



CITY OF  
AMERICAN  
CANYON

PUBLIC WORKS DEPARTMENT

4381 BROADWAY, SUITE 201  
AMERICAN CANYON, CA 94503

## WATER SUPPLY REPORT

FOR

### E&P Tech Way

Technology Way, Napa, CA 94558  
Napa County Assessor's Parcel Number  
057-250-030

Prepared by:

Edison Bisnar  
Development Services Engineer

**Approved by:**

DocuSigned by:

*Erica Ahmann Smithies*

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**Erica Ahmann Smithies, P.E.**  
**Public Works Director/City Engineer**

3/13/2023

**Date**

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## **PREFACE**

This Water Supply Report (WSR) is prepared in response to a request received by the City of American Canyon for a new water service(s) and/or an expansion of existing water service(s). The intent of the WSR is to help inform the discretionary approval process undertaken in conjunction with the request. Chief among its purpose is to:

- Determine if the request is consistent with City ordinances, policies, and practices;
- Determine whether the City's water supply is sufficient to grant the request when compared to existing and other planned future uses, including agricultural and manufacturing uses; and
- To establish a water allocation for the property.

On October 23, 2007, the American Canyon City Council adopted the following definition as the basis for its Zero Water Footprint (ZWF) Policy:

Zero Water Footprint – No loss of water service reliability or increase in water rates to the City of American Canyon's existing water service customers due to requested increase demand for water within the City's water service area.

The overarching intent of the ZWF Policy is to require all new development (residential or non-residential), or the expansion of existing commercial and industrial development, to mitigate all new water demands with "wet-water" offsets by one or more of the following options:

- Reducing existing potable water demands on-site
- Funding programs or constructing projects that would conserve an equivalent amount of water elsewhere within the water service area
- Funding of and/or constructing projects that would increase an equivalent amount of recycled water use elsewhere within the water service area where potable water is currently used.
- Purchase new water supplies from other water providers

## **SECTION 1.0 - REQUEST FOR SERVICE**

### **1.1 - Property Description**

The property is located on Technology Way (Assessor's Parcel Number: 057-250-030) on approximately 13.2 acres referred to herein as the "Property." The Property is zoned Industrial Park (IP) with Airport Compatibility (AC) and is located within the City's Extraterritorial Water Service Area (ETSA)<sup>1</sup>.

### **1.2 - Project Description**

The proposed project is to build a 143,325 winery. Entitlements required include a Use Permit from Napa County (P22-00307) and Will-Serve Letters from the City (for potable water service – domestic and fire service) and Napa Sanitation District (for sewer and recycled water)<sup>2</sup>.

The project incorporates the following water conservation best management practices:

- Dual plumbed the building to receive recycled water for toilet flushing
- Motion sensor faucets
- Use recycled water for landscaping
- On demand (Instahot) hot water heaters for individual restrooms or the plumbing of hot water return lines with an integral pump if using a centralized tank or tankless unit
- Education of employees regarding water conservation (offered in both English and Spanish)

### **1.3 - Status of Existing Services**

The property is currently vacant. The City has no record of historical potable water use at the property. No prior Will-Serve Letters have been issued by the City. The property is located within the Napa Sanitation District's (NSD) recycled water service area. Recycled water is available in the area.

### **1.4 - Will Serve Application**

A Will-Serve Application dated January 30, 2023 was submitted on behalf of the Owner, Dennis Paulley. The application submitted details the anticipated and existing water demands for the Site. Staff has reviewed the provided application and finds the estimate to be consistent with industry standards for similar uses.

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<sup>1</sup> As defined by Napa County Local Agency Formation Commission Policy 07-27.

<sup>2</sup> The project site is located within the Napa Sanitation District's (Napasand) recycled water service area.

### 1.5 – Average Day Demand (ADD)

As shown on Table 1, the anticipated “Average-Day” Demand (ADD) for the Property is 11,495 gpd.

Table 1 – Property ADD			
Domestic (gpd)	Industrial (gpd)	Irrigation (gpd)	Total (gpd)
230	11,265	0	11,495

### 1.6 - Maximum Day Demand (MDD)

As shown in Table 2, the anticipated Maximum Demand (MDD) for the Property is 1,018 gpd.

