	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

4.0 DISCUSSION OF POTENTIAL ENVIRONMENTAL IMPACTS

This section of the Initial Study analyzes potential impacts of the proposed project. For each topic issue a determination of the magnitude of the impact is made (via checklist) and then the impact is analyzed and discussed. Where appropriate, mitigation measures are identified that will reduce or eliminate an impact.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

I. AESTHETICS -- Would the project:

1. Have a substantial adverse effect on a scenic vista? ☐ ☐ ☒ ☐

Discussion: Well Treatment Facility No. 12 will be located adjacent to agricultural lands, industrial lands and playing fields. The treatment site will be screened from public view by a chain-linked fence that will be slatted. Well Treatment Facility No. 13 will be located adjacent to single-family residential dwellings. The treatment site will be screened from public view by a chain-linked fence that will be fitted with privacy slats.

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ☐ ☐ ☒ ☐

Discussion: There are no significant stands of trees, rock outcroppings, historic buildings or other recognized scenic features that will be disrupted by the two water treatment facilities.

3. Substantially degrade the existing visual character or quality of the site and its surroundings? ☐ ☐ ☒ ☐

Discussion: The existing visual character of the well sites and their surroundings is dominated by open space with Well Site No. 12 and single-family dwellings with Well Site No. 13. Because each treatment site will be screened from the public's view the project will have a minimal impact on the visual character around each well site.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
4. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion: The installation of new well treatment facilities with their accessory features will not significantly increase light or glare emanating from the sites.

II. 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 the Forest Protocols adopted by the California Air Resources Board. Would the project:

1. 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?	☐	☐	☐	☒

Discussion: According to the Farmland Mapping and Monitoring Program of the California Resources Agency the well treatment sites are not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance but falls within the classification of Urban Built-Up Land.

2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Discussion: Well Site No. 12 site is zoned RCO (open space). The subject property is not within an agricultural preserve but is adjacent to agricultural uses. The well treatment site will not disrupt the use of the adjacent property for agricultural uses because the site represents only a small area, about the same site that an agricultural well would occupy.

3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?

☐ ☐ ☐ ☒

Discussion: The well sites (12 and 13) are zoned AE-20 and RM-3, respectively. The project proposes a public use of the subject properties and is therefore not in conflict with forest or timberland zoning. There is no timberland or forestland within the city limits of Kingsburg.

4. Result in the loss of forestland or conversion of forestland to non-forest use?

☐ ☐ ☐ ☒

Discussion: The subject site does not contain trees that would be harvested for commercial lumber.

5. 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 forestland to non-forest use?

☐ ☐ ☐ ☒

Discussion: Well site 12 is located in an agricultural area but will not have an adverse impact on adjacent agricultural operations. The treatment site is about the same size as an agricultural well site. Well site 13 is located within the urbanized area of Kingsburg. Its continued use as a well site will not cause any surrounding land to be converted from an agricultural use to a non-agricultural use.

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management 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
1. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

Discussion:

Emissions generated by this project will fall into two categories: short-term and long-term.

Short-term air pollution impacts are those, which are generated at construction sites and usually, consist of PM-10 (particulate matter10 microns or smaller in diameter) as well as emissions from motor vehicles and equipment operating on (and to and from) the treatment sites. During construction, grading activities may result in suspended dust particles, particularly under windy conditions. This short-term potential impact can be mitigated by on-site dust suppression measures. These measures include watering of all graded or excavated material at least twice a day, stopping grading and excavation activities when the wind speed exceeds 20 mph for one hour, watering or covering all material transported off-site, and minimizing the area disturbed by grading and excavation activities. The San Joaquin Valley Unified Air Pollution Control District has jurisdiction over construction site activities, ensuring that dust suppression measures will be implemented. The District's dust control rules are contained in Regulation VIII.

The District's rules also pertain to emissions from construction equipment, primarily consisting of ozone-causing emissions – Reactive Organic Gases (ROG) and oxides of nitrogen (NOx). The project's construction-related emissions will be below the Air District's thresholds for significance - however the District's construction-site standards will apply to this project site. Among others, these standards include rules limiting idling times for vehicles and ensuring that vehicles are properly tuned.

