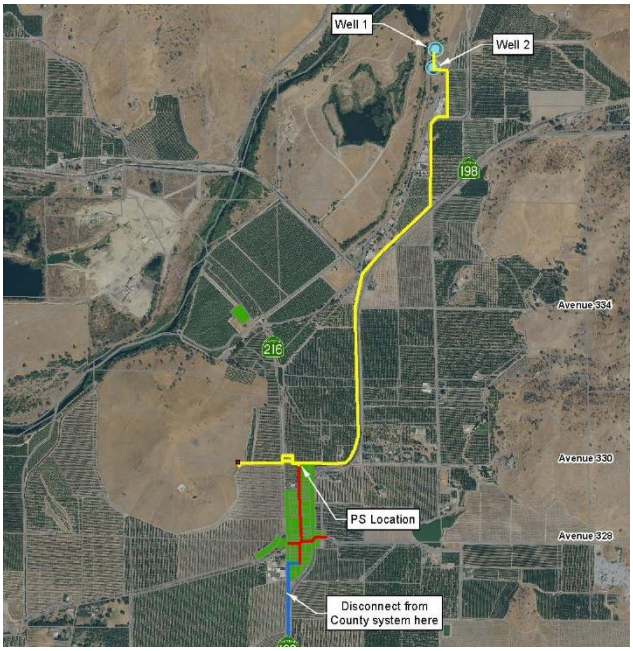

MITIGATED NEGATIVE DECLARATION

Lemon Cove Water System Improvement Project

November 2021

PREPARED FOR:

Lemon Cove Sanitary District
P.O. Box 44374
Lemon Cove, CA 93244

PREPARED BY:

Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 302
Visalia, CA 93291

Initial Study/Mitigated Negative Declaration

Lemon Cove Water System Improvement Project

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Crawford & Bowen Planning, Inc.
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Contact: Travis Crawford, AICP
(559) 840-4414

November 2021

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Chapter 1

INTRODUCTION

INTRODUCTION

1.1 Project Summary

This document is the Initial Study/Mitigated Negative Declaration describing the potential environmental effects of implementing a series of upgrades to the Lemon Cove Sanitary District's Water System (Project). The proposed Project is more fully described in Chapter Two – Project Description.

Lemon Cove Sanitary District (District) will act as the Lead Agency for this project pursuant to the *California Environmental Quality Act (CEQA)* and the *CEQA Guidelines.*

The Project is expected to be funded through a combination of District funds, Drinking Water State Revolving Fund (DWSRF) funds administered through the California State Water Resources Control Board (Water Board). One requirement of DWSRF funding is that the District will be required to comply with the Water Board's environmental requirements including CEQA-Plus. CEQA-Plus involves additional environmental analysis of certain topics to include federal thresholds, rules and regulations (for topics such as air, biology, cultural, etc.). In addition to this Mitigated Negative Declaration, the District is preparing a separate Environmental Package for submittal to the Water Board which includes the CEQA-Plus analysis.

1.2 Document Format

This IS/MND contains five chapters, and appendices. Section 1, Introduction, provides an overview of the project and the CEQA environmental documentation process. Chapter 2, Project Description, provides a detailed description of project objectives and components. Chapter 3, Initial Study Checklist, presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the proposed project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 4, Mitigation Monitoring and Reporting Program, provides the proposed mitigation measures,

completion timeline, and person/agency responsible for implementation and Chapter 5, List of Preparers, provides a list of key personnel involved in the preparation of the IS/MND.

Environmental impacts are separated into the following categories:

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less Than Significant After Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less Than Significant Impact. This category is identified when the project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.)

Regardless of the type of CEQA document that must be prepared, the basic purpose of the CEQA process as set forth in the CEQA Guidelines Section 15002(a) is to:

(1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

According to Section 15070(b), a Mitigated Negative Declaration is appropriate if it is determined that:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

The Initial Study contained in Section Three of this document has determined that with mitigation measures and features incorporated into the project design and operation, the environmental impacts are less than significant and therefore a Mitigated Negative Declaration will be adopted.

Chapter 2

PROJECT DESCRIPTION

Project Description

2.1 Project Location

The Lemon Cove Water System Improvement Project (Project) site is within the central-eastern portion of the San Joaquin Valley. The community of Lemon Cove is a census-designated place located near State Route (SR) 198, approximately seven miles southeast of Woodlake and 17 miles east of Visalia, in Tulare County, California (See Figure 1). The proposed Project will occur within various areas within the community of Lemon Cove. The new Well site is located approximately 2,500 feet north of SR 198 and approximately 2,000 feet west of Lake Kaweah within a vacant field. The transmission pipeline will convey water from the Well site along agricultural access roads until it reaches SR 198. From there, the pipeline will traverse south generally along the SR 198 alignment until it reaches Avenue 330. From Avenue 330, the pipeline will traverse west towards the proposed Pump Station. From the Pump Station, the pipeline will continue west for approximately 1,000 feet where the proposed Water Storage Tank is proposed to be installed. The Storage Tank will be installed on the slope of a hillside just west of the orchard access road. Refer to Figure 2 for the location of the Project components.

2.2 Setting

The Project area generally consists of agricultural lands and scattered residential and commercial establishments. The Kaweah River lies less than a quarter mile northwest of the site and the terrain is slightly sloping in that direction. An overflow ditch lies to the west of the proposed Well site. Neither the Kaweah River or the overflow ditch will be impacted by the Project. The Project site is bordered by citrus groves and orchards in all directions. Lake Kaweah is approximately 2,000 feet east of the Well site. Site photos for the areas involving the major Project components are depicted in Photos 1 through 6 that were taken in September 2021.

