



January 25, 2021

Mr. Walter Ward
Stanislaus County Department of Environmental Resources
3800 Cornucopia Road
Modesto, California 95358

**Subject: Draft Supplemental Initial Study and Negative Declaration
Well Permit Application 2020-118 – Robert Gioletti & Sons Dairy Expansion**

Dear Mr. Ward:

Jacobson James & Associates, Inc. presents the attached Draft Supplemental Initial Study in support of a Negative Declaration prepared pursuant to the requirements of the California Environmental Quality Act (CEQA) for a well permit application submitted by Robert Gioletti & Sons for construction of one agricultural well on Assessor's Parcel Number 022-041-006, located in rural northern Stanislaus County (Project).

This Supplemental Initial Study builds on the Initial Study/Negative Declaration (ISND) adopted by the County in 2018 for the Use Permit Application No. PLN2016-0132. The 2018 ISND evaluated potential impacts to environmental resources associated with the expansion of the Robert Gioletti & Sons dairy operation. The 2018 ISND determined that the Gioletti & Sons dairy expansion would have a less than significant impact to all 17 environmental resource areas requiring consideration under CEQA at that time.

This Supplemental ISND is also consistent with the Program Environmental Impact Report (PEIR)¹ adopted by the County in 2018. The PEIR evaluated potential impacts to environmental resources associated with implementation of the County's discretionary well permitting and management program under the County's Groundwater Ordinance (Chapter 9.37 of the County Code).

Results from the 2018 ISND and PEIR streamlined the CEQA review process for this well permit significantly.

The following supporting documents are enclosed:

- Completed CEQA Appendix G Checklist
- Attachment A – Groundwater Resources Impact Assessment (includes figures)

¹ Jacobson James & Associates, 2018. *Program Environmental Impact Report, Discretionary Well Permitting and Management Program, Stanislaus County, California*. June 11.

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Please don't hesitate to contact the undersigned at 916-367-5111, Ext. 135 with any questions or concerns.

Sincerely,

JJ&A



Linda Mercurio, PMP
Senior Project Manager

DRAFT CEQA SUPPLEMENTAL INITIAL STUDY



CEQA DRAFT SUPPLEMENTARY INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, Revised June 11, 2019

1. **Project title:** Robert Gioletti & Sons Dairy Expansion
Supplemental Well Permit Application 2020-118
2. **Lead agency name and address:** Stanislaus County Environmental Resources
3800 Cornucopia Way
Modesto, California 95358
3. **Contact person and phone number:** Devin Robert Gioletti (209) 667-6024
4. **Project location:** 9769 W. Main Street, Turlock, CA 95380
5. **Project sponsor's name and address:** Robert Gioletti & Sons Dairy, Inc.
118 N. Blaker Road
Turlock, CA 95380
6. **General Plan designation:** Agricultural
7. **Zoning:** General AG 40 Acre
8. **Description of project:**

In 2017, Stanislaus County completed a CEQA Initial Study (IS) to evaluate potential environmental impacts associated with expanding operations at the Robert Gioletti & Sons Dairy (Dairy), located west of the City of Turlock, as shown on Attachment A, Figure 1. The 2017 IS determined that the proposed expansion would result in less than significant impacts to environmental resources, and a Conditional Use Permit (CUP) was issued for the Dairy expansion.

The Dairy has determined that a new supply well is required to meet the operating water demand. This Supplement IS evaluates impacts associated with permitting installation and operation of a new supply well. The existing barn and cooling water demand for the operation is met by two wells located west of the main dairy complex on the north side of West Main Street (Well 1 and Well 2, respectively). These wells extract water from the confined aquifer system that underlies the Corcoran Clay. The proposed well will be located at the main Dairy complex at 9769 W. Main Street (APN 022-041-006), as shown on Attachment A, Figure 2. The proposed well is anticipated to be completed in the unconfined aquifer system above the Corcoran Clay because groundwater from this depth is of generally higher quality and less corrosive. Operation of the proposed well would thus shift some or all of the groundwater pumping to meet the Dairy water demand from the confined to the unconfined aquifer systems.

The proposed well will be located in the southeastern portion of the Dairy facility approximately 850 to 1,000 feet from the facility's wastewater settling basins and storage pond, respectively. It will be drilled in a developed parking area of the Dairy approximately 0.3 mile and 0.5 mile east of Well 1 and Well 2, respectively. The proposed well will be constructed using polyvinyl chloride (PVC) casing and screen in an 18-inch diameter borehole, with a bentonite grout seal extending to a depth of 50 feet below ground surface (bgs). The well is proposed to be completed in the shallow, unconfined aquifer system above the Corcoran Clay. The USGS reports that the Corcoran Clay is located approximately 150 to 250 feet bgs in this area. Review of Well Completion Records for Well 1 and Well 2 indicate that the first substantial clays of the Corcoran Clay were encountered at depths of 210 and 215 feet bgs, respectively. A minor clay unit approximately 5 to 10 feet thick was encountered at approximately 170 feet bgs and may stratigraphically be part of the Corcoran Clay; however, it was found to be underlain by additional sand units above the first clay unit exceeding 10 feet in thickness. The proposed well is therefore anticipated to be completed so it can extract groundwater from these available sand units that are effectively part of the shallow aquifer system. The anticipated depth of the proposed well therefore is approximately 210 to 215 feet bgs, or to the top of the first substantial clay layer (exceeding 10 feet thickness) of the Corcoran Clay. Screen intervals will be determined based on local conditions.

The following water demands are reported by the Dairy operator. The milk barn demand is estimated to be 82,000 gallons per day (gpd), which drains to the wastewater storage pond after use, and is reused for irrigation. An additional volume of approximately 164,000 gpd is estimated to be used for cow drinking, cow cooling, on farm housing and other uses by the dairy facility. Approximately 100,000 gpd of this water is estimated to drain to the wastewater storage pond and is reused for irrigation. Well 1 and Well 2 are reportedly fitted with pumps capable of producing groundwater at rates of 160 and 170 gallons per minute (gpm), respectively, and are used individually or in combination to meet these water demands. The proposed well is targeted to produce groundwater at a rate of 170 gpm and would either be used individually to provide the Dairy water demand, or in combination with the other wells. The average annual groundwater extraction rate from the proposed well, if the entire dairy demand were met from the proposed well, is calculated as summarized in Table 1, below.

Table 1 Robert Gioletti & Sons Dairy Average Annual Water Demand and Groundwater Supply

Dairy Water Balance Component	Average Annual Water Demand/Supply		
	gallons/day	acre-feet/year	gallons/minute
Dairy Water Demand			
Milk Barn	82,000	92	57
Other Operational Demand	163,000	183	113
Subtotal	245,000	275	170
Dairy Groundwater Supply			
Total Groundwater Pumping	245,000	275	170
Minus Recharge of Applied Wastewater			
<i>Milk Barn Wastewater Used for Irrigation</i>	<i>82,000</i>	<i>92</i>	<i>57</i>
<i>Other Wastewater Used for Irrigation</i>	<i>100,000</i>	<i>112</i>	<i>70</i>
Deep Percolation of Applied Water (15%)	(27,300)	(31)	(19)
Net Shallow Aquifer Groundwater Supply	218,000	244	151

Well construction and development work will take place during the spring of 2021. The well will be located north of the dairy barn in an existing parking area. All work and ground disturbance will take place within the footprint of the parking in areas of previous ground disturbance. A temporary well construction work area will be established around the well site. The work area will measure up to approximately 50 by 100 feet and be located within the existing disturbed parking area. Access to the site will be via the existing unpaved access road. The well will be constructed using the reverse mud rotary method. Drilling equipment, typically consisting of a drilling rig, pipe truck water truck, forklift, generators, compressors, pumps, light stands, de-sander, mud

pit and support trucks. Construction of the well will last approximately two to three weeks. Approximately one week for drilling and well construction and another one to two weeks for well development, pump installation, and connection.

10. Surrounding land uses and setting:

The project site is surrounded by actively cultivated agricultural land. The parcel is bounded by the Union Pacific railroad tracks to the east, the Turlock Irrigation District (TID) Lateral Canal to the north, the dairy operation settling ponds to the west, and W. Main Street to the south. The nearest sensitive receptor to the proposed project is a single-family residence located across the Union Pacific railroad tracks, approximately 650 feet to the east of the proposed well location.

11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Transportation / Traffic |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities / Service Systems |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Geology / Soils | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

- a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
 - 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
 - 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
 - 9) The explanation of each issue should identify:
 - a) the significant criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significant.

I. AESTHETICS -- Except as provided in Public Resource Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The 2017 Initial Study (IS) completed by the Stanislaus County Planning Commission considered impacts associated with issuing a Conditional Use Permit (CUP) for expanded operations at the Gioletti & Sons Dairy. The 2017 IS determined that potential impacts to aesthetic resources are less than significant. In particular, the 2017 IS noted that expanding operations at an existing dairy was consistent with the site and surrounding area developments, and that the site itself is not considered to be a scenic resource or a unique scenic vista.

This Supplemental IS focuses on the potential environmental impacts associated with installation and operation of a supply well. Based on the proposed well location, adjacent to an existing barn, there are no additional impacts to aesthetic resources expected. This determination is consistent with the 2018 Program Environmental Impact Report (PEIR) completed to evaluate potential environmental impacts associated with the Stanislaus County Discretionary Well Permitting Program. The PEIR determined on a program level that permitting a well located in an unincorporated area of the County not governed by a Groundwater Management Plan or Groundwater Sustainability Plan has a less than significant impact on aesthetic resources.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. *Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program*. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

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 Department 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 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 Included	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"/>

Discussion:

In 2017, the Stanislaus County Planning Department completed a IS to evaluate issuing a CUP for expanded dairy operations at the Site, and determined that impacts to agriculture and forest resources were less than significant. The 2017 IS noted that each of three parcels included in the proposed expansion is enrolled under a separate Williamson Act Contract (WAC Nos. 73-1422, 78-3118, and 78-3120), and the dairy expansion would not conflict with these contracts. Moreover, the 2017 IS determined that the dairy expansion would not result in any re-zoning, conversion of farmland to non-agricultural use, or conversion of forest land to non-forest use.

The project considered by this Supplemental IS proposes to install a groundwater supply well at the dairy operation. Impacts associated with the proposed project will not change the findings of the 2017 IS. Specifically, construction and operation of the proposed well will not conflict with existing zoning or Williamson Act contracts, or result in conversion of land from one use to another.