Table 2 – Property MDD			
Domestic (gpd)	Industrial (gpd)	Irrigation (gpd)	Total (gpd)
460	22,530	0	22,990

## SECTION 2.0 - PROJECT WATER FOOTPRINT

### 2.1 – Project Demand Consistency with UWMP and ACMC 13.10

The City's 2010 Urban Water Management Plan (UWMP) assumes industrially zoned property will have up to a maximum ADD of 675 gpd per acre. American Canyon Municipal Code Section 13.10 further limits industrially zoned property within City limits and the broader City ETSA up to a maximum ADD of 650 gpd per acre. As shown in Table 3 below, the Property's estimated ADD (1,735 gpd per acre) is greater than the maximum allowed by the ACMC 13.10 (650 gpd per acre):

Table 3 – Maximum ADD			
Parcel Size (acres)	UWMP (gpd/acre)	ACMC 13.10 (gpd/acre)	Property ADD (gpd/acre)
13.2	675	650	1,735

## 2.2 - Baseline Water Footprint

The Property's Baseline Water Footprint is determined as one of the following: a) the approved demand amount specific in a current, (unexpired) Will-Serve Letter, Water Supply Report and/or Water Service Agreement; b) the water demand calculated from an audit of three-years of water use; or c) absent other information, the water demand in 2007. As shown in Table 4 below, the Property's baseline water footprint is 0 gpd.

Table 4 – Baseline Water Footprint			
Approved Demand (gpd)	Audited Demand (gpd)	Historical Demand (gpd)	Baseline Water Footprint
N/A	0	N/A	0

## 2.3 - Zero Water Footprint Determination

Because the Property ADD (11,495 gpd) exceeds the Property's Baseline Water Footprint, the Property does not have a Zero Water Footprint (ZWF). Because the Property does not have a ZWF, the new demand(s) on the City's water system could potentially result in a loss in water service reliability or increase in water rates to the City's existing customers.

## 2.4 - Demand Offset

The City has established various programs intended to offset new demand(s) on its water system. The Property has agreed to participate in one such program whereby old plumbing fixtures in existing residences (such as toilets, showers and faucets) are replaced with high-efficiency fixtures. On average the cost to replace the fixtures in a single family dwelling unit is \$600 and results in an on-going savings of 65 gpd. By facilitating the replacement of these fixtures city-wide, the Property's new demand is offset by water which is saved elsewhere. The Property has agreed to contribute \$106,107.69<sup>3</sup> to the City's Zero Water Footprint Mitigation Fund. Monies in the Fund are used to pay for replacement of plumbing fixtures. The amount paid will result in equivalent savings of 11,495 gpd, thereby offsetting the Property's new ADD.

## 2.5 - Project Impact on Reliability & Rates

The City's water treatment, delivery and storage system is reliable to serve demands of existing development that existed at the time of ZWF Policy implementation in 2007. New or increased demands to the City's system after the implementation of the ZWF Policy are determined to potentially

<sup>3</sup> Calculation: 11,495 gpd/65 gpd x \$600 = \$106,107.69

have a negative impact on the City's water system reliability which could result in an increase in water rates of existing customers. By facilitating the replacement of inefficient plumbing fixtures through the monetary contribution to the City's ZWF Mitigation Fund, the Property has offset its new demand and thus, it is reasonable to conclude that it will have no impact on reliability or rates.

## **2.6 - Short term mitigations**

The water impacts of the Property will be fully mitigated by the financial contribution it will make to the water capacity fee program in addition to the ZWF Mitigation fee to mitigate 100% of the Property's new water demand.

## **2.7 - Long term mitigations**

The City's Water Shortage Emergency Plan authorizes the City Council to declare a water shortage emergency<sup>4</sup>. Emergencies are declared in four stages with specific reduction methods used for each stage. In the event the City experiences short term water shortages and determines it is necessary to purchase dry year water the Owner shall provide funds to the City of American Canyon to purchase dry-year water. Upon demand of the Public Works Director, when a water shortage has been declared by the City Council, the project may have to contribute a reasonably determined and reasonably allocated non-refundable payment to the water operations fund to allow the City to acquire dry-year water, if reasonably necessary. The projects contribution shall be equal to the properties reasonably allocated annual demand (AFY) times the City's reasonable cost of a one-year transfer. The annual demand will be implemented uniformly to all City water uses, determined by a City water audit of all City water uses for the previous water year and the analysis in reasonable detail made available to the Owner for reasonable review and comment prior to implementation. The contribution shall be recalculated and made on an annual basis, as reasonably necessary.

## **SECTION 3.0 – CAPACITY FEES AND SERVICE CHARGES**

### **3.1 - Capacity Fee**

Based on the American Canyon Water Capacity Fee Ordinance<sup>5</sup>, the Project shall pay a Water Capacity Fee is \$754,301.90. This amount one-time fee is based on the rate of \$32.81 per gallon x MDD (22,990 gpd).

