Is Nicasio Running Out of Water?



(Alan Dep/Marin Independent Journal)

Two, five, ten years from now — Will you still have sufficient water available at your Nicasio property to meet your needs? If you're not sure, have you thought about what you can do to try to maintain a reliable water supply?

Although your well may presently produce adequate water, or you have always been able to buy water when you needed it, a steadily increasing number of Nicasio residents and property owners who rely on groundwater for domestic and other needs are experiencing water supply problems.

Not only can running out of water create a major inconvenience in your daily life, but it might make it impossible to protect your property in the event of fire. In a worst case scenario, if you don't have a functioning well or access to trucked-in water, your property's value will likely be significantly reduced.

The Board of the Nicasio Land Owners Association (NLOA), in cooperation with the Nicasio Volunteer Fire Department (NVFD) and the Nicasio Disaster Council, is studying these and related issues. Over the course of the next few months, we will periodically issue information, reports, and recommendations on how Nicasio residents and neighborhoods might best address the health, safety and environmental threats presented by what appears to be a growing water supply crisis.

As a first step, we offer the following questions and answers for your consideration:

How Bad is Our Current Drought?

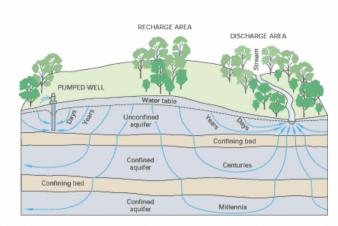
Marin is in a <u>Severe Drought</u> according to the US Drought Monitor Index. The ongoing drought in the Western US is the worst in <u>1,200 years</u>. Data indicates California is in a <u>megadrought</u> (one that lasts decades).

What Does This Mean for Marin?

This year (2022) has been the driest year since 1894, <u>128 years</u> ago. In 2021, we had the lowest rainfall Marin has seen in <u>140 years</u>.

What Does This Mean for Nicasio's Water Supply?

Marin has a very complex and varied geology. Only four groundwater basins are recognized in Marin, and all are considered low priority by the California Department of Water Resources. There are no recognized groundwater basins in the <u>Nicasio area</u>. Groundwater availability and the ability of springs and wells in the Nicasio watershed to reliably meet household water needs vary widely from property to property. Increasingly erratic rainfall and warmer temperatures mean our water future will probably be very different from our water past. Monitoring water use and well performance will be key to understanding what to expect at your property.



Ground-water flow paths vary greatly in length, depth, and travel time from points of recharge (i.e., recharge area) to points of discharge (e.g., stream and pumped well) in the ground-water system. United States Geological Survey (USGS), 1998. Groundwater and Surface Water, A Single Resource. USGS Circular 1139

What Does The Drought Mean for Nicasio's Fire Risk?

Wildfire size and frequency are increasing nationally. Four of the <u>largest wildfires</u> in US history occurred in the past five years. All four were in California. Nicasio's forests and grasslands contain a lot of fuel that has not burned in a long time.

What Is Causing More and Larger Fires?

California is experiencing warmer temperatures, longer dry seasons and more intense wind events. Persistent arid conditions dry out both soil and vegetation, increasing fire danger and fuel loads. The higher winds and low humidity drive fire intensity and damage.

Does Nicasio Need to Truck Water in Now?

Some Nicasio residents have trucked water to their properties for many years. More recently, declining groundwater supplies have required them to start trucking water for domestic use

earlier and earlier each year. Some Nicasio residents began trucking in water for the first time in 2021. In March, 2022, Governor Newsom issued drought emergency Executive Order N-7-22. Action 6 of the Order at least temporarily prevents counties from banning the trucking across county lines of water needed for emergency drinking, cooking and sanitation use.

What Do We Know About Rain in the Future?

Scientists say climate disruption is delivering weather whiplash. The wet years are getting wetter and the dry years are getting drier. On October 24-25, 2021, an atmospheric river brought historic heavy rains to Marin. Like Marin, other parts of California and the country are experiencing severe drought punctuated by record rainfall. For example, earlier this year Death Valley saw a thousand-year rainfall event drop 75 percent of the local average annual rainfall in just three hours. Nicasio likewise should expect to experience periods of rain and drought that are more extreme than in recent record and memory. Unfortunately, intense short-duration rainfall often causes rapid surface runoff rather than infiltration and groundwater recharge.

Can We Get Emergency Access to Marin Water?

With respect to drinking water, Nicasio is outside the service area of Marin Water (formerly MMWD). Accordingly, Marin Water has been unable to provide drinking water directly to Nicasio residents, although in 2021 it permitted some Nicasio ranchers to draw untreated water for livestock directly from the Nicasio Reservoir. Last Spring, Governor Newsom issued the Executive Order referenced above that now allows Marin Water to release water to domestic water users outside of its service area. However, we do not know how long the Governor's order will remain in effect, nor do we know any Nicasio resident who has directly obtained drinking water from Marin Water, which historically has insisted that such water be hauled by a licensed company such as Pardini Trucking.

With respect to recycled water, any Marin resident can obtain recycled water for free from Marin Water, which operates a supply station behind the Civic Center. See <u>recycled water filling</u> <u>station</u> for hours of operation and other details.

What Water Storage Exists in Nicasio?

The Nicasio Volunteer Fire Department has a 15,000 gallon tank buried at the Nicasio Square and has installed new water storage tanks at Halleck Creek Ranch, primarily for firefighting purposes. The Lafranchi subdivision and several small neighborhoods in Nicasio whose residents share wells have substantial tanks that were constructed primarily to help them meet domestic water needs. Some of these tanks may be available for emergency firefighting use.

If you have questions or comments, please contact one of the following NLOA members: Martha Davis (mlcmarthadavis@gmail.com), Greg Dalton (dalton.greg@gmail.com), Steve Lewis (slewis@bargcoffin.com), Keith O'Brien (kobrien@pesenv.com)

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