In summary, proposed project will have no impacts on agriculture or forest resources. These findings are consistent with the 2018 PEIR completed to evaluate potential impacts associated with the County's Discretionary Well Permitting Program.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

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 Included	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 checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The 2017 IS prepared by the Stanislaus County Planning Department to evaluate potential impacts associated with issuing a CUP for expanded dairy operations at the Site determined that impacts to air quality are less than significant. Based on the CUP project information, the San Joaquin Valley Air Pollution Control District (SJVAPCD) completed an Ambient Air Quality Analysis (AAQA) and a Risk Management Review (RMR) for the project. The addition of the supply well would not increase the project emissions above the SJVAPCD thresholds for ambient air or toxic air contaminants (TACs), therefore, potential impacts related to the proposed project would remain less than significant.

The 2018 PEIR determined that construction and operation of wells under the County's Discretionary Well Permitting Program will result in less than significant impacts to air quality. These findings are applicable to the proposed project. As discussed in the 2018 PEIR, emissions associated with discretionary well projects would be well below SJVAPD thresholds of significance, as well as the localized impact screening thresholds.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

IV. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>

Discussion: The 2017 IS determined that the proposed Dairy expansion would result in less than significant impacts to biological resources. Specifically, the 2017 IS indicated that the proposed expansion in operations would take place on property that was already developed, and would not conflict with an adopted policy, ordinance or plan.

As a conservative measure, a desktop biological analysis was completed for the proposed supply well project. According to the California Natural Diversity Database (CNDDB), there are no known occurrences of special status species within 1-mile of the proposed project. In addition, no rangeland would be converted as part of the proposed project. The proposed well would be installed in an existing unpaved parking area. Therefore, no additional surveys are required.

The installation of the proposed supply well would occur within the existing dairy and would not significantly change the operational noise levels or equipment movement on site. Therefore, it is assumed that any nests near the project area would be acclimated to the existing noise and equipment levels and the installation of the proposed supply well would not change these conditions.

Lastly, Formation Environmental prepared a Groundwater Resources Impact Assessment (GRIA) for the proposed project on behalf of the applicant (Attachment A). As discussed in the GRIA, the proposed well will withdraw water from the unconfined aquifer system, which may be a water source for groundwater dependent ecosystems (GDEs). The distance to predicted drawdown contour after 20 years of pumping is 15,500 feet. No potential GDEs were identified within this distance in the Natural Communities Commonly Associated with Groundwater (NCCAG) dataset of potential GDEs developed for the DWR by

The Nature Conservancy in cooperation with the California Department of Fish and Wildlife. As such, impacts to GDEs and interconnected surface waters are not anticipated to be affected by the proposed well.

In summary, impacts to biological resources associate with the proposed project are expected to be less than significant.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The 2017 IS determined that the proposed dairy expansion would result in less than significant impacts to archeological and cultural resources. The addition of a supply well does not change this finding. The proposed well location is within an existing unpaved parking area and the area of ground disturbance is limited to an 18-inch well borehole. Due to the limited area of ground disturbance, the proposed project is unlikely to demolish, eliminate, or manipulate an historical or archaeological resource. As a conservative measure, the well construction permit will include a "halt work" requirement to be implemented in the unlikely event that a previously unidentified cultural resource is observed during drilling operations. Drilling would resume, or a new well location identified, as appropriate, pending investigation of the observed cultural resource by a qualified professional. This permit condition is in alignment with a mitigation measure included in the 2018 PEIR.

Mitigation: None

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

VI. ENERGY:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: Construction of the proposed well would require fuel to power a drilling rig, pipe truck water truck, forklift, generators, compressors, pumps, light stands, de-sander, mud pit and support trucks for a duration of two to three weeks for well installation. Energy demands associated with construction of the proposed project would be limited and short term in nature. In addition, there are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state.

Well operations would use energy to power electrical well pumps and occasional motor vehicle trips associated with periodic maintenance at the well site. In 2015, Governor Brown signed Senate Bill 350 (SB350) to codify climate, clean energy, and energy efficiency goals. SB350 focuses on the generation of energy through renewable sources and increasing the energy efficiency of buildings. The proposed project does not include new facilities or permanent structures, and the energy demand associated with operation of the proposed wells is limited. Therefore, the proposed project would not conflict with or obstruct SB350 for renewable energy or energy efficiency.

In summary, the proposed project is expected to result in a less than significant impact to Energy resources.

Mitigation: None

References:

California Legislative Information. 2015. SB-350 Clean Energy and Pollution Reduction Act of 2015. October. https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350 (Accessed November 2019).

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

VII. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The 2017 IS determined that Geology and Soils impacts associated with the proposed Dairy expansion were less than significant provided that grading, drainage, and erosion/sediment control measures were implemented in accordance with plans submitted to and approved by Stanislaus County Public Works. Findings from the 2017 IS further indicated that the Dairy is not located near an active fault or within a high earthquake zone, and that landslides are not likely due to the flat terrain of the area.

This Supplemental IS pertains to a supply well located on one of the three parcels evaluated in the 2017 IS. Therefore, the less than significant findings that are solely based on the Dairy location apply to this supply well project. This is the case for checklist items “a”, “d”, “e”, and “f” above. With respect to item “b”, the proposed well will be constructed within the footprint of existing dairy operations, and will not result in substantial soil erosion or loss of topsoil. Item “c” is considered below and in the GRIA provided as Attachment A.

Land subsidence can occur when compressible clays are depressurized as a result of groundwater extraction, triggering water to flow from the clays into the surrounding aquifer, and ultimately causing consolidation of the clay under pressure from the overlying sediments. In general, most subsidence occurs when an aquifer is initially depressurized, but can

continue for months, or even years, after clays slowly dewater and adjust to the new pressure regime. If groundwater levels subsequently recover, subsidence generally does not resume (or does not progress as rapidly), until groundwater levels fall below historical low levels. Subsidence can occur especially in confined aquifer conditions, where the drawdown associated with groundwater extraction is greater than in unconfined aquifers. Subsidence in the San Joaquin Valley has occurred mainly when compressible clays are dewatered as a result of drawdown in the confined aquifer system beneath the Corcoran Clay to below historical low levels.

DWR has designated the entire Turlock Subbasin as having a moderate potential for future subsidence (DWR 2014), however, recent subsidence has only been reported further to the west in the Delta Mendota Subbasin. Approximately 2 inches of subsidence have been reported between 2005 and 2015 at continuous monitoring station P259 along State Route 33 near Marshall Road (NAVCO 2020), located approximately 7.6 mile west-southwest of the Dairy. This location represents the northern extent of an area of subsidence that extends southward into Merced County and increases in magnitude to the south. Most of the subsidence at P259 occurred between 2011 and 2015, when groundwater levels reached historical lows in the area, and no additional irrecoverable subsidence has been recorded at this location since groundwater levels began to recover in 2016. The total amount of subsidence recorded near at P259 is not reported to have resulted in damage to, or interfere with the proper functioning of, surface infrastructure. No subsidence has been reported in the area surrounding the dairy (DWR, 2020).

The new well will extract a relatively limited amount of water from the upper, unconfined aquifer system, which is less susceptible to subsidence than the confined aquifer system. The predicted drawdown associated with this extraction will be less than about 15 feet, and drawdown exceeding 5 feet will be limited to a relatively small area within approximately 880 feet of the proposed well. At the same time, the project will decrease the amount of groundwater extracted from, and drawdown effect in, the confined aquifer system. Given the limited amount of drawdown predicted to be associated with operation of the well, the fact that extraction will occur from the unconfined aquifer system, and the lack of reported subsidence near the Dairy during the recent drought, subsidence that substantially interferes with surface land uses and infrastructure is unlikely and no impacts are expected.

In summary, the proposed supply well project will have less than significant impacts on Geology and Soils.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

VIII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The 2017 IS determined that greenhouse gas (GHG) emissions impacts associated with the proposed Dairy expansion would be less than significant provided that the Dairy comply with USEPA GHG reporting requirements and implements any Best Management Practices (BMPs) adopted locally or by San Joaquin Valley Air Pollution Control District (SJVAPCD) to reduce GHG emissions from dairy operations. The 2017 IS further indicated that a requirement for compliance with current and future GHG BMPs would be included as a condition in the CUP. The addition of the supply well would not change these findings and impacts would remain less than significant.

A less than significant finding is also consistent with the 2018 PEIR which determined that permitting wells in accordance with the County's Discretionary Well Permitting Program results in less than significant impacts to greenhouse gas emissions.

In summary, installation and operation of the proposed well will have less than significant impact on GHG emissions.

Mitigation: None

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

IX. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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"/>
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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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"/>

Discussion: The 2017 IS concluded that no significant impacts associated with hazards or hazardous materials are anticipated to occur as a result of the Dairy expansion. The addition of the proposed supply well does not change this finding. It is also worth noting that the 2018 PEIR, which evaluated program level impacts associated with the County's Discretionary Well Permitting Program, also determined that hazards and hazardous material related impacts are less than significant.

Note: The above table reflect updates included in the 2019 version of Appendix G that were not included in the version of Appendix G in use for the 2017 IS or 2018 PEIR. Specifically, item "e" now specifies "excessive noise" as a consideration for projects located within an airport land use plan or within two miles of a public airport. The closest private airport to the Site is the Turlock Airpark, located approximately five miles to the east of the site. The nearest public airport is Modesto City-County Airport, approximately nine miles north. These criteria do not change the less than significant finding for this item.

In summary, impacts related to hazards and hazardous materials for the proposed project are presumed to be less than significant.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

X. HYDROLOGY AND WATER QUALITY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 per IS <sig	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: The 2017 IS determined that hydrology and water quality impacts associated with the proposed dairy expansion were less than significant. Based on the potential for the proposed supply well considered in this Supplemental IS to impact groundwater resources, each item in the above checklist is considered below and in the Groundwater Resources Impact Assessment (GRIA) completed by Formation Environmental on behalf of the applicant, and provided as Attachment A.

- a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?** As detailed in the GRIA, groundwater quality in the confined aquifer system is relatively good, and there are no known zones of degraded groundwater identified in the vicinity of the site that could be mobilized by pumping of the proposed new well. The only identified release incident identified within one mile of the Dairy is located at the Hatch Milling Company Site, located approximately 2,500 feet southeast of the Dairy (Attachment A, Figure 2). The case was closed and a no-further-action letter was issued in 2004.