Figure 1 – Project Regional Map

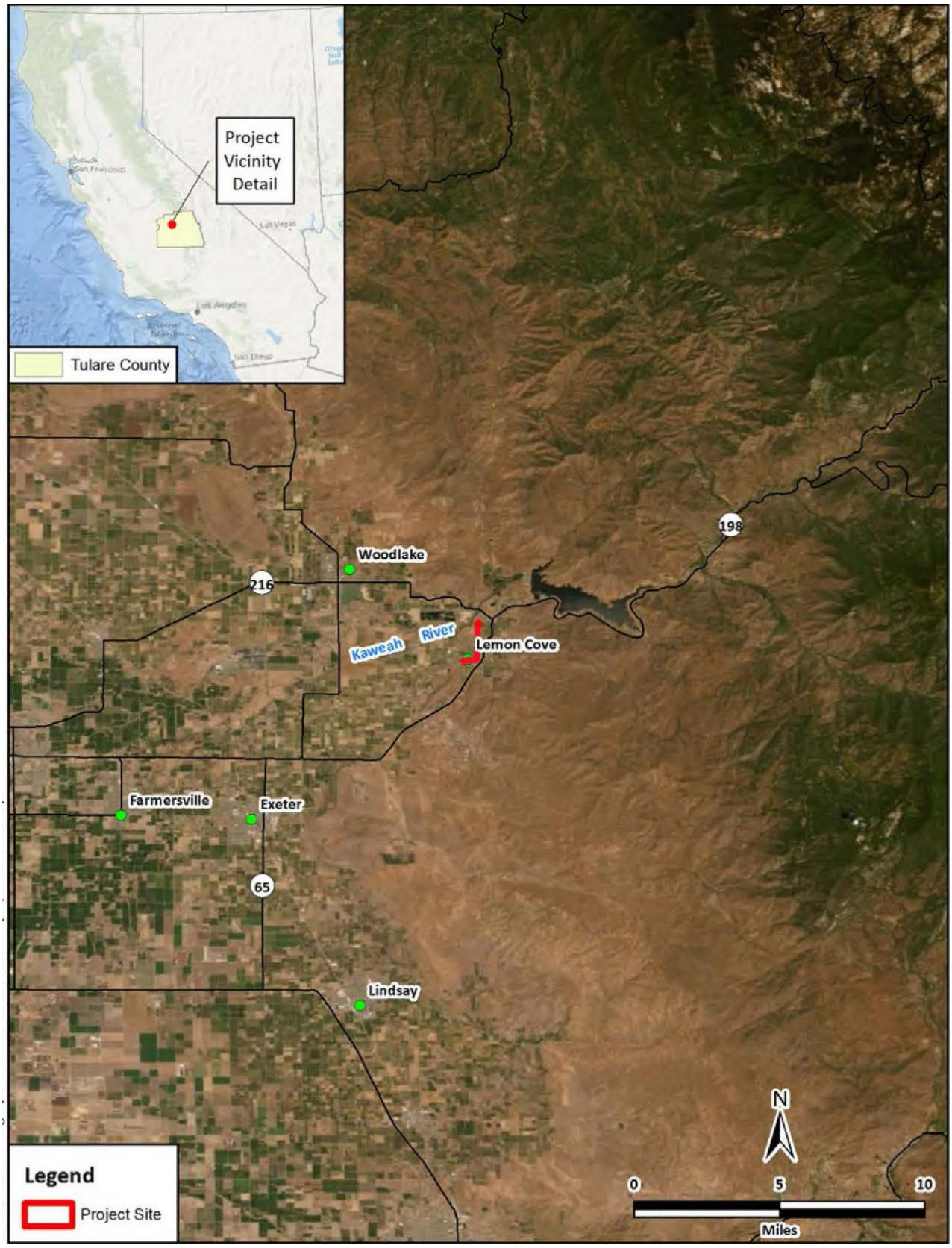


Figure 2 –Site Aerial

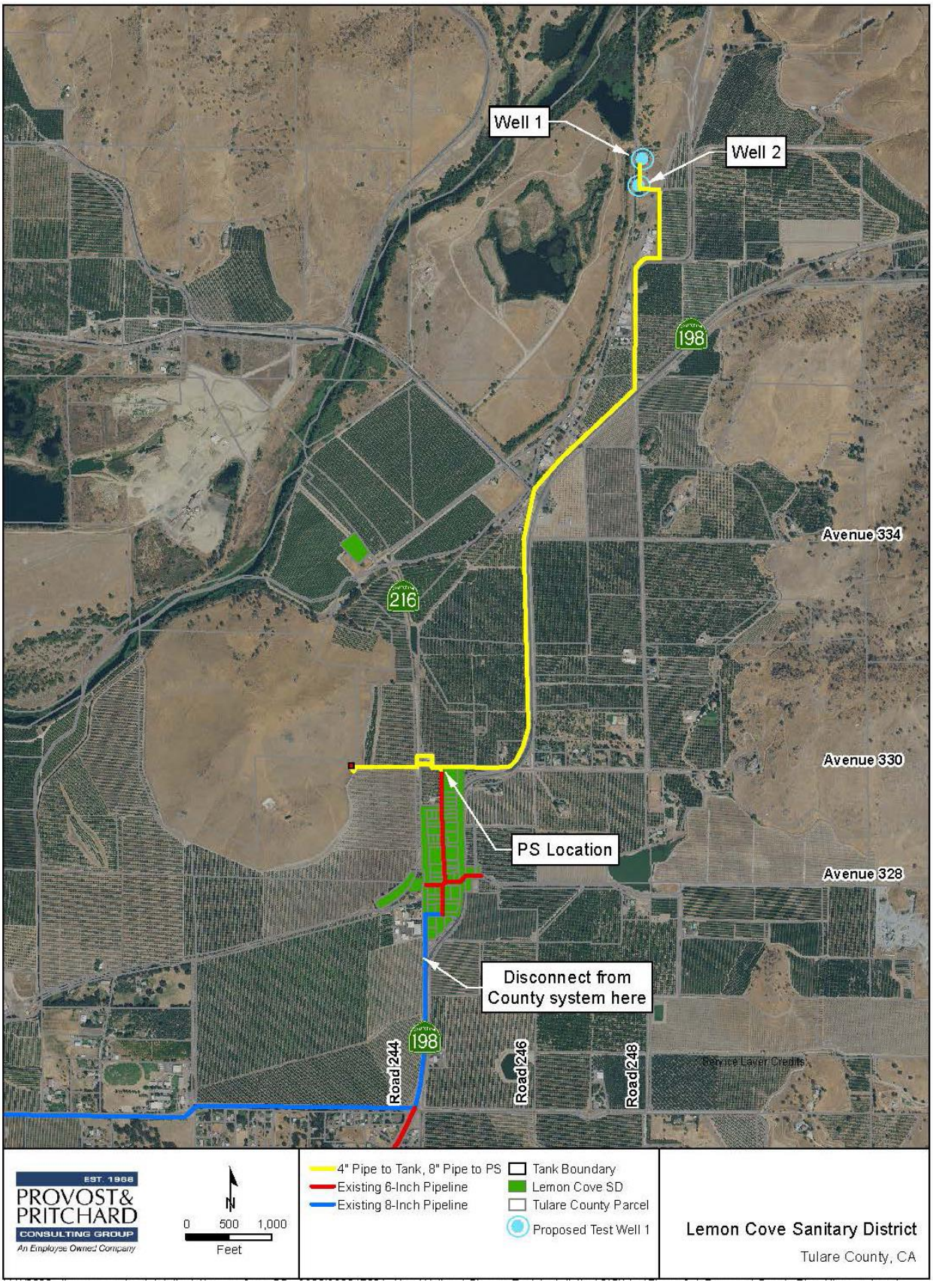


Photo 1: Proposed Well Field looking north.

Photo 2: Proposed Well Field looking east.

Photo 3: Pipeline alignment along SR 198 looking north.

Photo 4: Pipeline alignment along Avenue 330 looking west.

Photo 5: Pipeline alignment towards Hillside Tank looking west.

Photo 6: Location of Hillside Tank looking north.

2.3 Project Description

The proposed Project is fully described in the *Lemon Cove Sanitary District Preliminary Engineering Report* (May 2020) and the associated *Addendum #1 to the Lemon Cove Sanitary District Engineering Report* (November 2020) prepared by Provost & Pritchard Consulting Group (P&P) and is summarized herein. The Project will involve improving an existing drinking water system owned and operated by Lemon Cove Sanitary District. The District service area totals approximately 22.2 acres and includes approximately 61 water connections (serving approximately 109 people). The proposed Project will include the following:

- Two production wells (Well 1 and Well 2), pumps and motors: Title 22 requirements will be used to design the groundwater wells. Each well will be designed to provide at a minimum the estimated maximum day demand. The wells will produce water that meets Title 22 quality requirements. These include requirements for quality and quantity and recommended source including site and allocation allowed. They have 8-5/8-inch steel casings that were installed on each well to 100 feet. Below the casing, each well has an 8-inch diameter hole drilled in the hardrock to a depth of 510 feet and 530 feet. The pumps will be approximately 2-3 horsepower.
- Site piping, valves, flow monitoring equipment
- Fencing
- Access roadway improvements
- Electrical control panels
- Transmission pipeline: An 8-inch (inside diameter) transmission pipeline will be installed from the well site to the connection point as shown in Figure 2. Caltrans will require horizontal directional drilling for the installation of the transmission pipeline within their right-of-way. Outside of Caltrans right-of-way the pipelines will be installed with an open cut trench. The transmission main will be high-density polyethylene pipe (DR 13.5 or equivalent).
- Water Storage Tank (hillside): The hillside tank would be installed just west of the orchard access road as shown on Figure 2 (the tank is depicted as a small red box west of the Pump Station). The tank floor elevation would be approximately 595 feet above mean sea level (amsl), placing the tank at least 81 feet above the Lemon Cove distribution system. Installing the tank at this elevation will provide enough pressure to provide fire flow for the community, but normal day to day water deliveries would be provided by a small booster pump station located within the Community. The tank height will be approximately 24 feet tall and approximately 26 feet in diameter. Maximum slopes are

1.5H:1V. If a future geotechnical report indicates that these slopes are not sufficiently stable, retaining walls may be required. The site will be graded to promote sheet flow, and proper erosion control will be installed on the newly graded slopes.

- Bladder tank
- Tank access road
- Booster Pump Station with Variable Frequency Drives (VFDs)s: A duplex booster pump system will be installed on LCSD property to provide non-fire flows to the community. The pumps would be fed from the hillside tank. The pumps would have VFDs to maintain a relatively constant pressure in the system. The pump station would also include a small bladder tank for surge control. A CLA-VAL type control valve with check valve configuration would be included at the booster pump station. The valve would be typically closed when the booster pumps are operating and the system pressure is greater than pressure generated by the elevation of the water in the tank (estimated to be approximately 35 psi), but would open when the system pressure falls below that point, either due to a fire flow demand or in the event of a power outage. Therefore, a permanent standby generator is not proposed.

