

**INITIAL STUDY/NEGATIVE DECLARATION  
FOR PARKWOOD CMD 19A&B WATER SYSTEM IMPROVEMENTS**

**PREPARED FOR:  
MADERA COUNTY PUBLIC WORKS**

**PREPARED BY:**



**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

**JUNE 2019**

# TABLE OF CONTENTS

<b>MADERA COUNTY PUBLIC WORKS</b> .....	1
<b>PROPOSED INITIAL STUDY/NEGATIVE DECLARATION</b> .....	1
<b>PROJECT DESCRIPTION</b> .....	2
<b>FINDINGS</b> .....	4
<b>1. PROJECT DESCRIPTION</b> .....	5
<b>1.1 INTRODUCTION AND REGULATORY GUIDANCE</b> .....	5
<b>1.2 PROJECT BACKGROUND</b> .....	5
<b>1.3 PROJECT PURPOSE</b> .....	5
<b>1.4 PROJECT LOCATION AND SETTING</b> .....	6
<b>1.5 PROJECT DESCRIPTION</b> .....	6
<b>1.6 MEASURES INCLUDED IN THE PROPOSED PROJECT TO MINIMIZE IMPACTS</b> .....	9
<b>2. LEAD, RESPONSIBLE AND TRUSTEE AGENCIES</b> .....	11
<b>3. CONTACT PERSON</b> .....	11
<b>4. PROJECT LOCATION</b> .....	11
<b>5. SURROUNDING LAND USES AND SETTING</b> .....	11
<b>6. PROJECT SCHEDULE</b> .....	11
<b>7. OTHER PUBLIC AGENCY APPROVALS REQUIRED</b> .....	11
<b>8. PUBLIC INVOLVEMENT</b> .....	12
<b>9. NATIVE AMERICAN CONSULTATION</b> .....	12
<b>10. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:</b> .....	12
<b>11. DETERMINATION:</b> .....	13
<b>12. CEQA Environmental Checklist</b> .....	15
<b>A. AESTHETICS</b> .....	15
<b>B. AGRICULTURE AND FOREST RESOURCES</b> .....	16
<b>C. AIR QUALITY</b> .....	17
<b>D. BIOLOGICAL RESOURCES</b> .....	20
<b>E. CULTURAL RESOURCES</b> .....	21
<b>F. ENERGY</b> .....	22
<b>G. GEOLOGY AND SOILS</b> .....	23
<b>H. GREENHOUSE GAS EMISSIONS</b> .....	25

<b>I.</b>	<b>HAZARDS AND HAZARDOUS MATERIALS</b> .....	26
<b>J.</b>	<b>HYDROLOGY AND WATER QUALITY</b> .....	28
<b>K.</b>	<b>LAND USE AND PLANNING</b> .....	31
<b>L.</b>	<b>MINERAL RESOURCES</b> .....	32
<b>M.</b>	<b>NOISE</b> .....	32
<b>N.</b>	<b>POPULATION AND HOUSING</b> .....	34
<b>O.</b>	<b>PUBLIC SERVICES</b> .....	35
<b>P.</b>	<b>RECREATION</b> .....	35
<b>Q.</b>	<b>TRANSPORTATION</b> .....	36
<b>R.</b>	<b>TRIBAL CULTURAL RESOURCES</b> .....	37
<b>S.</b>	<b>UTILITIES AND SERVICE SYSTEMS</b> .....	38
<b>T.</b>	<b>WILDFIRE</b> .....	39
<b>U.</b>	<b>MANDATORY FINDINGS OF SIGNIFICANCE</b> .....	40
<b>13.</b>	<b>ALTERNATIVES</b> .....	40
<b>14.</b>	<b>REFERENCES</b> .....	41
<b>15.</b>	<b>LIST OF PREPARERS</b> .....	42

## Figures

Figure 1. Existing Conditions and Proposed Well 4A Location

## Appendices

1. Proposed Project Site Photographs
2. 60% Progress Design Plan Set
3. California Natural Diversity Database Query Results, USFWS Species List, California Water Board Biological Report
4. Class 1 Archival Review Report and AB 32 Consultation Letters

**MADERA COUNTY PUBLIC WORKS  
PROPOSED INITIAL STUDY/NEGATIVE DECLARATION**

**Project Title:** Parkwood CMD 19A&B Water System Improvements

**Lead Agency Name and Address:** Madera County Public Works  
200 W. 4th Street, 3rd Floor  
Madera, CA 93637

**Lead Agency Contact:** Ahmad Alkhayyat  
Public Works Director  
(559) 675-7811

**Project Location:** South of Avenue 13 ½ between Madera Ave. and Raymond Thomas Street adjacent to the City of Madera, Madera County, CA

**Project Sponsor's Name and Address:** Madera County Public Works  
200 W. 4th Street, 3rd Floor  
Madera, CA 93637

**Assessor's Parcel Number:** 047-364-011

**General Plan Designation:** Medium Density Residential (MDR)

**Zoning:** Public Open Space (POS)



## PROJECT DESCRIPTION

The Parkwood CMD (County Maintenance District) 19 A&B Parkwood Water System (Proposed Project) proposes to construct and operate one municipal production well to supplement existing supplies in the northern portion of its service area, within Madera County. The project site consists of one existing and one offline well and its associated features.

This project would involve of above grade and below grade infrastructure improvements designed to bring online a new production well to replace an existing, offline well on the same parcel. The final product will be a groundwater well capable of producing approximately 1,000 gallons per minute (gpm) to meet all drinking water quality requirements. The projected schedule is to construct the production well in 2019, with overall project completion in 2020.

Figure 1 provides a map of the existing conditions including test well locations and proposed new well location.

### Existing Conditions

This eastern section of the parcel contains a portion of Parkwood Park, a public park maintained by Madera County with a basketball court, a playground, sidewalks and other park related amenities. The western section of the parcel is a fenced drainage area. Residential areas surround the park on each side. An existing, offline well is located on the eastern area of the parcel. This well is offline due to excessive sand production that is intended to be remedied with this project. Most parts of this existing well will be repurposed for the new production well with the exception of some associated piping, appurtenances and sand separator that will be demolished (See Drawing C-2 of 30% Design Plans). Associated items to be retained from this well include a hydropneumatic tank, an electrical panel, a booster pump station, monitoring wells and a water storage tank.

Groundwater data collection and analysis has been conducted recently in the Subbasin in preparation efforts for the Groundwater Sustainability Plan (GSP) for the Madera Subbasin (Technical Memorandum: Madera Subbasin, 2017). For this study, maps of contours of equal groundwater elevation were prepared from spring 1958 to spring 2016. Spring 2016 groundwater contours indicate that the groundwater elevations in the City of Madera ranged from 10 feet to 90 feet msl. DWR groundwater contours between spring 2011 and spring 2017 indicate the direction of groundwater flow is primarily from south to north beneath the City of Madera (DWR Groundwater Information Center Interactive Map Application).

The MD 19 well field extracts groundwater from the underlying Madera Subbasin (Subbasin) (DWR Basin No. 5-22.06). The Subbasin covers an area of 614 square miles and is located entirely within Madera County. It is bound on the south by the San Joaquin River, on the west by the eastern boundary of the Columbia Canal Service Area, the north by the south boundary of the Chowchilla subbasin, and on the east by the crystalline basement bedrock of the Sierra Nevada foothills. Major streams in the area include the San Joaquin and Fresno Rivers and help promote recharge in the subbasin.

A hydrogeological investigation report was prepared by Wood Rodgers in April 2018. This report was used to design the site-specific exploratory drilling program. Based upon information within the report, Wood Rodgers designed an exploratory drilling and test well construction program to assess quality of the aquifers underlying the site to a depth of 600 feet.



Wood Rodgers contracted with Bradley and Sons Drilling (Bradley) of Del Rey, California, to conduct the exploratory drilling and construction of a multiple-completion test well at the site. Beginning on September 18, 2018, Bradley drilled an 8 ¾-inch borehole to a total depth of 600 feet, using the direct rotary drilling method. The test hole was geophysically logged on September 19, 2018 by Pacific Surveys, LLC of Claremont, California. The response of the geophysical surveys and the drill cutting samples suggested the best permeable aquifers were located between 460 to 540 feet below ground surface (bgs). Wood Rodgers provided Bradley with a nested triple completion test well design to assess the aquifer intervals, from 460 to 470 feet bgs (TW-475), 493 to 503 feet bgs (TW-508), and 530 to 540 feet bgs (TW-545). Each test well completion is identified by the total casing depth. Prior to the installation of the PVC casing, the borehole was reamed to 12 ¼-inch diameter to a depth of 520 feet bgs and a wiper pass was made with the 8 ¾-inch diameter bit to clean the borehole to a depth of 575 feet bgs. Following construction of the nested test well, it was determined that the shallow completion (TW-475) had failed, requiring a replacement. Bradley re-mobilized 10-feet south of the original test well and drilled an 8 ¾-inch diameter borehole to a depth of 485 feet bgs. On October 22, 2018, the replacement TW-475 was successfully constructed.