The air quality standards that apply to the San Joaquin Valley are detailed below in Table 1.

Table 1: Federal and State Ambient Air Quality Standards –2008

Pollutant	Averaging Time	California Standards [a]	Federal Standards [b]
		Concentration	Primary [c]
Ozone	1 Hour	0.09 ppm (180 µg/m3)	- - –
	8 Hour	0.07 ppm (137 µg/m3)	0.075 ppm (147 g/m3)
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m3	150 µg/m3
	Annual Arithmetic		

		Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	Mean		20 µg/m3	- - -	
Fine Particulate Matter ($PM_{2.5}$)	24 Hour		No separate standard	35 µg/m3	
	Annual Arithmetic Mean		12 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 Hour		9.0 ppm (10 µg/m3)	9 ppm (10 mg/m3)	
	1 Hour		20 ppm (23 mg/m3)	35 ppm (40 mg/m3)	
Nitrogen Dioxide (NO2) g/m3)	Annual Arithmetic Mean		0.030 ppm (56 µg/m3)	0.053 ppm (100	
	1 Hour		0.18 ppm (338 µg/m3)	- - -	
Sulfur Dioxide (SO2)	Annual Arithmetic Mean		0.030 ppm (80 g/m3) - - -		
	24 Hour		0.04 ppm (105 µg/m3)	0.14 ppm (365 /m3)	
	1 Hour		0.25 ppm (655 µg/m3)	- - -	
Lead	30 Day Average		1.5 µg/m3	- - -	
	Calendar Quarter		- - -	1.5 µg/m3	
Visibility Reducing Particles	8 Hour	- - -		- - -	
Sulfates	24 Hour	25 µg/m3		- - -	
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)		- - -	
Vinyl Chloride	24 Hour	0.010 ppm (26 µg/m3)		- - -	

A *California standards for ozone, carbon monoxide, sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values not to be exceeded. All others are not to be equaled or exceeded.*

B *National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year.*

C *National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.*

Long-term air pollution impacts are those that occur from the "operation" of the treatment sites. The project proposes the installation and operation of two TCP well treatment facilities. The operation of the engine that will pump water from the wells to the treatment sites is below the District's "threshold for significance". This engine will be powered by electricity thereby precluding any air emissions that would increase the frequency or severity of the Air District's non-attainment status for ozone or PM 2.5.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐

Discussion: The San Joaquin Valley Unified Air Pollution Control District is designated as a "non-attainment area" for ozone and PM 2.5. Ozone is a product of sunlight interacting with ROGs and NOx while PM 2.5 is dust and particles resulting from agricultural operations, internal combustion engines and manufacturing processes. The operation of electrical engines at the well sites will not result in an increase in the frequency or severity of existing air quality violations, delay their timely attainment, or interfere with the interim emission reductions specified in the Plan.

2. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

Discussion: The proposed well site projects will not generate significant criteria pollutants for which the region is non-attainment nor will emissions exceed thresholds established by the SJVAPCD for ozone precursors. The implementation of Regulation VIII will ensure that the project will not result in an increase in the frequency or severity of existing air quality violations, especially dust. Further, the operation of an electrical engine will ensure that new violations for ozone and PM 2.5 are not violated because no emissions will result from the operation of the engine.

3. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒

Discussion: Receptors include sensitive receptors and worker receptors. Sensitive receptors refer to segments of the population that are most susceptible to poor air quality - children, elderly, and persons with respiratory problems. The operation of an electrical engine to pump water from the well sites to the treatment sites will not result in any emissions and therefore will not expose sensitive receptors or work receptors to substantial pollutant concentrations.

4. Create objectionable odors affecting a substantial number of people?

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	☐	☐	☐	☒

Discussion: The installation and operation of two TCP treatment facilities will not generate any odors because the activated charcoal will absorb any order from the tainted well water.