The proposed well will withdraw groundwater from the upper aquifer system, which could be affected by long-term agricultural land use in the area or potential leakage from the waste management containments associated with the Dairy, if such leakage were to occur. Waste Discharge Requirements issued by the RWQCB for the proposed Dairy

expansion are intended to prevent impacts to groundwater quality. In addition, the County will require a well sanitary seal extending to a depth of 100 feet in order to prevent potentially degraded shallow groundwater from being drawn deeper into the aquifer system by the proposed well.

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?** Per the GRIA, Dairy operations are currently supplied water from two wells screened in the confined aquifer below the Corcoran Clay. These two wells are capable of producing groundwater between 160 to 170 gallons per minute (gpm)

The proposed well will be used to supplement the existing wells to meet the operation's water demand. The proposed well will be situated in the shallow unconfined aquifer above the Corcoran Clay and is anticipated to produce groundwater at 170 gpm. Annual groundwater extraction may also be entirely replaced by the proposed well, approximately 275 acre-feet per year. Drawdown estimates in the GRIA represent a conservative estimate of potential drawdown if the proposed well is used to supply all water for dairy operations, with a maximum predicted drawdown of 15.5 feet occurring at the well, and 5 feet of drawdown extending roughly 880 feet from the well. Therefore, the proposed project would not cause interference drawdown to existing wells or cause groundwater drawdown or storage depletion.

- c) Would the project 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?** The proposed project involves the installation of one dairy supply well. The well will be located north of the dairy barn in an existing parking area. Electrical service will be extended to the well location. A temporary well construction work area will be established around the well site and all work and ground disturbance will take place within the footprint of the existing dairy operation in areas of previous ground disturbance. No substantial increase in the rate or amount of surface run off resulting in flooding or substantial erosion due to the construction of the well, on or off-site is anticipated.

Existing drainage patterns at the site are not anticipated to change based on the installation of the well or associated construction. Work areas for well installation are anticipated to be 50 ft x100 ft in an already disturbed area, and after construction the majority of the disturbed work area will return to its previous state. The addition of a small impervious surface at the borehole location is not anticipated to alter the drainage pattern in the area. The impact associated with item "i" is presumed to be less than significant.

- ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?** The proposed project is not expected to result in modifications to the existing drainage pattern, thus will not cause significant on- or off-site flooding. Therefore, impacts associated with item ii are presumed to be less than significant.
- 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?** The 2018 PEIR determined that impacts associated with item iii above for wells permitted under the County's Discretionary Well

Permitting Program are less than significant. These findings are applicable to the proposed project. Therefore, impacts associated with item iii are presumed to be less than significant.

d) **Would the project result in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?** As summarized in the 2017 IS for a CUP to permit expanded Dairy operations, the Site is not located in a tsunami or seiche zone. The Site is located in an area identified by the Federal Emergency Management Administration (FEMA) as an Area of Minimal Flood Hazard. However, construction or operation of the proposed well does not present a risk with respect to the release of pollutants during a flood event, should one occur. Therefore, there is no impact with respect to this question.

e) **Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?** The proposed project does not conflict with any existing Groundwater Management Plan. However, the proposed well location is located within the jurisdiction area of the West Turlock Groundwater Sustainability Agency, which is in the process of developing a Groundwater Sustainability Plan, therefore sustainable groundwater management is considered below and in the GRIA (Attachment A) .

The long-term groundwater extraction associated with the proposed new well will be relatively limited. The average annual net water demand for Phase 1A that will be met by the well is at most 244 acre-feet/year (AFY), which is equivalent to a long-term pumping rate of 151 gpm, assuming that the entire Dairy water demand is met by pumping the new well. However, it is important to note that the water demand of the Dairy will not change, but will be shifted, in whole or in part, to the new well. This limited shifting in the CLIBP groundwater demand to supply Phase 1A will not result in less groundwater being available for future supply, insufficient availability of groundwater during dry periods, or a general increase in groundwater supply development costs.

Operation of the proposed new well will result in groundwater level drawdown in the unconfined aquifer ranging from approximately 5 to 15 feet within approximately 880 feet of the proposed well. No off-site wells are reported to be located within this radius (Figure 4). Such limited interference drawdown will not result in an observable decrease in well yield.

Based on the above information, Project impacts to groundwater supplies, aquifer volume, and lowering of the groundwater table will be less than significant.

Mitigation: None

References:

Federal Emergency Management Administration, 2020. FEMA Flood Map Service Center.

<https://msc.fema.gov/portal/search?AddressQuery=9769%20W.%20Main%20Street%2C%20Turlock%2C%20CA%2095380#searchresultsanchor>. Accessed December 2020.

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XI. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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 checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: As discussed in the 2017 IS, the dairy expansion project site which includes the proposed supply well location is zoned A-2-40 (General Agriculture). The 2017 IS found that the dairy expansion would not conflict with any applicable land use plan or regulation and will not physically divide an established community. The addition of the proposed supply well does not change this determination. Further, a less than significant impact finding is consistent with the 2018 PEIR which determined on a program level that impacts to land use and planning associated with permitting a well in accordance with the County's discretionary well permitting program are less than significant effect.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XII. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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"/>

Discussion: As discussed in the 2017 IS, there are no known mineral resources at the project site. The area encompassing the proposed well site was designated as Mineral Resource Zone (MRZ)-3a in the Mineral Land Classification of Stanislaus County Special Report 173. A designation of MRZ-3a indicates an area containing known mineral occurrences of undetermined mineral resource significance and further exploration work within these areas could result in the reclassification of specific localities into MRZ-2a or MRZ-2b categories. In the event that mineral resources are located at the proposed project site, proposed project activities would not interfere with the potential extraction of a mineral resource. Further, the 2018 PEIR determined that construction and operation of wells in accordance with the County's Discretionary Well Permitting Program would not impact mineral resources. In summary, installation and operation of the proposed supply well does not warrant further consideration and there is no expected impact on mineral resources.

Mitigation: None

References:

California Department of Conservation, Division of Mines and Geology, 1993. Mineral Land Classification of Stanislaus County, California, Special Report 173. Higgins, C., Dupras, D. 1993.

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XIII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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 ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>

Discussion:

The 2017 IS determined that construction of the dairy expansion would have a less than significant impact to noise. The potential impacts from the addition of the proposed supply well are addressed below.

The 2018 PEIR determined that construction or operation of wells under the County's Discretionary Well Permitting Program would have no impact related to item "b" in the checklist above. The no impact determination for item "b" applies to the proposed project.

The table above reflects updates included in the 2019 version of Appendix G that were not considered when the, 2017 IS, or 2018 PEIR were completed. Specifically, item "c" was updated to include consideration of a project's proximity to a private airstrip. The closest private airport to the Site is the Turlock Airpark, located approximately five miles to the east of the site. The nearest public airport is Modesto City-County Airport, approximately nine miles north. Based on the distance to the closest private or public airports or airstrips, there is no expected impact pertaining to item "c".

Item "a" essentially combines two items included in the previous version of Appendix G that had considered ambient noise levels and local noise standards separately. The 2018 PEIR determined that impacts pertaining to increases in ambient noise levels and generation of noise levels in excess of standards established in a local plan or ordinance are less than significant if construction activities take place more than 200 feet from nearby sensitive receptors on non-agriculturally zoned parcels. The nearest potential receptor is approximately 600 feet from the proposed construction activities.

In summary, noise impacts associated with the proposed project are presumed to be less than significant.

Mitigation: None

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Airport Land Use Compatibility Plan adopted October 6, 2016
http://www.stancounty.com/planning/agenda-aluc/draft_alucp.pdf (Accessed November 2019)

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XIV. POPULATION AND HOUSING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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 checked="" type="checkbox"/>	<input 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"/>

Discussion: The 2017 IS concluded that the dairy expansion would not create significant service extensions or new infrastructure which could be considered as growth inducing. The proposed supply well would be consistent with these findings. No housing or persons would be displaced by the dairy expansion or the proposed supply well.

A less than significant determination is also consistent with the 2018 PEIR finding that that construction and operation of wells under the County's Discretionary Well Permitting Program will have a less than significant impact on population growth and no impact on displacement of homes. In summary, impacts to population and housing are presumed to be less than significant and do not warrant further consideration.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XV. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<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"/>

Discussion:

The 2017 IS determined that expanding Dairy operations would have a less than significant impact on public services. Specifically, the 2017 IS noted that the County adopted Public Facilities Fees, as well as a Fire Facility Fee, to address impacts to public services. Such fees are required to be paid at the time of building permit issuance. Further the Dairy expansion project was circulated to all applicable school, fire, police, irrigation, and public works departments and districts during the early consultation referral period and no concerns were identified with regard to public services. The Turlock Irrigation District (TID) did request that any project activity conforms to Turlock Irrigation District standards.

The 2018 PEIR also determined that construction and operation of wells permitted under the County's Discretionary Well Permitting Program would result in less than significant impacts to the public services.

Construction and operation of the proposed well will not result in impacts not addressed in the 2017 IS or 2018 PEIR. Therefore, potential impacts to public services associated with the proposed project are presumed to be less than significant and do not warrant further consideration.

Mitigation: None

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XVI. RECREATION –	Potentially Significant Impact	Less Than Significant With Mitigation Included	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"/>

Discussion:

As discussed in the 2017 IS, the dairy expansion would not increase demands for recreation facilities. Similarly, the proposed supply well would not affect recreation facilities. This determination is also consistent with the 2018 PEIR which determined that construction and operation of wells under the County's Discretionary Well Permitting Program has a less than significant impact on use of existing recreational facilities and not result in additional recreational facilities. In summary, potential impacts to recreation resources associated with the proposed project are presumed to be less than significant and do not warrant further consideration.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XVII. TRANSPORTATION -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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)?	<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"/>

Discussion:

As discussed in the 2017 IS, impacts to traffic from the expansion of the dairy would be less than significant. The addition of the proposed supply well would not change these findings.

In addition, findings from the 2018 PE indicate that the construction and operation of wells under the County's Discretionary Well Permitting Program would have no impact related to transportation resources. The proposed project is consistent with these findings.

Note: Items "a" through "d" included in the above table reflect 2019 updates to Appendix G. Updates included deleting two questions and simplifying item "b". These updates do not change the determination that the proposed project would have no impact on transportation, and no further evaluation of this resource area is warranted.