### **Above Grade Infrastructure Design**

The design includes a 5-foot square concrete well pedestal, sole plate, base plate, discharge head, pump, motor, 360 feet of column pipe, and extension of the 3-inch gravel fill tube, and 2-inch sounding tubes. The discharge head will be connected to a restrained flanged coupling adapter which connects the discharge head to the discharge piping then a 3 ft. 9-inch spool piece which has a pressure switch (or transmitter) and pressure gage and air vacuum/air release valve connections. The spool piece is supported by a pipe support and connects to an 8-inch x 4-inch x 8-inch tee for pump to waste. The pump to waste 8-inch x 4-inch tee consists of the 8-inch flow thru dimension and a 4-inch connection for the pump to waste. The 4-inch pump to waste tee connects to manually operated gate valve, and a 4-inch blind flange. The 8-inch flow-thru end connects to an 8-inch swing check valve, 8-inch dismantling joint and then to a 1 ft. 6-inch pipe spool supported by a pipe support.

The pipe spool connects to a manually operated 8-inch gate valve which is attached to an 8-inch 90-degree elbow and then a 4 ft. – 9-inch pipe that goes below the 6-inch concrete base slab about 2 feet below the 90-degree elbow. The 4 ft. – 9-inch pipe spool connects to a 8-inch 90 degree mechanical joint elbow which starts the pipeline consisting of; 13 feet of pipe, a 90 degree elbow, 36 feet of pipe, a 90 degree elbow, 68 feet of pipe, a 45 degree elbow, 67 feet of pipe, a 45 degree elbow, 5 feet of pipe, a 90 degree elbow, 5 feet of pipe, a 90 degree elbow, a gate valve, 5 feet of pipe (pipe supported), an 8-inch dismantling joint, a flow meter, 3 feet of pipe (pipe supported) and connection to the existing Well 4A hydro pneumatic tank piping inlet butterfly valve.

In addition to the mechanical piping already identified, this project will have a 6-inch thick reinforced concrete slab on grade 20 feet long by 12 feet wide. The concrete slab on grade will have a footing and the area will be fenced with removable posts for well rehabilitation. Electrical conduits will be installed from the new pump/motor location back to the previous well pump and motor location where the original power conduits are located. The new pump and motor will have a Sound Attenuation Hood installed on it to dampen the noise to levels in compliance with the local noise ordinance. The pump will be a vertical turbine deep well pump equipped with a premium efficiency 1800 rpm vertical hollow shaft 150 hp motor. Some limited site grading will occur for the 20-foot long and 12-foot wide area for the concrete slab on grade. Additional site components include low pedestal LED lighting for the facility.



### **Below Grade Infrastructure Design**

The design includes a 32-inch diameter mild steel conductor casing grouted in place to a depth of 50 feet below ground surface (bgs). The conductor casing will serve to stabilize the upper formations during borehole drilling, and also to provide the DDW required sanitary seal. Inside the conductor casing, a 28-inch diameter borehole extends to a depth of 570 feet bgs. The well structure includes a 16-inch outside diameter mild steel well casing to a depth of 300 feet and transitions into a stainless-steel well casing and louvered well screen assembly. The design consists of a 10-foot sump, 40 feet of well screen, and 510 feet (excluding the stick-up above ground surface) of blank well casing, extending to a depth of 550 feet bgs.

To accommodate for the potential of future inelastic land subsidence in the area, it was determined to add additional protection of the well structure. A fully extended compression section is included from 380 to 400 feet to accommodate for any potential subsidence. The screen section has been designed to be "Ful-Flo" louvered well screen, with a slot size of 0.055 inches to provide the acceptable inlet velocities, suitable open area, and retention of the selected gravel envelope material. A 3-inch diameter steel gravel fill pipe extends to a depth of 327 feet bgs and a 2-inch diameter stainless steel sounding pipe will extend to and enter the well casing at a depth of 378 feet bgs. The annular space will be filled with 8x16 graded gravel from the bottom of the borehole to 312 feet bgs. A two-foot fine sand transition seal will be placed on top of the gravel envelope from 312 feet to 310 feet bgs, with a sand/cement grout annular seal from 310 feet bgs to ground surface.

### **FINDINGS**

An Initial Study (IS) has been prepared to describe and assess the significance of potential environmental impacts of the Proposed Project, and to propose mitigation for any significant impacts. Based on the results of the IS, it has been determined that the Proposed Project would not have significant impacts on the environment. This conclusion is supported by the following findings:

1. The Proposed Project would have no impacts on: agriculture, biological resources, cultural resources, mineral resources, geology and soils, land use planning, mineral resources, population and housing, public services, recreation, transportation and traffic, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, and utilities and service systems.
2. The Proposed Project would have less-than-significant impacts on: aesthetic resources, air quality, and noise.
3. The Proposed Project would have no significant impacts.

The Applicant has included a number of measures in the Proposed Project to avoid or minimize potential impacts.

Questions or comments regarding this IS/MND may be addressed to:

Ahmad Alkhayyat, Public Works Director  
Madera County Public Works  
200 W. 4<sup>th</sup> Street, 3<sup>rd</sup> Floor  
Madera, CA 93637  
(559) 675-7811



# **INITIAL STUDY**

## **1. PROJECT DESCRIPTION**

### **1.1 INTRODUCTION AND REGULATORY GUIDANCE**

This Initial Study/ Negative Declaration (IS/MND) has been prepared by Madera County Public Works (MCPW) to evaluate the potential environmental effects of the Parkwood CMD 19 A&B Parkwood Water System Improvements (Proposed Project), located in Madera County. This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.).

An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document to be prepared. In accordance with State CEQA Guidelines Section 15070, a “public agency shall prepare a proposed negative declaration or mitigated negative declaration when: (a) The initial study shows that there is no substantial evidence...that the project may have a significant impact on the environment, or (b) The initial study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level.” In those circumstances, the lead agency should prepare a written statement describing its reasons for concluding that the proposed project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). This IS/ND has been prepared to fulfill these requirements as well as the content requirements of State CEQA Guidelines Section 15071.

### **1.2 PROJECT BACKGROUND**

The County of Madera (County) Maintenance District No. 19A and 19B Parkwood (MD 19) relies solely on groundwater to meet its potable water supply demands. The MD 19 Water System has a total of 495 existing connections and is supplied by one well with a reported production of 400 gallons per minute (gpm). The MD 19 water system also includes one booster pump station, one emergency intertie with the City of Madera, and one 250,000-gallon storage tank.

The potable water supply demands at MD 19 are met through one active well (Well 3), with the remaining wells (Wells 1, 2 and 4) inactive and disconnected from the distribution system (Figure 1.). In 2014, declining water levels due to consecutive years of drought resulted in a failure of Well 3, requiring the emergency construction of an intertie to the City of Madera water system to provide potable water supply during well rehabilitation. Rehabilitation successfully returned Well 3 to its full pumping capacity; however, concentrations of manganese in the MD 19 Water System are currently near or exceed the State of California Water Resources Control Board– Division of Drinking Water (DDW) secondary (aesthetic) water quality standard of 50 micrograms per liter (µg/L).

### **1.3 PROJECT PURPOSE**

The project goals include the development of a new municipal supply well that meets State and Federal Drinking Water Regulations, protects the groundwater resource, provides 1,000 gallons per minute (gpm) capacity, and provides a well structure with a service life of approximately 75 years. In conjunction with our hydrogeologic investigation, Wood Rodgers reviewed construction



data from the City of Madera (City) Well 33 to better understand design principles previously utilized. Production Well 4A has been designed to take into account similar design criteria as the existing City wells, such as well casing diameter, screen type, sanitary seal depth, and selected aquifer zones.

## **1.4 PROJECT LOCATION AND SETTING**

The Proposed Project is located within Madera County, near the city limits of Madera. The proposed production well site is located within Parkwood Park, south of East Pecan Avenue (Avenue 13) between South Madera Avenue (Road 27) and Raymond Thomas Street adjacent to the City of Madera, Madera County, CA. The well site is located on APN 047-364-011, owned by Madera County. Topography within the MD 19 is generally flat, with the ground surface sloping from northeast to southwest with approximate elevations of 270 feet above mean sea level (msl) to 260 feet msl.

The MD 19 Water System has a total of 495 existing connections and is supplied by one well with a reported production of 400 gallons per minute (gpm). The MD 19 water system also includes one booster pump station, one emergency intertie with the City of Madera, and one 250,000-gallon storage tank. The Proposed Project can be easily accessed during construction and operation, and is in close proximity to required infrastructure, such as existing storm drains, sanitary sewers, a water source to assist the drilling process, and power.

Please refer to Proposed Project Site Photographs contained in Appendix 1.

## **1.5 PROJECT DESCRIPTION**

Based on the data gathered during the exploratory drilling program completed in 2018, Wood Rodgers designed Well 4A to target the aquifers between 460 and feet. The estimated design capacity for a well constructed at this site is 1,000 gpm. The recommended well design for the Production Well 4A Site targets the intermediate Older Alluvium Aquifers. Data from each test well completion suggests that the water produced from the proposed Production Well 4A, as designed, should meet all DDW drinking water quality standards.

Figure 1 provides a map of the existing conditions including test well locations and proposed new well location.

### Exploratory Drilling and Test Wells

Wood Rodgers contracted with Bradley and Sons Drilling (Bradley) of Del Rey, California, to conduct the exploratory drilling and construction of a multiple-completion test well at the site. Beginning on September 18, 2018, Bradley drilled an 8 ¾-inch borehole to a total depth of 600 feet, using the direct rotary drilling method. The test hole was geophysically logged on September 19, 2018 by Pacific Surveys, LLC of Claremont, California. The response of the geophysical surveys and the drill cutting samples suggested the best permeable aquifers were located between 460 to 540 feet below ground surface (bgs).