IV. BIOLOGICAL RESOURCES --
Would the project:

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

Discussion: The project, which involves the construction and operation of two TCP treatment facilities (connected to two city well sites), will not result in a take of a protected species nor the modification of habitat that might support protected species.

The treatment sites are located in urbanized areas of Kingsburg. A 6-foot chain-link fence with slats will surround each treatment site. The treatment sites will be connected to the city's water system.

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐

Discussion:

The proposed treatment sites will be located in an area that is devoid of any native vegetation. The installation of these treatment sites will not have an adverse impact on riparian habitat.

3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐

Discussion:

The new treatment sites will not encroach on any wetlands as defined by Section 404 of the Clean Water Act. There are no marsh, vernal pool or coastal estuaries near of adjacent to the proposed treatment sites.

4. 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?	☐	☐	☒	☐

Discussion:

The proposed treatment TCP sites are not located along any river or within a wildlife corridor.

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

Discussion: There are no local policies or ordinances in Kingsburg protecting biological resources.

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local,				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion: There are no adopted habitat conservation plans that apply to the project sites.

V. CULTURAL RESOURCES --
Would the project:

1. Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☐	☒	☐

Discussion:

None of the proposed well treatment sites will cause an adverse change to a historical resource as defined by CEQA Guidelines Section 15064.5 (b). A less than significant impact on historical resources will not require any type of mitigation measures. Each treatment site is within an urbanized area of Kingsburg with no structures on either site.

2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☐	☒	☐

Discussion: Record searches through the California State Bakersfield Regional Information Center have indicated that it is unlikely that that any cultural resources exist on or near the proposed treatment sites.

None of the proposed well improvements will cause an adverse change to an archaeological resource as defined by CEQA Guidelines Section 15064.5 (b). A less than significant impact on archaeological resources will not require any type of mitigation measures.

3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Discussion: The geology of the two project sites do not have the potential to yield paleontological resources. Excavation on the Valley floor has yielded paleontological finds, however, to predict these finds is very difficult. If any cultural or paleontological materials are uncovered during project activities, work in the area shall halt until a professional cultural resources evaluation and/or data recovery excavation can be planned and implemented.

4. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion: Due to past disturbance of the project site's soils (grading of site and clearing of vegetation) it is unlikely that any human remains exist at the sites. However, should any human remains be discovered during grading and construction, the Fresno County Coroner must be notified immediately. (*The Coroner has two working days to examine the remains and 24 hours to notify the Native American Heritage Commission [NAHC] if the remains are Native American. The most likely descendants then have 24 hours to recommend proper treatment or disposition of the remains, following the NAHC guidelines*).

VI. GEOLOGY AND SOILS -- Would the project:

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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.	☐	☐	☒	☐

Discussion: While Kingsburg is located in an area that is subject to ground shaking from earthquakes, the distance to active faults that will be the likely cause of ground motions is sufficient so that potential impacts are reduced. The project sites are not located within an identified Alquist-Priolo Earthquake Hazard Zone. Therefore, impacts are considered less than significant. Although no mitigation measures are required, Kingsburg requires all new structures in the city to be built consistent with Zone II seismic standards of the Uniform Building Code.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
2. Strong seismic ground shaking?	☐	☐	☒	☐

Discussion: The subject sites are not located on an earthquake fault and the geologic conditions on the Valley floor have a low hazard risk from earthquakes. These conditions show a less than significant impact on the project due to ground shaking. No mitigation measures are required.

3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

Discussion: The subject site is not located on an earthquake fault and the geologic conditions on the Valley floor have a low hazard risk from earthquakes- seismic activity. These conditions show a less than significant impact on the project sites due to ground shaking. No mitigation measures are required.

4. Landslides?	☐	☐	☒	☐

Discussion: The proposed treatment sites are on level ground and therefore is not subject to landslides.

5. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Discussion: The proposed treatment sites will be located on level ground and on soils that are not considered erosive.