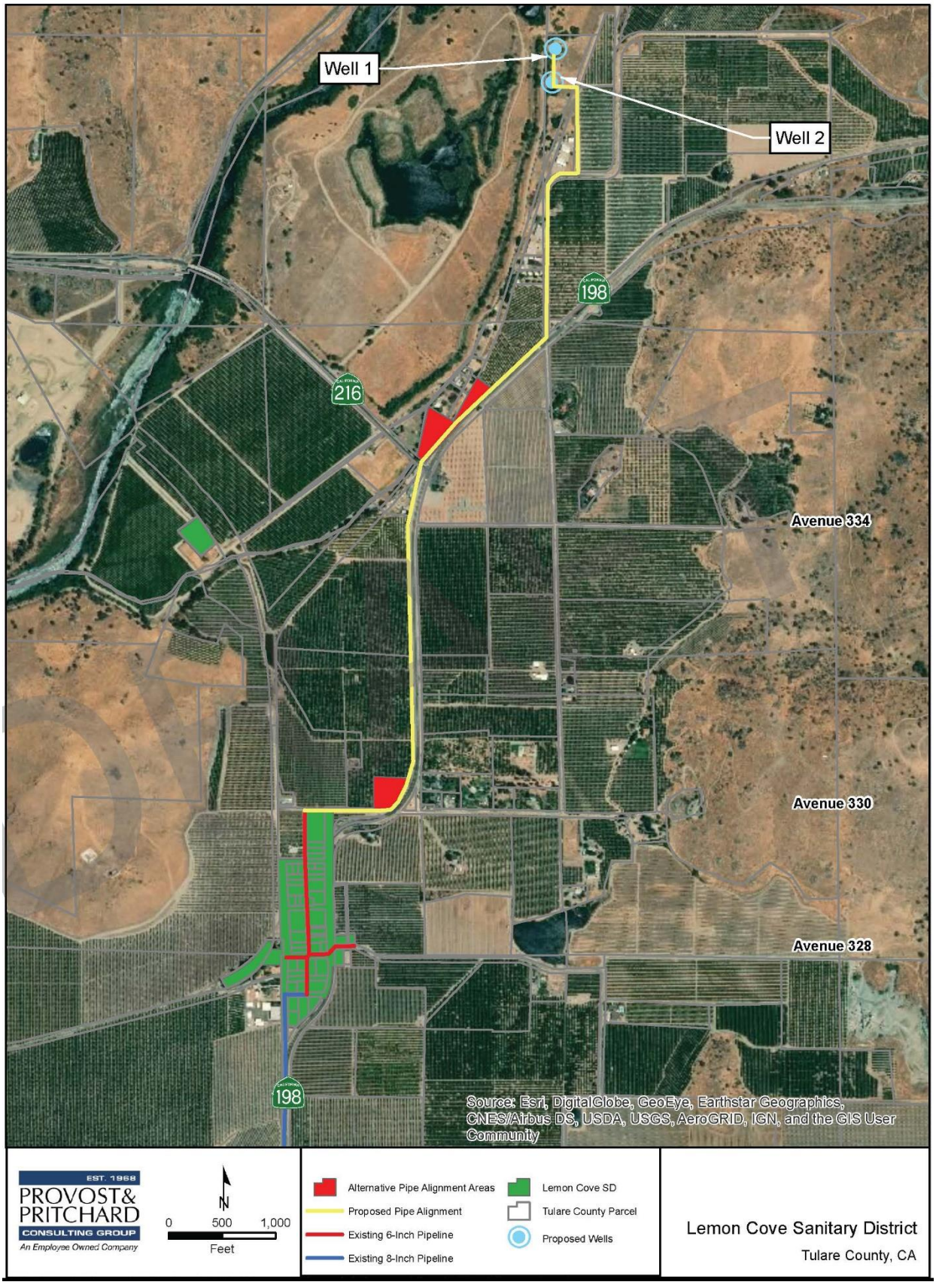
Land Acquisition

For the well site, LCSD has an option agreement in place for the purchase of the well site and the associated easement. Additionally, a longitudinal encroachment permit would be required from Caltrans to construct the proposed water supply pipeline in State Highway 198. As part of the planning grant process, P&P engaged preliminarily with Caltrans to determine what the requirements might be for an encroachment permit in State Highway 198 along the Project alignment. Due to Caltrans requirements, constructing pipeline within Caltrans right-of-way is more expensive than constructing pipeline outside of Caltrans right-of-way. LCSD has identified several areas along State Route 198 that may have room for construction of pipeline outside of Caltrans right-of-way on private property. If LCSD decides to try to utilize these areas outside of Caltrans right-of-way, it will have to execute option agreements with each individual landowner that will have pipeline constructed on their property. It is unclear at this point if option agreements can be executed with all landowners. Figure 3 shows the proposed supply pipeline alignment in State Route 198 align with the potential areas where the pipeline may be realigned for cost savings reasons. For the storage tank site, LCSD will be required to acquire the property for this component.

Construction:

Construction will occur as plans and funding are in place and is expected to take several months. It is expected to occur in 2022 or 2023.

Figure 3 – Transmission Pipeline Options



2.4 Objectives

The primary objectives of the proposed Project are as follows:

- The Lemon Cove Sanitation District's primary objective is to provide clean drinking water while maintaining existing levels of regulatory compliance for the protection of water quality and public health.
- The District seeks to operate the improved water system with the most cost-effective methods available that meet overall system performance and regulatory compliance requirements.

2.5 Other Required Approvals

The proposed Project will include, but not be limited to, the following regulatory requirements:

- The adoption of a Mitigated Negative Declaration by the District
- San Joaquin Valley Air Pollution Control District (dust control and other construction/operation permits)
- Regional Water Quality Control Board approval (SWPPP if applicable)
- California Water Resources Control Board (CEQA-plus approval

Chapter 3

IMPACT ANALYSIS

Initial Study Checklist

3.1 Environmental Checklist Form

Project title: Lemon Cove Water System Improvement Project

Lead agency name and address:

Lemon Cove Sanitary District
P.O. Box 44374
Lemon Cove, CA 93244

Contact person and phone number:

Bill Pensar
(559) 597-2504

Project location:

The Lemon Cove Water System Improvement Project (Project) site is within the central-eastern portion of the San Joaquin Valley. The community of Lemon Cove is a census-designated place located near State Route (SR) 198, approximately seven miles southeast of Woodlake and 17 miles east of Visalia, in Tulare County, California (See Figure 1). The proposed Project will occur within various areas within the community of Lemon Cove. The new Well site is located approximately 2,500 feet north of SR 198 and approximately 2,000 feet west of Lake Kaweah within a vacant field. The transmission pipeline will convey water from the Well site along agricultural access roads until it reaches SR 198. From there, the pipeline will traverse south generally along the SR 198 alignment until it reaches Avenue 330. From Avenue 330, the pipeline will traverse west towards the proposed Pump Station. From the Pump Station, the pipeline will continue west for approximately 1,000 feet where the proposed Water Storage Tank is proposed to be installed. The Storage Tank will be installed on the slope of a hillside just west of the orchard access road. Refer to Figure 2 for the location of the Project components.

Project sponsor's name/address:

Lemon Cove Sanitary District
P.O. Box 44374
Lemon Cove, CA 93244

Description of project:

Lemon Cove Sanitary District proposes to improve its water supply system by installing two new water wells, transmission pipelines, a pump station and water storage tank. The proposed Project is more fully described in Chapter Two – Project Description.

Surrounding land uses/setting:

The Project area generally consists of agricultural lands and scattered residential and commercial establishments. The Kaweah River lies less than a quarter mile northwest of the site and the terrain is slightly sloping in that direction. An overflow ditch lies to the west of the proposed Well site. Neither the Kaweah River or the overflow ditch will be impacted by the Project. The Project site is bordered by citrus groves in all directions. Lake Kaweah is approximately 2,000 feet east of the Well site. Site photos for the areas involving the major Project components are depicted in Photos 1 through 6.

Other Required Approvals:

- The adoption of a Mitigated Negative Declaration by the Lemon Cove Sanitary District
- San Joaquin Valley Air Pollution Control District (dust control and other construction/operation permits)
- Regional Water Quality Control Board approval
- CA Water Resources Control Board (CEQA-plus approval)

California Native American Tribal Consultation:

Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun or is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In accordance with Assembly Bill (AB) 52, potentially affected Tribes were formally notified of this Project and were given the opportunity to request consultation on the Project. The District's consultant contacted the Native American Heritage Commission, requesting a contact list of applicable Native American Tribes, which was provided to the consultant. Using the NAHC

provided contact list, letters were sent to identify Native American interests and concerns in the Project area. No responses were received from any of the Tribal contacts.

3.2 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources and Forest Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

3.3 Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Travis Crawford (Environmental Consultant) for the

Lemon Cove Sanitary District

Date

I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

RESPONSES

a. Have a substantial adverse effect on a scenic vista?
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. The Sierra Nevada Mountains and foothills, as well as the Kaweah River, are the primary natural and visual resources in the proposed Project region. Views of the mountains are afforded only

during clear conditions due to poor air quality in the valley. Distant views of the Sierra Nevada Mountains and close-up views of the Kaweah River would largely be unaffected by the development of the Project because of the nature of the Project, distance and limited visibility of these features from the Project site. The Project will not impact views of a protected scenic vista or resource from surrounding vantage points.

The nearest eligible scenic highway is a section of SR 198, over 20 miles west of the Project site. The Project is not visible to or from this eligible scenic highway due to intervening land uses.

Therefore, the Project has ***a less than significant impact*** on protected scenic vistas or designated scenic resources or highways.

Mitigation Measures: None are required.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?

Less Than Significant Impact. The proposed Project involves improvements to the existing water supply system that will occur within the Community of Lemon Cove. Improvements to the Water System will generate minimal visual impact. The proposed Well site is located in a remote field that is not visible from existing roadways or residences. This area is a vacant field that is surrounded by low level vegetation and crops. The wells themselves will be small above-ground structures surrounded by fencing. The wells will not be visually imposing or at a height that is visible from surrounding areas. The pipeline itself will not be visible (once installed) as it will be below grade and the land will be restored to pre-Project conditions following construction. The Booster Pump Station will be a small structure surrounded by fencing in an area adjacent to Avenue 330 along the pipeline alignment. The Water Storage Tank will be installed on a low hillside approximately 1,000 west of the Pump Station at an elevation of approximately 595 feet above mean sea level. The Storage Tank will be approximately 24 feet tall and 26 feet in diameter. This will be installed at a dead-ended agricultural roadway not anticipated to experience much traffic. The Storage Tank will be visible to some nearby residences, as it is located at a slightly higher elevation than the scattered residential homes and businesses that exist to the east of the proposed Storage Tank. However, most of the improvements will not be visible outside of the Project areas and the

improvements will have similar aesthetic features to other structures and developments in the area. Because these improvements are not visually imposing and do not represent atypical development in Lemon Cove, the visual character and quality of views in the area will not be significantly impacted.