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<sup>4</sup> ACMC §13.14.070

<sup>5</sup> ACMC §13.06.090

### **3.2 – Service Charge**

The Property is located outside the City’s corporate boundary but within the City’s Extraterritorial Water Service Area as defined by LAFCO. Based on the American Canyon Water Capacity Fee Ordinance<sup>6</sup>, the Property shall accrue a monthly service charge in the amount of \$8.15/100 cubic feet (in effect at the time of service and are subject to change), plus monthly meter fees.

### **3.3 - Reimbursable Improvements**

The Property proposes no improvement that would be eligible for reimbursement.

## **SECTION 4.0 - VINEYARDS ANALYSIS**

### **4.1 – Vineyards Decision**

The California Supreme Court decision “*Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova and Sunrise Douglas Property Owners Association, et al.*” sets forth guidelines for evaluating the water supply of a project under the California Environmental Quality Act (CEQA). It requires that water supplies not be illusory or intangible, that water supply over the entire length of the project be evaluated, and that environmental impacts of likely future water sources, as well as alternate sources, be summarized.

### **4.2 - Facts with Respect to Existing Water Supply and Demand**

The City’s 2015 Urban Water Management Plan (UWMP) analyzed existing demands and anticipated future demand growth. The 2015 UWMP also quantified the amounts and reliability of its water supplies in various planning horizon scenarios.

The City has entered into enforceable long-term contracts for its supply of potable water. The suppliers are the State Department of Water Resources (DWR) and City of Vallejo. The DWR supplies are provided by the State Water Project (SWP) and they vary each year up to a maximum of 5,200 acre-feet. The Vallejo supplies are 500 acre-feet of raw water as needed and up to 2,640 acre-feet of treated water may be purchased as a retail customer.

City customers consumed 2,976 acre-feet of SWP water in 2015. The 2015 UMWP determined adequate supplies exist for all planning horizons and supply scenarios, except for the “2030 single-dry scenario”.

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<sup>6</sup> ACMC §13.06.040



New water demand from the Project and reduced per capita consumption (facilitated by the City's Water Conservation Program) was anticipated as part of the assumed future demand growth in all planning horizons and supply scenarios in the 2015 UWMP. If the total ADD or MDD exceed the totals shown in this report, the applicant will be subject to penalties in-place at the time and has agreed to take the necessary measures to reduce demand to comply with this report.

#### **4.3 – Anticipated Water Supplies over the Life of the Project**

The City has developed a capacity fee capital program and water conservation program which, when implemented, will reasonably ensure an adequate supply of potable water and recycled water to meet demands under normal years, multiple-dry-years, and single-dry-years.

By fully complying with the City's ZWF Policy, the project will offset its new demand by paying an in-lieu fee that will be used by the City to implement its water conservation efforts to reduce potable water demands throughout its Water Service Area. Given the City's efforts to expand its water portfolio in terms of supply, storage, and conservation, and the fact that this project will not result in an increased demand on the existing system, it is reasonable to project there is sufficient water supply over the life of the project.

#### **4.4 – Environmental Impacts of Likely Future Water Sources**

According to the 2015 UWMP, adequate long-term supplies exist for all planning horizons and supply scenarios, except for the "2030 single-dry scenario". The Project will offset its new demand by paying an ZWF Mitigation fee that will be used by the City to further its water conservation efforts to reduce potable water demands throughout its Water Service Area. These efforts will have no significant impacts to the physical environment.

Moreover, it is unlikely that additional long-term supplies will need to be developed to meet the new demands attributable to the Project and it would be unnecessarily speculative to analyze the potential impact of such an unlikely activity.

Lastly, the City Council adopted a Mitigated Negative Declaration in November 2003 in conjunction with the adoption of the Recycled Water Facilities Plan. That plan identifies a series of projects which in conjunction with the water conservation program will reduce potable water demands throughout its Water Service Area. Impacts caused by the implementation of the Recycled Water Facilities Plan are less than significant because the new recycled water distribution pipelines were to be located in existing paved public rights of way.

**ACKNOWLEDGEMENT OF WATER SUPPLY ANALYSIS**

**E&P Tech Way  
Technology Way, Napa, CA 94558  
(APN 057-250-030)**

I, Dennis Paulley, acknowledge and accept  
the water supply analysis as set forth in this Water Supply Report  
dated 3/13/2023.

DocuSigned by:  
Dennis Paulley  
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(Signature)

Date: 3/15/2023