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**Water Availability Analysis  
Napa Wildlife Rescue  
P19-00495-UP**

# Water Availability Analysis

USE PERMIT P19-00495

## Napa Wildlife Rescue

4001 Middle Avenue  
Napa, CA 94559  
Napa County  
APN: 047-202-005 & 047-202-006

Technical Report Prepared By:  
Stillwater Civil Design  
1090 Shetler Avenue  
Napa, CA 94559  
(707) 974 – 9261  
[rangel@stillwatercivil.com](mailto:rangel@stillwatercivil.com)



May 8, 2020

### Project Overview

This Water Availability Analysis was completed as part of a Use Permit Application (P19-00495) submitted to the County for review in December 2019. The use permit application is for the conversion of an existing residential property to a wildlife center that rescues and rehabilitates wildlife.

The property consists of two parcels with a total area of approximately 2 acres. The property is developed with a 4-bedroom house, two barns, a groundwater well and a standard septic system. Records found in Napa County files show the existing groundwater well was developed in 1990.

Three non-project wells were found to be within 500 feet of the existing project well. Two wells are located approximately 150 feet to the southeast on parcel 047-202-007. One well is located approximately 200 feet to the southwest on parcel 047-202-004. All wells were found to be 200 to 290 feet deep with a static water level between 90 and 130 feet below ground surface. Please see the attached well exhibit completed by Stillwater Civil Design.

### Existing Water Demand

The existing property contains a 4-bedroom house, two barns and landscaping. According to Appendix B of the Water Availability Analysis Guidance Document, the potential existing groundwater demand for the property would be approximately 0.75 acre-feet per year.

### Proposed Water Demand

The property owners have developed a very thorough estimate of the proposed peak seasonal water use for the Napa Wildlife Rescue. Operations requiring water use for the Napa Wildlife Rescue are shown on attached Table 1. The estimate peak seasonal daily groundwater demand for the project will be approximately 0.49 acre-feet per year.

### Conclusion

The proposed peak seasonal water demand is estimated to be less than the existing peak water demand. The surrounding non-project wells should not be adversely affected by the project since less water will be drawn from the existing onsite well than could potentially be drawn by the existing residence. By converting the parcel use from residential to the proposed use will put less demand on the existing groundwater well and the groundwater aquifer.

Please feel free to contact Stillwater Civil Design at (707) 974-9261 if there are any questions or comments concerning this Water Availability Analysis.

Table 1 - Proposed Peak Seasonal Water Demand Estimate

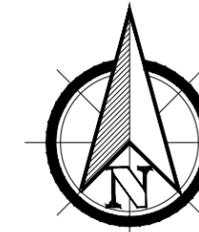
<b>WATER USE</b>	<b>GALLONS/DAY</b>
Front loading high efficient washing machine: 13 gallons per load; 3 loads per day	39
Dish washing by hand. 10 gallons per wash, 6 x per day	60
Dishwasher:4 gallons per cycle, 2 cycles per day	8
Toilet:3.5 gallons per flush, 14 flushes per day	49
Hand-washing: 14 people per day, 5 times each, 2 gallons per wash	140
Cleaning large outdoor animal enclosures: 20 gallons, 1 per day	20
Cleaning indoor small cages: 10 gallons, 4 per day	40
Animal water dishes:0.5 gallons per outdoor cage x 10 plus 2 gallons indoor cages	7
Vegetable garden, drip: 1 hour per day, 2 gallons per emitter per hour, 30 emitters	60
Miscellaneous potted plants	10
<b>TOTAL PEAK DAILY GROUNDWATER DEMAND (GALLONS)</b>	<b>433</b>
<b>TOTAL ANNUAL GROUNDWATER DEMAN (ACRE-FT)</b>	<b>0.49</b>

# WELL EXHIBIT

4001 MIDDLE AVENUE  
NAPA, CA 94559  
APN: 047-202-005

1199 CUTTINGS WHARF ROAD  
NAPA, CA 94559  
APN: 047-202-005  
APN: 047-202-006

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SCALE: 1" = 100'



STILLWATER CIVIL DESIGN  
1090 SHETLER AVE.  
NAPA, CA 94559  
(707) 974 - 9261  
rangel@stillwatercivil.com



PREPARED UNDER THE DIRECTION OF:

*ARG*  
J. RANGEL GONZALES R.C.E. 74712

NOTE:  
THREE (3) NON-PROJECT GROUNDWATER WELLS WERE FOUND TO BE WITHIN 500 FT OF THE PROJECT WELL. TWO WELLS WERE FOUND TO BE ON PARCEL 047-202-007. ONE WELL WAS FOUND TO BE ON PARCEL 047-202-004. WELL INFORMATION FOUND IN NAPA COUNTY RECORDS INDICATES THAT ALL WELLS HAVE A WATER COLUMN OF AT LEAST 100' FROM BOTTOM OF WELL TO STATIC WATER ELEVATION.