Therefore, the Project would have ***less than significant impacts*** on the visual character of the area.

Mitigation Measures: None are required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Currently the sources of light in the Project area are from occasional vehicles traveling along SR 198 and roadways that are adjacent to the proposed Project components. Other existing sources of light consist of residential homes and businesses. No additional lighting is proposed by the Project and thus will not result in additional new sources of light or glare. The Storage Tank will be painted with neutral tones to minimize glare or other visual impacts. Accordingly, the proposed Project would not create substantial new sources of light or glare. Potential impacts are ***less than significant***.

Mitigation Measures: None are required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

RESPONSES

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d. Result in the loss of forest land or conversion of forest land to non-forest use?

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less Than Significant Impact. The proposed Project is located in an area dominated by agricultural facilities, scattered residences and commercial establishments. Most of the Project disturbance areas of the Project are considered urban, build up land by the State Farmland Mapping and Monitoring Program (such as the pipeline alignment). The Project will not change any land uses. However, some areas, such as the Well Site and Storage Tank are located on vacant areas that have been used for grazing and/or other agricultural operations in the past. These small areas total approximately 1 acre for the Well Site and less than ½ acre for the Storage Tank and associated access road. It should be noted that these areas are currently vacant. As such, the proposed Project would not convert significant prime farmland, conflict with an existing agricultural use, or result in the conversion of existing farmland. Additionally, no Williamson Act contracted lands would be impacted due to the Project.

The proposed Project does not conflict with any forest land or Timberland Production or result in any loss of forest land. The proposed Project does not include any changes which will affect the existing environment. There is a ***less than significant impact.***

Mitigation Measures: None are required.

III. AIR QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?	☐	☐	☒	☐

Responses:

a. Conflict with or obstruct implementation of the applicable air quality plan?

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The proposed Project lies within the San Joaquin Valley Air Basin (SJVAB). At the Federal level, the SJVAB is designated as extreme nonattainment for the 8-hour ozone standard, attainment for PM_{10} and CO, and nonattainment fort $PM_{2.5}$. At the State level, the SJVAB is designated as nonattainment for the 8-hour ozone, PM_{10}, and $PM_{2.5}$ standards. Although the Federal 1-hour ozone standard was revoked in 2005, areas must still attain this standard, and the SJVAPCD recently requested an EPA finding that the SJVAB has attained the standard based

on 2011-2013 data.[1] To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has multiple air quality attainment plan (AQAP) documents, including:

- Extreme Ozone Attainment Demonstration Plan (EOADP) for attainment of the 1-hour ozone standard (2004);
- 2007 Ozone Plan for attainment of the 8-hour ozone standard;
- 2007 PM_{10} Maintenance Plan and Request for Re-designation; and
- 2008 $PM_{2.5}$ Plan.

Because of the region's non-attainment status for ozone, $PM_{2.5}$, and PM_{10}, if the Project-generated emissions of either of the ozone precursor pollutants (ROG or NOx), PM_{10}, or $PM_{2.5}$ were to exceed the SJVAPCD's significance thresholds, then the Project uses would be considered to conflict with the attainment plans. In addition, if the Project uses were to result in a change in land use and corresponding increases in vehicle miles traveled, they may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

The annual significance thresholds to be used for the Project emissions are as follows[2]:

Pollutant/ Precursor	Construction Emissions (tpy)	Operational Emissions (permitted) (tpy)	Operational Emissions (non-permitted) (tpy)
CO	100	100	100
NOx	10	10	10
ROG	10	10	10
SOx	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

The proposed Project, once constructed, will not generate on-going air emissions. The system will operate from electrical power and will only require the use of temporary backup generators if electrical power fails. Therefore, air emissions from the Project are limited to construction emissions. The estimated annual construction emissions are provided below. The Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version

[1] San Joaquin Valley Air Pollution Control District. Guide to Assessing and Mitigating Air Quality Impacts. March 19, 2015. Page 28. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf. Accessed September 2019.

[2] San Joaquin Valley Air Pollution Control District. March 19, 2015. Guide for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf. Page 80. Accessed September 2019.

9.0.0 was utilized to estimate emissions generated from installing the Water Wells, Pipelines, Booster Pump Station, Water Storage Tank and related improvements. The results are summarized in Table 1 and the Emissions Model output files are provided in Appendix A. A conservative approach was utilized when modeling emissions. It was assumed that construction activities would take place across the entirety of the Project area.

Table 1
Proposed Project Air Emissions

Pollutant/ Precursor	Construction Emissions (tpy)	Threshold/ Exceed?
CO	4.21	100/**N**
NOx	4.23	10/**N**
ROG	0.43	10/**N**
SOx	0.01	27/**N**
PM_{10}	2.43	15/**N**
$PM_{2.5}$	0.63	15/**N**

As demonstrated in Table 1, estimated construction and operational emissions would not exceed the SJVAPCD's significance thresholds for ROG, NOx, SOx, PM_{10}, and $PM_{2.5}$. As a result, the Project uses would not conflict with emissions inventories contained in regional air quality attainment plans and would not result in a significant contribution to the region's air quality non-attainment status.[3]

Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The SJVAPCD provides screening criteria to determine when to quantify local CO concentrations based on impacts to the level of service (LOS) of roadways in the Project vicinity.

As further discussed in the Transportation/Traffic checklist evaluation, the Project would not generate substantial traffic that would reduce the level of service on local roadways. Therefore, the Project would not significantly contribute to an exceedance that would exceed state or federal CO standards. Additionally, as the estimated construction and operational emissions are below SJVAPCD thresholds, any cumulative considerable increase in criteria pollutants would be less than significant.

As described above, the Project will not occur at a scale or scope with potential to contribute

[3] San Joaquin Valley Air Pollution Control District. Guide to Assessing and Mitigating Air Quality Impacts. March 19, 2015. Page 65. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf. Accessed October 2021.

substantially or cumulatively to existing or projected air quality violations, impacts, or increases of criteria pollutants for which the San Joaquin Valley region is under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). The proposed Project will comply with all applicable air quality plans. Therefore, no violations of air quality standards will occur and no net increase of pollutants will occur. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less than Significant Impact. If the proposed Project were to result in a sensitive odor receptor being located in the vicinity of an undesirable odor generator, the impact would be considered significant. The SJVAPCD regulates odor sources through its nuisance rule, Rule 4102, but has no quantitative standards for odors. The SJVAPCD presents a list of project screening trigger levels for potential odor sources in its GAMAQI, which is displayed in Table 2. If the project were to result in sensitive receptors being located closer to an odor generator in the list in Table 2 than the recommended distances, a more detailed analysis including a review of SJVAPCD odor complaint records is recommended.

Table 2
Screening Levels for Potential Odor Sources[4]

Odor Generator	**Distance (Miles)**
Wastewater Treatment Facilities	2
Sanitary Landfill	1
Transfer Station	1
Composting Facility	1
Petroleum Refinery	2
Asphalt Batch Plant	1
Chemical Manufacturing	1
Fiberglass Manufacturing	1
Painting/Coating Operations (i.e. auto body shop)	1

[4] San Joaquin Valley Air Pollution Control District. March 19, 2015. Guide for Assessing and Mitigating Air Quality Impacts. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf . Page 103. Accessed September 2019.

Food Processing Facility	1
Feed Lot/ Dairy	1
Rendering Plant	1

Significant odor problems are defined as:

- More than one confirmed complaint per year averaged over a three-year period; or
- Three unconfirmed complaints per year averaged over a three-year period.

There are sensitive receptors located within 2 miles of the Project site. However, the Project itself does not result in odors since it is a water distribution system. As such, any impacts would be considered less than significant.

Mitigation Measures: None are required.

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Responses:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation. The Project site consists of approximately 1 mile of pipeline, the Well Site (approximately 1 acre) and the Water Storage Tank site (approximately 0.5 acres). The Project areas are vacant and are generally void of substantial vegetation. The Project area generally consists of agricultural lands and scattered residential and commercial establishments. The Kaweah River lies less than a quarter mile northwest of the site and the terrain is slightly sloping in that direction. An overflow ditch lies to the west of the proposed Well Site. Neither the Kaweah River or the overflow ditch will be impacted by the Project. The Project site is bordered by citrus groves and orchards in all directions. Lake Kaweah is approximately 2,000 feet east of the Well site. The Project site is underlain by 90% Tujunga sand soil, alluvial fans (NRCS 2019).

Site photos for the areas involving the major Project components are depicted in Photos 1 through 6 that were taken in September 2021.

Photo 1: Proposed Well Field looking north.

Photo 2: Proposed Well Field looking east.

Photo 3: Pipeline alignment along SR 198 looking north.

Photo 4: Pipeline alignment along Avenue 330 looking west.

Photo 5: Pipeline alignment towards Hillside Tank looking west.

Photo 6: Location of Hillside Tank looking north.

The California State Water Board has temporarily waived the requirements for biological surveys for drinking water projects. As such, a formal biological survey was not conducted for the proposed Project. However, a previous Biological Resource Evaluation (BRE) was prepared for a project for the Lemon Cove Sanitary District (for their proposed Wastewater System Improvement Project) in September 2019 by Colibri Ecological Consulting, LLC. The proposed Project is in a similar area to the previous BRE. As part of the previous BRE, the California Natural Diversity Data Base (CNDDB), the California Native Plant Society's Inventory of Rare and Endangered Plants, and the USFWS special status species lists were queried for records of special-status plant and animal species in the Project area (10 mile radius). Based on the results of the records search, certain mitigation measures are being included to ensure that impacts to protected species are less than significant.

