

## Parcel Location Factors

The allowable allotment of water is based on the location of your parcel.

There are 3 different location classifications. Valley floor areas include all locations that are within the Napa Valley, Pope Valley and Carneros Region, except for areas specified as groundwater deficient areas. Groundwater deficient areas are areas that have been determined by the public works department as having a history of problems with groundwater. All other areas are classified as Mountain Areas. Please circle your location classification below (Public Works can assist you in determining your classification if necessary):

Valley Floor

1.0 acre feet per acre per year

Mountain Areas

0.5 acre feet per acre per year

MST Groundwater Deficient Area

0.3 acre feet per acre per year

Assessors Number(s)	Parcel Size (A)	Parcel Factor (B)	Location	Allowable Water Allotment (A) X (B)
018-060-072	20.14 ac.	0.5 ac-ft/ac/year		10.07 ac-ft/year

### Step #3:

Using the guidelines in Attachment A, tabulate the existing and projected future water usage on the parcel(s) in acre-feet per year (af/yr). Transfer the information from the guidelines to the table below.

#### **EXISTING USE:**

Residential	0.75	af/yr
Farm Labor Dwelling	0.0	af/yr
Winery	0.42	af/yr
Commercial	0.0	af/yr
Vineyard*	5.50	af/yr
Other Agriculture	0.0	af/yr
Landscaping	0.0	af/yr

#### **Other Usage (List Separately):**

Domestic & Landscape	0.1	af/yr
		af/yr
		af/yr

#### **PROPOSED USE:**

Residential	0.75	af/yr
Farm Labor Dwelling	0.0	af/yr
Winery	0.65	af/yr
Commercial	0.0	af/yr
Vineyard*	5.50	af/yr
Other Agriculture	0.0	af/yr
Landscaping	0.0	af/yr

#### **Other Usage (List Separately):**

Domestic & Landscape	.15	af/yr
		af/yr
		af/yr

<b>TOTAL:</b>	6.77	af/yr
<b>TOTAL:</b>	2,205,808	gallons**

<b>TOTAL:</b>	7.05	af/yr
<b>TOTAL:</b>	2,297,038	gallons**

\*Water use for vineyards should be no lower than 0.2 AF—unless irrigation records are available that show otherwise.

\*\*To determine your existing and proposed total water use in gallons, multiply the totals (in acre- feet) by 325,821 gal/AF.

Is the proposed use less than the existing usage    ( ) Yes    ☒ No    ( ) Equal

**Step #4:**

Provide any other information that may be significant to this analysis. For example, any calculations supporting your estimates, well test information including draw down over time, historical water data, visual observations of water levels, well drilling information, changes in neighboring land uses, the usage of other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.

The vines have established themselves over the past five (5) years, and have less impact on the existing water supply. Using less water to irrigate decreases watering times and increases conservation during irrigation cycles. The current water storage allows for greater capacity and in turn allows less impact on the well components and allows a greater time for well and water table recovery.

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**Conclusion:** Congratulations! Just sign the form and you are done! Public works staff will now compare your projected future water usage with a threshold of use as determined for your parcel(s) size, location, topography, rainfall, soil types, historical water data for your area, and other hydrogeologic information. They will use the above information to evaluate if your proposed project will have a detrimental effect on groundwater levels and/or neighboring well levels. Should that evaluation result in a determination that your project may adversely impact neighboring water levels, a phase two water analysis may be required. You will be advised of such a decision.

**Signature:**

Richard J. Dwyer PM  
Summit Engineering Inc.

**Date:**

9/20/07

**Phone:**

707-527-0775



## **Attachment A: Estimated Water Use Guidelines**

### **Typical Water Use Guidelines:**

Primary Residence	0.5 to 0.75 acre-feet per year (includes some landscaping)
Secondary Residence	0.20 to 0.30 acre-feet per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year

### **Non-Residential Guidelines:**

#### **Agricultural:**

Vineyards	
Irrigation only	0.2 to 0.5 acre-feet per acre per year
Heat Protection	0.25 acre feet per acre per year
Frost Protection	0.25 acre feet per acre per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year
Irrigated Pasture	4.0 acre-feet per acre per year
Orchards	4.0 acre-feet per acre per year
Livestock (sheep or cows)	0.01 acre-feet per acre per year

#### **Winery:**

Process Water	2.15 acre-feet per 100,000 gal. of wine
Domestic and Landscaping	0.50 acre-feet per 100,000 gal. of wine

#### **Industrial:**

Food Processing	31.0 acre-feet per employee per year
Printing/Publishing	0.60 acre-feet per employee per year

#### **Commercial:**

Office Space	0.01 acre-feet per employee per year
Warehouse	0.05 acre-feet per employee per year