### Production Well Design

Please see Appendix 2 for the 60 percent Progress Design Plans.

### *Above Grade Infrastructure Design*

The design includes a 5-foot square concrete well pedestal, sole plate, base plate, discharge



head, pump, motor, 360 feet of column pipe, and extension of the 3-inch gravel fill tube, and 2-inch sounding tubes. The discharge head will be connected to a restrained flanged coupling adapter which connects the discharge head to the discharge piping then a 3 ft. 9-inch spool piece which has a pressure switch (or transmitter) and pressure gage and air vacuum/air release valve connections. The spool piece is supported by a pipe support and connects to an 8-inch x 4-inch x 8-inch tee for pump to waste. The pump to waste 8-inch x 4-inch tee consists of the 8-inch flow thru dimension and a 4-inch connection for the pump to waste. The 4-inch pump to waste tee connects to manually operated gate valve, and a 4-inch blind flange. The 8-inch flow-thru end connects to an 8-inch swing check valve, 8-inch dismantling joint and then to a 1 ft. 6-inch pipe spool supported by a pipe support.

The pipe spool connects to a manually operated 8-inch gate valve which is attached to an 8-inch 90-degree elbow and then a 4 ft. – 9-inch pipe that goes below the 6-inch concrete base slab about 2 feet below the 90-degree elbow. The 4 ft. – 9-inch pipe spool connects to a 8-inch 90 degree mechanical joint elbow which starts the pipeline consisting of; 13 feet of pipe, a 90 degree elbow, 36 feet of pipe, a 90 degree elbow, 68 feet of pipe, a 45 degree elbow, 67 feet of pipe, a 45 degree elbow, 5 feet of pipe, a 90 degree elbow, 5 feet of pipe, a 90 degree elbow, a gate valve, 5 feet of pipe (pipe supported), an 8-inch dismantling joint, a flow meter, 3 feet of pipe (pipe supported) and connection to the existing Well 4A hydro pneumatic tank piping inlet butterfly valve.

In addition to the mechanical piping already identified, this project will have a 6-inch thick reinforced concrete slab on grade 20 feet long by 12 feet wide. The concrete slab on grade will have a footing and the area will be fenced with removable posts for well rehabilitation. Electrical conduits will be installed from the new pump/motor location back to the previous well pump and motor location where the original power conduits are located. The new pump and motor will have a Sound Attenuation Hood installed on it to dampen the noise to levels in compliance with the local noise ordinance. The pump will be a vertical turbine deep well pump equipped with a premium efficiency 1800 rpm vertical hollow shaft 150 hp motor. Some limited site grading will occur for the 20-foot long and 12-foot wide area for the concrete slab on grade. Additional site components include low pedestal LED lighting for the facility.

#### *Below Grade Infrastructure Design*

The design includes a 32-inch diameter mild steel conductor casing grouted in place to a depth of 50 feet below ground surface (bgs). The conductor casing will serve to stabilize the upper formations during borehole drilling, and also to provide the DDW required sanitary seal. Inside the conductor casing, a 28-inch diameter borehole extends to a depth of 570 feet bgs. The well structure includes a 16-inch outside diameter mild steel well casing to a depth of 300 feet and transitions into a stainless-steel well casing and louvered well screen assembly. The design consists of a 10-foot sump, 40 feet of well screen, and 510 feet (excluding the stick-up above ground surface) of blank well casing, extending to a depth of 550 feet bgs.

To accommodate for the potential of future inelastic land subsidence in the area, it was determined to add additional protection of the well structure. A fully extended compression section is included from 380 to 400 feet to accommodate for any potential subsidence. The screen section has been designed to be "Ful-Flo" louvered well screen, with a slot size of 0.055 inches to provide the acceptable inlet velocities, suitable open area, and retention of the selected gravel envelope material. A 3-inch diameter steel gravel fill pipe extends to a depth of 327 feet bgs and a 2-inch diameter stainless steel sounding pipe will extend to and enter the well casing at a depth of 378 feet bgs. The annular space will be filled with 8x16 graded gravel from the bottom of the borehole to 312 feet bgs. A two-foot fine sand transition seal will be



placed on top of the gravel envelope from 312 feet to 310 feet bgs, with a sand/cement grout annular seal from 310 feet bgs to ground surface.

Figure 1. Existing Conditions and Proposed Well Location

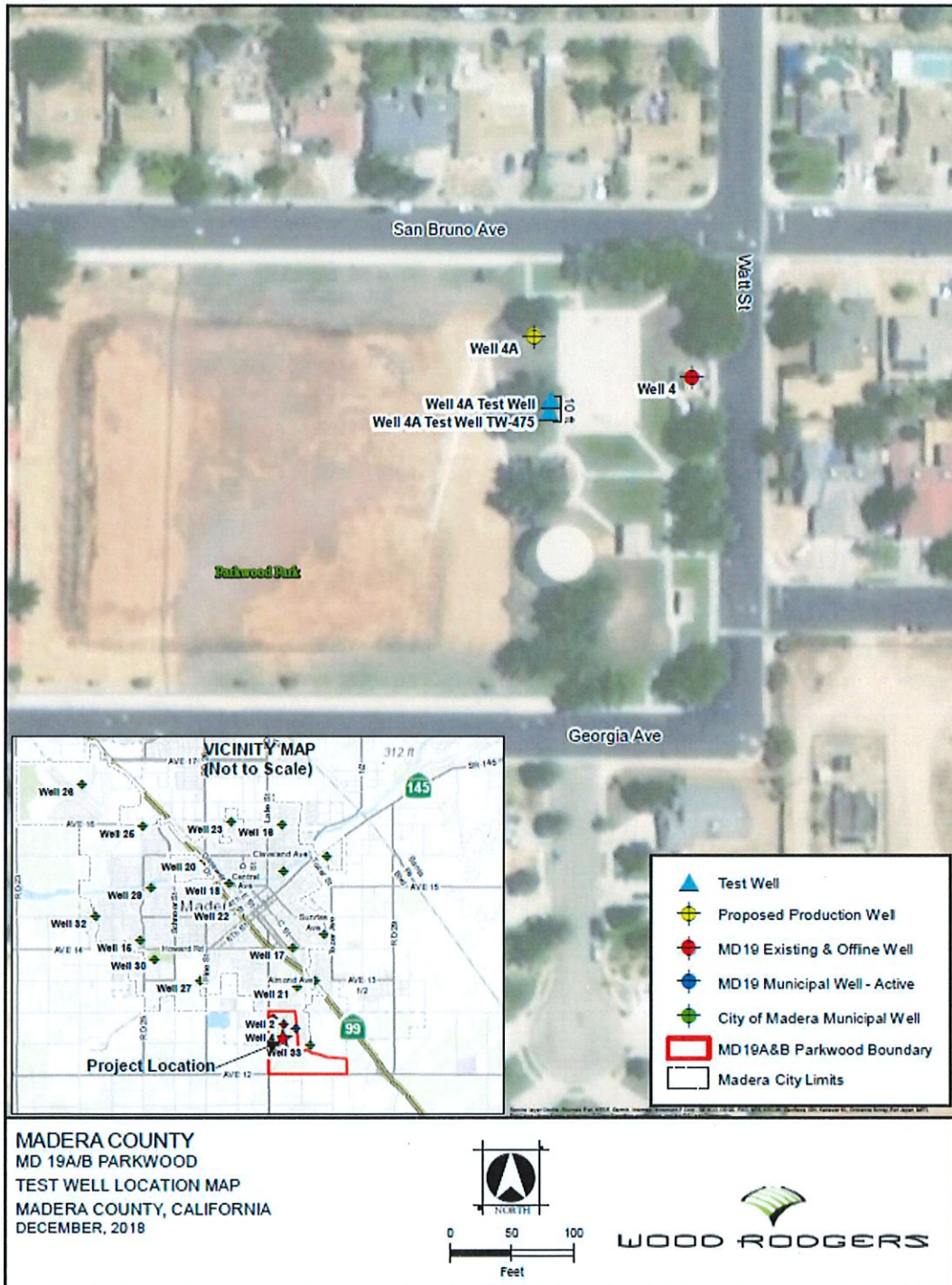


FIGURE 1

## **1.6 MEASURES INCLUDED IN THE PROPOSED PROJECT TO MINIMIZE IMPACTS**

The Parkwood CMD (County Maintenance District) 19&B Water System Improvements site is located in an area that has existing facilities and will be constructed near the existing onsite pumping station within a county park.

### **Aesthetics**

- There is potential that two trees would be removed to facilitate construction of the proposed project (Appendix 2, Sheet C-3). These trees will be replaced in the vicinity of the trees that will be removed with tree specimens of the same species and a minimum of one-half the existing tree's caliper. Madera County Parks Department will determine where the replacement trees would be planted. Due to the location of this well within a park, measures will be taken to mitigate disturbance to park activities. The existing adjacent basketball court will be protected during construction of the well. Most of the construction activities will only occur during daylight hours to minimize the potential of contributing to light pollution. A small portion of the well construction will require 24-hour activities. During this portion of the construction, mitigative measure will be taken to limit both light pollution and noise from construction related activities.

### **Biological Resources**

- Based on current 60 percent Progress Design Plans, two trees would be removed to facilitate construction of the proposed project (Appendix 2, Sheet C-3). If tree removal will coincide with the Migratory Bird Nesting Season, the required survey protocol will be implemented in compliance with the Migratory Bird Treaty Act to avoid all impact to nesting migratory birds.

