAC-SA07	F	Fluoride	Less_Than		MG/L	0.03	11/16/2022
S7-SAC-SA07	DCMA	Dichloromethane (Methylene Chloride)	Less_Than		UG/L	0.04	11/16/2022
S7-SAC-SA07	TCPR123	1,2,3-Trichloropropane (1,2,3-TCP)	Less_Than		UG/L	0.006	11/16/2022
S7-SAC-SA07	CL	Chloride	Equal_To	642	MG/L	0.02	11/16/2022
S7-SAC-C03	NAPH	Naphthalene	Less_Than		UG/L	0.26	11/15/2022
S7-SAC-NA03	LI	Lithium	Equal_To	82.2	UG/L	0.15	11/30/2022
S7-SAC-SA08	ACETS	Acetic Acid	Less_Than		MG/L	7.4	11/16/2022
S7-SAC-SA07	PFOS	Perfluorooctane sulfonate (PFOS)	Less_Than		MG/L	1.9	11/16/2022
S7-SAC-NA03	CL	Chloride	Equal_To	53	MG/L	0.02	11/30/2022
S7-SAC-SA09	PGATE	Perchlorate	Equal_To	0.39	UG/L	0.1	11/29/2022
SOL-07	OXFLDREN	Oxyfluorene	Less_Than		UG/L	0.016	7/21/2020
SOL-07	TCAL12	1,1,2-Trichloroethane	Less_Than		UG/L	0.046	7/21/2020
SVV-QPC-06	PRZN	n-Propylbenzene (Isocumene)	Less_Than		UG/L	0.036	7/7/2020
SOL-07	SE	Selenium	Less_Than		UG/L	0.05	7/21/2020
SAM-01	SD4	Sulfate	Equal_To	14.5	MG/L	0.02	7/7/2020
SOL-07	CO	Cobalt	Less_Than		UG/L	0.03	7/21/2020
SAM-03	AL	Aluminum	Less_Than		UG/L	3	6/24/2020
SVV-QPC-09	NH4NHAN	Ammonia	Equal_To	0.01	MG/L	0.01	6/24/2020
NAM-05	CD	Cadmium	Less_Than		UG/L	0.03	6/23/2020
SVV-QPC-09	PROPANIL	Propanol	Less_Than		UG/L	0.008	6/24/2020
SAM-03	BE	Beryllium	Less_Than		UG/L	0.01	6/24/2020
NAM-05	DICHLORVOS	Dichlorvos (DDVP)	Less_Than		UG/L	0.04	6/23/2020
NSI-QPC-04	TCAL12	1,1,2-Trichloroethane	Less_Than		UG/L	0.046	3/2/2020
NSI-QPC-04	CTCL	Carbon Tetrachloride	Less_Than		UG/L	0.06	3/2/2020
NSI-QPC-04	CD	Cadmium	Less_Than		UG/L	0.03	3/2/2020
COS-08	H2H1RAT	delta H2H1	Equal_To	-55.1	per mil		3/4/2020

Visit the [GAMA Data Download page](#) to access these new v3 tables and provide feedback.



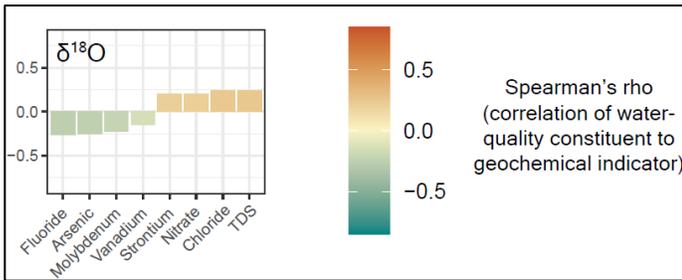
In late 2025, the GAMA Program released a [Dashboard](#) to assist in identifying potential **correlations between groundwater quality and groundwater recharge** events. This tool was originally developed with special consideration for the Atmospheric River events of water year 2022-2023 but can be utilized for any combination of precipitation, groundwater depth, and groundwater quality from 2014 to the present. Graphs of groundwater quality sampling data from a selection of over 30,000 wells from the GAMA GIS, along with statewide groundwater depth data gathered from the Department of Water Resources Water Data Library, the State Water Resources Control Board’s GeoTracker System, and the United States Geologic Survey’s National Water Information System. This tool also includes charts showing monthly accumulated precipitation measured at nearby weather stations, along with many layers developed by other agencies to assist users in evaluating groundwater quality trends as they relate to aquifer recharge events.



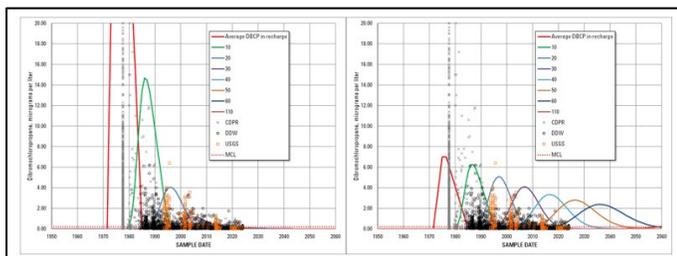


The U.S. Geological Survey, technical lead for the GAMA Priority Basin Project, released several publications in late 2025 and early 2026.

A paper examining **decadal scale trends** in the GAMA Priority Basin Project public-supply well network will be published shortly. This includes 444 wells sampled two or more times between 2004-2023. Trends are evaluated at the scale of eight hydrogeologic provinces for 145 inorganic and organic constituents. Results for select geochemical indicators and land-use metrics and their correlations to water quality constituents are also evaluated to assess broad drivers of water quality changes at statewide and regional scales.



Soon to be published, a 1,2-Dibromo-3-chloropropane (DBCP) paper examines the **distribution, historical trends, and projected future persistence of DBCP** using data from public supply wells, wells sampled by U.S. Geological Survey, and wells sampled by the Department of Pesticide Regulation. The paper focuses on the San Joaquin Valley and the Upper Santa Ana Watershed and uses modelling of groundwater age, observed con-



centration trends, and DBCP production data to reconstruct loading history of DBCP in recharge.

Following the release of the national study on per- and polyfluoroalkyl substances (PFAS), the GAMA Program is releasing the **California-specific statistical model for predicting PFAS**, which includes data collected between 2019-2024 from the statewide public supply well trends network and shallow aquifer study units. The paper will include distribution and occurrence, a statewide Random Forest statistical model for analysis of factors predicting PFAS. A more detailed look at select locations of interest will also be included.

## Other New Publications

[Gilroy-Hollister](#) and Kern County (shallow study units 15 & 16) domestic well assessments.

An update to the GAMA [PFAS](#) dataset.

Domestic-Supply (Shallow) Aquifer Assessment [study unit and grid cell boundaries](#)

[Water use information](#) for sites sampled by the GAMA Program Priority Basin Project

The update to the [attributed well-completion report data for domestic wells and selected other wells for Shallow Aquifer/Domestic Well study units 2 and 4-18](#) was published.

A [data release](#) containing potential explanatory factor data attributed to the 282,000 sites in SWRCB-GAMA-GIS and to the 515 DWR Bulletin 118 groundwater basins was published. Potential explanatory factors include aquifer lithology, land use, pesticide use, septic tank and underground storage densities, average number of domestic supply users, and climate data are attributed to groundwater sites and to groundwater basins.