Our Groundwater Resources in Napa County

What we know...

Groundwater and surface water resources are important natural resources in Napa County. Diverse community interests actively support and invest in water resources to provide reliable water supplies and sustain economic and agricultural productivity.

Groundwater Subareas:
To help better our understanding of groundwater conditions within Napa County, 17 groundwater Subareas have been delineated (see map).

Groundwater Levels:
In general, groundwater levels within the Napa Valley Floor sub-area have shown stable long term trends and a shallow depth to groundwater level, (10 to 30 feet).

The northern Milliken-Sarco-Tulucay MST sub-area shows declining levels in the 1960s to 1970s, then stabilized. The central MST sub-area exhibits general long term declines, with increasing decline since 1990. The southern MST sub-area is historically stable with shallow groundwater depth.

Groundwater Quality:
Less is known about groundwater quality. Overall quality is good except in very select areas in the most northern and southern of the County.

What we don’t know...

- Where are data gaps in current level and quality monitoring?
- How can we identify aquifer specific monitoring?
- What are the amounts of recharge, discharge to creeks/rivers, and storage?
- What is the overall supply availability and reliability within the County?
- What are the key relationships to surface water in our creeks, rivers and lakes?
- How does groundwater move through our aquifer system?

What we need to know...

- Estimates of recharge, discharge, and storage.
- Areas of groundwater and surface water interaction.
- Procedures for data collection to ensure quality data.
- Where to best locate additional groundwater level and groundwater quality monitoring wells.
- The status of annual groundwater conditions through regular review of collected data.
- Where potential groundwater recharge areas are located.

http://www.countyofnapa.org/bos/grac/
Napa County’s Voluntary Groundwater Monitoring Program

Volunteer Monitoring Program—Overview

The Voluntary Groundwater Level Monitoring Program allows well owners to have the depth to groundwater level measured in their wells twice per year to improve understanding of groundwater in the County. A network of privately owned volunteer wells augments County and publicly monitored wells that are tracking overall groundwater elevations. Monitoring groundwater elevation helps assess the overall status of Napa County aquifers.

Volunteer Monitoring Program—Benefits

The benefits of participating in the voluntary groundwater level monitoring program include:

- Receiving accurate groundwater level readings twice per year (late spring and late fall);
- Seeing seasonal and long-term groundwater level trends for your well;
- Receiving water quality data for your well (if conducted);
- Helping improve our understanding of groundwater resources; and
- There is no cost to the well owner for participation the program.

Why is groundwater important in Napa County?

Groundwater is a vital source of water supply in Napa County. Many residents, businesses, and agriculturalists rely on groundwater as their main water supply. Both groundwater and surface water of good quality and quantity are necessary to meet urban, rural, and agricultural water demands.

Residents of Napa County face many water-related challenges including:

- Increased competition for current and future available supplies,
- Preserving the quality and availability of local and imported water supplies,
- Sustaining groundwater recharge capacity and supplies,
- Meeting challenges arising during drought conditions,
- Avoiding environmental effects due to water use; and
- Changes in long-term availability due to climate change.

Answers to Questions

What is groundwater?

Groundwater is water below ground surface contained in formations known as aquifers, and yields significant quantities of water to wells and springs.

Will someone curtail my use if I participate?

No. The Voluntary Groundwater Level Monitoring Program is a non-regulatory, volunteer program that only measures the depth to groundwater. Groundwater use is not being measured or monitored as part of this program.

How long is the voluntary groundwater level monitoring program going to last?

The monitoring program will last as long as funding for the program is available. As priority sub-basins are identified, the program may change to focus on specific areas.

Where is additional groundwater level data needed?

Priority water level monitoring areas are currently being determined. See the Groundwater Monitoring Plan on the GRAC website: www.countyofnapa.org/bos/grac.

Who is eligible to participate?

If your well is within a priority sub-basin and well construction information is available for your well, you may be eligible to participate in the program.

How will the collected information be used?

The information will be used to: monitor and track generalized groundwater levels; understand relationships between surface water and groundwater; maintain a centralized data management system; and improve the accuracy and reliability of relevant water resource models.

Where can I find additional information?

For more information about the Volunteer Groundwater Monitoring Program, please visit the GRAC website: www.countyofnapa.org/bos/grac.