Mitigation: None

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XVIII. TRIBAL CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
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:				
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 checked="" type="checkbox"/>	<input 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 Resources 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

The version of CEQA Appendix G in use when the 2017 IS was completed did not include a separate section to address potential impacts to Tribal Cultural Resources. Therefore, the items above are addressed specifically in this section.

The proposed project would be located within an existing unpaved parking area and the only ground disturbance would be the 18-inch well borehole. Due to the limited ground disturbance, the proposed project would not have the potential to cause a substantial adverse change in the significance of a tribal cultural resource. As part of the permit conditions of approval for the proposed project, if previously unidentified archeological, historical, or paleontological resources, or human remains are observed during well drilling operations, work would be halted and a qualified archaeologist, historian, or paleontologist will review the observation. Therefore, potential impacts to tribal resources would be less than significant.

Mitigation: None

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

IXX. UTILITIES AND SERVICE SYSTEMS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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 checked="" type="checkbox"/>	<input 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"/>

Discussion: The 2017 IS concludes that potential impacts to utilities and service systems from the expansion of the dairy would result in a less than significant impact. The addition of the proposed supply well would not change the findings for items “a”, “c”, “d”, or “e” in the checklist above. Additional consideration if given to item “b” below and in the GRIA prepared by Formation Environmental, provided as Attachment A.

Chapter 9.37 of the Stanislaus County Code requires that: (1) groundwater quality and quantity are adequate and will not be adversely impacted by the cumulative amount of development and uses allowed in the area; (2) the proposed use will not cause or exacerbate an overdraft condition in a groundwater basin or subbasin; and (3) the proposal not result in groundwater overdraft, land subsidence, or saltwater intrusion. In addition, groundwater use must not result in critical reduction in flow in directly connected surface waters or adverse impacts to groundwater dependent ecosystems. The previous sections of this report provide substantial evidence that these requirements of the Stanislaus County Groundwater Ordinance have been met, and that sufficient groundwater supplies are available for extraction by the proposed new well to supply the Dairy expansion project under both normal and extreme drought conditions. In addition, the Dairy is not located in an adjudicated basin, and based on the available data it is unlikely the local Groundwater Sustainability Agency will need to regulate groundwater extraction in this area to implement its pending GSP. Therefore, there is no foreseeable regulation of groundwater that would limit the ability of the proposed new well to supply of the Dairy. The Dairy would be able to extract groundwater for beneficial use on its property under an overlying groundwater right. No new entitlements would be required, and the Project would therefore have no impact

In summary, impacts to utilities and service systems associated with the proposed project are less than significant, and no further consideration of this resource area is warranted.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XX. WILDFIRE – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	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"/>

Discussion: State Responsibility Areas are boundaries adopted by the Board of Forestry and Fire Protection. These designated State Responsibility Areas are areas where the California Department of Forestry and Fire (CAL FIRE), has a financial responsibility for fire suppression and prevention. These designated areas can be determined through review of the Stanislaus County Fire Hazard Severity Zone Maps for State Responsibility Area and Local Responsibility Area (CAL FIRE, 2007a and 2007b). Review of the Stanislaus County Fire Hazard Severity Zone Maps for State Responsibility Area and Local Responsibility Area indicate the proposed project is located in a Local Responsibility Area.

The proposed project would not impair an adopted emergency response plan or emergency evacuation plan. The Project location is not in a State Responsibility Area or lands classified as very high fire hazard severity zones; the nearest is located within the coastal range, approximately 20 miles west of the proposed project. Routine BMPs for construction activities address fire prevention methods such as:

- Restricting vehicles from driving or parking on dry vegetation during fire sensitive times of the year; and,
- Wetting dry areas before commencing activities, and wetting throughout the day, as appropriate, during fire sensitive times of the year.

The proposed project would not require the installation or maintenance of associated infrastructure (such as 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 and would not impair an adopted emergency response plan or emergency evacuation plan. The proposed project would not 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. Based on these findings, there would be no impact.

Mitigation: None.

References:

California Department of Forestry and Fire (CAL FIRE), 2007a. Stanislaus County Fire Hazard Severity Zone Maps in State Responsibility Area. November 7. <https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/> (Accessed November 13, 2019).

Cal Fire, 2007b. Stanislaus County Draft Fire Hazard Severity Zones in Local Responsibility Area. October 3. <https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/> (Accessed November 13, 2019).

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: Based on the evidence provided in this Supplemental Initial Study, potential impacts related to mandatory findings of significance that are associated with the proposed project are presumed to be less than significant.

Per the GRIA provided as Attachment A, the long-term groundwater extraction associated with the proposed new well will be relatively limited. The average annual net water demand that will be met by the well is at most 244 acre-feet/year (AFY), which is equivalent to a long-term pumping rate of 151 gpm, assuming that the entire Dairy water demand is met by pumping the new well. However, the water demand of the Dairy will not change, but will be shifted, in whole or in part, to the new well. This limited shifting in the groundwater demand to supply the dairy will not result in less groundwater being available for future supply, insufficient availability of groundwater during dry periods, or a general increase in groundwater supply development costs. No cumulative impacts are anticipated due to the proposed project.

Furthermore, findings from the 2018 PEIR indicate that construction and operation of wells under the County's Discretionary Well Permitting Program has a less than significant impact on mandatory findings of significance. These findings apply to the proposed project. Therefore, potential impacts to mandatory findings of significance associated with the proposed project are presumed to be less than significant and do not warrant further consideration.

Mitigation: None.

References:

Jacobson James & Associates, Inc. and Tetra Tech, Inc., 2018. Final Program Environmental Impact Report for the Stanislaus County Discretionary Well Permitting and Management Program. Prepared for Stanislaus County Department of Environmental Resources. June 11.

Stanislaus County Planning Commission, 2017. *Initial Study and Negative Declaration. Use Permit Application No. PLN2016-0132 – Robert Gioletti & Sons Dairy, Inc.* December 22.

ATTACHMENT A

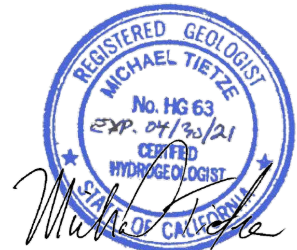
GROUNDWATER RESOURCES IMPACT ASSESSMENT

GROUNDWATER RESOURCES IMPACT ASSESSMENT, GIOLETTI & SONS DAIRY EXPANSION, STANISLAUS COUNTY, CALIFORNIA

PREPARED FOR: Devin Gioletti, Robert Gioletti & Sons Dairy

PREPARED BY: Mike Tietze, PG, CHG, CEG, Formation Environmental, LLC
Hank Dickey, Formation Environmental, LLC
Sierra Williams, Formation Environmental, LLC

DATE: January 6, 2020



1. INTRODUCTION

Robert Gioletti & Sons Dairy plans to expand an existing dairy operation located in rural Stanislaus County west of the City of Turlock on the northeast corner of West Main Street and North Blaker Road, between Central Avenue and North Blaker Road on Assessor's Parcel Numbers (APNs) 022-041-006, 022-041-013 and 022-041-012 (the Dairy). The location of the Dairy is shown on Figure 1. Formation Environmental, LLC (Formation) has prepared this Technical Memorandum to present the methods and results of a Groundwater Resources Impact Assessment (GRIA) to evaluate the potential groundwater resource-related impacts of installing a new supply well as part of the proposed Dairy expansion (the Project). The purpose of the proposed well is to shift water supply pumping for the Dairy from two wells completed on nearby parcels to a new well located on the parcel on which the demand is situated. No increase in groundwater demand will occur.

Because the proposed well will be located in unincorporated Stanislaus County in an area that is not served by a water agency operating in compliance with a Groundwater Management Plan, it is subject to the requirements of the Stanislaus County Groundwater Ordinance (County Code Chapter 9.37), which requires that applicants complete a supplemental application and provide "substantial evidence" that groundwater extraction from their proposed wells will be sustainable, as defined under the Ordinance. This Groundwater Resources Impact Assessment (GRIA) provides the required substantial evidence of sustainable extraction. A completed supplemental well permit application package is enclosed (Appendix A and B). The GRIA and supplemental well permit application are being submitted to Stanislaus County to support preparation of an environmental document that complies with the requirements of the California Environmental Quality Act (CEQA) and the Groundwater Ordinance.

2. PROJECT DESCRIPTION

The expansion would increase the Dairy operation from a maximum of 2,760 mature cows and 250 support stock to a maximum of 3,800 mature cows and 890 support stock. Stanislaus County adopted an Initial Study/Negative Declaration under CEQA for the proposed dairy expansion in 2016 and issued a Conditional Use Permit (CUP) No. PLN2016-0132 for the project. The dairy operates under General Waste Discharge Requirements Order R5-2007-0035. An updated Nutrient Management Plan (NMP) and Waste Management Plan (WMP) under that Order were submitted to the Regional Water Quality Control Board (RWQCB), who responded that they found these plans complete and acceptable. Their response also indicated that when the CEQA process is completed, the Dairy owner/operator will need to submit a Form 200, which is required by the RWQCB for preparation of individual Waste Discharge Requirements for the Dairy. Conditions of approval for the CUP were applied to the project which require adherence to the accepted WMP and all RWQCB standards, including completing individual Waste Discharge Requirements.

The Dairy expansion includes the addition of corrals, two freestall barns, two special needs barns and a calf hutch with flush lanes, and expansion of an existing special needs barn. The wastewater produced by the Dairy is managed in a series settling basins and ponds, and is utilized to fertilize approximately 700 acres of irrigated cropland farmed by the applicants in the vicinity of the dairy. The wastewater supplements irrigation water provided by Turlock Irrigation District (TID) and pumped from a series of six irrigation wells. TID delivers up to 42 inches of water to the irrigated parcels to meet estimated demands that range from 0.97 to 4.41 feet, depending on the crops grown. The existing barn and cooling water demand for the operation is met by two wells located west of the main dairy complex on the north side of West Main Street (Wells 1 and 2, respectively, on Figures 1 and 2). These wells extract water from the confined aquifer system that underlies the Corcoran Clay. Since the CUP was issued for the Dairy expansion, the operators have determined a new supply well will be needed at the main Dairy complex at 9769 W. Main Street (APN 022-041-006) to supplement the existing wells in meeting the operation's water demand. The new well is proposed to be completed in the unconfined aquifer system above the Corcoran Clay because groundwater from this depth is of generally higher quality and less corrosive. Operation of the new well could thus shift some or all the groundwater pumping to meet the Dairy water demand from the confined to the unconfined aquifer systems.