### **Air Quality**

Because the construction of the Proposed Project has the potential to create fugitive dust, Madera County Public Works will require the construction contractor to implement the following measures:

- Water all exposed surface two times daily, or as required to eliminate fugitive dust.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Keep the street clean and free of loose soil. Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads as least once per day. Use of dry power sweeping is prohibited.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrance to the site.

### **Cultural Resources**

- If previously unidentified cultural resources are encountered during earth-moving activities, construction activities in their vicinity will be halted immediately and the appropriate authorities notified. Authorities should include the County Coroner if suspected human remains are discovered and a qualified archaeologist if prehistoric or historic-period artifacts are found.



### **Energy**

- Although the well itself will have limited energy consumption, an emergency generator for the facility will be provided. This generator will be diesel powered and located at the northeast extent of the project area immediately adjacent to existing facilities (Figure 2).

### **Hydrology and Water Quality**

- To minimize the introduction of sediment to the storm water system during construction, Madera County Public Works will implement standard erosion management measures, including the following Madera County's storm water best management practices (BMPs):
- The use of straw wattles and/or silt fences onsite to prevent the flow of sediment off the site.
- The use of sediment traps or gravel bags at drainage inlets to prevent any sediment from entering the storm water system.
- Use of the existing stormwater detention pond for construction wastewater. The Madera County Public Works will comply with the conditions of the State Water Resources Control Board, National Pollutant Discharge Elimination System, and General Construction Permit.

### **Geology and Soils**

- Permanent erosion control measures and BMPs will be implemented during and after construction.
- The Madera County Public Works will comply with the conditions of the State Water Resources Control Board, National Pollutant Discharge Elimination System, and General Construction Permit. Given the extent of proposed disturbance is less than 1 acre, the project will not require preparation of a Storm Water Pollution Prevention Plan (SWPPP) for the project site.
- Geotechnical information will be collected prior to the construction of the proposed pump pedestal and pad. The recommendations from the geotechnical investigation will be incorporated into the design to rectify any soil characteristics adverse to the stability of the facilities.

### **Noise**

Because of the proximity of the well site several sensitive noise receptors (park, single family residential), and because the well drilling portion of construction could operate twenty-four hours a day for multiple days over a 1-week construction period, Madera County Public Works will implement the following measures to minimize noise effects:

- To the extent feasible, construction activities shall be limited to the daytime hours of between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 5:00 p.m. on Saturday or Sunday. Any deviation from these construction hours will require noise monitoring to ensure that construction noise levels do not exceed 55 dBA from the hours of 8:00 p.m. to 10:00 p.m. and 50 dBA from the hours of 10:00 p.m. to 6:00 a.m. at the nearest sensitive receptor.
- 24-hour operations will only be allowed during the drilling, construction, gravel packing, and sealing of the well. The Contractor shall arrange with the Agency Project Engineer for any 24-hour operations intended and/or required for the successful completion of the project. Together, the Contractor and the Agency must practice good neighborhood relations at all times.
- During the well drilling and construction portion of the project, equipment will be required to be rated for residential area use. Night time activities will be limited to only time sensitive and critical tasks that require 24-hour per day operations.
- A key design component to eliminate operational noise at the site includes use of the existing submersible pump and motor for the well surrounded by a concrete pedestal and pad.

- During the construction of the well, Madera County Public Works will work with the Madera County General Services Division to ensure that the construction schedule takes into consideration previously scheduled park events.
- The emergency generator will be equipped with standard noise attention equipment.

**Recreation:**

- Although the site is located within a public park, the well site is fully fenced not allowing public access. Construction activities will be fully contained in the fenced area of the parcel and will not impact activities at the park; however, strict safety measures will be adhered to during construction at this site and Madera County Public Works will work closely with the events calendar for Parkwood Park to minimize impacts to the public's park experience.

**Transportation:**

Madera County Public Works will prepare a transportation management plan to maintain the safe operation of all vehicle modes along San Bruno Avenue, Watt Street and Georgia Avenue during the period of construction of the well. This plan will contain the following provisions:

- Avoid blocking traffic on all roads and intersections
- Allow for continuous pedestrian traffic along Watt Street, San Bruno and Georgia Avenue.

**2. LEAD, RESPONSIBLE AND TRUSTEE AGENCIES**

Madera County Public Works is the lead agency under the California Environmental Quality Act (CEQA) with primary authority for project approval.

**3. CONTACT PERSON**

Ahmad Alkhayat, Public Works Director  
(559) 675-7811

**4. PROJECT LOCATION**

South of Avenue 13 1/2 between Madera Avenue and Raymond Thomas Street adjacent to the City of Madera, Madera County, CA

General Plan Description: Medium Density Residential (MDR)  
Zoning: Public Open Space (POS)

**5. SURROUNDING LAND USES AND SETTING**

The existing well site and facilities are located within Parkwood Park, a fully developed neighborhood park. The existing Madera County Public Works facilities are contained within a fenced area to restrict public access and maintain a high level of public safety.

Parkwood Park is surrounded by fully developed medium density residential lots.

**6. PROJECT SCHEDULE**

The project is scheduled to be constructed in 2019, with overall project completion in 2020.

**7. OTHER PUBLIC AGENCY APPROVALS REQUIRED**

The following responsible and trustee agencies may have jurisdiction over some or all of the elements of the proposed project:



Entity	Permit Required
Madera County	Encroachment Permit
Madera County	Grading Permit
Madera County	Erosion Control Permit
Madera County	Stormwater Pollution Preventions Plan
EPA	National Pollutant Discharge Elimination System Compliance
San Joaquin Air Pollution Control District	Emergency Diesel Generator - Authority to Construct Emergency Diesel Generator - Permit to Operate

## 8. PUBLIC INVOLVEMENT

This Initial Study is available for a public review period beginning on May 23, 2019 and ending on June 23, 2019. The CEQ document is available for review at the address below, and at <https://www.maderacounty.com/government/public-works/quick-links/special-districts-bulletin>.

Written comments may be submitted by 3:00 p.m. on June 20, 2019 to:

Madera County, Public Works Department  
Municipal Services Division  
200 West 4th Street, 3rd Floor  
Madera, California 93637

Comments may also be provided at a public hearing at which the project will be considered for approval. This hearing is scheduled for 10:00 a.m. on July 9, 2019 at the MCPW headquarters at 200 West 4<sup>th</sup> Street, 3<sup>rd</sup> Floor, Madera, California 93637.

## 9. NATIVE AMERICAN 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?

*Yes, please see Appendix 4.*

If yes, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

*Yes, please see Appendix 4.*

## 10. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 17 for additional information.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input type="checkbox"/>	Geology/Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials

<input type="checkbox"/>	Hydrology/Water Quality	<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Wildfire	<input type="checkbox"/>	Mandatory Findings of Significance

**11. DETERMINATION:**

<input checked="" type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.

*Leslie N. Burnside*

June 3, 2019

Leslie Burnside, Associate  
Wood Rodgers, Inc.

Date



---

Ahmad Alkhayyat  
Public Works Director

6.5.19

Date



## 12. CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

### A. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The Madera MD 19 A/B Parkwood Well site is located within a public park, adjacent to a residential area. The project area is zoned Public Open Space (POS). There is an existing steel fence that separates the well site from the adjacent property on all sides. This fence would remain and would be extended to enclose the emergency diesel generator. A second smaller (588 SF) fenced area would be erected on the west side of the basketball court to house the proposed well and appurtenances.

### Impact Assessment

**a). No Impact** The Proposed Project site is not located in an area with special scenic values. The proposed well would be constructed to be visually consistent with the existing well site located on the site.

**b). Less Than Significant** Project construction and operation at the Proposed Project site would not damage scenic resources, as there are none on or near the site. The proposed project will require the removal two trees. These trees will be replaced with trees of the same species, a

minimum of ½ the caliper of the existing trees, and in the vicinity of the tree to be removed.

**c.) No Impact** The Proposed Project would not substantially degrade the visual quality of the site. An existing, offline well is located at the site within an existing fenced area and this project is serving as a replacement well. Although the replacement well will not be located in the same location as the previous well, the proposed well facilities will be housed similar to the existing well site and in close proximity.

**d.) No Impact** The proposed project includes low pedestal LED lighting for the facility that is the same as the existing lighting.

**B. AGRICULTURE AND FOREST RESOURCES**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

The site is located within an already-developed residential area and does not contain lands currently in agricultural production.



**Impact Assessment**

- a). **No Impact** The site would not convert agricultural land to non- agricultural uses.
- b). **No Impact** The site is not zoned for agricultural use or under a Williamson Act contract.
- c). **No Impact** There is no forest land on the proposed well site.
- d). **No Impact** There is no forest land on the proposed well site.
- e). **No Impact** No conversion of agricultural land to non-agricultural uses would occur at the site nor would project activities have any effects on other agricultural lands.

**C. AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

Air Quality Elements are one of the major elements which may be included within a General Plan Document for a city or county. Within the San Joaquin Valley Air Basin (Valley), Assembly Bill 170 mandates that all cities (57) and counties (8) either adopt an air quality element or amend other elements (land use, circulation, housing, conservation and open space) of its general plan in order to improve overall air quality for its jurisdiction.

The EPA recently announced that it had finalized approval of the SJVAPCD’s request for redesignation to attainment of the federal PM10 standard. No official exceedances of the PM10 standard had been recorded anywhere in the San Joaquin Valley Air Basin (SJVAB) since 2003.