The proposed Project will occur generally in previously disturbed areas that lack substantial vegetation (as shown in Photos 1 through 6). No trees are proposed to be removed by the Project. Although no protected species are anticipated to occur within the Project disturbance footprint, the Project could potentially impact the state-listed as threatened Swainson's hawk, which could nest in trees near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs, nestlings, or young, or otherwise lead to nest abandonment for Swainson's hawks. Loss of fertile eggs, nestlings, or young or any activities resulting in nest abandonment would constitute a significant impact. Implementation of mitigation measure BIO-1 will reduce any impacts to ***less than significant.***

Mitigation Measures:

BIO – 1 Protect nesting Swainson's hawks

1. To the extent practicable, construction shall be scheduled to avoid the Swainson's hawk nesting season, which extends from March through August.
2. If it is not possible to schedule work between September and February, a qualified biologist shall conduct a survey for active Swainson's hawk nests within 0.25 miles of the Project site no more than 14 days prior to the start of construction. If an active nest is found within 0.25 miles, and the qualified biologist determines that Project activities would disrupt nesting, a construction-free buffer or limited operating period shall be implemented in consultation with the CDFW.

b. <u>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</u>

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. No wetlands, riparian habitat, or other sensitive natural community were present in the proposed Project area and as such, there would be ***no impacts*** associated with the proposed improvements.

Mitigation Measures: None are required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant with Mitigation. The Project could impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act and California Fish and Game Code. Migratory birds could be expected to nest in trees near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by the CDFW. Loss of fertile eggs or nestlings, or any activities resulting in nest abandonment, could constitute a significant impact if the species is particularly rare in the region. Implementation of BIO-2 would ensure any impacts remain ***less than significant***.

Mitigation Measures:

BIO – 2 Protect Nesting Birds

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.
2. If it is not possible to schedule construction between September and January, preconstruction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas for nests. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to

be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant Impact. No biologically sensitive areas will be significantly impacted by the proposed Project. Additionally, there are no adopted local, regional, or state habitat conservation plans adopted for the area. As such, there impact is ***less than significant.***

Mitigation Measures: None are required.

V. CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

RESPONSES

a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

c. Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact With Mitigation. The Project consists of approximately 1 linear mile of pipeline, the Well Site (approximately 1 acre) and the Water Storage Tank site (approximately 0.5 acres). The Project sites are generally vacant and void of substantial vegetation or trees. The Project area generally consists of agricultural lands and scattered residential and commercial establishments. The Kaweah River lies less than a quarter mile northwest of the site and the terrain is slightly sloping in that direction. An overflow ditch lies to the west of the proposed Well Site. Neither the Kaweah River or the overflow ditch will be impacted by the Project. The Project site is bordered by citrus groves and orchards in all directions. Lake Kaweah is approximately 2,000 feet east of the Well site.

The California State Water Board has waived the requirements for cultural surveys for drinking water projects. As such, a formal cultural survey was not conducted for the proposed Project. However, a

Cultural Resources Records Search was conducted at the Southern San Joaquin Valley Archaeological Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) to identify previously recorded cultural resources and prior studies within the Project footprint and surrounding 0.5-mile radius of the Project (See CHRIS results in Appendix B). According to the CHRIS results, there have been five previous cultural studies conducted within the Project area. Based on the results, there are three recorded resources in the Project Area: one historic era railroad and two historic era transmission lines. However, none of these resources will be impacted by the water system Project.

In addition, the Native American Heritage Commission Sacred Lands Files were also consulted. This search resulted in no sacred sites or tribal cultural resources being known in the immediate vicinity of the proposed Project (See Appendix C for the Sacred Land results). See Section 3.18 – Tribal Cultural Resources for information pertaining to Tribal Consultation outreach.

The Project's area of potential effect (APE) contains all construction, staging, and lay-down areas for the Project. The horizontal APE consists of approximately 1 linear mile of pipeline, the Well Site (approximately 1 acre) and the Water Storage Tank site (approximately 0.5 acres). With the exception of the new Water Wells, the vertical APE, estimated at 10-feet, is the maximum depth of excavation necessary for the installation of the pipelines, Booster Pump Station and Water Storage Tank. For the Water Wells, the maximum depth of the wells will be approximately 530 feet (8 inch diameter pipe).

Although no other cultural or archaeological resources, paleontological resources or human remains have been identified in the Project area, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measures CUL – 1 and CUL – 2 will be implemented to ensure that Project will result in ***less than significant impacts with mitigation***.

Mitigation Measures:

CUL – 1 Should evidence of prehistoric archeological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the District, describing the testing program and subsequent results. These reports shall identify any program mitigation that the Project proponent shall complete in order to mitigate

archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources).

CUL – 2 In order to ensure that the proposed Project does not impact buried human remains during Project construction, the Project proponent shall be responsible for on-going monitoring of Project construction. Prior to the issuance of any grading permit, the Project proponent shall provide the District with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall be halted until the Tulare County coroner is contacted and the coroner has made the determinations and notifications required pursuant to Health and Safety Code Section 7050.5. If the coroner determines that Health and Safety Code Section 7050.5(c) require that he give notice to the Native American Heritage Commission, then such notice shall be given within 24 hours, as required by Health and Safety Code Section 7050.5(c). In that event, the NAHC will conduct the notifications required by Public Resources Code Section 5097.98. Until the consultations described below have been completed, the landowner shall further ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices where Native American human remains are located, is not disturbed by further development activity until the landowner has discussed and conferred with the Most Likely Descendants on all reasonable options regarding the descendants' preferences and treatments, as prescribed by Public Resources Code Section 5097.98(b). The NAHC will mediate any disputes regarding treatment of remains in accordance with Public Resources Code Section 5097.94(k). The landowner shall be entitled to exercise rights established by Public Resources Code Section 5097.98(e) if any of the circumstances established by that provision become applicable.

VI. ENERGY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Responses:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The proposed Project involves improvements to the District's water supply system. During construction, the Project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass. Title 24 Building Energy Efficiency Standards would provide guidance on construction techniques for the wastewater pond to maximize energy conservation and it is expected that contractors and the District have a strong financial incentive to use recycled materials and products originating from nearby sources in order to reduce materials costs. As such, it is anticipated that materials used in construction and construction vehicle fuel energy would not involve the wasteful, inefficient, or unnecessary consumption of energy.

There would be little operational energy consumed by the upgraded Water System, as the system utilizes a pump station with 4 pumps operated on variable frequency drives. Operational energy will primarily be consumed during each vehicle trip associated with the proposed use; however, the Project site requires very little operator oversight and few trips are expected.

As discussed in Impact XVII – Transportation/Traffic, the proposed Project would not generate significant on-going additional vehicle trips. However, during construction there will be a temporary increase in vehicular trips to the Project site. The length of these trips and the individual vehicle fuel efficiencies are not known; therefore, the resulting energy consumption cannot be accurately calculated. Adopted federal vehicle fuel standards have continually improved since their original adoption in 1975 and assists in avoiding the inefficient, wasteful, and unnecessary use of energy by vehicles.

As discussed previously, the proposed Project would be required to implement and be consistent with existing energy design standards at the local and state level, such as Title 24. The Project would also be subject to energy conservation requirements in the California Energy Code and CALGreen for the new plant house. Adherence to state code requirements would ensure that the Project would not result in wasteful and inefficient use of non-renewable resources due to building operation.

Therefore, any impacts are ***less than significant***.

Mitigation Measures: None are required.

VII. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the most recently	☐	☐	☒	☐

VII. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
adopted Uniform Building Code creating substantial direct or indirect risks to life or property?				
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Responses:

a-i. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

a-ii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a-iii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a-iv. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Less Than Significant Impact. The proposed Project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act. The nearest known potentially active fault is the Clovis Fault, located almost 50 miles northwest of the site.[5] No active faults have been mapped within the Project boundaries, so there is no potential for fault rupture. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of seismic hazards on the Project would be ***less than significant.***

Mitigation Measures: None are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact With Mitigation. Construction activities associated with the Project involves excavation of soil for installation of an upgraded Water System, including installation of new water wells, pipelines, booster pump station and a water storage tank. These activities could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the Project site. During construction, nuisance flow caused by minor rain could flow off-site. The District and/or contractor would be required to employ appropriate sediment and erosion control BMPs as part of a Stormwater Pollution Prevention Plan (SWPPP) that would be required in the California National Pollution Discharge Elimination System (NPDES). In addition, soil erosion and loss of topsoil would be minimized through implementation of the SVJAPCD fugitive dust control measures (See Section 3.3 – Air Quality). Once construction is complete, the Project would not result in soil erosion or loss of topsoil. Mitigation Measure GEO – 1 will ensure that impacts remain ***less than significant with mitigation.***

Mitigation Measures:

GEO – 1 In order to reduce on-site erosion due to Project construction and operation, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods by a registered civil

[5] California Department of Conservation. Fault Activity Map of California (2010). http://maps.conservation.ca.gov/cgs/fam/. Accessed November 2021.