The following water demands are reported by the Dairy operator. The milk barn demand is estimated to be 82,000 gallons per day (gpd), which drains to the wastewater storage pond after use, and is reused for irrigation. An additional volume of approximately 164,000 gpd is estimated to be used for cow drinking, cow cooling, on farm housing and other uses by the dairy facility. Approximately 100,000 gpd of this water is estimated to drain to the wastewater storage pond, and is reused for irrigation. Wells 1 and 2 are reportedly fitted with pumps capable of producing groundwater at rates of 160 and 170 gallons per minute (gpm), respectively, and are used individually or in combination to meet these water demands. The new well is targeted to produce groundwater at a rate of 170 gpm and would either be used individually to provide the Dairy water demand, or in combination with the other wells. The average annual groundwater extraction rate from the new well, if the entire dairy demand were met from this new well, is calculated as summarized in Table 1, below.

TABLE 1. Dairy Average Annual Water Demand and Groundwater Supply

Dairy Water Balance Component	Average Annual Water Demand/Supply		
	gallons/day	acre-feet/year	gallons/minute
Dairy Water Demand			
Milk Barn	82,000	92	57
Other Operational Demand	163,000	183	113
Subtotal	245,000	275	170
Dairy Groundwater Supply			
.....Total Groundwater Pumping	245,000	275	170
Minus Recharge of Applied Wastewater			
<i>Milk Barn Wastewater Used for Irrigation</i>	<i>82,000</i>	<i>92</i>	<i>57</i>
<i>Other Wastewater Used for Irrigation</i>	<i>100,000</i>	<i>112</i>	<i>70</i>
Deep Percolation of Applied Water (15%)	(27,300)	(31)	(19)
Net Shallow Aquifer Groundwater Supply	218,000	244	151

The new well will be in the southeastern portion of the Dairy facility approximately 850 to 1,000 feet from the facility's wastewater settling basins and storage pond, respectively (Figure 2). It will be drilled in a developed portion of the Dairy approximately 0.3 mile and 0.5 mile east of Wells 1 and 2, respectively. The well will be constructed using polyvinyl chloride (PVC) casing and screen in an 18-inch diameter borehole, with a bentonite grout seal extending to a depth of 50 feet below ground surface (bgs). The well is proposed to be completed in the shallow, unconfined aquifer system above the Corcoran Clay. Based on a review of the well logs for Wells 1 and 2, the anticipated depth of the new well is approximately 210 to 215 feet bgs, or to the top of the first substantial clay layer (exceeding 10 feet thickness) of the Corcoran Clay. Screen intervals will be determined based on local conditions.

3. PROJECT SETTING

The Site is in the Turlock Groundwater Subbasin of the San Joaquin Valley Groundwater Basin. The characteristics of the subbasin are summarized in the table below.

TABLE 2 - Summary of Turlock Groundwater Subbasin

Groundwater Subbasin (DWR Basin Number)	Approximate Area	CASGEM Priority	Critical Overdraft Listing
Turlock Subbasin (5-22.03)	542 mi ² (347,000 acres, including areas outside the county)	High	No
Sources: DWR 2006; DWR 2016; DWR 2020			

Turlock Subbasin is bounded to the south by Merced River, to the north by Tuolumne River, to the west by San Joaquin River, and to the east by low-permeability bedrock of the Sierra Nevada. Topography ranges from gently rolling hills in the eastern subbasin to alluvial plains in the central and western portions, where the Dairy is located. Groundwater in the eastern portion of the Turlock Subbasin occurs mainly in the Mehrten, Turlock Lake, Riverbank, and Modesto formations under unconfined to semi-confined conditions. An unconfined to semi-confined aquifer system occurs in the central and western portions of the subbasin in the Modesto and Riverbank Formations and Holocene alluvial deposits overlying the Corcoran Clay, and confined aquifers occur in the Turlock Lake Formation and Mehrten Formation below the Corcoran Clay (SWRCB 2012; TGBA 2008).

The freshwater aquifers that are important to this study comprise extend to depths exceeding 1,000 feet in this area. Groundwater levels are reported to range from approximately 10 to 20 feet below ground surface (bgs), and groundwater flow is generally toward the southwest, toward the San Joaquin River (DWR 2020). The United States Geological Survey (USGS) reports that the Corcoran Clay is approximately 150 to 250 feet below ground surface (bgs) in this area (Faunt 2012). Review of Well Completion Records for Wells 1 and 2 indicate that the first substantial clays of the Corcoran Clay were encountered at depths of 210 and 215 feet below ground surface (bgs), respectively. Minor clay units were encountered above this level and may stratigraphically be equivalent with the upper portion of the Corcoran Clay, but were found to be underlain by additional sand units above the first clay unit exceeding 10 feet in thickness and therefore are functionally part of the upper aquifer system.

TABLE 3 – Upper Aquifer Stratigraphy

Well	Net Sand Thickness in Upper Zone by Depth Interval (feet)					Depth and Thickness of Corcoran Clay
	0-50 ft bgs	50-100 ft bgs	100-150 ft bgs	150-200 ft bgs	200-250 ft bgs	
Well #1	10	15	15	42	14	Depth: 210 ft bgs Thickness: 45+ feet
Well #2	38	4	31	40	15	Depth: 215 ft bgs Thickness: 55 feet

ft bgs = feet below ground surface

Agricultural water demand in the portion of the subbasin where the Dairy is located is served primarily by surface water deliveries from Turlock Irrigation District and supplemented to a lesser extent by groundwater extraction. Municipal water demand within the City of Turlock municipal service area is met via groundwater and is planned to be supplemented by a new project that will import surface water from the Tuolumne River. The area has a history of successful agricultural conjunctive use of groundwater and surface water that spans several decades, as evidenced by long-term well hydrographs indicating groundwater levels have recovered after periods of drought.

Groundwater hydrographs for several wells near the Site that are reported to be screened within the upper, unconfined aquifer and for which long term hydrographs were retrieved from the California Department of Water Resource (DWR) California Statewide Groundwater Elevation Monitoring (CASGEM) website and are shown on Figure 3 (DWR 2020). Groundwater levels declined by approximately 5 to 15 feet in the shallow aquifer during the drought period from 2011 to 2015. Starting in 2016, groundwater levels recovered by approximately 8 to 10 feet in the wells for which records are available, to near their pre-drought levels. This suggests that in recent history, overdraft conditions during periods of drought have recovered during subsequent periods of recharge.

The nearest reported land subsidence is at USGS extensometer P259, located near the intersection of Highway 33 and Bell Road, approximately 7.6 miles west of the Dairy (UNAVCO 2020). At this station, approximately 50 millimeters (roughly 2 inches) of subsidence during between 2005 and 2015. From 2016 to 2020, no additional non-recoverable subsidence was recorded. The station represents the northern extent of reported subsidence in Stanislaus County. No subsidence has been reported further to the east, near the site, indicating the area of recently active subsidence does not extend to this area.

Water quality is generally better in the unconfined aquifer system near the Dairy, with lower concentrations of total dissolved solids, which make the water more suitable for Dairy use (Gioletti, 2020). The uppermost portion of the shallow aquifer system in the area, however, is known to be impacted with elevated nitrate and TDS concentrations as a result of long-term agricultural land use. The nearest reported incident of groundwater contamination is the Hatch Milling Company Site, located approximately 2,500 feet southeast of the Dairy (Figure 2). At this site, a release of fuel hydrocarbons reported occurred from an underground storage tank in 1998. Impacted soils were excavated and remediation proceeded by monitored natural attenuation. The case was closed, and a no-further-action letter was issued in 2004.

Groundwater samples were collected from test piezometers completed in the zones shown above. Based on the data above and the water quality results, the intermediate and lower zone were selected for completion of the new well. The water quality of these aquifer zones was judged to be acceptable. Groundwater samples collected from both aquifer zones slightly exceeded the recommended secondary MCL for TDS of 500 milligrams per liter (mg/L), but were well below the upper secondary MCL of 1,000 mg/L. All other constituents analyzed met their respective primary and secondary MCLs.

4. EFFECTS ANALYSIS

4.1. CONCEPTUAL APPROACH

The groundwater demand for the Dairy will not increase, but will be shifted, in whole or in part, to a new well located more proximal to the main dairy operation and from the lower, confined aquifer system to the upper, unconfined aquifer system. Return flow from deep percolation of applied irrigation water recycled from the Dairy operation will offset some of the groundwater extraction, which will be considered in the effects analysis. The groundwater demand is relatively limited, so use of an analytical technique with conservative simplifying assumptions is appropriate. To simulate drawdown in the unconfined upper aquifer, the program AQTESOLV (version 4.50) was used in predictive mode to simulate distance-drawdown effects in an unconfined aquifer using the Neuman (1974) solution for unconfined flow. The model includes the following assumptions:

- The pumped aquifer is homogeneous. This is a common simplifying assumption.
- The simulated aquifer is uniform in thickness and infinite in areal extent. This is a reasonable assumption when no nearby flow impediments are known to exist near the Dairy.
- The aquifer receives no recharge, and all flow from the pumping well comes from aquifer storage. This simplifying assumption tends to produce a conservative result that over-predicts drawdown.
- The well pumping rate is constant. This is a reasonable assumption for a non-seasonal water supply project, especially when examining drawdown effects at distance from the pumping well.
- The aquifer experiences a net extraction rate that accounts for deep percolation of applied groundwater. This is reasonable for a shallow, unconfined aquifer.
- All the Dairy groundwater demand is met by pumping from the new well. This is likely conservative, but will account for the possibility that the Dairy operations may solely rely on the new well and leaves the flexibility to do so.

4.2. PROCEDURES

The model inputs are summarized in the table below.

TABLE 4 – Distance-Drawdown Model Inputs

Model Input Parameter	Input Value	Source	Additional Comments
Hydraulic Conductivity	27 ft/day	JJ&A, 2016	25 th percentile average hydraulic conductivity derived from 16 specific capacity tests for composite and confined aquifer wells in southern Stanislaus County.