The SJVAB counties exceed the federal annual PM2.5 standard. The SJVAB does not exceed the federal 24 hour PM2.5 standard. The SJVAPCD PM2.5 Attainment Plan predicted attainment of this standard by 2015.

As part of its CEQA consultation procedures, Madera County lead agencies refer projects to

the SJVAPCD for review and comment on air quality impacts. Staff will continue to provide CEQA documents and supporting technical reports to the SJVAPCD for review. The County will continue to utilize the SJVAPCD's Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) as a basis for air quality analysis requirements and for determining the significance of air quality impacts of development projects subject to CEQA.

the District recommends that the Lead Agencies apply the adopted significance thresholds when evaluating project specific impacts on air quality within the San Joaquin Valley. If the Lead Agency determines the proposed project would exceed any of the significance thresholds, then an environmental document should be prepared. However, it is recognized that the final determination of whether a project would have a significant effect on air quality is ultimately within the purview of the Lead Agency pursuant to CEQA Guidelines (CCR §15064(c)).

The District identifies thresholds that separate a project's short-term emissions from its long-term emissions. The short-term emissions are mainly related to the construction phase of a project and are recognized to be short in duration. The long-term emissions are mainly related to the activities that will occur indefinitely as a result of project operations. In addition, CEQA states that another condition that could establish a project as having a significant effect on the environment is effects that are considered "cumulatively considerable."

According to this guide, air quality impacts are considered less-than-significant if they are less than maximum tons per year of criteria and toxic pollutant emissions in the below table:

**Air Quality Thresholds of Significance – Criteria Pollutants**

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	<i>Emissions (tpy)</i>	<i>Emissions (tpy)</i>	<i>Emissions (tpy)</i>
<b>CO</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>NO<sub>x</sub></b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>ROG</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>SO<sub>x</sub></b>	<b>27</b>	<b>27</b>	<b>27</b>
<b>PM<sub>10</sub></b>	<b>15</b>	<b>15</b>	<b>15</b>
<b>PM<sub>2.5</sub></b>	<b>15</b>	<b>15</b>	<b>15</b>

The District has determined that use of District Rule 2201 (New Source Review - NSR) Offset thresholds as the District thresholds of significance for criteria pollutants under CCR §15064.7 is an appropriate and effective means of promoting consistency in significance determinations within the environmental review process and is applicable to both stationary and non-stationary emissions sources.

The District's attainment plans demonstrate that project specific emissions below the District's



offset thresholds will have a less than significant impact on air quality. Thus, the District concludes that use of District NSR Offset thresholds as the District thresholds of significance for criteria pollutants under CCR §15064.7 is an appropriate and effective means of promoting consistency in significance determinations within the environmental review process and are applicable to both stationary and non-stationary emissions sources.

The District's permitting process typically ensures that emissions of criteria pollutants from permitted equipment and activities at stationary sources are reduced or mitigated to below the District's thresholds of significance. District implementation of New Source Review (NSR) generally ensures that there is no net increase in emissions above specified thresholds from new and modified Stationary Sources for all nonattainment pollutants and their precursors. Permitted sources emitting more than the NSR Offset Thresholds for any criteria pollutant must, in general, offset all emission increases in excess of the thresholds. However, under certain circumstances, the District may be precluded by state law or other District rule requirements from requiring a stationary source to offset emissions increases.

As stated previously in Section 7 Other Public Agency Approvals Required, the proposed emergency diesel generator will require Authority to Construct and a Permit to Operate from the San Joaquin Air Pollution Control District. Therefore, the District's permitting process will ensure that emissions of criteria pollutants from this permitted equipment and activity at a stationary source would be reduced or mitigated to below the District's thresholds of significance.

### **Impact Assessment**

**a). No Impact.** NO<sub>x</sub> emissions during construction of the Proposed Project would generate less than the threshold of 85 pounds/day established by the SMAQMD, so the Proposed Project would not conflict or obstruct implementation of any air quality management plan. Further, as described under *Project Description*, the Proposed Project includes measures to minimize dust pollution during construction.

**b). No Impact** See the response to a) above.

**c). No Impact** Residents in the community to the west and east of the well site and at the public park site may be considered sensitive receptors, though exposure would be limited to the time they may spend outside in the vicinity of the well site during construction. Emissions will be temporary and limited to the roughly 4 weeks during which the well construction would occur, though most emissions would occur during roughly 2 weeks of well drilling.

The well drilling and construction would be approximately 16 months in duration. Because the emissions from the Proposed Project would only occur during the construction period, which is limited in time, this impact is considered less than significant.

**d). No Impact** The Proposed Project would not create any objectionable odors, either during the construction or operational phases of the project.

## D. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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 Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

On behalf of the applicant, in March of 2019, Wood Rodgers, Inc. submitted a request to the California Natural Diversity Database (CNDD) to determine the potential for sensitive species to occur at and in the vicinity of the site (Appendix 3).

Given the existing developed condition of the Parkwood Park and the well site, Wood Rodgers has determined that it is marginal wildlife and native vegetation habitat. A large portion of the project site is hard surface surround by landscaped species. The overstory (trees and shrubs) may provide potential nesting bird habitat. Species expected to be found in this area include American crows (*Corvus brachyrhynchos*), acorn woodpecker (*Melanerpes formicivorus*), house sparrows (*Passer domesticus*), and California scrub-jay (*Aphelocoma californica*). Expected mammals include the introduced eastern fox squirrel (*Sciurus niger*).

The results of CNDD query indicated that 1 reptile (California tiger salamander), 1 mammal (hoary bat), 1 plant (*Madera leptosiphon*) and 1 insect (molestan blister beetle) have potential to occur in the vicinity of the proposed project.



No special status plants or wildlife species, or sensitive plant communities have been observed within the project area of the proposed Parkwood 19A&B Well site.

No special-status wildlife species or raptors were found at the project site. If project construction is scheduled to occur during the nesting bird season (generally January through August), nesting bird surveys will be required in accordance with the Migratory Bird Treaty Act.

**Impact Assessment**

**a). No Impact** No special-status species were identified on or near the project site, and none are likely to occur there in the near future. Therefore, the Proposed Project would not create a significant impact on any special-status species.

**b). No Impact** No riparian or other sensitive natural communities were identified on either project site.

**c). No Impact.** The proposed Well 19 A/B site is within a developed area, and does not contain any wetlands or waters of the United States.

**d). No Impact** No migration corridors for native or resident migratory fish or wildlife species were identified on the project site, as it is located in urbanized area.

**e). No Impact** No protected biological resources were identified on the project site.

**f). No Impact** The project site is not located within an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

**E. CULTURAL RESOURCES**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

No cultural resources have been identified in the project site. April 26, 2019 an archival review was completed for the project area by Great Basin Consulting Group (GBCG) (Appendix 4). The Southern San Joaquin Valley Information Center (SSJVIC), California State University, Bakersfield under Permit #281 provided a record search for previous archaeological reports within the project area. The record search covered a ½ mile radius surrounding the project area parcel.

Eighteen previous inventories were conducted within the record search extent. The project parcel



and direct APE have not been inventoried. No resources are located within the project area. Of the eighteen inventories within the project vicinity, only four identified cultural resources. Two cultural resources have been recorded within the one-half mile record search boundary. Madera Canal Irrigation District (MID) Lateral 6.2 (P-20-002308/CA-MAD-002649H) bisects section 31 and extends throughout the project vicinity. The nearest lateral lie between 0.2 miles south and 0.5 miles west of the Direct APE. The Borden Chinese Cemetery is located 1.2 miles southeast of the existing well head. No constructed features are shown within Section 31, Township 11 South, Range 18 East on the 1852 General Land Office Survey Plat (GLO Plat). No properties are listed on the National Register of Historic Places, Office of Historic Preservation Historic Property Directory, or the OHP Archaeological Determinations of Eligibility, or OHP Historic Properties Directory occur in the project area.

The project area consists of an active and abandoned well field. It lies within a developed area and has been subjected to extensive surface and subsurface disturbance. No previously recorded sites lie within the well head area and it is unlikely that additional intact cultural resources. The proposed project will have no effect on known cultural resources.

If additional prehistoric or historic resources are subsequently discovered during construction, the California Department of Water Resources and California SHPO should be notified and activities in the area should cease until those resources can be evaluated. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. If historic properties are inadvertently discovered, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property will be taken and the State Historic Preservation Officer (SHPO) and Indian tribes with concerns about the property, and the Advisory Council on Historic Preservation (Council) will be notified within 48 hours in compliance with 36 CFR 800.13 (b) (3).

### **Impact Assessment**

**a). No Impact** No historic resources were identified on the project site.

**b). No Impact** The site has been disturbed by past development activities and the records search identified no archaeological resources. This project is considered to have no significant impact because the probability of finding buried archaeological artifacts is low and because MCPW has incorporated a measure in the Proposed Project that will ensure the protection of any unidentified buried archaeological remains, if any are found during construction.

**c). No Impact** No paleontological resources were identified at the Proposed Project site during test well construction and activity at the site is not likely to be extensive enough to expose paleontological resources.

**d). No Impact** The site has been disturbed by past development activities. This impact is considered less than significant because the probability of finding buried human remains is low and because MCPW has incorporated a measure in the Proposed Project that will safeguard the protection of any unidentified human remains, if any are found during construction.

