**Water Studies Everywhere - Not A Drop to Drink?**

**A comprehensive analysis on Napa County's current situation,**

**and a strong recommendation for a better future approach**

by Daniel Mufson, Ph.D.

**Where We Are Now**

Suddenly it appears that water is the topic of study by numerous governmental bodies here in Napa. That would seem to imply that people believe that water is important and it needs to be cared for. We certainly agree with that premise. When you look at it, no other factor will have such a profound influence on what our lives look like in the coming years. Yes, climate change is important, and it is especially so on how it will influence our water supplies.

**Let’s take a look at the studies underway.** In 2014 the Sustainable Groundwater Management Act became law. The legislative intent is to provide for sustainable management of groundwater basins, enhance local management of groundwater, and establish minimum standards for sustainable groundwater management.

The Department of Water Resources (DWR) has asked Napa County to come up with a plan for water sustainability in what is termed the Napa subbasin which they have determined is a high priority subbasin.

In late December 2019, the Board of Supervisors declared themselves the Napa County Groundwater Sustainability Agency (GWSA) and just this past week selected 25 members of the community to sit on a groundwater advisory committee. **This committee has two years to develop a plan to ensure the sustainability of our groundwater supplies.**

**In Addition, A Task Force Formed**

In September 2019 a group of water managers from the county and the municipalities also formed a task force to prepare for and respond to drought. This collaborative planning group will develop the following:

**Drought Contingency Plans:** How will we recognize the next drought in the early stages? How will drought affect us? How can we protect ourselves from the next drought?

**Drought Resiliency Projects**: Drought Resiliency is defined as the capacity of a region to cope with and respond to drought. The US Bureau of Reclamation provides grant assistance for drought resiliency projects identified in a DCP.

The area that they will study is larger than the study area of the GWSA as it will encompass the following critical sources and users:

* The Napa River watershed which drains into the northern edge of San Pablo Bay and includes an area of 430 square miles
* Urban and residential areas, extensive vineyards and agriculture, and diverse environmental habitats
* Water users in the area rely on a mixture of water supplies that include local surface water, imported surface water, groundwater, and recycled water

**Let’s focus on that last point that describes from where we get our water.** If you live in the municipalities your water comes from reservoirs (surface water) and from the State/Sierras via the North Bay Aqueduct (imported surface water). In fact, more than half of Napa City’s water comes from the state.

If you live in rural Napa County your water likely comes from a well (groundwater). Agriculture uses groundwater and some surface water from the Napa River.

The county has set aside the groundwater for agriculture as stated in the General Plan Goal CON-Reg 11: “Prioritize the use of available groundwater for agricultural and rural residential uses rather than for urbanized areas and ensure that land-use decisions recognize the long-term availability and value of water resources in Napa County.”

There are some known water-deficient areas in the county such as the MST (Milliken-Sarco- Tulucay) where the county has placed limits on development and has encouraged the use of recycled water for irrigation.

**The Problems and The Big Questions**

The big issue is how much water will be available for use by residences, industrial, agricultural, and environmental uses in the coming years? The state has issued numerous reports on water security i.e., **“Safeguarding California Implementation Action Plans 2016”** (need link to this) to ensure that people and communities are able to withstand the impacts of climate disruption:

* Loss of snow-pack storage may reduce the reliability of surface water supplies and result in greater demand on other sources of supply”.
* “As climate change reduces water supplies and increases water demands (as a result of higher temperatures), additional stresses are being placed on the Delta and other estuaries along the California coastline.”
* “Each local water agency will have to contend with impacts to their local watershed, as well as upstream and downstream watersheds that influence local water supply or water quality constraints.”

With 80% of Napa residents living in the cities, what is the master plan to supply them with water when the state water project is no longer able to deliver and the reservoirs are compromised by drought and/or polluting runoff?

**The Problem We Collectively Must Solve**

How much water from all sources will be available and who gets to have it? We can study this to death; we can hire consultant engineering firms and pay them to develop numerous scenarios but we think we all truly know that the earth is warming, fire dangers are increasing, the weather is changing dramatically and therefore we ought to focus on planning for the worst-case.

In 2017 Napa Vision 2050 stated in a letter to the DWR that if all users of water in Napa County were to need to rely solely upon the groundwater we would be in an unsustainable situation. We still believe this to be the case.

**Going Forward: A Clear, Consolidated Approach vs a Fractured System**

Within the past month, **LAFCO** (our Local Agency Formation Commission\*) issued a most comprehensive report, **“Napa Countywide Water and Wastewater Municipal Services Review” (May 18, 2020). (need to add link to this report)** The report thoroughly covers the history and operation of the many water service providers with recommendations regarding their administration and operation.

It is of great significance that this report introduced the concept of a county water agency and/or a countywide county water district. Benefits to forming such a county water district include:

* Efficient use of the County’s water resources
* Enhanced water resource management
* Solidarity amongst Napa water purveyors with greater leveraging power
* Greater scrutiny of all utility providers
* Enhanced technical and operational support for local providers
* Elimination of redundancies and duplication of efforts amongst the smaller systems
* Improved economies of scale.

**Unlike the other two study groups mentioned above that cover a portion of the county’s water supply e.g.** Napa County Groundwater Sustainability Agency-covers the Napa Valley subbasin (and just groundwater); Drought Contingency Plan Task Force-covers the watershed (with multiple sources of water),

**LAFCO is recommending an agency that will cover the entire county.** **We think that LAFCO gets it right and we recommend that these two working groups come up with a format so that their work product will be a plan for all of Napa’s water users to share the diminishing supply that belongs to the commons.**