engineer or certified professional. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of the SWPPP required by the California State Water Resources Control Board.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

Less Than Significant Impact. See Section VIa. above. The site is not at significant risk from earthquakes, ground shaking, liquefaction, or landslide and is otherwise considered geologically stable. Expansive soils are soils that expand when water is added and shrink when they dry out. Soils in and around the WS site include primarily Tujunga sand with gravel – NRCS 2019, which is well-drained sand formed in alluvium. These soils have no limitations for load supporting capacity and as such, would not be classified as expansive. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project does not include any wastewater disposal systems. Therefore, there is ***no impact.***

Mitigation Measures: None are required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. There are no known paleontological resources on or near the site. As identified in Section 3.5 – Cultural Resources, mitigation measures have been added that will protect unknown (buried) resources during construction, including paleontological resources. In addition, the site is substantially disturbed and/or graded and there are no unique geological features on site or in the area. Therefore, there is a ***less than significant impact.***

Mitigation Measures: None are required.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Responses:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The U.S. Environmental Protection Agency published a rule for the mandatory reporting of greenhouse gases from sources that in general emit 25,000 metric tons or more of carbon dioxide (CO2) per year. As shown in the Air Emissions Modeling results (Appendix A), the Project will produce 778.98 tons per year of CO2. This represents less than one percent of the reporting threshold. The impact is therefore considered ***less than significant.***

Additionally, emissions from construction are temporary in nature. The SJVAPCD has implemented a guidance policy for development projects within their jurisdiction. This policy, "Guidance for Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," approved by the Board on December 17, 2009, does not address temporary GHG emissions from construction, nor does this policy establish numeric thresholds for ongoing GHG emissions. Therefore, construction-generated GHGs are ***less than significant.***

Mitigation Measures: None are required.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Responses:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. While grading and construction activities may involve the limited transport, storage, use or disposal of hazardous materials, such as the fueling/servicing of construction equipment onsite, the activities would be short-term or one-time in nature and would be subject to federal, state, and local health and safety regulations.

Long-term operation of the proposed Project would involve transport, storage, use or disposal of hazardous materials. Water treatment chemicals may be utilized at the treatment site. Small quantities of petroleum products, thinners, and paints would also likely be used on-site.

There are several federal, state and local requirements and regulations that are designed to minimize risks from accidental releases of hazardous materials and the proposed Project will be in compliance with all applicable requirements and regulations. Any hazardous material storage and use areas associated with the Project will be built and operated in compliance with the minimum requirements of the Uniform Fire Code and the California Fire Code. Additionally, the Water Storage Tank will be

constructed in compliance with the California Building Code, which requires design features to resist forces generated by a major earthquake with limited architectural or structural damage.

With implementation of the proposed Project, there are no reasonably foreseeable upset and accident conditions that would create a significant hazard to the public due to the release of hazardous materials. Impacts are considered ***less than significant***.

Mitigation Measures: None are required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. No schools are located within 0.25 mile of the Project site. ***No impact*** would occur.

Mitigation Measures: None are required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. A database search was conducted to identify recorded hazardous materials incidents in the Project area. The search included recorded incidents on the National Priorities List (NPL), State Priority List (SPL), the Superfund Comprehensive Environmental Response Compensation and Liability Information System List (CERLIS), the EPA's emergency response notification system list (ERNS), and other federal, state, and local agency databases. The Project site was not listed in any of the databases searched. There is ***no impact.***

Mitigation Measures: None are required.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. There are no public or private airport within two miles of the Project site; the nearest airport is the Woodlake Airport approximately 4.4 miles west. The proposed Project is not located within any airport safety zone. The Project will have ***no impact*** to airport operations.

Mitigation Measures: None are required.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The proposed Project involves upgrading the infrastructure of an existing water system. Construction activities will take place within right of ways and will not cause any road closures that could interfere with any adopted emergency response or evacuation plan. The construction contractor will be required to work with the County (public works, sheriff/fire, etc.) if any roadway diversions are required to ensure that adequate access is maintained for residents and emergency vehicles. However, no such road diversions are anticipated. As such, any impacts will be ***less than significant***.

Mitigation Measures: None are required.

g. Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

No Impact. Implementation of the Project would not change the degree of exposure to wildfires because no new housing or businesses will be constructed and there are no wildlands in the Project vicinity, thus precluding the possibility of wildfires. Therefore, there is ***no impact.***

Mitigation Measures: None are required.

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off- site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
iv. impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Responses:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. The proposed Project includes improvements to the District's existing water system to ensure water quality standards and pressures are being met. The State Water Resources Control Board will have ultimate review and approval of the upgraded system, thereby ensuring adequate quality standards.

As identified in the *Lemon Cove Sanitary District Preliminary Engineering Report* (May 2020), a review of historic sampling data from existing water supplies shows that the District has violated the California Maximum Contaminant Levels (MCL) for nitrate. Nitrates are common in rural settings and, when found in groundwater, are typically associated with septic systems, confined animal feeding operations, or fertilizer use. Lemon Cove is located in a rural setting surrounded by citrus groves in all directions. Nitrates can interfere with the ability of red blood cells to carry oxygen to tissues within the body causing a condition called methemoglobinemia. Nitrates may also affect the oxygen-carrying ability of pregnant women.

In November 2015, the District was put under a compliance order (CO) (CO Number 03-24-15R-005) due to high nitrate levels. The residents of the District continue to be notified of the nitrate violation on a quarterly basis because the well is still supplying water to the community. The MCL for nitrate as nitrate (NO_3) is 45 milligrams per liter (mg/L). Nitrates were reported in terms of NO_3 until 2014. Since 2014,

nitrates have been reported in terms of nitrogen (as N). The MCL for nitrate as N is 10 mg/L. The LCSD Nitrate Levels from years 2015 to 2019 are shown below[6]:

Year	Nitrate (as N)
2015	14.3
2016	15.2
2017	17.3
2018	15.7
2019	17

As stated above, the District is under a CO to remedy the ongoing issue with nitrates. Nitrates dissolve rapidly in water and are difficult to remove. Once nitrates are present in groundwater they will typically remain for decades as natural degradation only occurs in specific circumstances. This is consistent with what is being observed in Lemon Cove as shown above. Alternatives to remedy the persistent nitrate issue for LCSD include a) construct new groundwater wells that can tap a subsurface fractured rock aquifer that is free of nitrate contamination, b) construct a well head treatment system for water supply wells, and c) connect to a community water system that meets regulatory requirements. As indicated in the Project Description, the District is proposing two new wells to serve the District.

The Project would not otherwise discharge any water to the surface or ground and thus would not impact ground water quality. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The proposed Project is intended to provide adequate water supply and water pressure to the area by improving the water supply infrastructure of the District as described in the Project Description. The proposed Project will not increase the density of development in the District, but is intended to provide adequate water service to existing users. The Project would propose to change the footprint of the existing system. The District desires to sever ties with a portion of the existing system, which includes the McKay's Point well and well site facilities. According to the *Lemon Cove Sanitary District Preliminary Engineering Report* (May 2020), it was previously shown the existing McKay's Point Well and associated storage tank have the combined capacity to meet demands up to the estimated maximum demand per County Improvement

[6] Lemon Cove Sanitary District Preliminary Engineering Report (May 2020), pages 2-6 and 2-7.

Standards. The McKay's Point Well and associated storage tank do not have the capacity to supply the fire flow demand during a maximum day condition per County Improvement Standards. Small water systems typically meet fire flow requirements by the use of a water storage tank. The 75 gpm well and 32,000-gallon water storage tank combined are not adequate to provide the required minimum fire storage needed to meet the minimum required fire flow. At a minimum, the District needs a total of 95,400 gallons (54,200 additional gallons of storage) to meet County Improvement Standards for fire protection. This deficit is exacerbated if the District is required to supply fire flow to areas within the service area where land use dictates larger minimum fire flow requirements. Table 3 below reconciles the existing supply against the estimated demands to show how much additional supply is needed for the existing system to comply with County Improvement Standards.

Table 3
Water Supply and Demand Reconciliation

Description	Volume (Gallons)		
Total Existing Water Supply	41,200		
Single Family Residential	95,400	-	-
Multi Family, Commercial and Light Manufacturing	-	215,400	-
Heavy Manufacturing	-	-	335,400
Net Supply Surplus (Deficit)	(54,200)	(174,200)	(294,200)

Source: Lemon Cove Sanitary District Preliminary Engineering Report (May 2020), page 2-6.

The proposed Project would provide up to the Title 22 maximum day demand (44 gpm) plus fire flow (500 gpm for 2 hours) to the current services in LCSD while maintaining at least 20 psi. This production is adequate to serve the District assuming no new services outside of the current District service area. Therefore, the impact is ***less than significant.***

Mitigation Measures: None are required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or offsite;

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows?