## **F. ENERGY**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Environmental Setting**

The Sustainable Energy Roadmap (SER) is an 18-month effort that launched in January 2015, sponsored by California's Strategic Growth Council. SER brings together municipal governments, regional planning agencies, community stakeholders, and technical experts to support San Joaquin Valley communities as they pursue goals related to smart growth, transportation, land use, climate, and energy.

Through participating in SER, San Joaquin Valley cities and counties can benchmark their energy and sustainable development policies and programs, identify best practices, and pursue goals that make economic sense for their communities. The SER approach is a compelling shared services model that provides vetted, easy-to-access information, actionable resources, and tailored assistance to benefit municipalities, their residents, and local businesses.

### **Impact Assessment**

**a). No Impact** The proposed project will not require a new or increased source of energy.

**b). No Impact** The proposed project has been designed and will be constructed in compliance with the goals of the SER.

## **G. GEOLOGY AND SOILS**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Environmental Setting**

The San Joaquin Valley (Valley) consists of geologic layers of marine sediments overlain by continental-sourced sediments (alluvium) deposited during erosion of the surrounding mountain ranges and flooding events. The alluvial deposits shed from the surrounding mountain ranges thicken towards the axis of the Valley and can reach up to 32,000 feet in thickness (DWR, 2004). The Valley extends to the Sacramento-San Joaquin Delta to the north, the Sierra Nevada Mountains to the east, the Coast Range Mountains to the west, and the Tehachapi and San Emigdio Mountains to the south.

### **Impact Assessment**

**a). No Impact** According to the State Division of Mines and Geology (DMG), there are no active or potentially active faults of major historic significance within Madera County; as a result, the county does not lie within any Alquist-Priolo Special Studies Zone for surface faulting or fault creep. The well building will not be occupied on a regular basis. Further, the pump stations, related equipment, and buildings will be constructed in accordance with the standards contained in the Uniform Building Code. Therefore, the risk associated with seismic activity is very low. The surrounding topography would not lend the site susceptibility to landslides.

**b). No Impact** The production well will be housed outside and surrounded by a concrete pedestal and pad. The well construction plans will include BMPs for construction to minimize off-site migration of soil and other potential contaminants. See *Section 1.6 Measures Included in The Proposed Project To Minimize Impacts* for more information. Site topography is relatively level, covered with grasses, and confined such that substantial soil erosion or loss of topsoil would not occur. Disturbed areas and construction materials will be covered during construction to minimize potential for offsite pollution.

The Contractors will be required to adhere to the BMP provisions, and because the site is essentially flat, the potential for erosion is considered less than significant.

**c). No Impact** The slope of the construction area is flat and at minimal risk of a landslide. The mountainous area of Madera County is underlain by rock and therefore not subject to liquefaction. The site soils are sufficiently stable and will not become unstable to the extent that the project would be adversely affected by on or off-site landslide, lateral spreading, subsidence, liquefaction, or hydro-collapse.

**d). No Impact** Geotechnical information will be collected prior to the construction of the proposed pump station building. The recommendations from the geotechnical investigation will be incorporated into the design to rectify any soil characteristics adverse to the stability of the building.

**e). No Impact** The Proposed Project would not generate the need for septic systems or alternative wastewater disposal systems, as any wastewater from the site will be disposed of in the sanitary sewer system, access to which is available at the site.

**f). No Impact** There are no known unique paleontological resources, sites or unique geologic features within the proposed project area.

**H. GREENHOUSE GAS EMISSIONS**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Caltrans, a State agency that consistently operates/implement projects within the State has used the best available information based to the extent possible on scientific and factual information, to describe, calculate, or estimate the amount of greenhouse gas emissions that may occur related to similar projects. To quote Caltrans, "It is Caltrans' determination that in the absence of statewide-adopted thresholds or GHG emissions limits, it is too speculative to make a significance determination regarding an individual project's direct and indirect impacts with respect to global climate change". All State and local agencies remain committed to implementing measures to reduce the potential effects of individual projects. Please see Section 1.6.			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

**Environmental Setting**

Water-related project greenhouse gas emissions (GHG) are mainly caused by energy use required to pump, transport, heat, cool and treat water and wastewater (City 2011a). The greenhouse gas effect is a natural process by which some of the radiant heat from the sun is captured in the lower atmosphere of the earth, thus maintaining the temperature and making the earth habitable. The gases that help capture the heat are called greenhouse gases (GHGs). GHGs can occur naturally in the atmosphere or result from human activity. Some naturally



occurring GHGs include water vapor, carbon dioxide, methane, nitrous oxide and ozone.

To assist Lead Agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific greenhouse gas emissions (GHG) on global climate change, the San Joaquin Valley Air Pollution Control District (District) has adopted the guidance: Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA and the policy: District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions, from business-as-usual, is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency’s authority in establishing its own process and guidance for determining significance of project related impacts on global climate change.

Construction of the Proposed Project would generate a small amount of GHGs primarily in the form of CO. Potential GHG emissions would be associated with the drilling rig, earth moving equipment, other construction equipment, and the travel of workers to and from the site. No thresholds associated with construction of a project are currently available.

**Impact Assessment**

**a). *Less Than Significant*** Because of the short duration and small scale of the construction associated with the Proposed Project the GHG emissions would be very small and are considered less than significant. The GHG emissions associated with ongoing operation of the Proposed Project are estimated to be well under the threshold used in this analysis, so these emissions are also considered less than significant.

**b). *Less Than Significant*** The proposed project has been designed for construction and operation to follow the GHG reduction measures and actions identified in the Citrus Heights GHGRP. In addition, the project is of such a small scale, that its emissions would not likely conflict with any such plan.

**I. HAZARDS AND HAZARDOUS MATERIALS**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The project site is located in Madera County. According to Wood Rodgers, 2018a, there were no active or historical groundwater contamination sites identified with the MD 19 A&B service boundary.

There are no public or private airports located near the site. The site is in an urbanized area, and is not within or adjacent to areas subject to wildfires.

### Impact Assessment

**a). Less Than Significant** The Proposed Project would not initially involve the routine transport, storage, and use of hazardous chemicals. There may be a future need for chemicals to be transported to the site contingent on future regulations regarding drinking water quality. However, chemicals are used routinely at nine existing well sites. Madera County manages the use of chemicals in accordance with the California Environmental Reporting System (CERS) Consolidated Emergency Response/Contingency plans where applicable.

**b). Less Than Significant** See the response to a) above.

**c). Less Than Significant** As described above under a) above, hazardous chemicals will not be used routinely at the Well 19 A/B site. However, these chemicals are used routinely by MCPW at each of its active well sites, and MCPW has developed safe handling procedures (described



above) that will safeguard the safety of children at the Parkwood Elementary school. Therefore, this impact is considered less than significant.

**d). No Impact** The site is not located near a hazardous materials site.

**e). No Impact** The site is not located within an airport land use plan area, nor within 2 miles of a public airport or public use airport. Madera Municipal Airport is located approximately 8 miles north and west of the Project Site.

**f). No Impact** The Proposed Project does not include any features that would impair implementation of or physically interfere with an emergency response plan or emergency evacuation plan, as MCPW will prepare a transportation management plan that safeguard continuous emergency access through the residential area.

**g). No Impact** The site is not located near wildlands nor is in an area subject to wildland fires.

## J. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

CMD 19 is in the San Joaquin Valley, which is the southern portion of the Central Valley of California. The San Joaquin Valley is a large asymmetrical trough measuring 200 miles long and up to 70 miles wide, bordered on the east by the Sierra Nevada. The San Joaquin Valley consists of two hydrologic areas: the south referred to as the Tulare Lake Hydrologic Region and the north as the San Joaquin Valley Hydrologic Region, where MD 19 is located. The San Joaquin Hydrologic Region covers an area of approximately 15,200 square miles and includes counties of Calaveras, Tuolumne, Mariposa, Madera, San Joaquin, and Stanislaus.

**Surface Water Hydrology.**

Major rivers located near MD 19 include the San Joaquin River approximately eight miles south, and the Tuolumne River approximately three miles to the north. There are no major streams or rivers located within MD 19.

**Groundwater Hydrology and Quality.**

Groundwater data collection and analysis has been conducted recently in the Subbasin in preparation efforts for the Groundwater Sustainability Plan (GSP) for the Madera Subbasin (Technical Memorandum: Madera Subbasin, 2017). For this study, maps of contours of equal groundwater elevation were prepared from spring 1958 to spring 2016. Spring 2016 groundwater contours indicate that the groundwater elevations in the City of Madera ranged from 10 feet to 90 feet msl. DWR groundwater contours between spring 2011 and spring 2017 indicate the direction of groundwater flow is primarily from south to north beneath the City of Madera (DWR Groundwater Information Center Interactive Map Application).

The MD 19 well field extracts groundwater from the underlying Madera Subbasin (Subbasin) (DWR Basin No. 5-22.06). The Subbasin covers an area of 614 square miles and is located entirely within Madera County. It is bound on the south by the San Joaquin River, on the west by the eastern boundary of the Columbia Canal Service Area, the north by the south boundary of the Chowchilla subbasin, and on the east by the crystalline basement bedrock of the Sierra Nevada foothills. Major streams in the area include the San Joaquin and Fresno Rivers and help promote recharge in the subbasin.

**Exploratory Drilling/Test Well**

A hydrogeological investigation report was submitted by Wood Rodgers in April 2018. This report was used to design the site-specific exploratory drilling program. Based upon information within the report, Wood Rodgers designed an exploratory drilling and test well construction program to assess quality of the aquifers underlying the site to a depth of 600 feet.