Model Input Parameter	Input Value	Source	Additional Comments
Vertical Hydraulic Conductivity	0.27 ft/day	Assumed	Conservatively assumed to be 1/100 th of the horizontal hydraulic conductivity
Storativity	0.04	JJ&A, 2016	Reasonable value used to simulate the unconfined aquifer for the Crows Landing Industrial Business Park project.
Specific Yield	11.8 %	DWR, 2006	Estimated specific yield for the Turlock Subbasin.
Pumping Rate	150 gpm	Section 2	Average long-term annual pumping rate.
Pumping Duration	20 years	Assumed	Typical assumed well operational life (after this time, additional groundwater level drawdown will increase very slowly and may be considered pseudo-stable).

4.3. RESULTS

The predicted drawdown associated with pumping of the proposed new well is summarized below in Table 5. The predicted location of the 5-foot drawdown contour after 20 years of pumping is shown on Figure 4.

TABLE 5 – Predicted drawdown

Maximum Predicted Drawdown at Well	Predicted Distance to 20 feet Drawdown	Predicted Distance to 5 feet Drawdown	Predicted Distance to 0.5 foot Drawdown
15.5 feet	Not Applicable	880 feet	15,500 feet

5. IMPACT ANALYSIS

This section presents an evaluation of the potential environmental impacts of the Project associated with pumping of the proposed new well. The impact evaluation is provided in the form of reasoned evaluations in answer to each of the applicable significance questions contained in Appendix G of the CEQA Guidelines, listed below, but the evaluations under the threshold questions are limited to assessing impacts related only to hydrogeologic effects. These evaluations also provide substantial evidence whether the proposed well will withdraw groundwater sustainably as required under the Stanislaus County Groundwater Ordinance and whether the proposed groundwater extraction is consistent with SGMA.

5.1. GROUNDWATER-DEPENDENT ECOSYSTEMS

Question IV(a): *Would the project 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?

Question IV(b): Would the project 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 CDFG or USFWS?

Question IV(c): Would the project have a substantial adverse effect on state or federally protected wetlands (including marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The proposed well will withdraw water from the unconfined aquifer system, which may be a water source for groundwater dependent ecosystems (GDEs). The distance to predicted drawdown contour after 20 years of pumping is 15,500 feet. As shown on Figure 1, no potential GDEs are identified within this distance in the Natural Communities Commonly Associated with Groundwater (NCCAG) dataset of potential GDEs developed for the DWR by The Nature Conservancy in cooperation with the California Department of Fish and Wildlife. As such, impacts to GDEs and interconnected surface waters are not anticipated to be affected by the proposed well. No impact will occur.

5.2. WATER QUALITY

Question IX(a): Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Question IX(e): Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Groundwater quality in the unconfined aquifer system is relatively good, and there are no known zones of degraded groundwater identified in the vicinity of the site that could be mobilized by pumping of the proposed new well as long as a sufficient sanitary seal is constructed. The only identified release incident identified within 1 mile of the Dairy is located at the Hatch Milling Company Site, located approximately 2,500 feet southeast of the Dairy (Figure 2). The case was closed, and a no-further-action letter was issued in 2004.

The proposed well will withdraw groundwater from the upper aquifer system, which could be affected by long-term agricultural land use in the area or potential leakage from the waste management containments associated with the Dairy, if such leakage were to occur. Waste Discharge Requirements issued by the RWQCB for the proposed Dairy expansion are intended to prevent impacts to groundwater quality. In addition, the county will require a well sanitary seal extending to a depth of 50 feet to prevent potentially degraded shallow groundwater from being drawn deeper into the aquifer system by the proposed well.

Based on the above information, potential impacts to water quality will be less than significant.

5.3. *SUBSIDENCE*

Question VII(c): Would the project 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?

Land subsidence can occur when compressible clays are depressurized because of groundwater extraction, triggering water to flow from the clays into the surrounding aquifer, and ultimately causing consolidation of the clay under pressure from the overlying sediments. In general, most subsidence occurs when an aquifer is initially depressurized, but can continue for months, or even years, after clays slowly dewater and adjust to the new pressure regime. If groundwater levels subsequently recover, subsidence generally does not resume (or does not progress as rapidly), until groundwater levels fall below historical low levels. Subsidence can occur especially in confined aquifer conditions, where the drawdown associated with groundwater extraction is greater than in unconfined aquifers. Subsidence in the San Joaquin Valley has occurred mainly when compressible clays are dewatered because of drawdown in the confined aquifer system beneath the Corcoran Clay to below historical low levels.

DWR has designated the entire Turlock Subbasin as having a moderate potential for future subsidence (DWR 2014), however, recent subsidence has only been reported further to the west in the Delta Mendota Subbasin. Approximately 2 inches of subsidence have been reported between 2005 and 2015 at continuous monitoring station P259 along State Route 33 near Marshall Road (NAVCO 2020), located approximately 7.6 mile west-southwest of the Dairy. This location represents the northern extent of an area of subsidence that extends southward into Merced County and increases in magnitude to the south. Most of the subsidence at P259 occurred between 2011 and 2015, when groundwater levels reached historical lows in the area, and no additional irrecoverable subsidence has been recorded at this location since groundwater levels began to recover in 2016. The total amount of subsidence recorded near at P259 is not reported to have resulted in damage to, or interfere with the proper functioning of, surface infrastructure. No subsidence has been reported in the area surrounding the dairy (DWR, 2020).

The new well will extract a relatively limited amount of water from the upper, unconfined aquifer system, which is less susceptible to subsidence than the confined aquifer system. The predicted drawdown associated with this extraction will be less than about 15 feet, and drawdown exceeding 5 feet will be limited to a relatively small area within approximately 880 feet of the proposed well. At the same time, the project will decrease the amount of groundwater extracted from, and drawdown effect in, the confined aquifer system. Given the limited amount of drawdown predicted to be associated with operation of the well, the fact that extraction will occur from the unconfined aquifer system, and the lack of reported subsidence near the Dairy during the recent drought, subsidence that substantially interferes with surface land uses and infrastructure is unlikely, and no impacts are expected.

5.4. *CHRONIC DRAWDOWN AND DIMINUTION OF SUPPLY*

Question IX(b): Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Question IX(e): Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The potential for operation of the proposed new well to interfere with implementation of a water quality control plan is discussed in Section 5.2, above.

The long-term groundwater extraction associated with the proposed new well will be relatively limited. The average annual net water demand that will be met by the well is at most 244 acre-feet/year (AFY), which is equivalent to a long-term pumping rate of 151 gpm, assuming that the entire Dairy water demand is met by pumping the new well. However, it is important to note that the water demand of the Dairy will not change, but will be shifted, in whole or in part, to the new well. This limited shifting in the groundwater demand to supply the dairy will not result in less groundwater being available for future supply, insufficient availability of groundwater during dry periods, or a general increase in groundwater supply development costs.

Operation of the proposed new well will result in groundwater level drawdown in the unconfined aquifer ranging from approximately 5 to 15 feet within approximately 880 feet of the proposed well. No off-site wells are reported to be located within this radius (Figure 4). Such limited interference drawdown will not result in an observable decrease in well yield.

Based on the above information, Project impacts to groundwater supplies, aquifer volume, and lowering of the groundwater table will be less than significant.

5.5. CUMULATIVE IMPACTS

Question XVIII(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.)

The effects of historical cumulative pumping in the area are represented in the well hydrographs shown in Figure 3. Groundwater levels declined by approximately 5 to 15 feet in the shallow aquifer during the drought period from 2011 to 2015. Starting in 2016, groundwater levels recovered by approximately 8 to 10 feet in the wells for which records are available, to near their pre-drought levels. This suggests that in recent history, groundwater level drawdown in the upper aquifer system during periods of drought has recovered during subsequent periods of recharge.

The proposed Regional Surface Water Supply Project, a conjunctive use project that is being implemented by the Stanislaus Regional Water Authority, will provide up to approximately 11,100 AFY of surface water to the City of Turlock water service system to lessen groundwater demand, starting in 2023 (JJ&A, 2017). This project is expected to decrease future groundwater demand and drawdown near the City of Turlock.

Based on these considerations, the groundwater resources impacts associated with the Project will be less than cumulatively considerable.

5.6. WATER SUPPLY AND ENTITLEMENTS

Question XVII(d): Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Chapter 9.37 of the Stanislaus County Code requires that: (1) groundwater quality and quantity are adequate and will not be adversely impacted by the cumulative amount of development and uses allowed in the area; (2) the proposed use will not cause or exacerbate an overdraft condition in a groundwater basin or subbasin; and (3) the proposal not result in groundwater overdraft, land subsidence, or saltwater intrusion. In addition, groundwater use must not result in critical reduction in flow in directly connected surface waters or adverse impacts to groundwater dependent ecosystems. The previous sections of this report provide substantial evidence that these requirements of the Stanislaus County Groundwater Ordinance have been met, and that sufficient groundwater supplies are available for extraction by the proposed new well to supply the Dairy expansion project under both normal and extreme drought conditions. In addition, the Dairy is not located in an adjudicated basin, and based on the available data it is unlikely the local Groundwater Sustainability Agency will need to regulate groundwater extraction in this area to implement its pending GSP. Therefore, there is no foreseeable regulation of groundwater that would limit the ability of the proposed new well to supply of the Dairy. The Dairy would be able to extract groundwater for beneficial use on its property under an overlying groundwater right. No new entitlements would be required, and the Project would therefore have no impact.