6. 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?	☐	☐	☐	☒

Discussion: The proposed treatment sites will rest on a soil that is composed of fluvaquents and xenofluvents. These soils are located along floodplain channels and are very deep and poorly drained. They are formed by alluvium derived from sedimentary rock. They are not unstable for the proposed treatment facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
7. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒

Discussion: The treatment sites will rest on a soil that is composed of fluvaquents and xenofluvents. These soils are located along floodplain channels and are very deep and poorly drained. They are formed by alluvium derived from sedimentary rock. They do not contain clays, which are typically considered to be expansive thereby causing problems for structures, roadways and foundations.

8. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion: No septic systems will be utilized as part of the project.

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

Discussion: Greenhouse gas emissions (GHG) are emissions of various types of gases that are believed to be causing an increase in global temperatures, which is affecting the world's climate patterns. Scientists recognize GHG resulting from human activities, particularly the use of machinery that burns fossil fuels for power. Key greenhouse gases include carbon dioxide, methane, nitrous oxide, and hydro fluorocarbons.

Greenhouse gas emissions will occur during the construction phase and the operation phase of the project. The construction phase will entail the installation of TCP treatment equipment, connecting the treatment plant to the city's water line system and installing the pump and other associated improvements (e.g. foundations, fences and gates).

Emissions (short-term emissions) from the construction phase of the project are not expected to have a significant impact on the environment. During the construction phase CO2, CH4, and N2O will be emitted, which are emissions that result from the combustion of fuel utilized by construction equipment and motor vehicles. Completion of this phase is estimated to be 60 days. The emissions that would be generated during

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

the construction phase of the project are deemed less than significant because it would only involve a couple of vehicles and a drilling rig. The greenhouse gas emissions generated by a couple of vehicles and power equipment associated with these tasks are insignificant when compared the number of vehicles and stationary sources operating within the Kingsburg city limits let alone the State of California's greenhouse gas emissions, which is estimating to be 483.87 million metric tons per year. No mitigation measures are required for this phase of the project.

The operation phase of the project, which involves the pumping of water from the aquifer and feeding this water to the TCP treatment facilities, will generate indirect greenhouse gas emissions because the pump will have electrical demands rather than a direct demand for diesel fuel if the pump was fueled by diesel. Given that there are about 4,000 residential units in Kingsburg, the operation of these pumps is insignificant compared to the amount of greenhouse gases, which is a product of energy usage, produced by households in the community. This impact is deemed insignificant and therefore does not require any mitigation measures.

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

☐ ☐ ☒ ☐

Discussion: The project is not in conflict with any plan involving the reduction of greenhouse gases.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

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

☐ ☐ ☒ ☐

Discussion: The project will generate spent activated charcoal, which has been uses to absorb TCP from pumped well water. These cartridges will be picked up and disposed of at Kettleman Hills Hazardous Waste Disposal Site.

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

☐ ☐ ☐ ☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Discussion: The project only involves the pumping of water from the aquifer to the water treatment plant. Hazardous materials will not be released during this process.

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

☐ ☐ ☐ ☒

Discussion: The project will not emit hazardous emissions but will generate spent activated charcoal cartridges, which will absorb TCP. The spent charcoal will be disposed of at an authorized waste disposal site (e.g. Kettleman Hills site).

3. 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?

☐ ☐ ☐ ☒

Discussion: The project sites are not included on any list of known hazardous materials sites compiled pursuant to Government Code Section 65962.5 nor are there any sites within 1/2 mile of the project sites.

4. 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 for people residing or working in the project area?

☐ ☐ ☒ ☐

Discussion: The project site is not located within an airport land use plan. The treatment sites are well outside any airport flight paths.

5. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

☐ ☐ ☐ ☒

Discussion: The project sites are not located within the vicinity of any known private airstrips.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

Discussion: The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan adopted by Fresno County or the City of Kingsburg.

6. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Discussion: There are no wildlands on or near the treatment sites.

