

## WAA Tier 1: Water Use for Napa County

**Tier 1 analysis is required for all new or modified wells**

Well Permit Type	Inside Subbasin		Outside Subbasin	
	0.3 acre-feet/acre	No Net Increase <sup>1</sup>	2 acre-feet/year or Parcel specific recharge	No Net Increase
<b>New Domestic Well</b> - Single Well on Property	<b>X</b>		2 acre-feet/year	
<b>New Well (Public Water Supply or Other Type Well)</b> - Single Well on Property	<b>X</b>		Water use based on parcel specific recharge	
<b>Replacement Well (Domestic, Public Water Supply or Other Type Well)</b>		<b>X</b>		<b>X</b>
<b>New Well (Domestic, Public Water Supply or Other Type Well)</b> - with Existing Wells on Property		<b>X</b>	Water use based on parcel specific recharge	

**X** = Required water use standard

<sup>1</sup> No net increase, or 0.3 acre-feet/acre if existing water use is currently less than the standard

WAA = Water Availability Analysis, adopted May 12, 2015

<b>WAA Tier 2: Mutual Well Interference for Napa County (inside and outside Napa Subbasin)</b>		
<b>Well Permit Type</b>	<b>Less than 500 feet to Nearby Well(s) or 1,500 feet to Nearby Spring(s)<sup>1</sup></b>	<b>Greater than 500 feet to Nearby Well(s) or 1,500 feet to Nearby Spring(s)</b>
<b>New Well (Domestic, Public Water System, or Other)</b>	<b>X</b>	
<b>Replacement Well (Domestic, Public Water System, or Other) -</b> When located in the vicinity of well to be replaced and there is no net increase in water use.		
<b>Replacement Well (Domestic, Public Water System or Other) -</b> When placed in a new location and/or there is a proposed increase in water use.	<b>X</b>	

**X** = Required analysis

<sup>1</sup> The minimum significant drawdown values presented in Table 2B (WAA, 2015) are intended for use in cases where information about existing non-project wells or springs is limited or non-existent.

Tier 2 analysis must be performed by licensed professional retained by applicant or through County services and paid for by applicant

**Table 2B. Default Well Interference Criteria**

<b>Type of wells within 500 ft. screened within the same aquifer as project well</b>	<b>Estimated Drawdown at Neighboring Non-Project Wells</b>
Wells with a casing diameter of six inches or less	10 feet
Wells with a casing diameter greater than six inches	15 feet

<b>WAA Tier 3: Proximity to Streams for Napa County (inside and outside Napa Subbasin)</b>		
<b>Well Permit Type</b>	<b>Less than 1,500 feet to Stream(s)<sup>1</sup></b>	<b>Greater than 1,500 feet to Stream(s)</b>
<b>New Well (Domestic, Public Water System, or Other)</b>	<b>X</b>	
<b>Replacement Well (Domestic, Public Water System, or Other)</b> - When located in the vicinity of well to be replaced and there is no net increase in water use.		
<b>Replacement Well (Domestic, Public Water System or Other)</b> - When placed in a new location and/or there is a proposed increase in water use.	<b>X</b>	

**X** = Required analysis

<sup>1</sup> - Additional evaluation will be required to identify the potential for impacts of very low pumping capacity wells within 500 feet of surface waters, low pumping capacity wells within 1000 feet of surface waters, and moderate to high pumping capacity wells within 1500 feet of surface waters. The tables below are from the 2015 WAA Guidelines.

Tier 3 analysis must be performed by licensed professional retained by applicant or through County services and paid for by applicant

See Figure 1 for map of “Significant Streams” to which the proximity standards apply

<b>Well Distance Standards and Construction Assumptions; Very low capacity pumping rates (i.e., less than 10 gallons per minute), constructed in unconsolidated deposits in the upper part of the aquifer system (unconfined aquifer conditions)</b>					
<b>Aquifer Hydraulic Conductivity (ft/day)</b>	<b>Acceptable Distance from Surface Water Channel</b>			<b>Minimum Surface Seal Depth (feet)</b>	<b>Depth of Uppermost Perforations (feet)</b>
	<b>500 feet</b>	<b>1,000 feet</b>	<b>1,500 feet</b>		
80	X			50	100
50	X			50	100
30	X			50	100
0.5	X			50	100
<b>Well Distance Standards and Construction Assumptions; Low capacity pumping rates (i.e., between 10 gpm and 30 gpm), constructed in unconsolidated deposits in the upper part of the aquifer system (unconfined aquifer conditions)</b>					
80			X	50	150
50			X	50	150
30			X	50	150
0.5		X		50	150
<b>Well Distance Standards and Construction Assumptions; Moderate to high capacity pumping rates (i.e., greater than 30 gpm), constructed in unconsolidated deposits in the upper part of the aquifer system (unconfined aquifer conditions)</b>					
80			X	50	150
50			X	50	150
30			X	50	150
0.5			X	50	150