6. REFERENCES

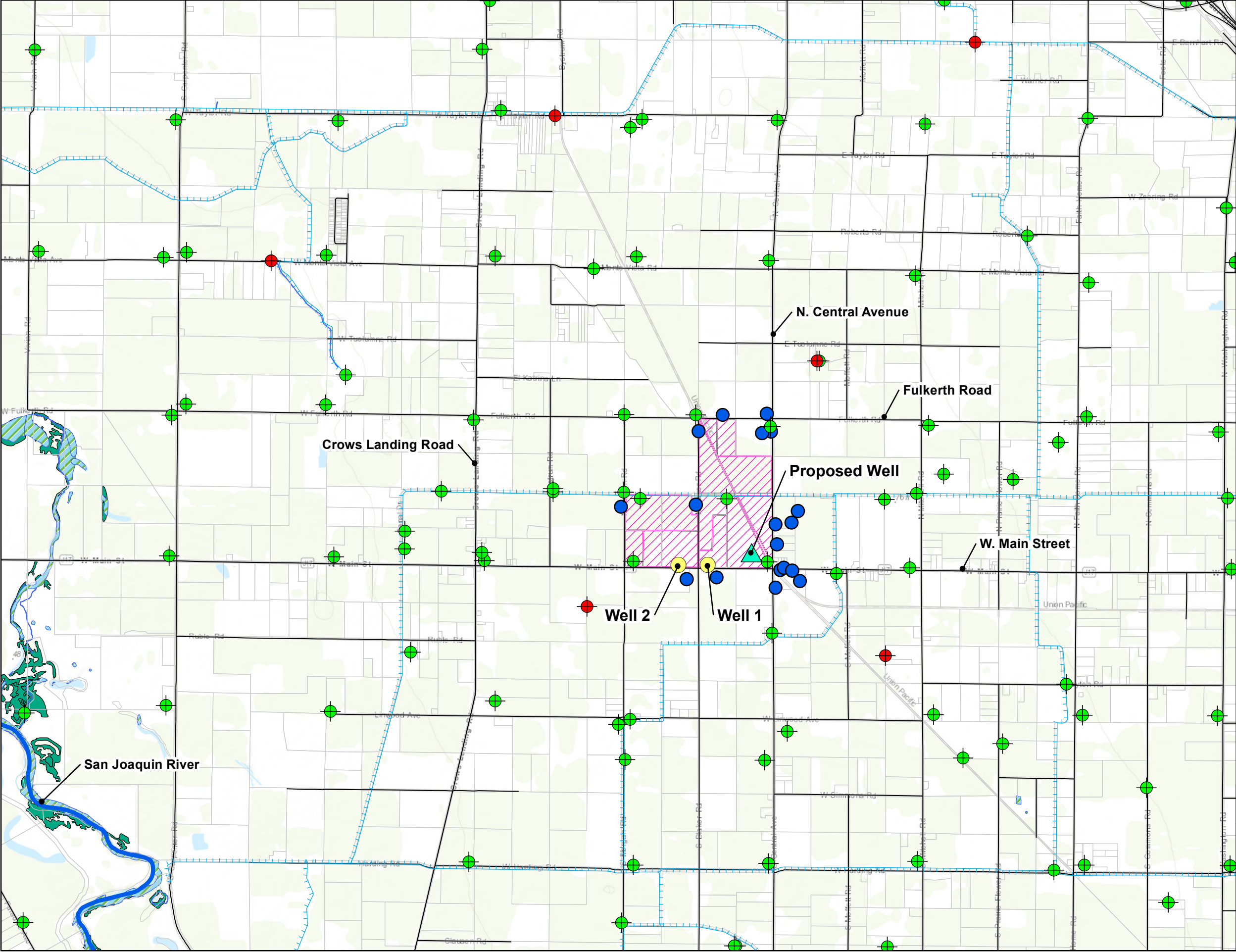
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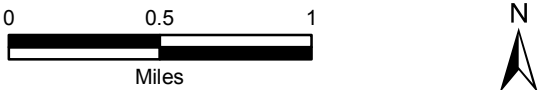
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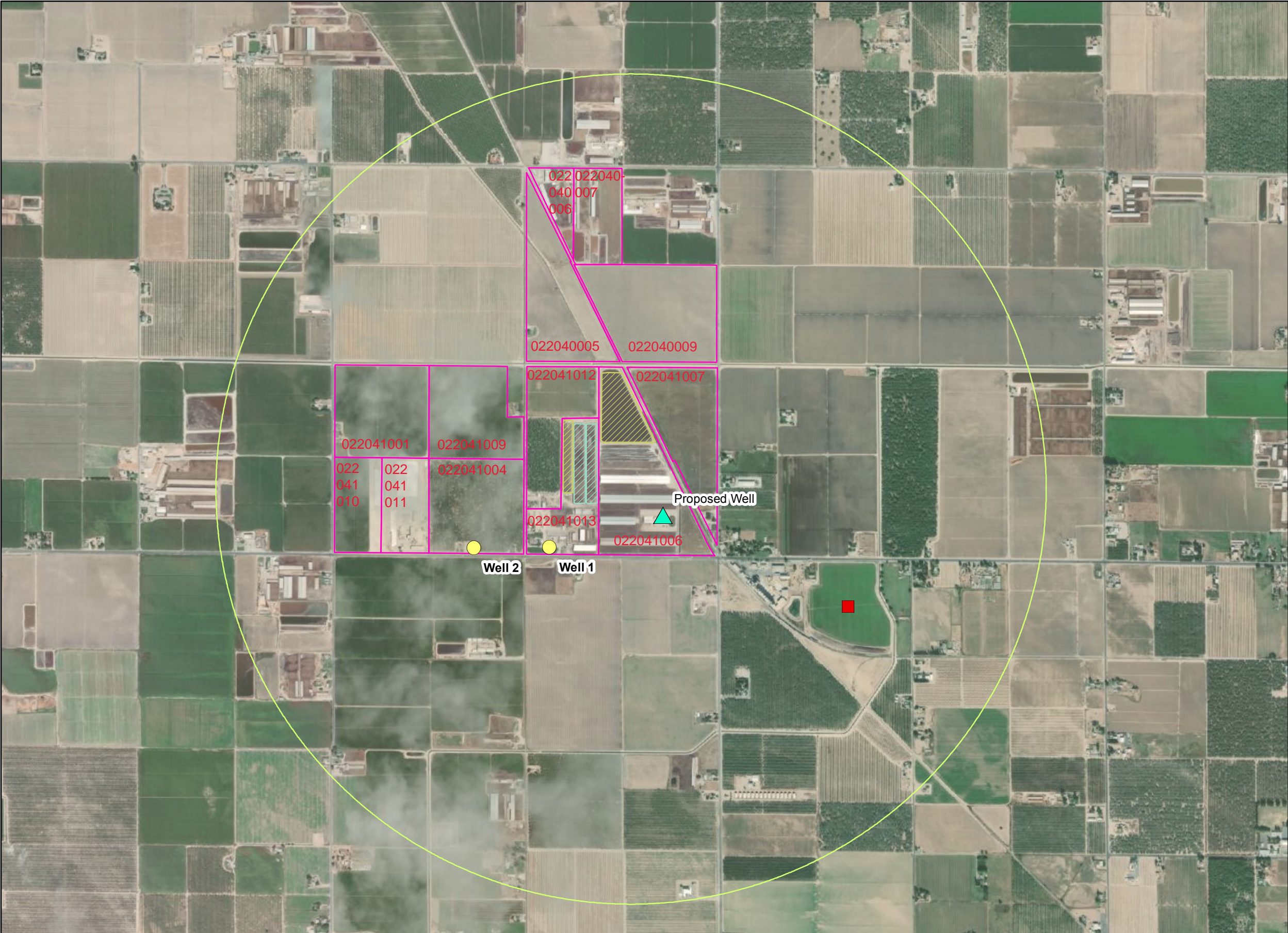


- Legend**
- Proposed Well
 - Existing Onsite Wells
 - Wells Designated under the CASGEM Program
 - Voluntary Wells under the CASGEM Program
 - Potential Offsite Wells Identified by the Applicant
 - Canals
 - Creeks
 - Rivers
 - Roads
 - Lakes
 - Stanislaus County Assessor's Parcels
 - Parcels Owned by Gioletti & Sons
 - Wetlands
 - Riparian Vegetation



Gioletti & Sons Dairy Expansion
Groundwater Resources Impact Assessment

Figure 1. Site Vicinity Map



Legend

Proposed Well

Existing Wells

Parcels Owned by Gioletti & Sons and APN

Solids Settling Pond

Wastewater Storage Pond

Reported Contamination Site (Hatch Milling Company)