IX. HYDROLOGY AND WATER QUALITY -- Would the project:

1. Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐

Discussion: In 2017, the California State Water Board updated the maximum contaminant level (MCL) for the chemical 1,2,3 Trichloropropane also known as TCP. Kingsburg's Wells 12 and 13 recently had test results that exceeded the MCL for TCP. The State Water Board has issued a Compliance Order which requires the City to either provide treatment facilities to reduce the TCP levels to below the MCL or discontinue use of the wells. The City cannot adequately supply the water needs of the communities without these wells operational. Therefore, the City is proposing to construct TCP treatment plants at these two well sites. The treatment facilities include Granular Activated Carbon vessels which removes the TCP, chlorination disinfection facilities, and miscellaneous piping and site improvements.

In essence, the proposed project serves as a mitigation measure. It will reduce an existing impact on local water quality standards to a less than significant level. No further mitigation measures will be required as a result of the proposed project being implemented.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

Discussion: The City of Kingsburg secures its domestic water from the local groundwater system. This water is then pumped throughout the community through a system of distribution lines. The project will not increase the amount of water pumped from the local groundwater system but will simply ensure that the water is of a higher drinking water quality.

The project will not have a significant impact on the local aquifer because the same amount of water will be pumped from the ground, therefore, mitigation measures are not required.

3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

Discussion: The drainage pattern on and around the proposed treatment sites will not be altered. Other than the treatment site footprints, which will measure 50 feet by 100 feet, the surrounding area will remain undisturbed. There will be a small number of impervious surfaces created with the construction of the new treatment plants, however, this area will not lead to any substantial runoff that would cause downstream flooding or erosion. The runoff would most likely percolate into the native ground that surrounds the new treatment sites.

4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
that would result in flooding on- or off-site?	☐	☐	☒	☐

Discussion: The drainage pattern on and around the proposed treatment sites will not be altered. Other than the treatment site footprints, which will measure 50 feet by 100 feet, the surrounding area will remain undisturbed. There will be a small number of impervious surfaces created with the construction of the new treatment sites, however, this area will not lead to any substantial runoff that would cause downstream flooding or erosion. The runoff would most likely percolate into the native ground that surrounds the new well site.

5. 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?	☐	☐	☒	☐

Discussion: The drainage pattern on and around the proposed treatment sites will not be altered. Other than the site footprints, which will measure 50 feet by 100 feet, the surrounding area will remain undisturbed. There will be a small number of impervious surfaces created with the construction of the new treatment sites, however, these areas will not lead to any substantial runoff that would cause downstream flooding or erosion. The runoff would most likely percolate into the native ground that surrounds the new treatment sites. It will not be diverted to the city's storm drainage system.

The runoff generated from the well site will not contain any contaminants.

6. Otherwise substantially degrade water quality?	☐	☐	☒	☐

Discussion: The proposed project will not adversely impact the community's water quality. In fact, with the installation of the proposed treatment plants, the level of TCP in the domestic water system will be reduced thereby ensuring that Kingsburg's water system meets the State's Safe Drinking Water standards. No mitigation measures are required.

7. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐

Discussion: No housing is proposed with the project. Housing will not be adversely impacted by potential flood conditions.

8. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐

Discussion: The proposed treatment sites are not within the 100-year flood hazard areas. No mitigation measures are necessary.

9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐

Discussion: The project will not expose people or structures to risk of loss resulting from flooding or overtopping of the Kings River. Any water flooding the treatment sites will simple flow over or past the systems. Because treatment plant systems are sealed, they will not experience contamination from floodwaters.

10. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion: The project is located about 100 miles inland from the Pacific Ocean, the closest source of a seiche or tsunami. There are no aspects of the project that reasonably present the danger of a mudflow.

X. LAND USE AND PLANNING -
Would the project:

1. Physically divide an established community?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Discussion: The water treatment sites are small and will not divide the community. Generall, physical features that divide a community include freeways, railroads, and major roadways.

2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? ☐ ☐ ☒ ☐

Discussion: The treatment sites are permitted uses under Kingsburg's Zoning Ordinance. They are not in conflict with Kingsburg's General Plan or the North Kingsburg Specific Plan.

3. Conflict with any applicable habitat conservation plan or natural community conservation plan? ☐ ☐ ☐ ☒

Discussion: The project site is not subject to any habitat or natural community conservation plans.