Less Than Significant Impact. The proposed Project includes improvements to the District's water supply system. Given the highly disturbed nature of the Project areas, the improvements are not anticipated to significantly alter the drainage pattern of the site. However, the site is designed for adequate stormwater drainage. During construction, the District would be required to obtain a Stormwater Pollution Prevention Plan to minimize erosion and potential site runoff. As such, any impacts resulting from drainage patterns would be ***less than significant.***

Mitigation Measures: None are required.

d. In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. According to the Tulare County General Plan, the Project is within a base floodplain (100 year) elevation. However, the Project does not include any housing or structures that would be subject to flooding either from a watercourse or from dam inundation. There are no bodies of water near the site that would create a potential risk of hazards from seiche, tsunami or mudflow. Terminus Dam is located at the western end of Kaweah Lake, upstream from the Project area. The Project site is within the dam failure inundation zone. Dam failure can result from a number of natural and/or man-made causes, including earthquake, high flood waters, structural deficiency, and other causes. Existing protocol implemented through the area includes flood warning alert and evacuation implemented by the Tulare County Flood Control District. If there is adequate forewarning of a dam failure, access to facilities would be closed. Implementation of the existing procedures will ensure a less than significant impact related to the exposure of persons to flood risks caused by the Project.

Therefore, impacts are considered ***less than significant.***

Mitigation Measures: None are required.

XI. LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Responses:

a. Physically divide an established community?

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. Construction and operation of the proposed Project would not cause any land use changes in the surrounding vicinity nor would it introduce barriers that would divide and established community. The proposed Project involves upgrading the infrastructure of an existing water system and does not conflict with any land use plans, policies or regulations. There are ***no impacts.***

Mitigation Measures: None are required.

XII. MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Responses:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. There are no known mineral resources in the Project area and none are identified in the County's General Plan near the proposed Project site. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIII. NOISE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Responses:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. The nearest sensitive receptors to the proposed Project are scattered residential homes and businesses in the District. Once operational, the improved water system will not generate noise above levels that currently exist. The proposed Well Site is not located in an area with any sensitive receptors. The two new wells will include a 2-3 horsepower electric pump that will be enclosed. The underground pipelines, once constructed, do not emit noise when operational. The location of the Booster Pump station along Avenue 330 would be located within 200 feet of an existing residence and

church. However, the small Booster Pump Station motor will also be enclosed and will not emit significant noise that would be audible to sensitive receptors. The hillside tank will not emit noise once constructed.

Proposed Project construction related activities will involve temporary noise sources. Typical construction related equipment include graders, trenchers, small tractors and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Activities involved in construction will generate maximum noise levels, as indicated in Table 4, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise controls.

Table 4
Typical Construction Noise Levels

Type of Equipment	dBA at 50 ft	
	Without Feasible Noise Control	With Feasible Noise Control
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time. Most residents recognize this reality and expect to hear construction activities on occasion.

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project is earthmoving activities associated installing pipelines and installing equipment.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day.[7] Table 4 describes the typical construction equipment vibration levels.

Table 5
Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Authority threshold for the nearest sensitive receptors.

As such, any impacts resulting from an increase in noise levels or from groundborne noise levels is ***less than significant.***

Mitigation Measures: None are required.

c. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. As there are no airports or airstrips in the vicinity, there is ***no impact***.

Mitigation Measures: None are required.

[7] Transit Noise and Vibration Impact Assessment. Final Report No. FTA-VA-90-1003 prepared for the U.S. Federal Transit Administration by Harris Miller Miller & Hanson Inc., May 2006. Page 7-5. http://www.rtd-fastracks.com/media/uploads/nm/14_Section_38_NoiseandVibration_Part3.pdf. Accessed October 2021.

XIV. POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Responses:

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant Impact. There are no new homes associated with the proposed Project, nor would Project implementation displace people or housing. The proposed Project is needed to improve the existing water system to serve the existing Lemon Cove Community and to meet statewide water quality standards. The Project is intended to serve existing customers and will not result in substantial new development or unplanned population growth. There is a ***less than significant impact***.

Mitigation Measures: None are required.

XV. PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Responses:

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

Police Protection?

Schools?

Parks?

Other public facilities?

Less Than Significant Impact. The proposed Project would improve infrastructure of the existing water system. The proposed Project would not directly or indirectly induce population growth and as such, will not increase demand for schools, parks, or other public facilities. Existing Tulare County fire and sheriff services will continue to maintain site safety. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

XVI. RECREATION

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Responses:

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed Project does not include the construction of residential uses or recreational facilities and would not directly or indirectly induce population growth. Therefore, the proposed Project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. The Project would have ***no impact*** to existing recreational facilities.

Mitigation Measures: None are required.

XVII. TRANSPORTATION/ TRAFFIC

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

Responses:

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

d. Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project includes upgrading the District's existing water supply system. There are no components of the proposed Project that would increase hazards due to a geometric design feature. As traffic due to construction activities would be temporary in nature, the proposed Project would not cause a substantial increase in traffic or result in inadequate emergency access. Once installed, the newly installed water system would not generate significant additional traffic

trips per day. The system would require periodic but infrequent maintenance/monitoring, which would generate an insignificant amount of vehicle trips. The Project would not conflict with a program plan, ordinance, or policy addressing the circulation system and as such, impacts would be ***less than significant.***

Mitigation Measures: None are required.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Responses:

a). Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii)A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact. In accordance with Assembly Bill (AB) 52, potentially affected Tribes were formally notified of this Project and were given the opportunity to request consultation on the Project. The District's consultant contacted the Native American Heritage Commission, requesting a contact list of applicable Native American Tribes, which was provided to the consultant. Using the NAHC provided contact list, letters were sent to identify Native American interests and concerns in the Project area. The following Native American Tribes were contacted:

- Kern Valley Indian Community
- Tule River Indian Tribe
- Santa Rosa Rancheria Tachi Yokut Tribe
- Wuksache Indian Tribe / Eshom Valley Band
- Tubatulabals of Kern Valley

No responses were received from any of the Tribal contacts. Therefore, there is a ***less than significant impact***.

Mitigation Measures: None are required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Responses:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact with Mitigation. The Project includes improvements to the District's existing drinking water system, the results of which would not require the construction of storm water drainage, natural gas or telecommunication facilities. The Project will require a minor amount of electric power, however, these facilities will be derived from existing electric services in the area. The Project itself is the construction of improvements to the District's water system and any environmental impacts resulting from the improvements are discussed within this document.

Mitigation Measures: The Project will require multiple mitigation measures as identified throughout this document.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. The proposed Project is intended to provide adequate water supply and water pressure to the area by improving the water supply infrastructure of the District as described in the Project Description. The proposed Project will not increase the density of development in the District, but is intended to provide adequate water service to existing users. The Project would propose to change the footprint of the existing system. The District desires to sever ties with a portion of the existing system, which includes the McKay's Point well and well site facilities. According to the *Lemon Cove Sanitary District Preliminary Engineering Report* (May 2020), it was previously shown the existing McKay's Point Well and associated storage tank have the combined capacity to meet demands up to the estimated maximum demand per County Improvement Standards. The McKay's Point Well and associated storage tank do not have the capacity to supply the fire flow demand during a maximum day condition per County Improvement Standards. Small water systems typically meet fire flow requirements by the use of a water storage tank. The 75 gpm well and 32,000-gallon water storage tank combined are not adequate to provide the required minimum fire storage needed to meet the minimum required fire flow. At a minimum, the District needs a total of 95,400 gallons (54,200 additional gallons of storage) to meet County Improvement Standards for fire protection. This deficit is exacerbated if the District is required to supply fire flow to areas within the service area where land use dictates larger minimum fire flow requirements. Table 6 below reconciles the existing supply against the estimated demands to show how much additional supply is needed for the existing system to comply with County Improvement Standards.

Table 6
Water Supply and Demand Reconciliation

Description	Volume (Gallons)		
Total Existing Water Supply	41,200		
Single Family Residential	95,400	-	-
Multi Family, Commercial and Light Manufacturing	-	215,400	-
Heavy Manufacturing	-	-	335,400
Net Supply Surplus (Deficit)	(54,200)	(174,200)	(294,200)

Source: Lemon Cove Sanitary District Preliminary Engineering Report (May 2020), page 2-6.

The proposed Project would provide up to the Title 22 maximum day demand (44 gpm) plus fire flow (500 gpm for 2 hours) to the current services in LCSD while maintaining at least 20 psi. This production is adequate to serve the District assuming no new services outside of the current District service area. Therefore, the impact is ***less than significant.***

Mitigation Measures: None are required.

Mitigation Measures: None are required.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. As the proposed Project includes improvements to the District's existing water system, and no component of the proposed Project would generate additional wastewater, there is ***no impact***.

Mitigation Measures: None are required.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Proposed Project construction and operation will generate minimal amounts of solid waste. The proposed new drinking water system will be an unmanned facility and therefore won't generate waste on an on-going basis. The proposed Project will comply with all federal, state and local statutes and regulations related to solid waste. Any impacts will be ***less than significant.***

Mitigation Measures: None are required.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Responses:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The proposed Project is located within a relatively disturbed area (homes, roads, active agriculture, etc.) which precludes the risk of wildfire. The area surrounding the Project site is generally flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread.

The proposed Project would be required to be in compliance with the adopted emergency response plan. As such, any wildfire risk to the Project structures or people would be ***less than significant.***

Mitigation Measures: None are required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Responses:

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to ***less than significant***.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is ***less than significant***.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to ***less than significant.***

Chapter 4

MITIGATION MONITORING & REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Lemon Cove Water System Improvement Project (Project). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements.