1 Mile Radius of Site



Gioletti & Sons Dairy Expansion
Groundwater Resources Impact Assessment

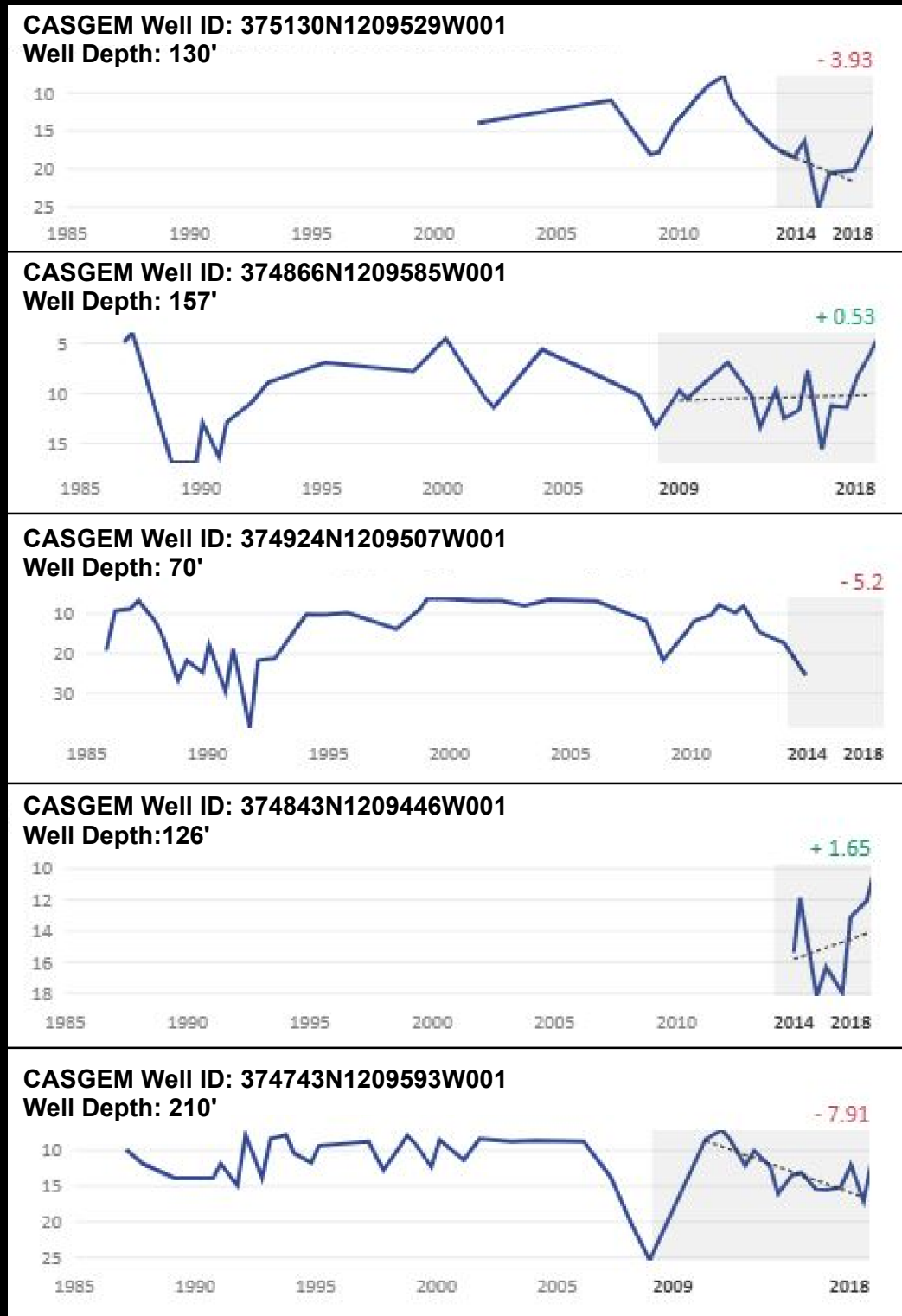
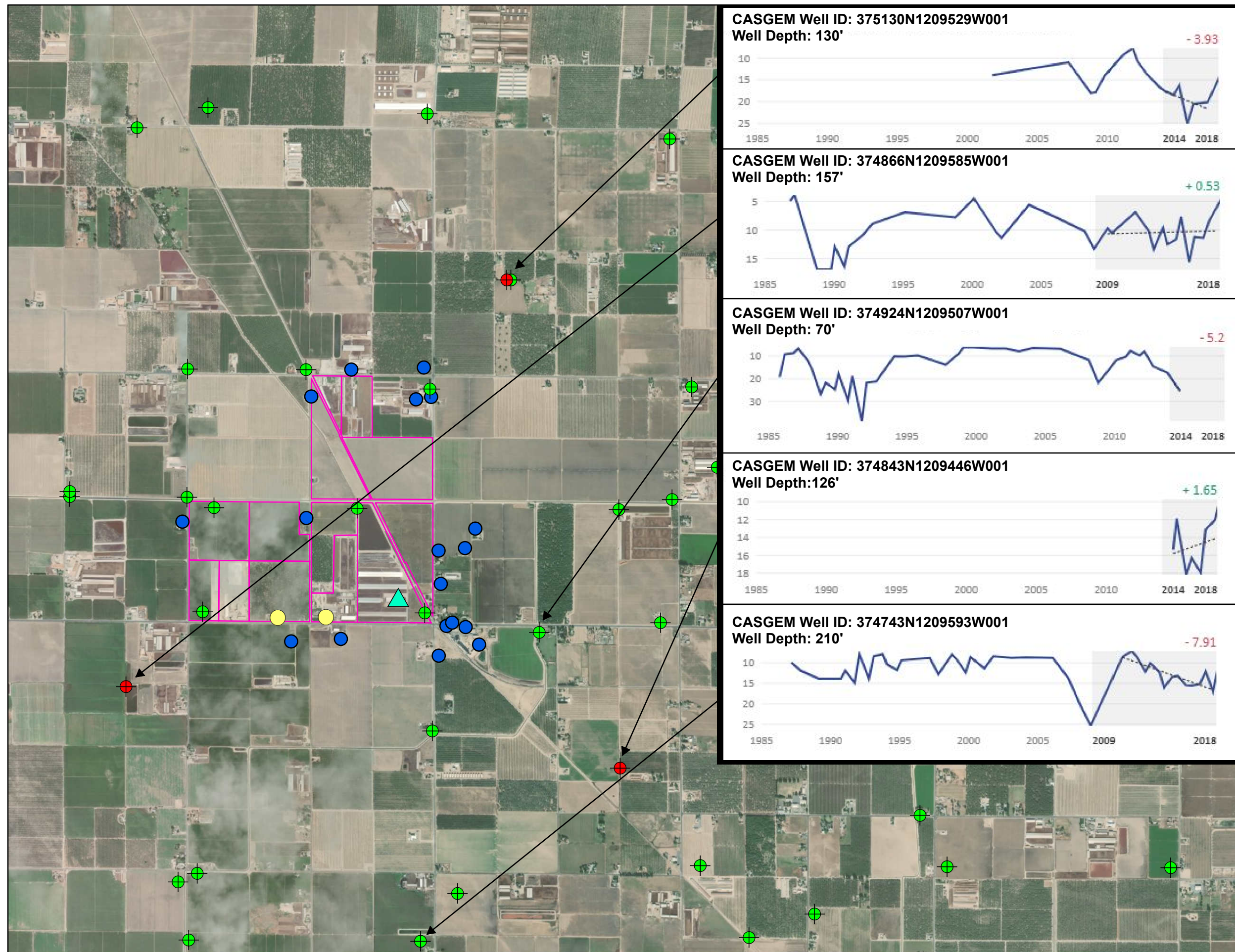
Figure 2. Nearby Potential
Sources of Contamination

Site Name	Contaminant	Program	Media of Concern	Status
Hatch Milling Company	Diesel, Gasoline, Other Solvent or Non-Petroleum Hydrocarbon	LUST	Aquifer used for drinking water	Closed: 2004

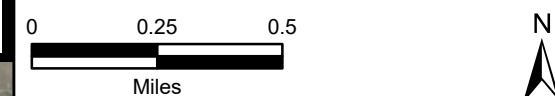
DATE: OCT 21, 2020

FORMATION

ENVIRONMENTAL



- Legend**
- Proposed well
 - Existing Onsite Wells
 - Wells Designated under the CASGEM Program
 - Voluntary Wells under the CASGEM Program
 - Potential Offsite Wells Identified by the Applicant
 - Parcels Owned by Gioletti & Sons

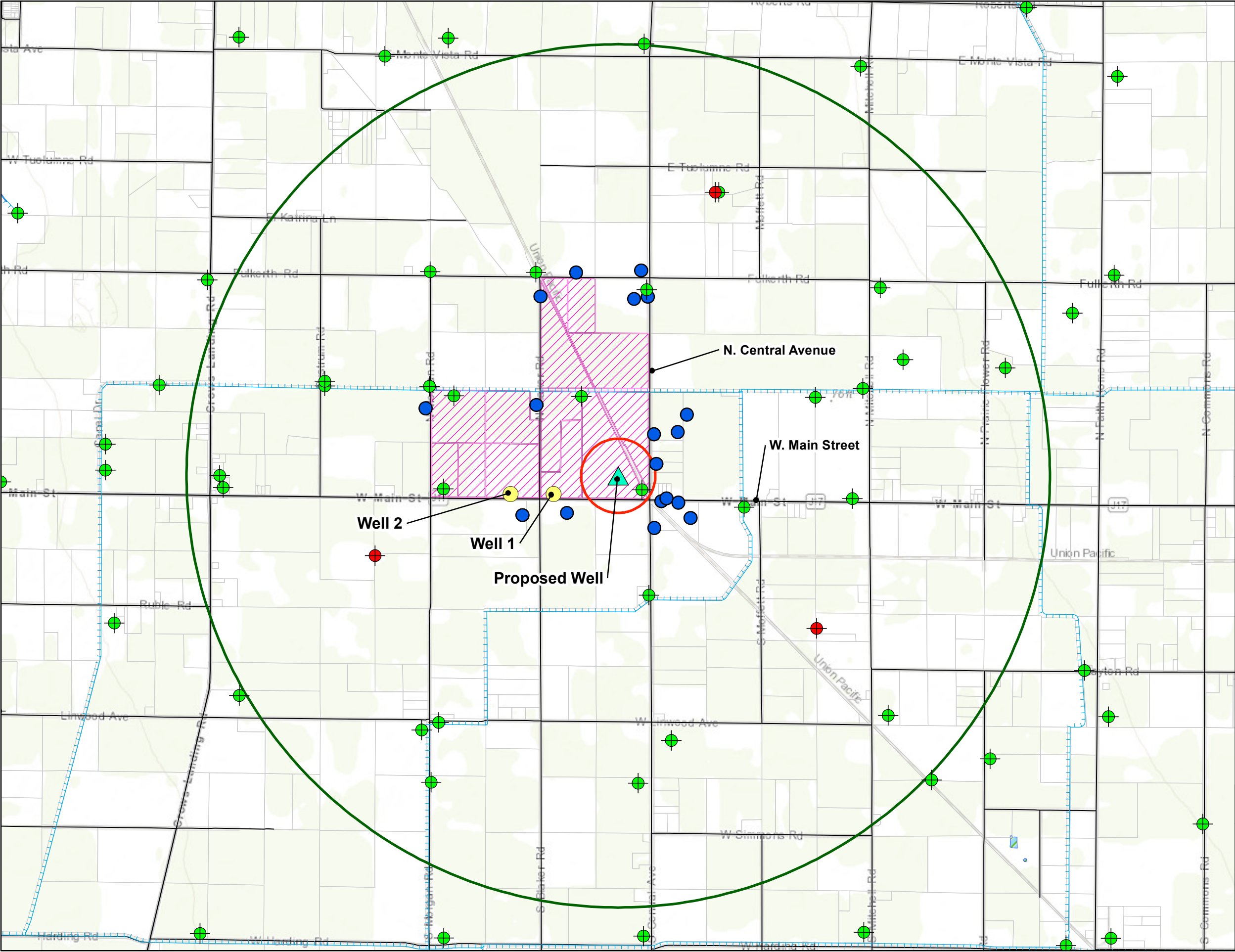


**Gioletti & Sons Dairy Expansion
Groundwater Resources Impact Assessment**

**Figure 3. Representative Well
Hydrographs in the
Vicinity of Gioletti & Sons Dairy**

DATE: OCT 26, 2020





Legend

- Proposed Well
- Existing Onsite Wells
- Wells Designated under the CASGEM Program
- Voluntary Wells under the CASGEM Program
- Potential Offsite Wells Identified by the Applicant

Drawdown Contours

- 1'
- 5'
- Canals
- Roads
- Stanislaus County Assessor's Parcels
- Parcels Owned by Gioletti & Sons

0 0.25 0.5
Miles

N

**Gioletti & Sons Dairy Expansion
Groundwater Resources Impact Assessment**

Figure 4. Drawdown Contours

DATE: OCT 26, 2020

FORMATION
ENVIRONMENTAL