XI. MINERAL RESOURCES --

Would the project:

1. 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? ☐ ☐ ☐ ☒

Discussion: The sites are not known to harbor mineral resources that would be valuable to the region. Land along rivers are valuable as sites for sand and gravel operations but neither of the treatment sites are near the Kings River.

2. 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?

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	☐	☐	☐	☒

Discussion: Neither Kingsburg's nor Fresno County's general plans identify the project sites as a location where important mineral recovery sites exist. The project will not have a significant impact on this resource. No mitigation measures are required.

XII. NOISE -- Would the project result in:

1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Discussion: The installation of the two treatment facilities will increase ambient noise levels in the project vicinity during the construction phase of the project In the short term; the ambient noise level will be raised during the construction of the project by the operation of equipment and other associated activities. Because construction noise will occur intermittently on Monday through Saturday during daylight hours, the impact of noise on surrounding land uses is not expected to be significant**.** During the evening hours, when work has ceased on the project, it is unlikely that noise levels on surrounding sites will exceed 65 dBA outside each building or 45 dBA inside each building. Short-term noise impacts are considered less than significant and no short-term noise mitigation measures are required.

The long-term operation of the two treatment facilities will rely on electrical energy, not gasoline or diesel engines. Operation of the treatment facilities will not generate noise levels that would cause noise levels to exceed 65 dBA outside surrounding buildings, some of which are residential dwellings, or 45 dBA inside surrounding buildings. Long-term noise impacts are considered less than significant and no long-term noise mitigation measures are required.

2. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐

Discussion: The project does not involve the use of equipment that would generate ground-borne vibrations or the utilization of heavy trucks or other types of equipment that might generate excessive vibrations.

2. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	☐	☐	☒	☐

Discussion: The project will not increase long-term ambient noise levels within the vicinity of the project. The treatment plants use electrical energy to power the on-site equipment.

3. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Discussion: Construction activities associated with the project may result in temporary noise increases for residential areas nearby the site. As discussed above, construction will be limited to daylight hours Monday through Saturday. The additional noise generated by construction equipment should not cause a substantial increase in noise above and beyond levels currently experienced in each neighborhood. As mentioned above, the treatment plants use electricity for power. This source of energy puts out little noise. The project will not have a significant impact on ambient noise levels in the vicinity of the project sites; mitigation measures will not be required.

4. 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 expose people be residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Discussion: The project sites are not located near any airports and therefore the project will not be impacted by noise from this type of land use. No mitigation measures are required.

5. For a project within the vicinity of a private airstrip, would the project expose people be residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion: The project site is not located within the vicinity of any private airstrips.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

XIII. POPULATION AND HOUSING
-- Would the project:

1. Induce substantial 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)?	☐	☐	☒	☐

Discussion: The project will indirectly support population growth in the community. The project will upgrade Kingsburg's water system by ensuring that domestic water meets the State's Safe Drinking Water Standards.

The project will have a less than significant impact on the community's population growth given that the amount of water that will pumped from these two wells will remain the same but the water will be cleaner – meeting the State's Safe Drinking Water Standards.

2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion: There are no dwelling units on the subject sites.

3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion: No existing dwellings will be removed as a result of the project.

XIV. PUBLIC SERVICES

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				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐

Discussion: The project sites will receive fire protection services from the Kingsburg Fire Department. The Department is headquartered in downtown Kingsburg. Fire hydrants are located adjacent to the sites so ample water will be available should a fire event occur at either of the sites. The project will have a less than significant impact on fire protection services in Kingsburg. No mitigation measures are required.

Police protection?	☐	☐	☒	☐

Discussion: The project will receive police protection from the Kingsburg Police Department, headquartered in central Kingsburg. The project will have a less than significant impact on police protection services in Kingsburg. No mitigation measures are required.

Schools?	☐	☐	☐	☒

Discussion: The project will have a less than significant impact on schools in Kingsburg. No mitigation measures are required.

Parks?	☐	☐	☒	☐

Discussion: The project will not have a significant impact on parks in the community. No mitigation measures are required.