Wood Rodgers contracted with Bradley and Sons Drilling (Bradley) of Del Rey, California, to conduct the exploratory drilling and construction of a multiple-completion test well at the site. Beginning on September 18, 2018, Bradley drilled an 8 ¾-inch borehole to a total depth of 600 feet, using the direct rotary drilling method. The test hole was geophysically logged on September 19, 2018 by Pacific Surveys, LLC of Claremont, California. The response of the



geophysical surveys and the drill cutting samples suggested the best permeable aquifers were located between 460 to 540 feet below ground surface (bgs). Wood Rodgers provided Bradley with a nested triple completion test well design to assess the aquifer intervals, from 460 to 470 feet bgs (TW-475), 493 to 503 feet bgs (TW-508), and 530 to 540 feet bgs (TW-545). Each test well completion is identified by the total casing depth. Prior to the installation of the PVC casing, the borehole was reamed to 12 ¼-inch diameter to a depth of 520 feet bgs and a wiper pass was made with the 8 ¾-inch diameter bit to clean the borehole to a depth of 575 feet bgs. Following construction of the nested test well, it was determined that the shallow completion (TW-475) had failed, requiring a replacement. Bradley re-mobilized 10-feet south of the original test well and drilled an 8 ¾-inch diameter borehole to a depth of 485 feet bgs. On October 22, 2018, the replacement TW-475 was successfully constructed.

**Regulatory Setting.** MCPW holds a water system permit administered by the DDW that allows them to operate their water supply and distribution system. Current permits include: Project No.: 2010004, DDW Permit No.: 03-11-17P-024.

On November 18, 2014, MCPW was granted Order WQ 2014-0194-DWQ, NPDES No. CAG140001 (NPDES Permit) covering Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Waters by the California Regional Water Quality Control Board, Central Valley Region (California Regional Water Quality Control Board, Central Valley Region 2014). The NPDES permit grants MCPW the right to discharge water into the Madera County storm water system pursuant to Section 402 of the federal Clean Water Act (NPDES permit) and Article 4, Chapter 4, Division 7 of the California Water Code (Waste Discharge Requirements). The following MCPW activities are covered under the permit:

- Well development water,
- Construction dewatering,
- Pump/well testing,
- Pipeline/tank pressure testing,
- Pipeline/tank flushing or dewatering,
- Condensate discharges,
- Water supply system discharges, and
- Miscellaneous dewatering/low threat discharges.

Under the terms of the NPDES permit, "...potable water discharges as qualified under this permit have been determined to pose no significant threat to water quality..."

### **Impact Assessment**

**a). No Impact** MCPW will operate the well under the terms of the Statewide NPDES permit, which includes the determination that discharges within the terms of the permit "have been determined to pose no significant threat to water quality". In addition, MCPW has included measures in the Proposed Project to minimize erosion and the introduction of sediment into the storm water system. Therefore, this impact is considered less than significant.

**b). No Impact** The project goals for the CMD 19 site include the development of a new municipal supply well that meets State and Federal Drinking Water Regulations, protects the groundwater resource, provides 1,000 gallons per minute (gpm) capacity, and provides a well structure with a service life of approximately 75 years. The Parkwood well is intended to replace an offline, existing well that was recently removed from service due to water quality concerns. The Proposed Project would not deplete groundwater supplies over currently approved levels of groundwater extraction. The project is intended to improve water quality and water system reliability. The well site will not

increase impervious surface, and therefore would not adversely impact groundwater recharge via percolation of precipitation.

**c(i). No Impact** The proposed project would not result in substantial erosion of siltation on or off-site.

**c(ii). No Impact** The proposed project would not require surface runoff and therefore would not result in flooding on or off-site.

**c(iii). No Impact** During construction, the proposed project would discharge construction runoff to the existing stormwater detention pond. Construction planning does not anticipate a significant amount of wastewater that would exceed the freeboard capacity of the stormwater detention pond.

**c(iv). No Impact.** The Project area is not subject to flooding.

**d). No Impact.** The site is not located near a body of water that would be subject to seiche or tsunami. The site is located in flat terrain, not subject to mudflows.

**e). No Impact** MCPW has confirmed that the proposed project is in compliance with the XXXXX Water Quality Control Plan and the Madera County Sustainable Groundwater Management Plan.

**K. LAND USE AND PLANNING**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

The site is on a parcel with Madera County with a land use designation of Medium Density Residential (MDR) and a zoning of Public Open Space (POS). Land uses surrounding the site include single-family residential and a County Park.

No change in general plan designation or zoning is required at the site to allow the Proposed Project to be constructed and operated, and no use permit is required.

**Impact Analysis**

**a). No Impact** The Proposed Project does not contain any features that would lead to physically dividing a community.

**b). No Impact** The County has indicated that, the proposed project can be constructed and operated without the need for a general plan amendment, a zoning change, or a use permit.



**L. MINERAL RESOURCES**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

Mineralization has occurred in the metamorphic rocks of both the foothills zone (Macdonald, 1941, p. 267-270) and the Minaret mining district, in the Ritter Range region at the north end of the San Joaquin Basin (Erwin, 1934, p. 10-11, 61-78), but there has been virtually no mineral production of significance. The Minaret district, in particular, has been extensively prospected, and ore bodies have been found containing iron, lead, zinc, copper, and silver, as well as minor amounts of molybdenum, tungsten, and bismuth. On the upper slope of Iron Mountain, in this district, is a body of magnetite that has long attracted the attention of miners and that possibly would be profitable to exploit if it were more accessible to roads and markets (USGS 2009).

**Impact Analysis**

**a). No Impact** The site is not located in an area designated as possessing mineral resources. The site is in an urban area, so no mineral development of these areas is anticipated.

**b). No Impact** The site is not located in an area designated as possessing mineral resources. The site is on a developed parcel in an urban area, so no mineral development of these areas is anticipated.

**M. NOISE**

Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Environmental Setting**

The site is located adjacent to a residential area and it is located in a public park.

The 1995 Madera County General Plan Background Report (Chapter 8: Noise) contains noise policies to protect county residents from the harmful and annoying effects of exposure to excessive noise. However, the focus of noise policies is on the impact of roadways, highways, airports and industrial facilities on noise levels. The Proposed Project is not anticipated to be a significant, long term noise generator.

To the extent feasible, construction activities shall be limited to the daytime hours of between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 5:00 p.m. on Saturday or Sunday. Any deviation from these construction hours will require noise monitoring to ensure that construction noise levels do not exceed 55 dBA from the hours of 8:00 p.m. to 10:00 p.m. and 50 dBA from the hours of 10:00 p.m. to 6:00 a.m. at the nearest sensitive receptor.

24-hour operations will only be allowed during the drilling, construction, gravel packing, and sealing of the well. The Contractor shall arrange with the Agency Project Engineer for any 24-hour operations intended and/or required for the successful completion of the project. Together, the Contractor and the Agency must practice good neighborhood relations at all times.

Because well drilling will occur on continuous basis 24-hours per day, MCPW has included noise reduction measures in the Proposed Project to mitigate the potential for impact to a less than significant level, including the requirement of residential rated equipment during the well drilling phase and limiting the activities that will be allowed at night to keep exposure to noise during construction to 60 dBA (residential). Noise levels generated during drilling activities will be verified during construction and additional mitigating measures will be applied, as necessary to maintain a less than significant impact.

After construction, operational noise is expected to be no more than the current ambient noise levels. The use of a submersible pump and motor surrounded by a concrete pedestal and pad will also aid in operational noise reduction.

### **Impact Assessment**



**a). Less Than Significant** The site is adjacent to sensitive receptors including residences and a public park. However, the majority of the noise contributed during construction would be due to well construction activities that would be of a limited duration (approximately 1 week), and because MCPW has included measures in the Proposed Project to reduce noise levels, this impact is considered less than significant.

Noise levels during the operations phase of the Proposed Project will be very similar to existing levels, as the pump, motor, and all equipment will be contained in a fenced enclosure and will be equipped with noise attenuation that will contain the noise.

**b). Less Than Significant** The site will not expose persons to excessive ground borne vibration or noise levels. As stated above, construction activities will be of limited duration and will be minimized by measures included in the project description. During operations, the pumps and other equipment operating at each site will not create excessive ground borne vibration or noise levels because they will be submerged (pump and motor) or will be housed in a concrete building or be equipped with noise attenuation.

**c). No Impact** The site is not located within an airport land use plan or within two miles of a public airport or public use airport and would not expose people residing or working in the project area to excessive noise levels.

**N. POPULATION AND HOUSING**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

The site is located within urbanized portions of Madera County.

**Impact Assessment**

**a). No Impact** The Proposed Project will improve the reliability of water provided within portions of the MCPW system, and is intended to increase the sustainability of the existing system.

**b). No Impact** No housing or people would be displaced by the construction of the well.

**O. PUBLIC SERVICES**

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:				
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

The proposed well site is in an urbanized area and is currently served by fire protection, police protection, schools, parks and other public facilities. The proposed replacement well will have no impact on the current level of these services.

**Impact Assessment**

a). **No Impact** Sufficient capacity remains in the water, power, and sanitary sewer systems to provide for the small incremental requirements associated with the construction and operation of Well MD 19A/B Parkwood.

