

# Water Availability Analysis



## A Tradition of Stewardship A Commitment to Service

#### Department of Public Works

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### WATER AVAILABILITY ANALYSIS - PHASE ONE STUDY

<u>Introduction:</u> As an applicant for a permit with Napa County, It has been determined that Chapter 13.15 of the Napa County Code is applicable to approval of your permit. One step of the permit process is to adequately evaluate the amount of water your project will use and the potential impact your application might have on the static groundwater levels within your neighborhood. The public works department requires that a Phase 1 Water Availability Analysis (WAA) be included with your application. The purpose of this form is to assist you in the preparation of this analysis. You may present the analysis in an alternative form so long as it substantially includes the information required below. Please include any calculations you may have to support your estimates.

The reason for the WAA is for you, the applicant, to inform us, to the best of your ability, what changes in water use will occur on your property as a result of an approval of your permit application. By examining the attached guidelines and filling in the blanks, you will provide the information we require to evaluate potential impacts to static water levels of neighboring wells.

#### Step #1:

Provide a map and site plan of your parcel(s). The map should be an 8-1/2"x11" reproduction of a USGS quad sheet (1:24,000 scale) with your parcel outlined on the map. Include on the map the nearest neighboring well. The site plan should be an 8-1/2"x11" site plan of your parcel(s) with the locations of all structures, gardens, vineyards, etc in which well water will be used. If more than one water source is available, indicate the interconnecting piping from the subject well to the areas of use. Attach these two sheets to your application. If multiple parcels are involved, clearly show the parcels from which the fair share calculation will be based and properly identify the assessor's parcel numbers for these parcels. Identify all existing or proposed wells

<u>Step #2:</u> Determine total parcel acreage and water allotment factor. If your project spans multiple parcels, please fill a separate form for each parcel.

Determine the allowable water allotment for your parcels:

## 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 underline your location classification below (Public Works can assist you in determining your classification if necessary):

Valley Floor Mountain Areas MST Groundwater Deficient Area 1.0 acre feet per acre per year 0.5 acre feet per acre per year 0.3 acre feet per acre per year

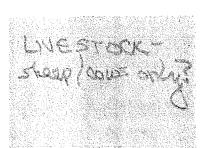
Assessor's Parcel Number(s)	Parcel Size	Parcel Location Factor	Allowable Water Allotment
	(A)	(B)	(A) X (B)
31-050-47	40,98	VALLEY FLOOR	40.98
		1.112	

#### 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.

	0		
EXISTING USE:		PROPOSED USE:	
Residential	0.75 af/yr	Residential	0,75 af/yr
Farm Labor Dwelling	af/yr	Farm Labor Dwelling	af/yr
Winery	af/yr	Winery	af/yr
Commercial	af/yr	Commercial	f/yr
Vineyard*	af/yr	Vineyard*	af/yr
Other Agriculture	af/yr	Other Agriculture	af/yr
Landscaping	0.124 af/yr	Landscaping	0.14 af/yr
Other Usage (List Separately):		Other Usage (List Separately):	
Secondary Res.	<u>0.30</u> af/yr		<u>0.30</u> af/yr
LIVESTOCK	<u>O.4</u> af/yr		<u> 0. 中</u> af/yr
	af/yr		af/yr
TOTAL:	1046_af/yr	TOTAL:	af/yr TOTAL:
	gallons**	TOTAL:	gallons**
Is the proposed use less than the	existing usage? Yes	No ZEqual	
Step #4:			
•		ysis. For example, any calculations supp data, visual observations of water levels	<del></del>

changes in neighboring land uses, the usage if other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.



Congrutuations! 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. awhy Stil Date: 2.5114 Phone: 415-810-5211 707-944-9312

\$15/H LHN DOCH WILLIA WEEK 3% 30 mm LAWN -140. 192/10 20 19 Around pool Poor Deak 9/1 38.5 1/4 gal/D 30 mm 7 7.2 SM # gal (DAY 168. 6 spray  $g/\omega$ Parking Area 30 min 3/2 1 gAC/D 10.5 3 lg 7 spray 4 gal Day 98. d/w 31/2 5 spray 30 mm 4 GRL DAY 70. Front door ARRA sm. d/w 14 gac ( D. 8.75 8 mm & SM 'H GAL D 14, DECK 31/2 d/w 10 al /D 35, Spray 30 mm my garden 1 PACID 50. Olianders 9/m 25 1 hr 4 gal/D 140. 35 Olives WIB 1 hr 1 1 gAC/D 45. 15 9/m Barn 30 m 1/2 gol/D 9/m 37.5 25 College 3 30 m 845,25

850 x 52 = 44,200.

Speing/Summer/Face usage usage in writer

= 0.135644641 ACRE FEST.