Other public facilities?	☐	☐	☐	☒

Discussion: The project will not adversely impact other public facilities in the community. In fact, by treating the water to remove TCP all public facilities will benefit in Kingsburg because the water will be cleaner.

XV. RECREATION --

1. Would the project increase the use of existing neighborhood and regional				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

Discussion: The project does not affect recreational facilities. The project will have a less than significant impact on recreation facilities and mitigation measures are not required.

2. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion: The project does not include any recreational facilities and therefore will have a less than significant impact on the environment.

XV. TRANSPORTATION/TRAFFIC

-- Would the project:

1. Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), considering all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐

Discussion: The project will generate a small volume of traffic during the construction phase of the project. Vehicles associated the construction of the two treatment facilities will be operating off-road, at the treatment sites. Vehicles entering and exiting the treatment sites will be utilizing local roadways, which can effectively accommodate the additional traffic that will be generated by this project.

The will not have an adverse impact on Kingsburg's circulation system. Only minimal vehicular traffic will be generated by the project. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
1. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐

Discussion: Traffic generated by the project is not expected to conflict with Fresno County's Congestion Management Programs. The volume of traffic that will be generated by the project will be negligible. The roadways that serve the two treatment sites will not be adversely impacted with the project's traffic because they are operating at a Level of Service of B or better. No mitigation measures are required.

2. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐

Discussion: The project will not affect air traffic patterns.

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

Discussion: The project is not anticipated to increase hazards due to any roadway design feature or incompatible uses that would use adjacent roadways. The project does not involve any modifications to a road nor will it utilize any equipment that would be incompatible with the operation of adjacent roadways. The heavy equipment that will be used to construct the treatment sites can be driven on local roadways and state highways. No significant impacts are expected in this category and mitigation measures are not required.

4. Result in inadequate emergency access?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Discussion: The project does not propose any improvements that would restrict emergency access to the site. No significant impacts are expected in this category. Mitigation measures are not required.

5. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ☐ ☐ ☐ ☒

Discussion: The project will not conflict with any policies, plans, or programs supporting alternative modes of transportation.

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? ☐ ☐ ☒ ☐

Discussion: The project will not generate any wastewater. All water treated at the treatment sites will be pumped into Kingsburg's water distribution system.

2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? ☐ ☐ ☒ ☐

Discussion: The project itself involves the construction of two TCP treatment facilities. This project will have a positive impact on Kingsburg's water system by treating the water to remove TCP and improve the water quality to meet the State's Safe Drinking Water Standards. No mitigation measures are required.

3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	☐	☐	☐	☒

Discussion: The project does not involve the construction of storm drainage improvements and therefore will not cause any environmental effects potentially caused by the installation of these improvements.

4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

Discussion: The project itself will ensure that Kingsburg has an adequate supply (and high quality) of water for existing development and development planned for the future. The project will have a positive impact on Firebaugh's water system.

5. Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐

Discussion: The project will not lead to an increase in the demand for more treatment capacity at the wastewater treatment plant because the project does not involve land uses that generate sewage. The project will not have a significant impact on this public service. No mitigation measures are warranted.

6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Discussion: The project will not generate any solid waste and therefore will not have any impact on local landfills. The project only involves the treatment water from the groundwater system.

7. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Discussion: The project will not generate any solid waste material and therefore will not violate any federal, state or local statutes or regulations related to solid waste. The spent carbon filters will be disposed of at a site that can accept hazardous waste and is certified by the State of California.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

5.0 ALTERNATIVES

A single alternative solution was explored for the project. It was:

Abandon Wells 12 and 13 and replace them with new wells that pump water that meets the State's Safe Drinking Water Standards. The cost to construct two new wells would exceed between 1.5 and 2.0 million dollars and the City is uncertain if the water pumped from the new wells would meet State standards.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
6.0. MANDATORY FINDINGS OF SIGNIFICANCE				
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
2. 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)?	☐	☐	☒	☐
3. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

CHECKLIST PREPARED BY:

_____
Name

_____
Date

	Potentially Significant Impact	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**