**P. RECREATION**

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

The Well MD 19A/B Parkwood site is within a public park, Parkwood park. An existing, offline well is located in a different section of this park. The MCPW well site is completely enclosed by a



chain-link fence and closed to the public.

**Impact Assessment**

**a). No Impact** The Proposed Project does not include any features that would result in an increase in usage of any park or recreational facility, and would thus not lead to any physical deterioration of such facilities.

**b). No Impact** The Proposed Project is located in a park, but does not include any park or recreational facilities, nor any features that would result in an increase in usage of any park or recreational facility, and would thus require the construction or expansion of any such facilities.

**Q. TRANSPORTATION**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?  <i>NOTE: While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. The PDT may determine the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b). Projects for which an NOP will be issued any time after December 28<sup>th</sup>, 2018 should consider including an analysis of VMT/induced demand if the project has the potential to increase VMT (see page 20 of OPR's updated SB 743 Technical Advisory), particularly if the project will be approved after July 2020.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Setting**

The Proposed Project site is located on Watt Street. Access to the nearest freeway is to Highway 99. There are no bicycle lanes on any adjacent streets, nor any public bus service.

**Impact Assessment**

**a). No Impact** During the construction phase of the Proposed Project the delivery of equipment and materials, and the travel of workers would generate a small number of vehicle trips. During the operations phase, the site would be visited periodically by workers to check the operations for

maintenance activities and chemical delivery. However, this would amount to less than one trip per day. Thus, the Proposed Project would not affect the operations of any roadways.

Construction at the site will not cause any significant disruption to traffic on Watt Street, Georgia Avenue or San Bruno Avenue, as the roads have wide shoulders, and there is room on the site for all of the equipment and materials to be stored to drill the well and construct the facilities. MCPW will prepare a transportation management plan, and will require the contractor selected to construct the Proposed Project to implement the plan. The transportation management plan will provide for the safe operation of autos and bicycles along Panorama Drive, and for the use of the sidewalk by pedestrians.

Because this impact will be temporary, and because MCPW will prepare a transportation management plan, this impact is considered less than significant.

**b). No Impact** There will be very limited if any disruption to traffic along Watt Street, and there will be no long-term change to the level of service. No congestion management program has been prepared that applies to the site.

**c). No Impact** The proposed project would not require the creation or restructuring of any roadway, and thus would not create a dangerous intersection. Neither would the Proposed Project create any incompatible uses on surrounding roadways.

**d). No Impact** The site would have no effect on emergency access.

**R. TRIBAL CULTURAL RESOURCES**

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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The California Native American Heritage Commission (NAHC) was contacted on March 5, 2019 and a Tribal Consultation list was requested Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2. A Sacred Lands File search was also submitted as part of that request. Upon receipt of the tribal list, Consultation letters were prepared for respective Tribes describing



the proposed project and inviting them to begin Informal Section 106 and NEPA Consultation. Those letters and responses will be attached to final CEQA documentation for the project. No sacred lands were identified by the NAHC. Please see Appendix 4.

## S. UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The site is currently served by water (MCPW), sanitary sewers, storm drains, and solid waste collection and disposal. The proposed project is a replacement well that is currently offline due to excessive sand production.

### Impact Assessment

**a). No Impact** The proposed project will not 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). No Impact** Water is available at the site, and is only needed during the construction phase of the Proposed Project. Once the well is operating, it will provide water to the MCPW water supply system and will need no outside source of water.

Construction of The Proposed Project will generate waste water that will be discharged into the existing stormwater detention pond that is located onsite. Discharged waste water will be in compliance with the terms of R5-2018-0085 and possibly 2003-003-DWQ as applicable (CRWQCB 2013).

c). **No Impact** MCPW has confirmed that there is adequate freeboard in the existing detention pond to accommodate discharge of construction waste water.

d). **No Impact** The only solid waste generated by the Proposed Project would be the cuttings generated by the well drilling during construction and construction waste generated during the pump station construction phase. MCPW will allow the well-drilling contractor to stockpile cuttings on site during the drilling phase, but ultimately, they will be required to be hauled off site and disposed of in accordance with all applicable regulations before the drilling phase is completed. Waste generated during the pump station construction phase will also be hauled off site and disposed of in accordance with all applicable regulations. The amount of waste generated would be very small, and can easily be accommodated by existing waste disposal systems.

e). **No Impact** As described above, the only solid waste generated by the Proposed Project would occur during construction, principally as cuttings produced by the well drilling. These cuttings will be disposed of by the contractor in accordance with all applicable regulations.

**T. 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	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Impact Assessment**

The proposed project area is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.



## U. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a). No Impact** The Proposed Project site does not provide potential habitat for any special-status species, nor were any special-status species identified during field reconnaissance. No cultural resources were identified during the CHRIS records search nor during previous construction activities. No significant impacts requiring mitigation were identified during the analysis of the impacts of the Proposed Project. Therefore, the Proposed Project would not have the potential to significantly degrade the quality of the environment.

**b). No Impact** The Proposed Project is not expected to contribute to any cumulatively significant impacts for several reasons. First, because the Proposed Project is a replacement well project, no new impacts or allocation of new resources are anticipated. Second, all potential impacts would be temporary and only occurring during the construction phase, and are therefore limited in duration. Third, MCPW has incorporated a number of measures (Section 1.6) into the Proposed Project to avoid or minimize any impacts.

**c). No Impact** All potential impacts would be temporary and would occur only during the construction phase, and are therefore limited in duration. Based on prior project experiences, the pollutant emissions generated during the construction of the Proposed Project would not exceed the thresholds established by the San Joaquin Valley Air Pollution Control District, so these impacts could not be considered substantial. The noise generated during construction will be temporary, and will be minimized through the usage of residential rated equipment and this are not considered substantial.

## 13. ALTERNATIVES

Given that the Proposed Project is a replacement well, the project site is owned by MCPW, and the test well data verified the potential success of a new well at this site, no other sites have been evaluated.

## 14. REFERENCES

**California Department of Fish and Wildlife.** (CDFW).2018. California Natural Diversity Database. Madera County Quad (3812163). December 26, 2018

**California Environmental Protection Agency.** 2019. Cortese List: Section 65962.5(a). Envirostor website, available at: <http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site ty pe=CSITES,ERAP,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST>; accessed September 13, 2018.

**California Geological Survey.** 2010. Alquist-Priolo Earthquake Fault Zones. Available at: <https://www.conservation.ca.gov/cgs/Pages/Earthquakes/affected.aspx>; accessed on March 19, 2019.

**California Regional Water Quality Control Board, Central Valley Region.** (CRWQCB). 2013. Order No. R5-2018-0085 on December 7, 2018; State Water Resources Control Board Water Quality Order No. 2003 – 0003 - DWQ – Statewide Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality.

**Great Basin Consulting Group.** 2019. A Class I Archival Review for the Proposed Parkwood County Maintenance District 19 A&B Water System Project, Madera County, California.

**Madera County Code.** 2019. Available at: [https://library.municode.com/ca/madera\\_county/codes/code\\_of\\_ordinances](https://library.municode.com/ca/madera_county/codes/code_of_ordinances); accessed on March 19, 2019.

**Madera County General Plan.** 1995. Available at: <https://www.maderacounty.com/Home/ShowDocument?id=2850>, accessed on March 19, 2019.

**Madera County General Plan - Air Quality Element.** Available at: <https://www.maderacounty.com/Home/ShowDocument?id=2846>, accessed on March 19, 2019.

**Madera Regional Groundwater Management Plan.** Available at: <https://www.maderacounty.com/Home/ShowDocument?id=286>, accessed March 19, 2019

**San Joaquin Valley Air Pollution Control District.** 2015. Guidance for Assessing and Mitigating air Quality Impacts. Accessed on March 19, 2019. Available at: [http://www.valleyair.org/transportation/GAMAQI\\_3-19-15.pdf](http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf). Accessed on March 19, 2019.

**U.S. Fish and Wildlife Service.** 2019. Formal Species List. Consultation Code: 08ESMF00-2019-SLI-1883

**U.S. Geological Service.** 2009. Geological Survey Professional Paper 329. Reconnaissance of the Geomorphology and Glacial Geology of the San Joaquin Basin, Sierra Nevada California.



**Wood Rodgers, Inc.** 2018a. Madera County Maintenance District (MD) 19 A&B Parkwood – Well Siting Study

**Wood Rodgers, Inc.** 2018b. Madera County, Maintenance District 19 A & B Parkwood – Hydrogeological Investigation Report. April 26, 2018

**Wood Rodgers, Inc.** 2018c. Madera County, Maintenance District 19 A & B Parkwood – Draft Well Design Report, December 17, 2018

## **15. LIST OF PREPARERS**

### **Lead Agency – Madera County Public Works**

Ahmad Alkhayat.....Public Works Director

Ramon Mendez.....Engineer III

### **Engineering – Wood Rodgers, Inc.**

Lawrence Ernst.....Project Hydrogeologist

Jeffrey Lodge.....Project Engineer

### **IS/ND Preparation**

Leslie Burnside, Wood Rodgers, Inc.....CEQA Project Manager

Michael Drews, Great Basin Consulting Group.....Cultural Resources

## **APPENDIX 1**

### **Project Site Photographs**



## **APPENDIX 2**

### **60% Progress Design Plan Set**

## **APPENDIX 3**

# **California Natural Diversity Database Query Results**



## **APPENDIX 4**

### **Class 1 Archival Review**

### **AB 32 Consultation Letters**