The first column of the Table identifies the mitigation measure. The second column, entitled "Party Responsible for Implementing Mitigation," names the party responsible for carrying out the required action. The third column, "Implementation Timing," identifies the time the mitigation measure should be initiated. The fourth column, "Party Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the Lemon Cove Sanitary District to ensure that individual mitigation measures have been monitored.

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
Biology				
BIO – 1 Protect nesting Swainson's hawks 1. To the extent practicable, construction shall be scheduled to avoid the Swainson's hawk nesting season, which extends from March through August. 2. If it is not possible to schedule work between September and February, a qualified biologist shall conduct a survey for active Swainson's hawk nests within 0.25 miles of the Project site no more than 14 days prior to the start of construction. If an active nest is found within 0.25 miles, and the qualified biologist determines that Project activities would disrupt nesting, a construction-free buffer or limited operating period shall be implemented in consultation with the CDFW. **BIO –2 Protect Nesting Birds** 1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.	Lemon Cove Sanitary District / Construction Contractor	Prior to and during construction	Lemon Cove Sanitary District / Construction Contractor	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
If it is not possible to schedule construction between September and January, preconstruction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas for nests. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.				

Mitigation Measure		Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
Cultural					
CUL – 1	Should evidence of prehistoric archeological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the District, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project proponent shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources).	Lemon Cove Sanitary District / Construction Contractor	Prior to and during construction	Lemon Cove Sanitary District / Construction Contractor	
CUL – 2	In order to ensure that the proposed project				

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the District with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall be halted until the Tulare County coroner is contacted and the coroner has made the determinations and notifications required pursuant to Health and Safety Code Section 7050.5. If the coroner determines that Health and Safety Code Section 7050.5(c) require that he give notice to the Native American Heritage Commission, then such notice shall be given within 24 hours, as required by Health and Safety Code Section 7050.5(c). In that event, the NAHC will conduct the notifications required by Public Resources				

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
Code Section 5097.98. Until the consultations described below have been completed, the landowner shall further ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices where Native American human remains are located, is not disturbed by further development activity until the landowner has discussed and conferred with the Most Likely Descendants on all reasonable options regarding the descendants' preferences and treatments, as prescribed by Public Resources Code Section 5097.98(b). The NAHC will mediate any disputes regarding treatment of remains in accordance with Public Resources Code Section 5097.94(k). The landowner shall be entitled to exercise rights established by Public Resources Code Section 5097.98(e) if any of the circumstances established by that provision become applicable.				

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
Geology / Soils				
GEO – 1 In order to reduce on-site erosion due to project construction and operation, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods by a registered civil engineer or certified professional. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of the SWPPP required by the California State Water Resources Control Board.	Lemon Cove Sanitary District / Construction Contractor	Prior to construction	Lemon Cove Sanitary District / Construction Contractor	

Chapter 5

PREPARERS

LIST OF PREPARERS

Crawford & Bowen Planning, Inc.

- Travis Crawford, AICP, Principal Environmental Planner
- Emily Bowen, LEED AP, Principal Environmental Planner

Appendices

Appendix A

Air Emissions Output Files

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Lemon Cove Water System Improvement Project				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust					
Project Phases (Pounds)	**ROG (lbs/day)**	**CO (lbs/day)**	**NOx (lbs/day)**	**PM10 (lbs/day)**	**PM10 (lbs/day)**	**PM10 (lbs/day)**	**PM2.5 (lbs/day)**	**PM2.5 (lbs/day)**	**PM2.5 (lbs/day)**	**SOx (lbs/day)**	**CO2 (lbs/day)**	**CH4 (lbs/day)**	**N2O (lbs/day)**	**CO2e (lbs/day)**
Grubbing/Land Clearing	1.04	10.40	9.36	20.43	0.43	20.00	4.54	0.38	4.16	0.02	2,132.94	0.59	0.02	2,154.47
Grading/Excavation	4.84	44.85	48.92	22.08	2.08	20.00	6.03	1.87	4.16	0.10	9,599.80	2.88	0.10	9,700.64
Drainage/Utilities/Sub-Grade	2.93	29.31	27.61	21.23	1.23	20.00	5.29	1.13	4.16	0.06	5,634.61	1.19	0.06	5,681.08
Paving	1.37	17.94	12.47	0.66	0.66	0.00	0.59	0.59	0.00	0.03	2,778.26	0.76	0.03	2,806.35
Maximum (pounds/day)	4.84	44.85	48.92	22.08	2.08	20.00	6.03	1.87	4.16	0.10	9,599.80	2.88	0.10	9,700.64
Total (tons/construction project)	0.43	4.21	4.23	2.43	0.19	2.24	0.63	0.17	0.47	0.01	850.35	0.23	0.01	858.66

Notes:

Project Start Year ->	2023
Project Length (months) ->	12
Total Project Area (acres) ->	13
Maximum Area Disturbed/Day (acres) ->	1
Water Truck Used? ->	No

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	320	0
Grading/Excavation	0	0	0	0	920	0
Drainage/Utilities/Sub-Grade	0	0	0	0	680	0
Paving	0	0	0	0	520	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Lemon Cove Water System Improvement Project				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust					
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	**ROG (tons/phase)**	**CO (tons/phase)**	**NOx (tons/phase)**	**PM10 (tons/phase)**	**PM10 (tons/phase)**	**PM10 (tons/phase)**	**PM2.5 (tons/phase)**	**PM2.5 (tons/phase)**	**PM2.5 (tons/phase)**	**SOx (tons/phase)**	**CO2 (tons/phase)**	**CH4 (tons/phase)**	**N2O (tons/phase)**	**CO2e (MT/phase)**
Grubbing/Land Clearing	0.01	0.14	0.12	0.27	0.01	0.26	0.06	0.00	0.05	0.00	28.15	0.01	0.00	25.80
Grading/Excavation	0.26	2.37	2.58	1.17	0.11	1.06	0.32	0.10	0.22	0.01	506.87	0.15	0.01	464.66
Drainage/Utilities/Sub-Grade	0.14	1.35	1.28	0.98	0.06	0.92	0.24	0.05	0.19	0.00	260.32	0.06	0.00	238.11
Paving	0.03	0.36	0.25	0.01	0.01	0.00	0.01	0.01	0.00	0.00	55.01	0.01	0.00	50.41
Maximum (tons/phase)	0.26	2.37	2.58	1.17	0.11	1.06	0.32	0.10	0.22	0.01	506.87	0.15	0.01	464.66
Total (tons/construction project)	0.43	4.21	4.23	2.43	0.19	2.24	0.63	0.17	0.47	0.01	850.35	0.23	0.01	778.98

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Appendix B

CHRIS Search Results

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford Bowen Planning, Inc.
113 N. Church Street, Suite 302
Visalia, CA 93291

Record Search 20-255

Date: July 21, 2020

Re: Lemon Cove Sanitary District Water System Improvement Project

County: Tulare

Map(s): Woodlake 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there have been five previous cultural resource studies conducted within the project area, TU-00049, 00108, 00550, 00985, and 01498. There have been six additional cultural resource study conducted within the one-half mile radius, TU-00084, 00135, 00378, 01359, 01653, and 01856.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

There are three recorded resources within the project area, P-54-004034, 005027, and 005299. These resources include one historic era railroad and two historic era transmission lines. There are seven known resources within the one-half mile radius, P-54-000341, 004007, 004615, 005098. 005099, an unrecorded prehistoric era bedrock milling feature and an unrecorded prehistoric era rock art site. The recorded resources include a prehistoric era villages site, two historic era trash scatters, an historic era ditch, and an historic era hotel.

Resource P-54-004007 is the Pogue Hotel, located at 32792 Sierra Drive in Lemoncove. This resource has been given a National Register status code of 1S, indicating it has been listed in the National Register of Historic Places by the Keeper. Resource P-54-000341, a prehistoric village site, has been given a National Register status code of 2S2, indicating it has been determined eligible for listing in the National Register of Historic Places by a consensus through the Section 106 process. Both resources are listed in the California Register of Historical Resources. There are no other recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project consists of installation of approximately 11,400 linear feet of water pipeline, a water storage tank, and new booster pumps, electrical and other appurtenances associated with the water tank. Further, we understand the pipeline will be installed along the State Route 198 alignment and with the right-of way on paved and unpaved farm roads and the tank will be installed on vacant land. Waterways and their surrounding areas are generally considered to be highly sensitive for cultural resources, as indigenous people utilized these areas as permanent villages, temporary camps, and task specific sites. Because of the close proximately of both the Kaweah River and a prehistoric village site of historical significance, there is a reasonable probability that cultural resources may be present in the area, both on the surface and subsurface. Therefore, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey of any vacant land to determine if cultural resources are present. We also recommend a qualified, professional consultant be present during any ground disturbance activities to identify any unearthed cultural resources and make the appropriate mitigation recommendations. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file in order to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Celeste M. Thomson, Coordinator **Date**: July 21, 2020

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Appendix C

NAHC Sacred Lands File Search Results

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 8, 2020

Emily Bowen

Crawford & Bowen Planning, Inc.

Via Email to: emily@candbplanning.com

Re: Lemon Cove Sanitary District Improvements Project, Tulare County

Dear Ms. Bowen:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment