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September 3, 2004
WEC 2004-078

Lance Shaw
Compliance Project Manager
Docket Number 02-AFC-4C
California Energy Commission
1516 Ninth Street, (MS 2000)
Sacramento, CA 95814

**RE: AMENDMENT 2 - PETITION TO AMEND PROJECT BRIDGE WATER SUPPLY
(02-AFC-4C)**

Dear Mr. Shaw:

On behalf of the Walnut Energy Center Authority, please find attached one original and 12 copies of Amendment 2 for the Walnut Energy Center Project ("WEC"). The WEC project as licensed proposed using City potable water as its bridge water supply. The purpose of this amendment is to replace that water source with poor quality groundwater.

If you have any questions, please call Susan Strachan, WEC Compliance Manager, at (530) 757-7038.

Sincerely,

A handwritten signature in blue ink that reads "John L. Carrier".

John L. Carrier, J.D.
Program Manager

Attachment

WALNUT ENERGY CENTER (02-AFC-4C)

AMENDMENT NO. 2 (Alternative Water "Bridge" Supply)

Submitted by
Walnut Energy Center Authority

September 3, 2004

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1.0 INTRODUCTION

1.1 OVERVIEW OF AMENDMENT

The Walnut Energy Center Authority (the “Authority”) hereby petitions to amend the certification for the Walnut Energy Center (WEC) (02-AFC-4C) to include the use of an alternative water supply until recycled water from the City of Turlock is available (this “Amendment”). The WEC project as licensed allows for the use of a “bridge” water supply as an interim cooling and steam cycle make-up supply until recycled water is available. The bridge supply would also be used as a back-up to the recycled water supply in the event of a short-term disruption in service. As licensed, the bridge supply consists of potable water from the City of Turlock.¹ Rather than using this potable water supply, the Authority proposes in this Amendment to utilize poor quality groundwater for the bridge supply. This would be beneficial because the project would no longer use high quality potable water for this purpose.

The Authority would access the groundwater by drilling two groundwater wells on either the WEC project site (the “WEC project site”) or the Turlock Irrigation District’s (the “District”) South Washington Road equipment storage area, located immediately adjacent to its Walnut Peaker Plant and substation on South Washington Road (the “South Washington” site). Although the Authority’s seeking approval to locate the wells on either the WEC project site or the South Washington site, the Authority would ultimately only develop one set of the wells in only one of the locations. Moreover, the Authority would only operate one of the wells at any given time. That is, two wells would be constructed, one next to the other, to provide one operating well and a 100 percent redundant back-up well on either the WEC project site or the South Washington Road site.

The Amendment to the project bridge supply for cooling and steam cycle make-up requires a modification to Condition of Certification Soil & Water-5. This condition identifies the project’s sources of water, including the bridge supply. Modification of the condition is necessary in order for it to be consistent with the water sources to be used at the WEC. In addition, Condition of Certification Soils & Water-6 would also require conforming changes.

This Amendment to modify the project description contains all of the information that is required pursuant to Section 1769 (Post Certification Amendments and Changes) of the California Energy Commission’s Siting Regulations. The information necessary to fulfill the requirements of Section 1769 are contained in Sections 1.0 through 7.0.

1.2 NECESSITY OF PROPOSED CHANGE

Sections 1769 (a)(1)(B), and (C) of the CEC Siting Regulations require a discussion of the necessity for the proposed revision to the WEC project and whether the modification is based

¹ As licensed by the Commission, the WEC will use City potable water for fire protection and domestic purposes both during the bridge period and thereafter for these two, limited purposes. Accordingly, this Amendment does not affect the WEC project’s fire protection and domestic water supplies.

on information known by the petitioner during the certification proceeding. This Amendment is necessary in light of the District's negotiations with the City of Turlock regarding the bridge supply, which occurred after the certification proceeding. The Authority had originally estimated that the use of poor quality groundwater for cooling and steam cycle make-up would be cost prohibitive compared to using potable water from the City. However, based on the negotiations with the City regarding the cost of providing potable water for the bridge supply, it is now more cost effective for the Authority to use poor quality groundwater.

1.3 CONSISTENCY OF CHANGES WITH LICENSE

Section 1769(a)(1)(D) of the CEC Siting Regulations requires a discussion of the consistency of the proposed project revision with the LORS and whether the modifications are based upon new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision. If the project is no longer consistent with the license, an explanation why the modification should be permitted must be provided.

The use of poor quality groundwater in lieu of City potable water is consistent with the applicable laws, ordinances, regulations, and standards and the project license. Further, although the CEC determined that the WEC project's interim use of potable water would not result in any significant impacts, this Amendment is environmentally beneficial since the project would no longer use high quality potable water for its interim cooling and steam cycle make-up water needs or as a back-up to recycled water if it is temporarily unavailable.

The Amendment is not based upon new information that changes or undermines any bases for the final decision. The findings and conclusions contained in the Commission Decision for the WEC project are still applicable to the project as modified.

1.4 SUMMARY OF ENVIRONMENTAL IMPACTS

Section 1769 (a)(1)(E) of the CEC Siting Regulations requires that an analysis be conducted to address the potential impacts the proposed Amendment may have on the environment and proposed measures to mitigate any potentially significant adverse impacts. Section 1769 (1)(a)(F) requires a discussion of the impact of the proposed Amendment on the facility's ability to comply with applicable laws, ordinances, regulations, and standards (LORS). Section 3.0 of this Amendment includes a discussion of the potential environmental impacts associated with the Amendment as well as a discussion of the consistency of the modification with LORS. Section 3 concludes that there would be no significant environmental impacts associated with the Amendment and that the project as modified would comply with all applicable LORS.

2.0 DESCRIPTION OF PROJECT AMENDMENT

Consistent with the California Energy Commission Siting Regulations Section 1769 (a)(1)(A), this section includes a complete description of the proposed project Amendment as well as the necessity for the Amendment.

2.1 PROPOSED PROJECT AMENDMENT

As stated above, the Authority proposes to amend the WEC project by using an alternative bridge supply of water, until recycled water from the City of Turlock is available for use by the WEC. This bridge supply would also be used as a back-up to recycled water if it is temporally unavailable. The project as licensed uses potable water from the City of Turlock for its bridge supply. However, based upon negotiations with the City, the use of this water for the bridge supply is cost prohibitive. The Authority now proposes to use poor quality groundwater from the upper aquifer (above the Corcoran Clay), which is less expensive to obtain and allows the City's potable water to be preserved for other uses.

Three aquifers lie beneath the project site in descending order: the shallow aquifer, the upper aquifer, and the lower aquifer.

- The shallow aquifer is the first encountered below ground level. The base of the shallow aquifer is the top of the shallow aquitard, which occurs at about 20 feet below the land surface. The groundwater table within the power plant area is about 8 feet below the land surface, and the shallow aquifer is about 12 feet in thickness.
- An upper aquifer occurs within the Modesto and Riverbank formations in the depth interval from the base of the shallow aquitard to the top of the Corcoran Clay. This aquifer is about 135 feet in thickness within the power plant area.
- A lower aquifer occurs within the Turlock Lake Formation in the depth interval from the base of the Corcoran Clay to the base of the Mehrten Formation. This aquifer is about 1,200 feet in thickness within the power plant area.

The water would be obtained through the development of two groundwater wells on either the WEC project site or the South Washington site. Two wells would be constructed next to one another to provide one operating well and a 100 percent redundant back-up well. Only one well would operate at any one time. The wells would be completed using the same construction methods for both. Each well would draw groundwater from the upper aquifer. It would be drilled to a depth that allows the bottom of the well to be seated in the Corcoran Clay deposit, which separates the upper and lower aquifers. This would be a depth of approximately 160 feet. The wells would be sealed with a sanitary seal from ground surface to a depth of 50 feet and the well casing would be perforated below the sanitary seal to the bottom of the well. In the event the wells are located at the WEC project site, the well pumps would be electrically driven with power supplied from a WEC motor control center. The power supply cables would be located underground in buried conduits. In the event the wells are located at the South Washington site, the well pumps would be electrically driven with

power supplied either from an existing motor control center at the Walnut Peaker Plant or from a new outdoor motor control center located at the wells and fed overhead power from the 12 kV distribution line which parallels South Washington Road.

Pipelines would be installed to transport water to the non-potable cooling tower makeup line located at the east side of the project site. As shown on Figure 1 (all figures are located at the end of the document) the wells on the WEC project site would be located anywhere within the 18-acre site, except within 150 feet of the leach field. This area around the leach field is shown in the figure as an exclusion area to comply with Department of Health Services and Stanislaus County requirements for horizontal separation from the leach field. If the Authority chooses to develop the wells at the South Washington location (see Figure 2), an 8-to 14-inch water pipeline within already developed roads and rights-of-way would transport the water from the South Washington wells to the WEC project site. From the South Washington wells, the pipeline route would extend east paralleling the UPRR railroad tracks, located on the south side of the District's South Washington Road equipment Storage Area. At South Washington Road, the horizontal directional drill construction method would be used to cross under both the railroad tracks and South Washington Road. Once the pipeline is on the east side of South Washington Road, it would turn south, paralleling the road until it reaches the access road to the WEC project site. The pipeline route would turn east, running parallel to or within the access road until it reaches the WEC project site.

From an environmental perspective, the proposed Amendment is beneficial. Specifically, the use of poor quality groundwater from the upper aquifer for the bridge supply would allow the Authority to avoid completely the use of City potable water as a make-up water supply, as currently authorized by the Commission's final decision.

The Amendment also has the ancillary benefit of creating a well system that would work in coordination with the District's existing agricultural dewatering wells. The District currently operates 6 drainage wells within one-half mile of the project for the purpose of removing agricultural irrigation water from the root zone of crops. The use of the proposed well system for the bridge supply would work in concert with the existing agricultural dewatering system. Specifically, the operation of the WEC groundwater wells would assist in the dewatering of the irrigation water from the root zone of the crops.

In addition to allowing the project to avoid the use of potable water for cooling and steam cycle make-up, the information presented in Section 3.9 of this Amendment confirms that the proposed well system for the bridge supply would not adversely affect or interfere with existing wells in the vicinity of the project. To confirm the lack of interference, the Authority conducted detailed modeling to calculate the drawdown in the shallow aquifer and upper aquifer. The modeling confirms that the proposed bridge supply wells would have no adverse effects on any other water users' wells.

The Authority also analyzed the drawdown from the WEC project or South Washington well compared to the minimum water level observed in the area of the project during the period from 1977-2001. Specifically, the Authority used the 1991 drought water levels as a projected worst-case scenario for water levels in the vicinity of the project. The Authority

then modeled the potential drawdown of the aquifer from the pumping associated with the bridge supply and analyzed the effect such drawdown might have on the surrounding wells, again assuming 1991 drought level conditions.

The results of the modeling shows that even with these conservative assumptions, the Authority's proposed bridge supply well system would not significantly adversely affect any other water users. Specifically, the worst-case drawdown at any one well assuming a 5-year operation of the bridge supply well system was 9 feet. Even assuming (1) 1991 drought water levels; and (2) worst case drawdowns, the projected 5-year pumping of the Authority's bridge supply well system would not result in any significant impacts on surrounding wells.

3.0 ENVIRONMENTAL ANALYSIS OF PROPOSED PROJECT AMENDMENT

The proposed project changes set forth in this Amendment provide the WEC with a bridge supply of non-potable water until recycled water is available. In addition, this bridge supply from the wells to be installed on the WEC project site or the South Washington site would also be available as a back-up water supply in the event recycled water is temporarily unavailable. An analysis of each of the environmental areas is presented below for the proposed project description modification.

3.1 AIR QUALITY

Condition AQ-80 limits the project drift rate to 0.0005 percent. This drift rate would be maintained during the interim use of poor quality groundwater. As a result, any potential air quality impacts associated with this Amendment would be less than significant.

3.2 PUBLIC HEALTH

Because the groundwater does not contain biological contaminants, the proposed modification would not result in potential impacts greater than those analyzed by the Commission during licensing. As a result, any potential public health impacts associated with this Amendment would be less than significant.

3.3 HAZARDOUS MATERIALS MANAGEMENT

The chemical inventory for the WEC project (Attachment A in the Hazardous Materials section of the Commission Decision) was modified when the Authority selected the High Efficiency Reverse Osmosis (HERO) zero-liquid discharge system. This Amendment would not result in any further modifications to the WEC chemical inventory and would not result in any potential impacts any greater than those analyzed by the Commission during licensing. As a result, any potential impacts associated with this Amendment would be less than significant.

3.4 WASTE MANAGEMENT

The WEC project would use a High Efficiency Reverse Osmosis (HERO) zero-liquid discharge (ZLD) system. The ZLD system would not be adversely affected by the higher TDS level of the poor quality groundwater compared to City-supplied potable water or recycled water. Moreover, supplemental groundwater sampling conducted by the Authority determined that silica levels of the poor quality groundwater are likely lower, or equal to, the silica levels in City-supplied potable or recycled water. The results of the supplemental water quality sampling are presented in Table 2 of Appendix A of this Amendment. Those results confirm that the higher TDS values previously provided are conservative.

Based upon this conservative assessment of water quality, the use of the poor quality groundwater would affect operation of the ZLD system in two ways. First, the frequency of regeneration of the softeners in the HERO system would increase by approximately 40

percent compared to regeneration rates using City-supplied potable water. Second, the solids produced by the ZLD system would similarly increase. It is projected that solids production from the ZLD system operating on poor quality groundwater could also increase by approximately 40 percent compared to production rates using City-supplied potable water. Although, the production of salt cake using the lower quality groundwater will increase compared to use of potable water, the production of salt cake will be similar to amounts produced using recycled water. The Commission's Final Decision for the WEC project requires the use recycled water when it is available and found that the potential salt cake production associated with recycled water is less than significant. Thus, because the potential salt cake production associated with the use of poor quality groundwater is similar to the production associated with recycled water, the potential waste management impacts associated with this Amendment are not significant.

3.5 WORKER SAFETY AND FIRE PROTECTION

Since all workers will undergo proper training, and since the water supply for fire protection would remain unchanged, the proposed modification would not result in potential impacts greater than those analyzed by the Commission during licensing. As a result, any potential Worker Safety and Fire Protection impacts associated with this Amendment would be less than significant.

3.6 BIOLOGICAL RESOURCES

The bridge supply wells the Authority would develop would be located on either the WEC project site or the South Washington site. Disturbance of the project site was addressed in the FSA, thus development of the wells would not result in any additional disturbance to biological resources on the site.

The South Washington site is void of vegetation and portions are graveled. The area was previously surveyed as part of the biological surveys conducted for the WEC project. No biological resources were found within the area. The area along the pipeline route was also previously surveyed and no significant biological resources were identified. As a result, the proposed modification would not result in any potential impacts any greater than those analyzed by the Commission during licensing. Any potential Biological Resources impacts associated with this Amendment would be less than significant.

3.7 CULTURAL RESOURCES

The two wells the Authority would develop would be located on the WEC project site or the South Washington Road site. Based on the history of the area and conclusions reached by the WEC Cultural Resource Specialist resulting from cultural resource monitoring conducted on the WEC project site, development of the wells would not likely result in disturbance to cultural resources on the WEC project site, the South Washington Road site, or along the pipeline corridor. As a result, the proposed modification would not result in potential impacts greater than those analyzed by the Commission during licensing. Any potential Cultural Resources impacts associated with this Amendment would be less than significant.

3.8 GEOLOGY AND PALEONTOLOGY

The proposed modification would not result in potential impacts to Geology greater than those analyzed by the Commission during licensing. The proposed modification has the potential to impact paleontological resources due to the earthmoving activities associated with the development of the wells and construction of the pipeline from South Washington site to the WEC project site. However, with the implementation of the mitigation measures contained in the Commission Decision for the WEC project, such as paleontological resource monitoring and worker environmental awareness training, potential impacts would be reduced to a level of insignificance.

3.9 SOILS AND WATER RESOURCES

The use of poor quality groundwater from the upper aquifer (above the Corcoran Clay) in-lieu of City potable water would not result in any significant impacts to the water resources in the region. Specifically, it would not adversely affect any other wells users in the area. In addition, there are benefits to the Authority utilizing the poor quality groundwater. First and most importantly, the Authority would be replacing the use of potable water with a poor quality source of water that does not meet drinking water standards (California Code of Regulations, Title 22) for dissolved solids and nitrate.

In addition, the District currently operates 6 drainage wells within one-half mile of the WEC project site for the purpose of removing agricultural irrigation water from the root zone of crops. These wells are located in the upper aquifer. The use of the proposed well system for the bridge supply would work in concert with the existing agricultural dewatering system. Specifically, the operation of the WEC groundwater wells would assist in the dewatering of the irrigation water from the root zone of the crops.

To determine that the District's use of the poor quality groundwater would not impact other users, groundwater modeling simulations were conducted to analyze the extent to which pumping new wells would affect water levels in the aquifer and surrounding wells. The modeling report is included in Appendix A. As part of this evaluation, the location and construction details of all known wells within a 4- mile radius of the new production wells were identified and located within the conceptual model.

A worst-case simulation was performed that determined the maximum potential impact from the pumping of water to serve the WEC. This worst-case scenario assumed that a single well would supply all of the WEC process water requirements at maximum demand for a continuous period of 5 years. Both well locations (the WEC project site and South Washington Road location) were evaluated. The resulting drawdown of the aquifer then reflects the water level reductions associated with maximum instantaneous pumping from each well location and the accumulated drawdown resulting from withdrawals of water from storage by other well users in excess of localized recharge rates. Figures 12 and 14 in Appendix A show the geographic extent of the drawdown in the upper aquifer that would result from this worst case pumping scenario. The dots on the figure represent the location of existing production wells.

As shown in Figures 12 and 14 in Appendix A, the drawdown from a single well after 5 years continuous pumping would be on the order of 10 feet immediately adjacent to the well. With a well at the WEC project site the drawdown would be less than 6 feet at the nearest production well. At the South Washington Site, the drawdown would be less than 9 feet. Most production wells within the 4-mile radius would experience a localized lowering of the water table of less than 2 feet from the WEC production wells.

In terms of potential effect under existing hydrological conditions, the reduction in water levels in neighboring wells is insignificant, only a few feet in an area with already high groundwater levels.

In terms of potential effect under extreme hydrological conditions, the reduction in water levels is still insignificant. Specifically, as set forth Tables A and B (tables are located at the end of the document), the drawdown from either the WEC project site or the South Washington location is insignificant even compared to water levels during the most extreme drought conditions over the past 27 years, the minimum water level observed in the wells during the period 1977 through 2001.

Minimum water levels were experienced in October 1991 during a drought event. Tables A and B show: (1) each production well for which data is available; and (2) the minimum water level in the wells from 1991 compared to: (a) the well depth, (b) the screened interval of the well, and (c) the incremental drawdown of these production wells that could be caused by WEC project well operating at 1,800 acre-feet per year (AF/year) over a 5-year period.

Tables A and B demonstrate that even considering the effects of extended drought, the modest lowering of water levels potentially resulting from the continuous operation at either the WEC project site or the South Washington site would not cause a significant reduction in the available water column in any well (less than 9 feet at the nearest production well). Given the well depths and the screened intervals of the wells, the relatively minor drawdown potentially resulting from the operation of the bridge supply wells would not adversely impact the utility of any well. Moreover, a closer examination of the water level variations from 1977 to 2001 shown in Appendix A, Figures 7 through 9, demonstrates that the potential reductions in water levels caused by a new WEC well (less than 9 feet at any well location) are safely within the much larger natural fluctuations in water levels occurring in this drought period.

3.10 LAND USE

The installation of wells at either the WEC project site or the South Washington site would be consistent with existing and planned land uses in this area. Surrounding uses are predominately industrial and agricultural, which include wells as ancillary to permitted uses. The proposed modification would not result in potential impacts greater than those analyzed by the Commission during licensing. As a result, any potential Land Use impacts associated with this Amendment would be less than significant.

3.11 TRAFFIC AND TRANSPORTATION

Since the construction workforce required to install the wells and pipeline would be small and of short duration, the proposed modification would not result in a significant increase in the construction workforce; and therefore, potential impacts would not be greater than those analyzed by the Commission during licensing. As a result, any potential Traffic and Transportation impacts associated with this Amendment would be less than significant.

3.12 VISUAL RESOURCES

The two groundwater wells would be located on the project site or the South Washington Road site. It is also important to note that groundwater wells are a common and expected sight in the project area dominated by surrounding industrial and agricultural uses. The wells would be relatively small (less than 10 feet in diameter) and short (less than 8 feet in height.)

At the WEC project site, the wells would not affect the view of the plant site from sensitive receptors in the project area. As relatively small structures, the wells will likely be either hidden in the background behind larger project features or if in the foreground, blend into the visual landscape with other existing industrial setting. Similarly, the South Washington Road site is surrounded by chain link fence with slats. This would prevent the wells from being seen. However, if in the future the District were to remove the slats, the two wells would not result in a visual impact since they would be located adjacent to large industrial equipment, specifically the Walnut Peaker Plant to the north and a District substation to the west.

In either location, the proposed modification would not result in any potential impacts any greater than those analyzed by the Commission during licensing. Any potential Visual Resources impacts associated with this Amendment would be less than significant.

3.13 NOISE AND VIBRATION

Given that the wells would be electrically driven, the proposed modification would not result in any potential impacts to Noise any greater than those analyzed by the Commission during licensing. Any potential Noise and Vibration impacts associated with this Amendment would be less than significant.

3.14 SOCIOECONOMICS

Construction of the wells could result in a slight increase in local purchases of materials and a slight increase in local construction labor. This increase could provide some economic benefits to the community. Therefore, the proposed modification could not result in potential impacts to Socioeconomics any greater than those analyzed by the Commission during licensing. As a result, any potential Socioeconomic impacts associated with this Amendment would be beneficial, but less than significant.

3.15 CUMULATIVE IMPACTS

The proposed modification would not result in potential cumulative impacts greater than those analyzed by the Commission during the licensing. As shown in Appendix A, the Authority's use of poor quality groundwater would not adversely affect other water users. In

fact, the WEC project's use of poor quality groundwater for its bridge supply would be beneficial from a cumulative impacts perspective because: 1) it would reduce consumption of potable water; and 2) the WEC groundwater pumping would benefit the District's current dewatering program.

The District operates 6 dewatering wells within a half-mile of the WEC, which pump water from the upper aquifer, with the objective of lowering water levels in the surface water aquifer. Agricultural drainage accumulates in the surface water aquifer, adversely impacting the crop root zones. The use of the proposed well system for the bridge supply would work in concert with the District's existing agricultural dewatering system, assisting in the removal of the irrigation water from the surface aquifer.

3.16 LORS

The Commission Decision certifying the WEC project concluded that the project is in compliance with all applicable LORS. Because the modification to project's bridge water supply described in this proposed change to project description is also consistent with all applicable LORS, the modification would not alter the assumptions or conclusions made in the Commission Decision.

4.0 PROPOSED MODIFICATIONS TO THE CONDITIONS OF CERTIFICATION

Consistent with the requirements of CEC Siting Regulations Section 1769 (a)(1)(A), this section addresses proposed modifications to the project's Conditions of Certification. As a result of the WEC project's use of poor quality groundwater for its bridge supply, Condition of Certification SOIL & WATER-5 and SOIL & WATER-6 require modification.

Modification to Condition SOIL & Water-5 is necessary to reflect the use of poor quality groundwater for the WEC project bridge supply and as a back-up to recycled water in the event of a short-term disruption in service. It removes the use of potable water as the bridge supply and as a back-up water supply and removes the 51 afy limit for the use of potable water as a back-up water supply.

Condition SOIL & WATER-6 has also been modified to conform to this Amendment.

SOILS&WATER-5: The project's water use shall be limited as described below. For purposes of this condition, the bridge period is defined as that period of time between the commencement of commercial operation of the WEC and the earlier of December 31, 2006 or when recycled water from the City of Turlock's wastewater treatment plant (WWTP) is available to the WEC.

Water for construction purposes shall consist of groundwater provided from the existing TID well at the Walnut substation. ~~Water, for all purposes, used during the bridge period shall consist of potable water provided by the City of Turlock, and shall not exceed 2 million gallons per day or 1,803 afy.~~

During the bridge period, water used for cooling and steam cycle make-up shall consist of poor quality groundwater from the upper aquifer supplied from one of two groundwater wells located on either the WEC project site or the TID equipment storage area on South Washington Road (the "South Washington" site). Only one of the two groundwater wells may be operated at any time (with the other well serving as a 100 percent redundant backup). Groundwater production from the wells shall not exceed two million gallons per day or 1,800 afy.

After the bridge period, Wwater for operational and landscaping purposes used after the bridge period shall consist of recycled water from the City of Turlock WWTP and shall not exceed two million gallons per day or 1,800 afy. Water for domestic needs after the bridge period shall consist of potable water provided by the City of Turlock and shall not exceed 3 afy. Potable water Groundwater from the wells to be located either on the WEC project site or the South Washington site may also be used for back-up to the recycled water supply in the event of a short-term disruption in service and shall not exceed 51 afyexceed two million gallons per day and. Potable water may also be used in the event that recycled water is not available to the project subject to the provisions of **SOILS&WATER-6**. Alternative water use shall be calculated using a 5-year rolling average.

Both during and after the bridge period, potable water from the City of Turlock shall be used for domestic uses (not to exceed 3 afy) and fire protection.

Verification: The project owner shall notify the Commission no later than May 31, 2006, and in monthly compliance reports thereafter, as to the status of recycled water production by the City of Turlock's WWTP until the WEC is using tertiary treated, recycled water for its non-potable operational and landscaping requirements. This notice shall include information on the issues related to recycled water production, DHS approval for recycled water service and the expected availability of recycled water supplies to WEC. After recycled water service is provided to WEC, the project owner shall report water use to the Commission as required by **SOILS&WATER-7**. Annual average water use shall be calculated using a 5-year rolling average of actual water use starting with the first year of operation. In the event of an interruption or reduction in recycled water service that requires the use of ~~baek up potable water~~ groundwater from the wells to be located either on the WEC project site or the South Washington site, the project owner shall notify the CPM, in writing, within 24 hours.

SOILS&WATER-6: The project owner shall prepare an Alternative Water Supply Plan to address either: (1) Title 22 compliant recycled water not being available from the City of Turlock's WWTP by December 31, 2006; or (2) a force majeure event occurring after initiation of recycled water service. The Plan shall be submitted no later than June 30, 2006. The Alternative Water Supply Plan shall demonstrate that ~~high quality~~water use by WEC shall not exceed either (1) the historical average of 54 afy required to irrigate the 18-acre site if City potable water is used (item 3 in the verification below) or (2) two million gallons per day or 1,800 afy if groundwater from the upper aquifer or irrigation tailwater/return flows are used (items 1 and 2 in the verification below). The project developer shall obtain approval for the ~~a~~Alternate w~~s~~Water s~~p~~Plan prior to its implementation.

In the event that the City of Turlock's WWTP is not able to produce recycled water in accordance with Title 22 requirements by December 31, 2006 for use by WEC, the project owner shall inform the CPM no later than November 30, 2006. If the CPM determines that the WWTP is not able to produce the recycled water for delivery by December 31, 2006, the CPM shall allow implementation of the Alternative Water Supply Plan until such time as the recycled water is available.

If, after the initiation of recycled water service, a force majeure event results in the recycled water supply being temporarily interrupted, the project owner shall notify the CPM within 24 hours. As soon as reasonably possible, the project owner shall meet and confer with the CPM and City of Turlock to determine the estimated duration of the outage and how to restore the recycled water supply as soon as practicable. If the CPM determines that the force majeure event may result in recycled water being unavailable for more than 30 days, then the CPM shall allow the project owner's implementation of the Alternative Water Supply Plan for the duration of the force majeure event.

Verification: The project owner shall prepare the “Alternative Water Supply Plan” to address either (1) recycled water not available by December 31, 2006 or (2) a force majeure event. The Plan shall be submitted no later than June 30, 2006.

This plan shall demonstrate no net increase in ~~high quality~~ water use above (1) the historical average of 54 afy ~~if City potable water is used (item 3 below) or (2) two million gallons per day or 1,800 afy if groundwater from the upper aquifer or irrigation tailwater/return flows are used (items 1 and 2 below)~~. This plan may achieve no net increase in ~~high quality~~ water use by methods including, but not limited to:

1. Use of shallow, degraded groundwater from the unconfined upper aquifer in the vicinity of the project site ~~from either the WEC project site or the South Washington site.~~
2. Use of irrigation tailwater or return flows.
3. ~~Continued u~~Use of potable water supplied by the City of Turlock in conjunction with conservation measures that achieve an offset of water use in excess of 54 afy on an average annual basis.

This plan shall specifically address how the project owner will demonstrate no net increase in water use and any assumptions, calculations, needed agreements, and infrastructure to implement identified measures.

In the event that recycled water is not expected by the City of Turlock to be available until after December 31, 2006, the project owner shall notify the CPM in writing no later than November 30, 2006. The notification shall include the revised schedule for recycled water availability, an explanation of the causes for the delay in recycled water service, and any relevant correspondence between the project developer and the City of Turlock regarding recycled water service.

If after the initiation of recycled water service a force majeure event results in the recycled water supply being temporarily interrupted, the project owner shall notify the CPM within 24 hours by telephone or e-mail. This notification shall describe the event that has resulted in the interruption of recycled water supply, expected duration, and actions required to restore recycled water service.

5.0 POTENTIAL EFFECTS ON THE PUBLIC

Consistent with the CEC Siting Regulations Section 1769(a)(1)(G), this section discusses the proposed project modifications effects on the public. The proposed modification to the project's bridge water supply would have no potentially significant impacts on the public and will even have a slightly beneficial effect on the public since the project would not use potable water for process make-up water and cooling and would provide a few more temporary construction jobs.

6.0 LIST OF PROPERTY OWNERS

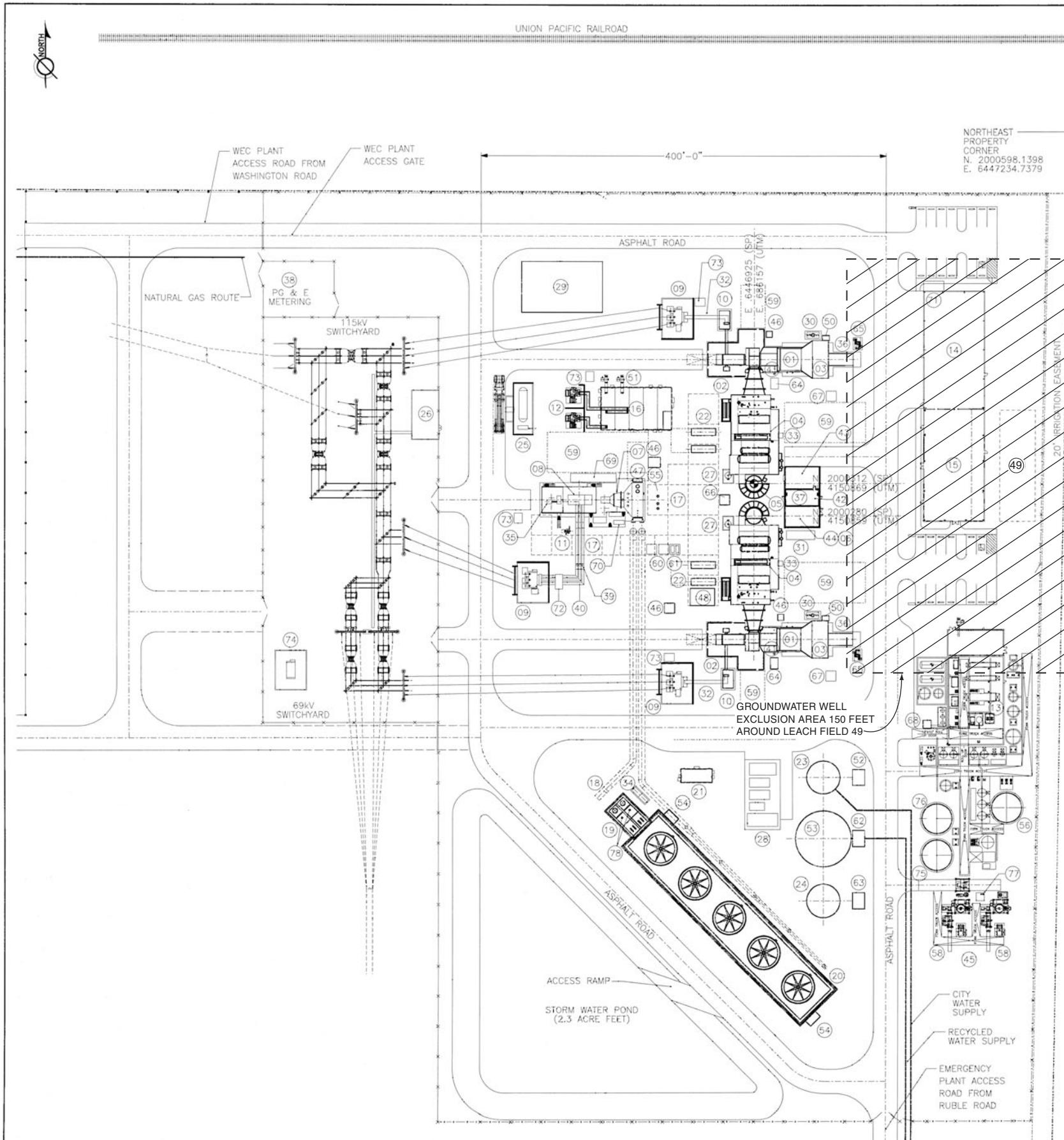
Consistent with the CEC Siting Regulations Section 1769(a)(1)(H), this section lists the property owners affected by the proposed modifications. As described in this Amendment, in general, and Section 3.9, Water Resources, and Appendix A, in particular, the WEC project's use of poor quality groundwater from either the WEC project site or the South Washington site as its bridge supply would not adversely affect neighboring groundwater wells. Therefore, no well owners would be affected by the Amendment. Construction of the water line, should the South Washington Site be selected, would cross the Union Pacific Railroad spur. The railroad can be notified at the following address:

Union Pacific Corporation Railroad.
1700 Farnham St. 10th FL S PR
Omaha, NE 68102

7.0 POTENTIAL EFFECTS ON PROPERTY OWNERS

Consistent with the CEC Siting Regulation Section 1769 (a)(1)(I), this section addresses potential effects of the proposed Amendment on nearby property owners, the public, and parties in the application proceeding.

As described in Section 3.9 Water Resources and Appendix A, the WEC project's use of poor quality groundwater as its bridge supply would not adversely affect neighboring groundwater wells. Therefore, no property owners, the public, and parties in the application proceeding would be affected by the Amendment, with the exception of crossing the Union Pacific railroad tracks, if the wells are located at the South Washington Road site.



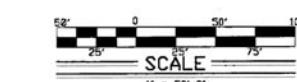
LEGEND

- (38) GAS METERING YARD
- (39) EXCITATION TRANSFORMER (STG)
- (40) ISO PHASE BUS DUCT
- △ (41) CTG OIL MIST ELIMINATOR
- (42) SAMPLE PANEL & LAB
- (43) CYCLE CHEMICAL FEED
- (44) HRSG MCC's
- △ (45) ZERO DISCHARGE SYSTEM AREA
- (46) OILY WASTEWATER SUMP
- (47) CONDENSER
- (48) AIR COMPRESSOR PACKAGE
- (49) LEACH FIELD
- △ (50) CTG AIR PROCESSING UNIT
- △ (51) STATION SERVICE XFMR 4160-480 V
- (52) FIRE PUMP SKID
- (53) RECYCLED WATER STORAGE TANK
- (54) COOLING TOWER STAIR TOWER
- (55) CONDENSATE PUMPS (3)
- △ (56) COOLING TOWER BLOWDOWN STORAGE TANK
- △ (57) NOT USED
- (58) CRYSTALLIZERS
- (59) CRANE AREA/MAINTENANCE
- (60) CLOSED COOLING WATER HEAT EXCHANGERS
- (61) CLOSED COOLING WATER PUMPS
- (62) SERVICE WATER BLOWDOWN PUMPS
- (63) DEMINERALIZED WATER PUMPS
- (64) GAS VALVE MODULE
- (65) CO2 FIRE PROTECTION
- (66) BLOWDOWN SUMP/PUMPS
- (67) GAS FILTER/SEPARATOR
- △ (68) ZDS WASTEWATER SUMP
- (69) ST LUBE OIL SKID
- (70) ST GLAND STEAM SKID
- (71) OIL STORAGE SHED
- △ (72) STG GENERATOR CIRCUIT BREAKER
- △ (73) DELUGE
- △ (74) SPARE GENERATOR STEPUP TRANSFORMER
- △ (75) REGEN WASTE FEED TANK
- △ (76) HERO REJECT FEED TANK
- △ (77) CRYSTALLIZER SUMP
- △ (78) COOLING TOWER BLOWDOWN PUMPS

NOTES

1. STATE PLANE (SP) COORDINATES ARE BASED ON CALIFORNIA 3 - 0403 ZONE AND HORIZONTAL DATUM IS NAD83. UNIT OF MEASURE IS FEET.
2. (UTM) COORDINATES ARE BASED ON ZONE 10 AND HORIZONTAL DATUM IS NAD27. UNIT OF MEASURE IS METERS.
3. FINISHED GRADE ELEVATION IS 86.5' AMSL

PLANT COORDINATES N 10000.00' E 5000.00'	STATE COORDINATES N 2000312' E 6446925' ELEV. 100.00'
--	--



1. REVISED PER VENDOR INFO AND CLIENT COMMENTS 20070427
2. ISSUE FOR CONSTRUCTION REVISONS 20080310 ADS JEN RD JAY
NO. 1
3. DRAWINGS ARE THE PROPERTY OF THE TURLOCK ILLUMINATION DISTRICT AND ARE NOT TO BE REPRODUCED OR USED TO FURNISH ANY INFORMATION FOR THE MAKING OF DRAWINGS OR APPARATUS, EXCEPT WHERE PROVIDED FOR IN AGREEMENT WITH SAID COMPANY

UTILITY ENGINEERING
1515 AVAFAIR DR., SUITE 100, BLDG. 100
AMARILLO, TEXAS 79109
CORTLAND, CONNECTICUT
MINNEAPOLIS, MINNESOTA



CALPINE
Power Services

TID WALNUT ENERGY CENTER
GENERAL ARRANGEMENT

REGISTERED PROFESSIONAL ENGINEER CHARLES W. CROWLEY M32689 EXPIRED 3/2/06 STATE OF CALIFORNIA	DRAWN BY O. STAMPS REVIEWED BY R. CARPENTER MECHANICAL J. HATCHER DATE DRAWN 04/24/04 DRAFTING NUMBER D011197-GENL001	CHECKED BY G. CLEARY SHEET NO. 01 1
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FIGURE 1
GROUNDWATER WELL EXCLUSION AREA
WALNUT ENERGY CENTER

CH2MHILL



TABLE A.
Dry Year Water Levels and Drawdown with Power Plant Well in Existing Private Irrigation Wells in Area (Feet)

Well Address	DWR File Number	Completed Depth	Depth to Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
1685 El Capitan Wy	33805	250	235	135	5/27/1977	23	0.80	0.81
813 S Moffett Rd	325323	230	225	135	11/22/1989	29	0.84	0.73
547 Pedros Rd	24809	240	240	90	5/25/1977	24	0.84	0.77
8505 Central Ave	71101	nd	52	nd	3/21/1972	30	1.07	0.90
Bradbury Rd	26158	217	217	30	7/3/1977	19	0.73	0.78
6006 S Central Ave	47939	330	330	90	8/16/1977	15	0.76	0.85
1431 N Central Ave	250438	365	365	100	4/23/1988	30	1.12	0.95
118 N Blaker Rd	290610	160	160	120	9/28/1988	35	1.85	1.64
731 S Central Ave	325356	125	125	115	2/16/1990	34	1.20	1.10
3431 S Moffett Rd	374491	200	200	120	4/5/1991	20	1.09	1.10
5213 W Main St	21314	nd	158	132	12/22/1976	20	1.16	1.16
2866 Robert Rd	54410	273	270	140	10/18/1979	30	1.12	0.92
5202 S Faith Home Rd	495263	65	65	nd	1/19/1994	15	0.95	1.05
4413 Prairie Flower Rd	47999	360	360	90	7/26/1977	15	1.18	1.27
880 S Kirby Rd	433988	nd	290	nd	4/28/1992	17	2.62	2.68
313 N Prairie Flower Rd	26589	157	157	97	7/1/1977	35	2.32	1.87
3107 S Prairie Flower Rd	252984	270	270	150	5/11/1988	16	1.67	1.74
3107 S Prairie Flower Rd	24670	270	270	50	5/5/1977	17	1.67	1.71
3107 S Prairie Flower Rd	24674	280	280	nd	5/14/1977	16	1.46	1.51
Ceres	21328	nd	100	80	1/17/1977	28	1.51	1.21
936 W Monte Vista Ave	24605	360	360	90	6/16/1977	27	1.34	1.10
6631 S Central Ave	76870	410	410	128	5/13/1981	25	1.52	1.21
Hilmar	22988	150	nd	nd	5/1/1977	30	0.93	0.73
1105 S Faith Home Rd	66746	nd	nd	nd	5/6/1971	19	3.24	3.05
5672 Almaden Express	125355	165	165	45	1/14/1975	34	2.99	2.37
9243 Merced Ave	46498	244	244	184	1/4/1977	15	0.00	0.73
7613 W Main St	87162	155	155	35	3/28/1974	15	0.99	1.13
1419 N Commons Rd	433901	395	395	nd	10/31/1991	29	3.35	2.59
2801 S Prairie Flower Rd	252997	380	380	220	5/24/1988	15	1.46	1.57
8413 Faith Home Rd	569169	143	143	nd	8/5/1994	33	2.40	1.89
4112 N Walnut Ave	24663	332	332	140	4/16/1977	28	2.28	1.82
8413 Faith Home Rd	33834	373	360	135	7/22/1977	25	1.85	1.52
1852 River Rd	75762	78	nd	nd	6/25/1971	25	1.84	1.52
6955 Faith Home Rd	433977	140	140	nd	4/13/1992	27	1.15	0.96
5700 Zeering Rd	569318	348	348	nd	4/18/1994	25	1.53	1.24
5213 W Main St	10124	300	300	108	//0	20	7.39	4.59
4800 Fulkerth Rd	22995	294	294	180	7/11/1977	23	3.40	2.70
PO Box 1803	226552	162	162	112	10/13/1981	22	4.04	3.12
4207 W Simmons Rd	46290	492	492	80	2/7/1978	11	2.53	3.19
9579 Hultberg Rd	22925	138	138	24	4/1/1977	15	0.00	0.75
5831 S Tegner Rd	27004	300	300	90	9/22/1977	15	0.00	0.81
5612 Hultberg Rd	35535	200	nd	nd	7/18/1977	15	0.82	1.00
9579 N Hultberg Rd	168987	320	320	230	4/2/1988	16	1.10	1.29
	35522	205	nd	nd	5/25/1977	20	3.21	2.73
5612 Hultberg Rd	22932	133	133	24	4/20/1977	16	1.40	1.72
5601 E Keyes Rd	24299	120	120	nd	7/29/1969	10	2.91	3.83
1320 N Quincy Rd	168945	220	220	160	3/7/1988	11	3.33	4.41
700 Sloat	90887	136	132	nd	4/16/1975	24	1.83	1.58
4907 S Hwy 99	98326	160	160	112	8/1/1974	25	1.42	1.24
5000 Esmar Rd	27005	270	270	180	8/16/1977	25	1.22	1.06
4218 N Washington Rd	33802	395	390	90	5/16/1977	25	1.54	1.25

TABLE A.
Dry Year Water Levels and Drawdown with Power Plant Well in Existing Private Irrigation Wells in Area (Feet)

Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
4212 S Tegner Rd	22992	330	330	210	7/12/1977	17	1.28	1.60
Tegner Rd	22625	282	282	204	8/7/1977	13	1.95	2.46
3706 S Tegner Rd	22984	264	264	72	1/1/1977	16	1.55	1.89
3406 S Tegner Rd	495157	360	360	nd	6/11/1993	15	1.64	2.01
Turlock	495157	360	360	nd	6/11/1993	15	1.64	2.01
4313 Tegner Rd	147961	170	nd	nd	10/26/1979	17	1.23	1.53
2419 Tegner Rd	33816	399	389	160	6/15/1977	11	2.24	2.83
22338 Short Rd	46529	144	144	48	9/19/1977	18	0.83	1.03
21330 Johnson Ave	36315	170	nd	nd	6/23/1977	15	0.00	0.74
4112 N Walnut Ave	24665	340	340	140	4/23/1977	21	1.86	1.71
2219 W Monte Vista Ave	145652	390	390	120	12/19/1977	23	1.50	1.36
PO Box 1318	582777	125	nd	27	7/8/1994	24	1.37	1.23
3612 Mt View Ave	89357	152	152	38	8/16/1973	30	0.97	0.84
4118 N Kilroy Rd	24684	233	233	20	5/27/1977	25	1.30	1.18
10218 N Lander Ave	131009	320	292	176	1/20/1978	24	1.17	1.09
Simmons Rd	85429	211	211	37	5/11/1977	15	1.73	2.13
2136 S Walnut Ave	26166	264	264	50	8/25/1977	16	1.59	1.89
20694 Johnson Rd	36311	200	nd	nd	6/28/1977	18	0.00	0.75
9001 N Lander Ave	326962	240	235	80	12/1/1989	26	0.00	0.76
4018 Swanson Rd	437539	180	180	nd	7/20/1996	20	1.19	1.44
15760 N Ave	29212	236	234	162	12/5/1978	20	1.26	1.31
1119 Pedros Rd	146260	160	160	110	6/3/1975	20	1.27	1.28
11913 W East Ave	287352	460	460	250	5/5/1989	20	0.00	0.76
1129 9th St	66752	nd	nd	nd	2/3/1971	33	1.00	1.15
700 Crane Rd	66741	nd	nd	nd	5/4/1971	34	0.94	1.07
101 Wayside	46286	425	425	110	12/21/1977	20	1.10	1.14
421 E Olive Ave	90457	146	146	126	9/23/1974	20	0.86	0.87

nd indicates data not available from well driller's report

TABLE B.
Dry Year Water Levels and Drawdown with Power Plant Well in Existing Private Domestic Wells in Area (Feet)

Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
118 N Blaker Rd	189638	125	125	105	12/10/1985	31	0.92	0.80
737 S Blaker Rd	98314	147	147	107	6/26/1979	30	0.93	0.82
3024 S Blaker Rd	250555	152	152	132	8/15/1988	25	0.74	0.71
10407 S Bradbury Rd	246990	150	150	90	5/20/1982	25	0.00	0.00
3312 S Blaker Rd	247491	175	175	155	8/4/1988	25	0.00	0.00
3307 S Blaker Rd	811823	165	165	nd	2/17/1999	25	0.00	0.00
1550 S B St	191167	106	106	86	5/28/1986	24	0.81	0.77
3418 S Blaker Rd	129532	84	84	64	8/31/1978	25	0.00	0.00
10007 Fulkerth Rd	128975	121	121	81	12/29/1978	30	0.94	0.78
10007 Fulkerth Rd	149365	75	75	65	5/18/1976	30	0.94	0.78
1912 E Taylor Rd	426340	160	160	nd	4/12/1993	30	0.00	0.00
7725 Central Ave	70222	110	110	100	4/21/1972	30	0.77	0.00
501 S Central Ave	51225	70	69	50	3/18/1970	34	1.16	1.05
507 S Central Ave	66754	nd	77	67	2/9/1971	34	1.16	1.05
6025 S Central Ave	498206	155	155	nd	5/14/1992	23	0.00	0.00
9730 W Bradbury Rd	148629	88	88	73	7/28/1976	23	0.00	0.00
5780 S Central Ave	495115	75	75	nd	2/15/1990	23	0.00	0.00
5525 S Central Ave	64867	70	nd	nd	4/15/1987	22	0.00	0.00
3030 S Central Ave	251141	160	160	120	6/6/1987	20	0.95	0.93
5443 S Central Ave	96258	178	178	158	7/21/1980	22	0.00	0.00
5221 S Central Ave	811790	100	100	nd	12/3/1998	22	0.00	0.00
5200 S Central Ave	145903	80	80	60	4/9/1976	22	0.00	0.00
8331 Central Ave	154233	165	165	125	10/16/1984	30	0.89	0.00
5824 S Central Ave	96695	158	158	94	4/21/1981	23	0.77	0.78
2325 E Taylor Rd	47909	255	255	215	5/2/1977	30	0.00	0.00
219 S Central Ave	47907	270	270	90	7/18/1977	35	1.18	1.07
219 S Central Ave	65090	140	140	120	8/20/1987	35	1.19	1.07
2225 Central Ave	21038	68	nd	nd	5/22/1969	20	1.06	1.02
219 Central Ave	516483	142	142	nd	2/16/1998	35	1.20	1.08
7936 S Central Ave	154241	120	120	100	11/2/1984	30	0.87	0.00
3513 S Central Ave	21047	84	nd	nd	11/25/1969	22	0.91	0.90
306 N Central Ave	29338	130	nd	nd	12/2/1969	35	1.20	1.07
4906 S Central Ave	495222	190	190	nd	10/15/1993	22	0.00	0.00
506 N Central Ave	252808	140	140	120	9/15/1987	35	1.19	1.06
5601 S Central Ave	381849	180	180	160	12/10/1992	22	0.00	0.00
3825 S Central Ave	76520	84	84	74	11/8/1972	23	0.84	0.85
2331 Roberts Rd	370330	295	295	275	7/3/1990	30	0.82	0.00
2466 E Taylor Rd	99498	74	74	64	12/2/1974	30	0.00	0.00
2506 E Taylor Rd	64880	112	112	92	4/23/1987	30	0.00	0.00
2406 Roberts Rd	151158	142	140	120	8/7/1975	30	0.87	0.00
2408 Roberts Rd	129788	140	140	106	5/24/1978	30	0.87	0.00
PO Box 949	191158	300	300	280	1/7/1986	35	1.39	1.19
8655 Moffett Rd	243235	94	94	74	10/18/1982	30	1.19	1.00
2654 E Taylor Rd	325386	170	170	150	4/23/1990	30	0.76	0.00
7236 Moffett Rd	168846	300	300	280	7/7/1987	30	0.76	0.00
813 S Moffett Rd	29166	137	137	124	10/20/1977	32	1.47	1.31
1424 S Moffett Rd	164923	130	130	110	8/8/1986	25	1.41	1.30
2719 S Moffett Rd	580320	160	160	nd	6/28/1995	20	1.20	1.18
3431 S Moffett Rd	326871	120	120	100	9/11/1989	20	1.07	1.08
3431 S Moffett Rd	326872	140	140	120	9/12/1989	20	1.07	1.08
4419 S Moffett Rd	98947	75	75	65	6/6/1974	19	0.88	0.92

TABLE B.
Dry Year Water Levels and Drawdown with Power Plant Well in Existing Private Domestic Wells in Area (Feet)

Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
8601 Moffet Rd	304062	120	120	100	6/20/1989	30	1.20	1.02
PO Box 7	495255	330	330	nd	1/11/1994	30	1.21	1.02
PO Box 32	340945	155	155	135	4/23/1990	30	1.11	0.92
2642 E Tuolumne Rd	96280	190	190	170	9/9/1980	30	1.23	1.05
8718 W Main St	226864	125	125	105	9/4/1981	35	1.59	1.39
8702 W Main St	150826	130	nd	nd	6/23/1985	35	1.59	1.39
9018 W Linwood Ave	246989	160	160	120	5/24/1982	20	1.45	1.37
PO Box 576	22681	119	119	109	2/28/1977	30	0.00	0.00
PO Box 645	227049	138	140	120	12/28/1981	30	1.04	0.84
8506 W Main St	87171	89	89	79	2/12/1974	35	1.66	1.46
2807 E Tuolumne Rd	326998	185	185	165	3/9/1990	30	1.34	1.12
8825 Simmons Rd	53725	150	150	130	8/13/1979	20	1.39	1.37
2872 E Taylor Rd	326979	170	170	150	2/2/1990	30	0.89	0.00
2700 E Tuolumne Rd	290656	190	190	170	11/3/1988	30	1.40	1.15
718 S Mitchell Rd	475237	173	173	nd	9/12/1995	31	1.86	1.70
6612 Prairie Flower Rd	283476	156	156	146	9/15/1988	17	0.00	0.00
2213 S Mitchell Rd	495283	160	160	nd	3/1/1994	20	1.62	1.58
2912 E Taylor Rd	326846	160	160	140	8/17/1989	30	0.92	0.71
2912 E Taylor Rd	433827	200	50	nd	8/19/1991	30	0.92	0.71
2912 E Taylor Rd	83942	62	46	36	8/22/1973	30	0.92	0.71
2912 E Taylor Rd	98349	80	80	70	9/10/1974	30	0.92	0.71
6112 S Mitchell Rd	495182	200	200	nd	7/12/1993	16	0.00	0.00
5436 S Mitchell Rd	334938	185	185	165	4/20/1990	15	0.77	0.85
5712 S Mitchell Rd	154207	195	195	175	11/20/1984	15	0.80	0.88
5701 S Mitchell Rd	86192	120	120	105	7/20/1979	15	0.84	0.92
4419 S Mitchell Rd	96919	175	175	135	6/24/1980	15	1.08	1.13
2230 S Mitchell Rd	245970	125	125	105	3/3/1982	20	1.66	1.62
700 N Mitchell Rd	304056	160	160	140	6/19/1989	35	1.93	1.68
8407 Simmons Rd	96263	138	138	123	8/6/1980	19	1.56	1.56
2914 Taylor Rd	347506	120	120	100	6/22/1990	30	0.99	0.78
3243 Roberts Rd	142808	120	120	100	9/12/1978	30	1.18	0.97
7606 Clayton Rd	187152	170	170	150	8/25/1986	23	2.04	1.91
PO Box 1814	51219	81	78	63	2/18/1970	30	1.07	0.86
3437 Roberts Rd	64846	150	150	130	2/23/1987	28	1.24	1.03
313 N Prairie Flower Rd	246530	350	nd	nd	6/3/1985	35	2.43	2.05
PO Box 663	344936	285	285	265	7/18/1990	35	2.33	1.90
6401 S Prairie Flower Rd	64825	135	135	115	1/27/1986	15	0.00	0.72
1731 S Prairie Flower Rd	822543	125	125	nd	6/3/1999	19	2.13	2.09
4919 S Prairie Flower Rd	46483	114	114	84	12/14/1977	15	1.06	1.16
313 N Prairie Flower Rd	26563	76	76	36	7/2/1977	32	2.51	2.17
Turlock	115630	108	nd	nd	6/25/1965	17	1.86	1.89
#1 Redondo St	70217	61	61	51	4/3/1972	15	0.95	1.05
PO Box 710	247395	110	110	90	7/30/1982	15	1.19	1.28
5931 S Prairie Flower Rd	46541	122	122	102	9/20/1977	15	0.76	0.87
5481 Grassy Run Rd	374551	156	156	136	6/7/1991	35	2.32	1.88
PO Box 6053	70774	113	113	93	2/25/1980	35	2.47	2.05
3107 S Prairie Flower Rd	157634	87	87	62	6/5/1976	15	1.67	1.75
3107 S Prairie Flower Rd	86056	165	165	125	1/8/1979	16	1.68	1.76
3107 S Prairie Flower Rd	334909	145	145	125	1/30/1990	16	1.69	1.77
4218 Prairie Flower Rd	29203	283	283	268	10/24/1978	15	0.83	0.93
3100 Prairie Flower Rd	822519	110	110	nd	4/30/1999	16	1.68	1.76

TABLE B.
Dry Year Water Levels and Drawdown with Power Plant Well in Existing Private Domestic Wells in Area (Feet)

Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
3107 Prairie Flower Rd	243974	180	180	140	5/28/1983	16	1.70	1.77
3107 S Prairie Flower Rd	484005	275	275	100	8/24/1991	16	1.69	1.77
3107 Prairie Flower Rd	580202	160	160	nd	7/27/1995	15	1.66	1.74
3107 S Prairie Flower Rd	289681	268	268	228	1/16/1989	15	1.67	1.75
3107 S Prairie Flower Rd	243207	95	95	75	9/21/1982	15	1.66	1.74
4313 Prairie Flower Rd	252929	119	119	99	3/1/1988	15	1.24	1.37
1330 Prairie Flower Rd	76015	240	240	200	6/22/1981	35	2.22	1.80
7000 Clayton Rd	290667	175	175	155	11/17/1988	22	2.45	2.31
Livingston	92807	122	122	61	5/6/1974	30	0.79	0.00
PO Box 216	334966	222	222	182	8/26/1989	30	1.14	0.94
3643 Warner Rd	481186	135	nd	20	6/5/1991	30	0.92	0.71
5000 Escar	65055	117	117	97	3/13/1987	30	0.93	0.73
3737 Warner Rd	46500	127	127	107	1/6/1978	30	0.86	0.00
3700 W Taylor Rd	86583	130	nd	nd	3/27/1972	29	1.17	0.97
6725 W Main St	495221	150	150	nd	10/13/1993	27	3.05	2.58
6718 Elaine Rd	247375	120	120	80	7/21/1982	15	0.00	0.00
3901 Roberts Rd	168831	120	120	100	6/12/1987	25	1.40	1.14
8342 Faith Home Rd	187200	160	160	140	12/4/1986	26	1.84	1.51
8413 Faith Home Rd	325321	140	140	100	11/7/1989	27	1.90	1.56
836 N Faith Home Rd	83970	75	75	65	5/3/1973	34	2.94	2.36
7337 S Faith Home Rd	150867	67	nd	nd	11/1/1985	15	0.00	0.00
4930 S Faith Home Rd	250595	126	126	106	9/19/1988	15	1.09	1.21
7130 Faith Home Rd	366567	148	148	128	3/16/1991	15	0.00	0.00
2124 S Faith Home Rd	96270	190	195	175	8/21/1980	17	2.57	2.64
6643 Faith Home Rd	252871	160	160	140	12/4/1987	30	0.90	0.00
6618 Faith Home Rd	146829	57	57	47	8/11/1975	30	0.91	0.72
6912 Faith Home Rd	197523	175	175	155	2/7/1986	29	0.99	0.79
6955 Faith Home Rd	374590	250	250	235	7/12/1991	29	1.00	0.80
6224 S Faith Home Rd	65066	155	155	135	3/30/1987	15	0.00	0.82
5818 S Faith Home Rd	226871	85	85	65	9/24/1981	15	0.82	0.95
231 S Faith Home Rd	498216	340	340	nd	6/4/1992	25	3.45	2.93
PO Box 1803	226551	125	125	105	10/6/1981	33	3.14	2.49
1100 N Faith Home Rd	516467	180	180	nd	12/12/1997	31	3.25	2.59
4809 Zeering Rd	21664	120	135	110	12/13/1976	27	1.27	1.07
836 N Faith Home Rd	76519	43	43	34	11/3/1972	30	3.36	2.70
6001 W Zeering Rd	22419	103	103	93	1/21/1977	26	1.41	1.15
PO Box 1867	21483	73	73	63	9/10/1976	24	3.69	3.08
24238 S Mohler Rd	125778	83	83	70	1/9/1975	28	0.87	0.00
5825 Fulkerth Rd	370333	320	320	300	7/6/1990	33	2.71	2.16
100 S Krinley Ave	71015	100	100	85	2/12/1980	15	0.89	1.03
5341 Zeering Rd	347508	155	130	85	4/14/1990	25	1.44	1.17
5725 Ehrlich Rd	96076	80	80	60	11/7/1980	15	0.72	0.87
1500 Commons Rd	112000	190	140	120	7/7/1975	30	3.00	2.36
1307 N Commons Rd	90552	145	145	135	11/1/1973	30	3.16	2.47
224 S Commons Rd	125302	80	80	60	7/29/1975	22	4.78	3.68
230 S Commons Rd	66757	73	73	63	4/12/1971	22	4.78	3.68
1230 S Commons Rd	227714	91	91	71	10/21/1981	15	3.80	3.85
4206 S Commons Rd	326886	110	110	100	9/28/1989	15	1.49	1.71
4600 S Commons Rd	66790	85	nd	nd	5/12/1971	15	1.31	1.54
Rt 1 Box 775	111859	64	64	56	10/10/1975	15	0.93	1.08
5531 Ehrlich Rd	29336	90	nd	nd	12/7/1969	15	0.73	0.88

TABLE B.
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Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
PO Box 2385	87387	95	nd	nd	8/15/1973	15	0.96	1.11
5625 W Bradbury Rd	580167	120	120	nd	5/30/1995	15	1.18	1.37
23467 W Short Ave	374558	130	130	110	6/14/1991	15	0.00	0.82
5525 Clayton Rd	191181	95	95	75	6/16/1986	15	3.95	4.01
Turlock	718337	240	240	nd	7/23/1999	29	3.27	2.54
6630 Foote Rd	24565	142	142	130	3/25/1977	25	0.90	0.00
4908 Glenmoor Wy	569323	120	120	nd	4/20/1994	15	1.15	1.32
1101 Commons Rd	245936	112	112	97	8/27/1982	27	3.89	2.95
5725 Ehrlich Rd	340954	100	100	80	4/24/1990	15	0.00	0.82
5518 W Bradbury Rd	422625	115	115	50	12/13/1991	15	1.19	1.39
Ceres	147232	110	110	106	9/13/1978	25	0.90	0.72
PO Box 4278	498327	385	385	nd	10/21/1992	25	0.90	0.72
PO Box 889	275139	140	140	120	12/3/1988	25	0.90	0.72
Turlock	17351	80	80	60	4/20/1969	25	0.90	0.72
5326 Clayton Ave	346760	174	174	154	8/15/1990	14	4.16	4.41
5324 Clayton Ave	153475	nd	nd	nd	2/25/1985	14	4.17	4.41
5213 W Main St	52841	83	nd	nd	3/3/1970	21	6.14	4.09
5213 W Main St	153473	157	nd	20	2/23/1985	21	6.14	4.09
5213 W Main St	53667	250	250	220	10/8/1979	21	6.14	4.09
PO Box 35	149381	75	75	65	5/3/1976	15	1.18	1.39
5319 W Bradbury Rd	245907	80	80	60	6/16/1982	15	1.20	1.42
5201 Zeering Rd	347507	155	150	85	4/6/1990	25	1.51	1.23
5019 Christofferson Rd	219499	115	115	95	8/28/1984	15	0.92	1.08
4813 W Main St	498316	237	237	nd	9/22/1992	20	8.80	4.68
4800 W Main St	219045	118	118	98	9/4/1984	20	8.87	4.69
601 N Washington Rd	326842	235	235	215	8/16/1989	23	4.90	3.56
1318 S Washington Rd	284295	228	228	208	9/20/1988	13	4.31	5.57
4631 S Washington Rd	704844	105	105	nd	7/2/1998	15	1.25	1.52
5107 W Bradbury Rd	76861	91	91	71	5/18/1981	15	1.20	1.44
PO Box 352	361911	255	255	235	8/29/1990	24	2.17	1.78
5672 Almaden Express	125365	120	120	100	4/28/1975	22	2.79	2.28
4113 N Washington Rd	501989	140	33	nd	3/16/1993	25	1.50	1.23
4218 W Washington Rd	247365	125	125	105	6/25/1982	25	1.46	1.20
4113 N Washington Rd	150880	110	110	90	10/4/1985	25	1.50	1.23
4113 N Washington Rd	192248	82	82	62	8/15/1986	25	1.50	1.23
Turlock	71008	250	250	225	1/26/1980	11	3.33	4.27
1706 N Washington Rd	99416	60	60	50	9/22/1974	22	3.29	2.63
4591 Fulkerth Rd	813196	220	220	nd	12/7/1998	22	3.10	2.50
Turlock	21006	72	nd	nd	1/3/1969	14	1.98	2.41
4600 Idaho Rd	26566	81	81	61	7/5/1977	15	1.53	1.81
4519 Idaho Rd	465292	105	105	nd	11/23/1993	15	1.53	1.82
4500 W Monte Vista Ave	247486	145	145	125	8/1/1988	24	1.93	1.64
20271 W Johnson St	64868	250	250	230	4/14/1987	15	0.00	0.85
4330 Silva Rd	53672	80	80	70	10/26/1979	14	1.82	2.23
4318 Idaho Rd	250459	275	275	255	5/24/1988	15	1.52	1.82
11113 Copperopolis	475304	118	118	nd	3/11/1996	15	1.72	2.08
1201 W Monte Vista Ave	361925	230	230	200	9/25/1990	24	1.87	1.60
4124 Idaho Rd	174576	95	95	75	8/29/1985	15	1.51	1.81
4816 W Barnhart Rd	197526	245	245	230	2/26/1986	25	0.92	0.76
9579 Hultberg Rd	197505	110	110	80	11/27/1985	15	0.78	0.96
9579 Hultberg Rd	21231	110	110	95	11/10/1976	15	0.78	0.96

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2219 Barnhart Rd	304094	170	170	150	7/7/1989	25	0.93	0.76
5612 Hultberg Rd	128977	230	230	190	11/9/1978	16	0.99	1.18
4113 Monte Vista Ave	303904	220	220	200	1/20/1989	24	1.85	1.60
5837 Hultberg Rd	250497	274	276	254	6/24/1988	16	1.08	1.27
6025 Hultberg Rd	29204	82	82	67	11/1/1978	16	1.08	1.27
PO Box 2996	164787	125	125	90	6/8/1987	25	1.32	1.14
PO Box 1910	433892	310	310	nd	10/22/1991	25	1.22	1.06
2180 Enterprise Blvd	168920	220	220	200	11/6/1987	25	1.27	1.11
4200 W Monte Vista Ave	289643	110	110	90	11/9/1988	21	2.38	2.02
Turlock	21019	nd	61	51	4/4/1969	21	2.38	2.02
3928 W Linwood Ave	243208	145	145	85	9/29/1982	10	3.43	4.78
3925 W Linwood Ave	475261	265	265	nd	11/3/1995	10	3.42	4.78
1576 N Nelinder Ave	148610	76	76	61	9/9/1976	15	1.68	2.05
PO Box 845	128904	100	100	90	3/17/1978	26	0.90	0.74
4512 Barnhart Rd	325370	135	135	115	3/28/1990	26	0.91	0.75
4454 Barnhart Rd	145997	97	97	87	5/21/1976	26	0.91	0.75
3800 Ruble Rd	28121	76	75	60	2/18/1969	13	4.09	5.72
4401 W Barnhart Rd	21018	72	75	65	4/3/1969	27	0.91	0.75
4042 Barnhart Rd	174101	105	105	85	4/22/1985	27	0.90	0.75
3831 Silva Rd	53652	80	80	nd	8/27/1979	15	1.67	2.04
3631 Buble Rd	250458	245	245	225	5/24/1988	14	3.83	4.99
PO Box 1437	346797	155	155	135	10/29/1990	21	2.30	1.99
4042 Barnhart Rd	227722	238	238	218	11/20/1981	28	0.88	0.73
3686 E Monte Vista Ave	427232	173	65	nd	8/10/1991	24	1.77	1.56
3707 E Monte Vista Ave	21313	nd	99	79	12/18/1976	24	1.78	1.56
3425 E Monte Vista Ave	290637	225	225	205	10/18/1988	24	1.76	1.54
Drawer A	275714	223	223	203	5/27/1988	11	2.27	2.86
3300 Idaho Rd	498308	285	285	nd	9/22/1992	16	1.42	1.75
3525 W Monte Vista Ave	706199	80	80	nd	9/10/1998	24	1.76	1.55
21817 Johnson Rd	580237	110	110	nd	10/20/1995	15	0.00	0.83
3515 Linwood Ave	64886	220	220	200	5/1/1987	10	2.79	3.62
3218 Idaho Rd	250407	300	300	260	4/8/1988	17	1.41	1.73
424 S Tegner Rd	245992	175	175	155	5/5/1982	20	3.54	3.91
1031 S Tegner Rd	29307	173	173	161	1/7/1978	16	3.31	4.13
3113 Taylor Rd	53673	140	140	130	10/26/1979	29	1.10	0.96
1424 S Tegner Rd	704833	220	220	nd	5/29/1998	13	3.07	3.94
5831 S Tegner Rd	89379	85	85	75	10/9/1973	17	0.98	1.17
5831 S Tegner Rd	145706	90	90	70	11/21/1977	17	0.98	1.17
5831 S Tegner Rd	53714	115	115	95	8/16/1979	17	0.98	1.17
2406 S Tegner Rd	516164	180	180	nd	3/4/1998	10	2.33	2.96
2419 S Tegner Rd	580346	230	230	nd	8/22/1995	10	2.32	2.95
3306 S Tegner Rd	822809	260	260	nd	5/8/1999	14	1.85	2.33
4018 S Tegner Rd	580274	250	250	nd	3/23/1995	16	1.50	1.83
4019 S Tegner Rd	99478	73	73	63	11/3/1974	16	1.50	1.83
10069 W Tegner Rd	76858	110	110	90	5/13/1981	15	0.00	0.83
3919 N Golden State Blvd	47957	190	190	160	6/28/1977	27	1.33	1.17
Turlock	23000	127	124	113	7/15/1977	19	3.34	4.01
2624 White Rd	96256	255	255	235	7/16/1980	17	0.94	1.14
1901 N Tegner Rd	29175	140	140	125	11/4/1977	20	2.59	2.39
11807 Valley Home Rd	306511	165	165	125	8/24/1987	10	2.45	3.12
4331 S Shirk Rd	247066	140	140	120	1/8/1983	17	3.14	3.92

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PO Box 3838	150804	180	nd	nd	6/14/1985	21	2.04	1.82
4600 W Tegner Rd	168872	215	215	195	8/12/1987	28	1.26	1.12
1331 Diane Dr	144492	100	100	80	3/1/1978	20	2.53	2.36
1001 Dianne Rd	243225	113	113	93	10/28/1982	20	2.56	2.45
PO Box 2968	409155	180	180	nd	2/11/1993	24	1.64	1.46
3436 Barnhart Rd	70458	nd	70	60	6/1/1972	30	0.84	0.00
3842 N Mt View Rd	90452	75	71	55	7/24/1974	26	1.37	1.21
PO Box 625	21345	128	128	108	3/7/1977	20	2.77	2.80
2655 W Monte Vista Ave	433927	140	140	nd	1/3/1992	23	1.63	1.46
Turlock	21031	105	nd	nd	5/14/1969	16	2.40	2.99
3000 Eye St	60861	70	67	56	3/25/1971	20	2.33	2.21
5324 Mountain View Rd	128974	101	101	81	12/22/1978	30	0.91	0.79
PO Box 3838	129517	120	120	80	7/21/1978	20	1.88	1.76
4961 Mt View Rd	811832	115	115	nd	3/9/1999	30	0.97	0.84
2525 E Monte Vista Ave	250485	285	285	265	6/15/1988	23	1.55	1.39
6107 Mountain View Rd	128683	120	120	100	6/2/1978	30	0.78	0.00
PO Box 949	532844	120	120	nd	8/12/1997	17	0.82	1.02
3501 S Kilroy Rd	168903	258	258	238	9/26/1987	16	1.54	1.87
3800 S Kilroy Rd	580313	250	250	nd	6/13/1995	17	1.43	1.76
3918 S Kilroy Rd	495232	245	245	nd	11/2/1993	17	1.38	1.72
2406 E Monte Vista Ave	147201	130	130	118	8/30/1978	23	1.52	1.36
3607 S Kilroy Rd	290691	255	255	235	12/13/1988	17	1.43	1.76
PO Box 354	96740	125	125	105	5/7/1980	30	0.78	0.00
21321 White Rd	153496	225	nd	nd	5/28/1985	17	0.83	1.04
2442 Tuolumne Rd	580338	220	220	nd	8/11/1995	20	1.80	1.69
601 Century Blvd	149382	72	72	62	5/4/1976	20	2.41	2.45
2307 Bradbury Rd	498386	221	221	nd	2/22/1993	19	1.08	1.29
Turlock	128911	140	140	120	3/21/1978	26	1.20	1.09
700 W Walnut Rd	125873	87	87	67	11/10/1975	20	2.41	2.47
PO Box 127	149802	107	107	97	12/15/1975	28	1.07	0.96
2612 E Barnhart Rd	247369	151	151	131	6/24/1982	30	0.76	0.00
2171 Aspenwood Dr	153482	275	nd	nd	3/8/1985	20	2.10	2.08
2407 W Glenwood Rd	374401	235	235	215	12/20/1990	15	1.87	2.32
2407 Glenwood Ave	71046	215	215	200	6/23/1980	16	1.85	2.30
2406 Glenwood Ave	147207	175	175	167	7/28/1978	16	1.85	2.29
725 N Tully Rd	580335	290	290	nd	8/9/1995	20	2.17	2.23
2211 Solitude Ave	164340	155	155	135	11/20/1986	20	2.13	2.17
2500 Barnhart Rd	96255	117	117	102	7/2/1980	30	0.73	0.00
1980 Cody Ct	580254	255	255	nd	2/8/1995	20	1.86	1.83
2021 W Tuolumne Rd	426304	215	215	nd	12/31/1992	21	1.59	1.50
2007 W Main St	304075	95	95	75	6/27/1989	22	2.23	2.45
2325 E Taylor Rd	46937	293	293	248	8/28/1977	28	0.93	0.82
1890 Fulkerth Rd	498263	315	315	nd	7/14/1992	20	1.81	1.77
600 N Tully Rd	65053	203	203	183	3/7/1987	22	2.16	2.31
10526 Goulart Rd	252977	245	245	225	5/7/1988	18	0.78	0.98
Turlock	70460	nd	63	53	1/7/1972	20	1.07	1.28
2630 W Tuolumne Ave	96664	158	158	148	11/12/1980	20	1.61	1.53
2007 W Tuolumne Ave	53749	90	90	70	4/1/1980	20	1.60	1.53
2618 N Golden State Blvd	226896	225	225	205	10/12/1981	20	1.56	1.49
1560 Springville	65095	185	185	165	5/1/1987	23	1.26	1.19
2700 N Golden State Blvd	252874	245	245	205	12/14/1987	20	1.55	1.48

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2310 N Walnut Rd	21245	153	158	138	10/28/1976	20	1.53	1.46
2207 S Walnut Rd	340995	290	290	270	6/1/1990	20	1.69	2.03
3607 S Walnut Rd	326943	240	240	220	11/27/1989	20	1.25	1.57
Turlock	21046	72	75	65	11/24/1967	21	1.16	1.43
1800 Glenwood Ln	21016	nd	nd	nd	2/21/1969	19	1.65	1.97
1800 Glenwood Ln	90892	101	nd	nd	7/11/1975	20	1.66	1.98
1600 W Main St	416500	110	110	nd	5/18/1994	23	1.92	2.14
PO Box 588	304059	160	160	140	6/16/1989	16	1.56	1.86
3318 S Walnut Ave	275702	290	290	270	5/17/1988	20	1.25	1.57
3730 N Walnut Ave	326823	120	120	100	7/28/1989	26	1.00	0.92
4219 N Walnut Ave	340925	175	175	155	4/7/1990	19	1.59	1.89
1424 Circus Ct	475338	330	330	nd	5/15/1996	20	1.68	1.67
2820 Brevard Ln	86188	190	190	175	7/10/1979	22	1.26	1.20
2500 Hampton Rd	340918	275	275	255	3/30/1990	20	1.44	1.38
1465 Ellerd RD	326964	232	232	212	1/12/1990	30	1.67	1.96
1518 Bradbury Rd	22727	140	140	120	5/9/1977	20	0.86	1.06
5724 N Walnut Rd	22675	140	140	130	2/18/1977	29	0.00	0.00
PO Box 275	197503	245	245	100	11/16/1985	15	0.00	0.00
1200 W Tuolumne Rd	89363	142	142	132	10/6/1973	20	1.34	1.28
4641 Crowell Rd	370304	360	360	340	6/7/1990	27	0.77	0.00
3513 S Soderquist Rd	226557	77	77	57	11/6/1981	21	1.20	1.47
4012 S Soderquist Rd	150833	245	nd	nd	7/25/1985	25	1.03	1.23
3931 S Soderquist Rd	498375	240	240	nd	2/2/1993	24	1.08	1.29
3336 S Soderquist Rd	110633	55	55	45	6/17/1975	22	1.16	1.41
3912 S Soderquist Rd	326843	230	230	210	8/17/1989	25	1.02	1.22
4124 S Soderquist Rd	495290	240	240	nd	3/9/1994	25	0.97	1.17
3336 S Soderquist Rd	287260	180	180	160	3/8/1989	23	1.14	1.38
2740 Crowell Rd	290690	205	205	185	12/20/1988	20	1.25	1.21
1151 Williams Rd	168885	175	175	155	8/27/1987	30	1.62	1.85
1004 Mae St	580300	240	240	nd	5/5/1995	28	1.64	1.85
913 W Greenway Ave	290632	175	175	155	10/14/1988	20	1.25	1.55
Oslo Rd	76606	96	96	76	12/19/1972	16	0.00	0.00
805 W Minnesota Ave	168960	270	270	250	1/15/1988	21	1.15	1.11
PO Box 432	46478	100	100	80	12/3/1977	23	1.11	1.34
752 Julia	21035	110	nd	nd	5/21/1969	22	1.56	1.67
839 W Main St	146266	145	145	125	7/9/1975	24	1.54	1.69
5532 Copeland Ln	22994	90	90	70	7/11/1977	20	1.23	1.50
565 Santa Clara	326931	245	245	225	11/10/1989	20	1.23	1.50
Livermore	29343	70	70	60	6/28/1978	29	1.49	1.70
20426 W Johnson Ave	66756	nd	71	61	2/11/1971	16	0.00	0.00
671 Park St	96093	117	117	97	2/25/1981	21	1.47	1.57
512 Montana Ave	822557	205	285	nd	6/24/1999	33	1.41	1.64
809 N Broadway	252886	245	245	225	1/11/1988	20	1.43	1.52
2041 Julie Ave	129507	140	140	100	6/21/1978	20	1.17	1.15
2141 Julie Ave	495108	255	255	nd	3/25/1993	20	1.18	1.17
Modesto	92530	102	102	82	5/8/1974	28	0.00	0.00
520 Pedros Rd	86940	85	85	65	2/15/1974	20	1.22	1.22
471 Clark St	191200	170	170	150	7/23/1986	33	1.34	1.56
528 E Main St	85104	nd	70	50	5/26/1973	24	1.39	1.55
2141 Georgia Wy	548989	151	28	nd	8/8/1995	20	1.15	1.14
607 W Clausen Rd	64861	nd	255	235	4/2/1987	29	0.92	1.12

TABLE B.
Dry Year Water Levels and Drawdown with Power Plant Well in Existing Private Domestic Wells in Area (Feet)

Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
647 Columbiam	89364	65	65	55	10/8/1973	25	1.39	1.55
547 Pedros Rd	96261	157	157	137	7/27/1980	20	1.20	1.21
547 Pedros Rd	147227	113	113	93	8/30/1978	20	1.20	1.21
217 Coren St	86910	85	85	65	11/4/1973	21	1.07	1.25
632 W Greenway	468098	160	160	nd	12/7/1995	20	1.08	1.26
632 W Greenway	244079	265	nd	nd	5/21/1984	20	1.08	1.26
528 E Main St	85102	80	80	60	5/24/1973	25	1.35	1.50
509 Vermont Ave	219457	120	120	100	6/19/1984	29	1.32	1.51
304 W Minnesota Ave	128930	126	126	114	5/28/1978	20	1.05	1.03
448 W Clausen Rd	576605	220	220	nd	12/16/1996	30	0.89	1.08
232 20th Century Blvd	128969	240	140	100	11/6/1978	20	1.20	1.22
565 Santa Clara	76536	64	64	54	11/30/1972	26	0.00	0.87
378 W Syracuse	325303	190	190	170	10/17/1989	20	1.26	1.35
430 Columbia	158179	nd	95	70	10/28/1976	26	1.29	1.46
30272 E Orange Ave	146253	100	100	88	7/8/1975	35	1.22	1.43
221 W Minnesota Ave	145640	60	60	35	1/26/1978	20	1.02	1.01
733 N Broadway	326887	85	85	75	9/29/1989	23	1.24	1.36
20751 W Fowler Rd	289683	115	115	95	1/6/1989	20	0.00	0.00
855 Geer Rd	96742	100	100	80	5/6/1980	20	1.16	1.21
855 Geer Rd	147243	145	145	133	10/5/1978	20	1.16	1.21
858 Geer Rd	168804	285	285	265	5/21/1987	20	1.16	1.21
1445 Lander Ave	409128	272	272	nd	10/13/1992	35	1.17	1.34
9725 Lander Ave	29334	98	nd	nd	12/5/1969	16	0.00	0.00
9725 Lander Ave	29334	98	nd	nd	12/5/1969	16	0.00	0.00
2620 Lander Ave	576604	220	220	nd	12/3/1996	20	1.04	1.21
2609 Lander Ave	96716	154	154	134	4/11/1980	20	1.05	1.22
3007 Lander Ave	197584	180	180	160	6/9/1986	20	0.99	1.17
3125 Lander Ave	370321	225	225	205	6/29/1990	20	0.97	1.15
20167 W Fowler Rd	326913	130	130	120	10/20/1989	20	0.00	0.00
10117 Lander Ave	247378	116	116	76	7/28/1982	18	0.00	0.00
4000 Lander Ave	148628	70	70	60	7/16/1976	30	0.82	1.01
4136 Lander Ave	67729	100	100	80	4/4/1971	30	0.79	0.98
4200 Lander Ave	287266	215	215	195	3/9/1989	30	0.78	0.97
10218 Lander Ave	64857	285	285	265	3/25/1987	18	0.00	0.00
10218 Lander Ave	498381	200	200	nd	2/4/1993	18	0.00	0.00
10218 Lander Ave	498204	210	210	nd	5/18/1992	18	0.00	0.00
10218 Lander Ave	475360	210	210	nd	6/24/1996	18	0.00	0.00
10218 N Lander Ave	145508	154	154	144	2/11/1976	18	0.00	0.00
10430 Lander Ave	247096	195	195	155	3/20/1984	19	0.00	0.00
737 E Monte Vista Ave	251120	122	122	102	5/27/1987	20	0.91	0.89
2700 Lander Ave	187161	210	210	190	9/18/1986	20	0.97	1.15
30 W Minnesota Ave	46474	156	156	138	11/26/1977	20	0.98	0.98
2080 Temple Ave	63834	98	98	88	2/15/1973	20	1.00	1.01
2125 Gulf Rd	22939	216	216	201	3/20/1977	32	1.10	1.25
605 Lander Ave	21036	nd	60	50	5/21/1969	31	1.17	1.31
605 Lander Ave	29333	71	nd	nd	12/4/1969	31	1.17	1.31
605 Lander Ave	21040	nd	nd	nd	12/25/1969	28	1.18	1.30
605 Lander Ave	66714	60	60	50	9/7/1970	28	1.18	1.30
3424 Geer Rd	250471	235	235	215	6/7/1988	20	0.84	0.81
447 E Center St	326807	100	100	80	7/17/1989	22	1.15	1.23
2618 Geer Rd	250470	225	225	205	6/6/1988	20	0.95	0.95

TABLE B.
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Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
225 Rutgers Ave	89340	nd	76	66	9/25/1973	20	0.96	0.96
837 9th St	46463	126	126	100	10/28/1977	35	1.12	1.26
388 N Golden State Blvd	40433	142	142	132	10/19/1976	23	1.14	1.22
2000 Loyola Wy	83937	97	97	89	7/17/1973	20	0.98	0.99
225 Rutgers Ave	89968	103	103	93	2/22/1974	20	0.98	0.99
5018 N Geer Rd	525362	290	290	nd	5/3/1997	25	0.00	0.00
837 8th ST	576638	160	160	nd	3/12/1997	35	1.10	1.23
900 N Palm St	488671	400	405	nd	2/20/1992	20	1.09	1.15
900 N Palm St	488675	370	375	nd	2/3/1992	21	1.09	1.16
335 North Ave	249232	215	215	195	2/16/1984	20	0.98	1.00
333 E Canal Dr	99466	105	105	95	10/28/1974	20	1.08	1.13
333 E Canal Dr	149503	88	84	nd	1/12/1976	20	1.08	1.13
333 E Canal Dr	85831	70	70	50	6/18/1973	20	1.08	1.13
475 Elmwood Ct	303920	200	200	180	2/13/1989	35	1.07	1.21
1860 Loyola Wy	90644	130	nd	nd	1/24/1974	20	1.00	1.02
PO Box 878	226367	160	160	140	3/27/1981	31	1.01	1.16
215 N Thor St	569308	380	380	nd	1/11/1994	24	1.07	1.15
465 Hanover Ave	129764	110	110	90	4/7/1978	20	0.93	0.94
2106 N Denair Ave	90613	121	121	111	1/2/1974	20	0.89	0.90
355 E Linwood Ave	516475	220	220	nd	12/24/1997	30	0.99	1.13
528 E Main St	148105	85	85	65	7/1/1976	23	1.04	1.11
528 E Main St	145946	98	98	78	5/23/1976	23	1.04	1.11
528 E Main St	151199	100	100	80	2/3/1976	23	1.04	1.11
528 E Main St	148101	100	100	80	6/4/1976	23	1.04	1.11
528 E Main St	148211	100	100	80	6/26/1976	23	1.04	1.11
528 E Main St	151189	100	100	80	2/1/1976	23	1.04	1.11
528 E Main St	111956	101	101	80	3/12/1975	23	1.04	1.11
528 E Main St	111955	102	102	80	3/11/1975	23	1.04	1.11
528 E Main St	21699	110	110	80	1/15/1977	23	1.04	1.11
528 E Main St	23311	106	106	86	2/13/1977	23	1.04	1.11
528 E Main St	92539	135	135	115	5/17/1974	23	1.04	1.11
528 E Main St	99676	140	140	120	12/7/1974	23	1.04	1.11
528 E Main St	25157	140	140	120	8/2/1977	23	1.04	1.11
528 E Main St	25192	140	140	120	10/3/1977	23	1.04	1.11
528 E Main St	85109	nd	152	122	6/9/1973	23	1.04	1.11
528 E Main St	25193	144	144	124	10/4/1977	23	1.04	1.11
528 E Main St	111991	160	160	140	6/27/1975	23	1.04	1.11
528 E Main St	151190	160	160	140	2/2/1976	23	1.04	1.11
528 E Main St	151166	160	160	140	8/19/1975	23	1.04	1.11
1525 Glenwood Ave	158900	94	94	85	8/23/1976	30	0.99	1.13
3431 Santos Ct	226383	145	145	125	4/13/1981	21	0.00	0.00
259 N Palm St	437607	240	240	nd	11/27/1996	24	1.04	1.12
590 Ashland Ave	475267	155	155	nd	11/21/1995	20	0.77	0.76
19632 Johnson Rd	66761	nd	62	52	2/17/1971	17	0.00	0.00
1930 N Denair	66767	69	69	59	2/24/1971	20	0.91	0.94
1321 I St	98955	92	92	82	4/15/1974	27	0.00	0.00
530 Glen Haven Ct	96926	83	83	63	6/30/1980	20	0.93	0.97
565 Glen Haven Ct	150885	302	302	282	10/11/1985	20	0.93	0.97
600 Glenwood Ave	251217	184	184	164	7/13/1987	23	0.90	1.06
350 Strathaven Ct	481197	212	nd	20	7/3/1991	20	0.91	0.95
1940 Rohrer Rd	98321	100	100	80	6/22/1979	20	0.90	0.92

TABLE B.
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Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
POBox 457	70496	60	60	50	2/28/1972	20	0.00	0.00
1224 E 5th	70494	67	nd	nd	2/26/1972	26	0.99	1.08
501 Golden State Blvd	77036	217	217	193	7/15/1981	30	0.99	1.09
35 Shawnee Ct	326987	310	310	290	2/20/1990	20	0.92	0.97
PO Box 2106	111934	140	140	130	11/25/1975	21	0.00	0.00
125 G ST	359703	161	161	155	11/7/1990	31	0.97	1.08
1663 Meadow Ln	144461	70	70	50	1/12/1978	18	0.00	0.00
1645 Amberwood Dr	498348	303	303	nd	11/17/1992	27	0.89	1.04
875 E Canal Dr	289680	180	180	160	1/19/1989	21	0.93	0.99
nd	187124	310	310	290	7/25/1986	22	0.86	1.02
400 E Clausen Rd	498340	85	85	nd	11/11/1992	23	0.00	0.88
PO Box 670	24264	210	nd	nd	2/3/1969	20	0.00	0.00
Turlock	111997	80	80	60	7/4/1975	20	0.00	0.00
583 S Center St	246974	187	187	127	4/26/1982	31	0.95	1.06
124 H St	197546	200	200	180	3/21/1986	32	0.95	1.06
4 Carter Lakeway	22606	60	60	48	2/21/1977	30	0.00	0.75
PO Box 1805	476370	265	265	nd	7/2/1987	30	0.00	0.75
1749 N Olive Ave	252952	173	173	153	4/11/1988	20	0.86	0.90
PO Box 580	187122	220	220	200	7/18/1986	33	0.94	1.06
1749 N Olive Ave	197599	210	210	190	6/27/1986	20	0.86	0.90
19610 Bradbury Rd	154072	113	113	93	10/3/1984	27	0.00	0.00
Turlock	86985	104	104	74	9/17/1973	33	0.93	1.05
Turlock	21206	156	156	143	1/11/1977	33	0.93	1.05
1019 E Linwood Ave	125376	82	82	74	6/7/1975	31	0.90	1.04
2189 W Crane Rd	29316	192	142	127	1/11/1978	25	0.93	1.01
Turlock	52241	113	110	90	9/3/1970	20	0.79	0.81
Turlock	48939	182	182	162	2/7/1978	20	0.79	0.81
Turlock	29558	nd	nd	nd	11/28/1967	20	0.79	0.81
132 I St	149811	140	140	120	11/26/1975	32	0.93	1.05
607 W Clausen Rd	96089	236	236	216	9/22/1980	30	0.00	0.73
1233 5th St	96254	150	150	135	7/8/1980	33	0.91	1.04
1233 5th St	29341	99	nd	nd	12/21/1969	33	0.91	1.04
3501 Colorado Ave	495262	80	80	nd	1/21/1994	20	0.00	0.00
813 Runyon Dr	125297	80	80	60	7/23/1975	20	0.85	0.89
10455 N Lana Ln	128964	162	162	122	11/29/1978	18	0.00	0.00
837 E Glenwood Ln	76007	165	165	145	7/2/1981	22	0.83	0.98
PO Box 304	66764	110	nd	nd	2/20/1971	32	0.92	1.04
19425 W Clausen Rd	501532	156	70	nd	2/12/1993	30	0.00	0.73
PO Box 2521	168873	240	240	220	8/13/1987	22	0.83	0.98
Stevenson	29341	60	60	52	7/6/1978	33	0.91	1.04
1018 S First St	168984	230	230	210	3/11/1988	31	0.92	1.03
1263 Pioneer Ave	111886	80	80	70	9/24/1975	20	0.85	0.89
1263 Pioneer Ave	111887	80	80	70	9/25/1975	20	0.85	0.89
1076 Pioneer Ave	66718	154	nd	nd	9/13/1970	20	0.86	0.91
PO Box 368	83106	125	125	105	8/19/1980	20	0.00	0.00
3001 N Inys	96279	154	154	142	9/10/1980	20	0.75	0.77
911 Tornell Ave	125854	72	72	52	10/6/1975	20	0.73	0.75
936 W Monte Vista Ave	54349	100	100	80	10/31/1979	20	0.00	0.00
4850 Bridgeport Dr	507735	985	nd	nd	9/23/1996	20	0.00	0.00
Turlock	70488	60	60	50	3/2/1972	26	0.00	0.00
912 Glenwood Ave	326915	70	70	60	10/24/1989	21	0.79	0.94

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Barnhart Rd	76605	95	nd	nd	12/18/1972	26	0.00	0.00
1113 E Glenwood Ave	243976	75	75	55	5/23/1983	25	0.81	0.96
1019 E Linwood Ave	246496	97	97	77	2/3/1983	26	0.82	0.96
1019 E Linwood Ave	22749	110	110	91	6/17/1977	26	0.82	0.96
1020 E Linwood Ave	111222	57	57	48	3/11/1975	26	0.81	0.96
1240 S First St	547564	305	305	nd	10/6/1994	31	0.87	0.99
821 Pioneer Dr	76553	100	100	80	4/4/1973	23	0.85	0.92
913 E Warner Ave	158177	nd	91	76	10/23/1976	25	0.00	0.00
PO Box 1998	219472	215	215	155	7/19/1984	20	0.76	0.92
19478 W Bradbury Rd	168913	232	232	212	10/22/1987	27	0.00	0.00
901 S Minaret Ave	150842	182	nd	nd	8/2/1985	30	0.83	0.94
2150 Colorado Ave	22750	109	109	89	6/18/1977	20	0.72	0.75
1360 E Harding Rd	31055	180	180	160	1/14/1988	24	0.00	0.76
1412 S 1st St	250600	350	350	310	9/20/1988	31	0.81	0.93
1412 S 1st St	110595	42	42	27	4/9/1975	31	0.81	0.93
1400 Cahill Ave	129528	92	92	72	8/17/1978	27	0.81	0.89
1266 E Linwood Ave	149833	60	60	50	1/12/1976	25	0.75	0.90
3237 Colorado Ave	334927	130	130	110	3/19/1990	20	0.00	0.00
1660 Carleton Dr	344915	145	145	125	6/12/1990	20	0.00	0.00
1100 Sierra Dr	66713	120	nd	nd	9/5/1970	21	0.75	0.80
Denis Wy	86989	76	76	56	9/29/1973	24	0.00	0.00
4718 Colorado Ave	190849	132	132	112	5/2/1986	22	0.00	0.00
868 Alpha St	92544	105	105	85	9/3/1974	30	0.79	0.90
Denis Wy	92531	80	80	60	5/9/1974	24	0.00	0.00
2020 Belhaven Pl	129791	110	110	90	5/30/1978	20	0.00	0.00
1405 E Linwood Ave	247472	242	nd	nd	12/10/1982	28	0.73	0.87
2181 Carleton Dr	145688	150	150	130	3/23/1978	20	0.00	0.00
2621 Greeley Ct	303974	290	290	270	4/15/1989	20	0.00	0.00
10444 Lana Ln	251247	225	225	205	9/17/1987	20	0.00	0.00
19300 Bradbury Rd	226987	170	170	155	10/20/1981	25	0.00	0.00
10443 Lana Ln	498363	250	250	nd	12/30/1992	20	0.00	0.00
10440 Lana Ln	704866	252	252	nd	7/29/1998	20	0.00	0.00
10439 Lana Ln	247487	245	245	225	8/2/1988	20	0.00	0.00
19077 Fowler Rd	252820	220	220	200	9/29/1987	20	0.00	0.00
10410 Lana Ln	488287	260	260	nd	3/2/1992	20	0.00	0.00
19099 Denis Wy	129539	141	141	101	9/6/1978	24	0.00	0.00
19099 Denis Wy	148604	58	58	nd	7/30/1976	24	0.00	0.00
19099 Denis Wy	149354	147	147	137	2/19/1976	24	0.00	0.00
1113 N Berkeley Ave	250583	130	130	110	9/1/1988	22	0.00	0.75
1441 E Monte Vista Ave	532888	160	160	nd	10/31/1997	20	0.00	0.00
1441 E Monte Vista Ave	582962	177	177	nd	2/21/1994	20	0.00	0.00
19055 W Denis Wy	219670	238	258	238	7/24/1984	24	0.00	0.00
2618 Golf Rd	576618	220	220	nd	2/6/1997	20	0.00	0.77
2530 Golf Rd	325357	270	270	255	2/20/1990	20	0.00	0.78
2230 Golf Rd	246437	238	238	210	8/23/1983	20	0.00	0.80
1719 Golf Rd	66768	63	63	53	2/25/1971	25	0.00	0.82
1624 Golf Rd	346703	262	262	222	5/21/1990	26	0.00	0.83
3024 Golf Rd	172982	175	175	165	10/26/1987	21	0.00	0.73
3331 Golf Rd	495143	225	225	nd	5/12/1993	24	0.00	0.00
1526 Sycamore St	98339	84	84	74	10/4/1974	30	0.73	0.82
2000 Belhaven Pl	145605	155	155	135	1/11/1978	20	0.00	0.00

TABLE B.
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Well Address	DWR File Number	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Depth to Groundwater in Upper Aquifer in October, 1991	Drawdown in Upper Aquifer with South Washington Well	Drawdown in Upper Aquifer with Power Plant Well
3400 Golf Rd	576769	225	225	nd	10/2/1996	24	0.00	0.00
19016 Dennis Wy	65011	240	240	200	1/12/1986	24	0.00	0.00
10453 Golf Link Rd	158186	nd	152	132	11/11/1976	20	0.00	0.00
10329 N Golf Link Rd	290606	240	240	220	9/27/1988	28	0.00	0.00
10435 Golf Rd	252819	225	225	205	9/29/1987	28	0.00	0.00
10532 N Golf Link Rd	173112	250	250	230	4/23/1985	28	0.00	0.00
9312 N Golf Rd	247463	nd	nd	nd	7/1/1983	27	0.00	0.00
10589 Golf Link Rd	433867	245	245	nd	9/25/1991	24	0.00	0.00
11007 Golf Rd	144459	111	111	91	1/18/1978	28	0.00	0.00
10619 Golf Link Rd	252881	270	270	250	12/31/1987	24	0.00	0.00
10661 Golf Link Rd	173141	390	390	270	6/7/1985	25	0.00	0.00
nd	66743	100	100	90	5/8/1971	27	0.00	0.00
3823 N Hwy 59	516973	228	232	nd	10/18/1997	20	0.00	0.76
9596 Golf Rd	22621	107	107	80	7/25/1977	27	0.00	0.00
Winton	66742	nd	60	50	5/7/1971	20	0.00	0.73
11751 N Golf Link Rd	129529	185	185	145	8/18/1978	26	0.00	0.00
2300 Block	23336	140	140	120	3/22/1977	20	0.00	0.00
11351 N Golf Link Rd	580258	300	300	nd	2/22/1995	27	0.00	0.00
11318 Golf Rd	96906	175	175	155	5/22/1980	27	0.00	0.00
948 S Berkeley Ave	111857	52	52	42	9/9/1975	30	0.00	0.80
948 S Berkeley Ave	29342	198	nd	nd	12/7/1969	29	0.00	0.80
2813 Berkeley Ave	99774	206	206	193	7/2/1974	20	0.00	0.00
5901 Golf Link Rd	26581	81	81	61	7/18/1977	20	0.00	0.76
948 S Berkeley Ave	29342	198	nd	nd	12/7/1969	29	0.00	0.80
2219 N Berkeley Ave	85838	325	nd	nd	6/18/1973	20	0.00	0.00
2901 N Berkley Ave	147218	138	138	128	8/11/1978	20	0.00	0.00
1613 E Tuolumne Ave	247071	140	140	120	1/31/1983	20	0.00	0.00
10619 Golf Rd	250574	250	250	230	8/31/1988	27	0.00	0.00
1631 E Tuloumne	197569	218	218	198	5/8/1986	20	0.00	0.00
19199 Bradbury Rd	22903	65	65	55	2/13/1977	25	0.00	0.00
19141 Bradbury Rd	157631	95	95	85	6/1/1976	25	0.00	0.00
19141 Bradbury Rd	192230	225	223	195	7/18/1986	25	0.00	0.00
1685 El Capitan Wy	146817	143	143	128	8/1/1975	25	0.00	0.72
1801 East Ave	129518	120	120	80	7/12/1978	30	0.00	0.76
16 Soderstrom Ln	129763	155	155	135	4/4/1978	30	0.00	0.76
1719 E Monte Vista Ave	65054	285	285	265	3/9/1987	20	0.00	0.00
1900 Paulson Rd	22431	160	160	135	2/9/1977	25	0.00	0.74
24 Soderstrom Ln	814870	270	270	nd	3/23/1999	30	0.00	0.74
18851 E Clausen Rd	246972	300	300	240	5/3/1982	25	0.00	0.00
2000 Brier Rd	148621	89	89	74	9/17/1976	30	0.00	0.72
2261 Golden State Blvd	76017	300	300	260	6/10/1981	21	0.00	0.00

nd indicates data not available from well driller's report

APPENDIX A

WALNUT ENERGY CENTER POWER PLANT WATER SUPPLY IMPACTS ANALYSIS



Date: September 1, 2004

To: Randy Baysinger

From: Timothy Durbin

Subject: TID Walnut Energy Center Power Plant Water-Supply Impacts

Introduction

The Turlock Irrigation District (TID) is constructing a gas-fired power plant, called the Walnut Energy Center (“WEC”) power plant, near the southwestern boundary of Turlock (Figure 1). The power plant may require a temporary cooling-water supply of about 1,800 acre-ft/yr over the next five years. One alternative for providing that water supply is to pump groundwater, either at the power plant (the “WEC Site” well location) or at TID’s South Washington Road equipment storage area located about one-half mile northwest of the power plant immediately adjacent to TID’s Walnut Peaker Plant and substation on South Washington Road (the “South Washington” well location). This memorandum describes the groundwater level impacts of such groundwater pumping and the expected quality of the pumped water.

Hydrologic Setting

The WEC Site and South Washington well locations are within the Turlock groundwater basin (Figure 1). The basin is bordered by the Tuolumne River on the north, the Merced River on the south, the San Joaquin River on the west, and the Sierra Nevada foothills on the east (California Department of Water Resources, 2003). The groundwater basin comprises about 541 mi² within these boundaries. The power plant is located within the west-central part of the groundwater basin about 9 mi from the Tuolumne River, about 9 mi from the Merced River, and about 7 mi from the San Joaquin River.

Hydrogeology. The Turlock groundwater basin is part of the San Joaquin Valley groundwater basin, a northward trending geologic trough filled with marine and

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continental sediments (Williamson, Prudic and Swain, 1985; and Page, 1986). The Turlock groundwater basin occurs within the uppermost interval of those sediments, which are comprised of westward-dipping alluvial-fan and other deposits. The active groundwater system is as much as 1,500 ft in thickness.

Deposits of post-Miocene age comprise the hydrogeologic units representing the active groundwater system (California Division of Mines and Geology, 1966; Hotchkiss, 1972; Marchand and Allwardt, 1981; Page, 1986; and Page and Balding, 1973). The base of the groundwater system is the base of the Mehrten Formation (Figures 2 and 3). Three units that represent separate alluvial-fan-building episodes overlie the Mehrten Formation. Those units are the Turlock Lake, Riverbank, and Modesto formations. Both the Modesto and Turlock Lake formations contain lake and flood-basin deposits. Where those fine-grained deposits occur in the Modesto Formation, they are referred to as the shallow aquitard. Where those deposits occur within the Turlock Lake Formation, they are referred to as the Corcoran Clay.

The Modesto, Riverbank, Turlock Lake, and Mehrten formations comprise the principal aquifers within the power-plant area. Three aquifers lie beneath the project site in descending order: the shallow aquifer, the upper aquifer, and the lower aquifer. The shallow aquifer is the first encountered below ground level. The base of the shallow aquifer is the top of the shallow aquitard, which occurs at about 20 ft below the land surface. The groundwater table within the power-plant area is about 8 ft below the land surface, and the shallow aquifer is about 12 ft in thickness.

An upper aquifer occurs within the Modesto and Riverbank formations in the depth interval from the base of the shallow aquitard to the top of the Corcoran Clay. This aquifer is about 135 ft in thickness within the power-plant area. A lower aquifer occurs within the Turlock Lake Formation in the depth interval from the base of the Corcoran Clay to the base of the Mehrten Formation. This aquifer is about 1200 ft in thickness within the power-plant area.

The Modesto, Riverbank, Turlock Lake, and Mehrten formations yield moderate to large quantities of water to wells. However, the hydraulic conductivity within the groundwater basin tends to decrease with depth. This is indicated by Table 1, a summary of hydraulic-conductivity values derived from specific-capacity and screened-interval data for wells within the Turlock groundwater basin. The log-average hydraulic

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conductivity (geometric mean) is 407.8 ft/d for the Modesto Formation, 86.7 ft/d for the Riverbank Formation, 46.5 ft/d for the Turlock Lake Formation, and 22.7 ft/d for the Mehrten Formation. While hydraulic conductivity differs between formations, it tends not to have a geographic trend within a formation.

The groundwater table occurs within the Modesto Formation, which is composed mostly of sands and silts (Hotchkiss, 1972; Marchand and Allwardt, 1981; Page, 1986; and Page and Balding, 1973). The specific yield of the formation at the groundwater table is about 10 percent (California Department of Water Resources, 2003).

Depth to Ground Water. The groundwater levels within the shallow and upper aquifers are slightly below the land surface. Within the power-plant area, the groundwater levels within the shallow aquifer are about 8 ft below the land surface. The groundwater levels within the upper aquifer are therefore about 15 ft below the land surface when measured in a well column. Because the base of the shallow aquitard is about 20 feet below the land surface, the upper aquifer is confined under pressure beneath the shallow aquitard.

The geographic distribution of groundwater levels near Turlock are shown on Figures 4 through 9. Figures 4 through 6 show contours of depth to groundwater within the shallow aquifer. The contours are based on monthly water-level measurements within a network of shallow monitoring wells that are operated by TID. The wells are about 15 ft in depth. Figures 7 through 9 show contours of depth to groundwater within the upper aquifer. The contours are based on annual measurements made by the California Department of Water Resources in irrigation wells in that area. Measurements for November 1977, October 1991, and October 2001 are shown on Figures 4 through 9. The selected months represent months for which sets of concurrent measurements are available for both the shallow and upper aquifer. The selected years represent a collection of dry and wet years.

Groundwater quality. Groundwater-quality varies within the power-plant area. The available data on groundwater constituents are listed in Table 2, and the location of the sampling wells are shown on Figure 10. Table 2 indicates that dissolved solids range from 420 to 720 mg/L, and nitrate ranges from 64 to 149 mg/L. Groundwater within the power-plant area does not meet drinking-water standards (California Code of Regulations, Title 22) for dissolved solids and nitrate.

Well Construction. Privately owned domestic and irrigation wells are located near the power plant. Based upon driller's reports submitted to the California Department of Water Resources, about 600 domestic wells are located within about four miles of the power plant, and about 78 irrigation wells are located within that distance. The location, well depth, screened interval, and completion date for the domestic and irrigation wells are listed respectively in Tables 3 and 4. The locations for the domestic and irrigation wells are shown on Figure 11.

Most of the domestic and irrigation wells are completed only within the upper aquifer, but some wells are completed within the lower aquifer or within both the upper and lower aquifers. No wells are completed within the shallow aquifer. For the domestic wells, the average depth is 160 ft, and the range of depths is from 42 to 985 ft. The average depth to the top of the uppermost screen is 127 ft, and the range of depths is from 27 to 340 ft. For the irrigation wells, the average depth is 252 ft, and the range of depths is from 65 ft to 492 ft. The average depth to the top of the uppermost screen is 114 ft, and the range of depths is from 20 to 250 ft.

Calculation of Drawdown

A well to supply cooling-water to the power plant will be constructed very similarly to the TID drainage wells that are located within the power-plant area. The well depth will extend to the top of the Corcoran Clay. The well will be screened from 50 ft below the land surface to the bottom of the well. A 50-ft sanitary seal will be installed. The construction will be identical for each alternative well site.

The groundwater-level drawdown due to pumping for power-plant cooling is shown on Figures 11 through 14. Figures 11 and 12 show the effects of pumping from a well located within the center of the WEC site. Figures 13 and 14 show the effects of pumping from the South Washington location, which is located about one-half mile northwest of the power plant. Figures 11 and 13 show the groundwater-level drawdown in the shallow aquifer after pumping at 1,800 acre-ft/yr for five years. Figures 12 and 14 correspondingly show the groundwater-level drawdown in the upper aquifer.

The drawdown was calculated using the U. S. Geological Survey computer program *WTAQ* (Barlow and Moench, 1999). This program computes the drawdown

from a partially penetrating well within a water-table aquifer. Drawdowns are computed for a radially infinite groundwater system that is bounded at the top by the groundwater table and at the bottom by an impermeable base. Within this system, the program can compute the drawdown in an observation well located at a specified distance from the pumping well and screened over a specified interval below the groundwater table. The pumping well is pumped at a constant rate. The inputs to the program include the aquifer thickness, horizontal hydraulic conductivity, vertical hydraulic conductivity, specific storage, and specific yield. The inputs additionally include the screened interval of the pumping well, the screened interval of the observation well, and the distance from the pumping well to the observation well.

The program *WTAQ* was used to calculate drawdown in the upper and shallow aquifers. An effective vertical hydraulic conductivity was used to represent this multi-aquifer system within the program. The input values are listed in Table 5. The horizontal hydraulic conductivity was assumed to be 100 ft/d, which is based on the specific-capacity-derived hydraulic conductivity for the Modesto and Riverbank formations that is referenced in Table 1. However, the input values are reduced to account for the fact that production wells generally are screened in the most transmissive aquifer intervals. The vertical hydraulic conductivity was assumed to be 0.055 ft/d. This vertical hydraulic conductivity was derived from the observed groundwater-level differential between the shallow and upper aquifers (Figures 4 through 9). The specific storage was assumed to be 10^{-4} 1/ft, which is typical of Quaternary alluvial deposits (Morris and Johnson, 1967). The specific yield was assumed to be 10 percent, which is the value derived by the California Department of Water Resources (2003).

Using these inputs, the program *WTAQ* was used to compute the groundwater-level drawdown after pumping for a five-year period. The resulting geographic pattern of groundwater-level drawdown is similar for each cooling-water well site. For a particular distance from the well, the drawdown is identical for the two sites. Correspondingly, the drawdown shown on Figure 11 for the WEC site and the drawdown shown on Figure 13 for the South Washington well site are identical except that the drawdown pattern is shifted geographically. The same applies to the comparison of Figures 12 and 14.

The drawdowns shown on Figures 11 through 14 represent a constant pumping rate of 1,800 acre-ft/yr. The actual pumping will vary day-to-day depending on weather conditions, because the efficiency of the cooling system depends in part on the ambient

air temperature. Based on average climatic conditions, the monthly average pumping rates are

Month	Pumping Rate (Acre-Feet)
January	130
February	124
March	144
April	144
May	157
June	163
July	177
August	177
September	163
October	158
November	134
December	129
Total	1,800

K Helm, written communication, 2004

This pattern of monthly pumping induces annual fluctuations in groundwater levels. For the shallow aquifer, the fluctuations are less than about one foot above and below the drawdowns shown on Figures 11 and 13. For the upper aquifer, the fluctuations are slightly more than one foot above and below the drawdowns shown on Figures 12 and 14.

The computed drawdown is somewhat sensitive to the parameter values used in the computer program *WTAQ*. This is indicated in Table 6, which lists the results of using alternative aquifer-parameter values in the program. The computed drawdown is listed with the parameter values perturbated from the baseline parameter values listed in Table 5. Drawdowns within the upper aquifer are listed both for the parameter values equal to 50 percent of the baseline value and for the parameter values equal to 200 percent of the baseline value. The results indicate that, even when a large range of parameter values is considered, the drawdowns within the upper aquifer are insignificant with the alternative parameter values.

Modeling Results

Groundwater pumping to supply cooling-water will not significantly impact the groundwater. The drawdown due to the power-plant pumping will result in a depth to

groundwater within the shallow aquifer at one-quarter mile of 12.7 ft instead of the current 8 ft and will result in a depth to groundwater within the upper aquifer at one-quarter mile of 20 ft instead of the current 15 ft. The drawdown very near either cooling-water supply well location will be small in the immediate vicinity, not more than about 10 ft, and significantly, as shown through the modeling results, the drawdown decreases rapidly from the well site as the distance from the well site increases. Drawdowns of the magnitude demonstrated in the modeling results will not impair the utility of any domestic or irrigation well within the power-plant area.

Further, the actual groundwater impact of the power-plant pumping will be smaller than indicated above. The indicated drawdowns are the isolated effects of the power-plant pumping. However, the power-plant pumping will not be isolated but will be linked to the TID drainage pumping. TID pumps groundwater within the power-plant area and other areas to manage high groundwater levels that otherwise would damage crops. The purpose of the drainage pumping is to lower the groundwater table and prevent poorer quality water from reaching crop root zones. The drawdown due to the power-plant pumping will substitute for, not be in addition to, the current TID drainage pumping.

Properly designed wells are constructed to function with the expectation of hydrologic variability. The most important design considerations are the depth to the screened interval, the depth to the pump intakes, and the efficiency characteristics of the pump. Given the well-construction and pump-installation practices typically applied to wells within the Turlock area, the groundwater pumping for the power plant will not impair the use of existing domestic and irrigation wells.

While screens are installed within the most transmissive aquifer zones, the depth to the top of the uppermost screen is set such that the water level within the well casing is always higher than that depth. Well completion reports for domestic wells within the Turlock area indicate operating drawdowns from the land surface of about 54 ft within a typical well during extended pumping. Likewise, the well completion reports for irrigation wells indicate drawdowns of about 78 ft. The typical depth to the top of the uppermost screen is about 127 ft for domestic wells and 114 ft for irrigation wells. Correspondingly, the top of the uppermost screen typically is about 73 ft below the operating drawdown within domestic wells and 36 ft below the operating drawdown within irrigation wells.

Pump intakes are installed so as to maintain a required minimum submergence of the pump during the expected operating conditions. Adequate inlet submergence is required for the proper operation of pumps. Specific data are not available on the setting of pump inlets, but general practice is to install pumps not higher than immediately above the uppermost screen. Based on the available data regarding well screens, the pump intake typically is about 73 ft below the operating drawdown within domestic wells and 36 ft below the operating drawdown within irrigation wells.

Pumps are selected for a well to operate efficiently for a specified capacity and the anticipated operating drawdown. However, pumps generally are selected that operate efficiently over a range of operating drawdowns. The pumps typically installed in domestic wells can operate effectively over drawdowns that range more than 30 ft above or below the optimal conditions. Likewise, the pumps installed in irrigation wells can operate effectively over drawdowns that range more than 20 ft above or below the optimal conditions.

The drawdowns caused by the power-plant pumping will be considerably smaller than those that would impair the existing domestic and irrigation wells. The drawdown due to the cooling-water supply well will be less than 5 ft, except at distances of less than one-quarter mile from the cooling well. Correspondingly, the typical operating drawdown from the land surface for a domestic well located one-quarter mile from the power-plant well will be 59 ft. The typical operating drawdown from the land surface for an irrigation well located one-quarter mile from the power-plant well will be 83 ft. However, the well screens for domestic wells typically are more than 127 ft below the land surface, and the well screens for irrigation wells typically are more than 114 ft below the land surface. Therefore, well screens are not likely to be dewatered or seriously dewatered. Likewise, the pump intakes are not likely to be dewatered. Furthermore, the drawdowns due to the power-plant pumping are within the operating range for domestic and irrigation wells within the Turlock area.

For the upper aquifer, the drawdown from either the WEC Site location or the South Washington site is 5 ft at one-quarter mile from the pumping well, 1.9 ft at two miles, and less than 1 ft at four miles. For the shallow aquifer, the drawdown from either the WEC Site location or the South Washington site is 4.7 ft at one-quarter mile from the

pumping well, 1.9 ft at two miles, and less than 1 ft at four miles. (See Figures 11-14 and Table 6.)

The drawdown at each domestic and irrigation well is listed respectively in Tables 3 and 4. These tables include, among other things, the drawdown, expressed in feet, projected for both domestic and agricultural wells, assuming five years of continuous pumping of 1,800 acre feet annually from the upper aquifer.

For the WEC Site well location, the maximum drawdown within the upper aquifer at a domestic well is 5.72 ft. However, that well is 76 ft in depth, and the depth to the top of the uppermost screen is 60 ft. As for irrigation wells, the maximum drawdown with the power-plant well within the upper aquifer at an irrigation well is 4.59 ft. However, that well is 300 ft in depth, and the depth to the top of the uppermost screen is 108 ft. Accordingly, the modeling results show no significant impacts on surrounding wells associated with the WEC Site well location.

For the South Washington well location, the maximum drawdown within the upper aquifer at a domestic well is 8.87 ft. However, that well is 118 ft in depth, and the depth to the top of the uppermost screen is 98 ft. As for irrigation wells, the maximum drawdown with the South Washington well location within the upper aquifer at an irrigation well is 7.39 ft. However, that well is 300 ft in depth, and the depth to the top of the uppermost screen is 108 ft. Thus, the modeling results show no significant impacts on surrounding wells associated with the South Washington well location.

The overall conclusion of this report is that for all domestic and irrigation wells, the potential drawdowns at the wells associated with either the WEC Site well location or the South Washington location are insignificant given the well depth, the depth to the top of the uppermost screen and the relatively small drawdowns predicted.

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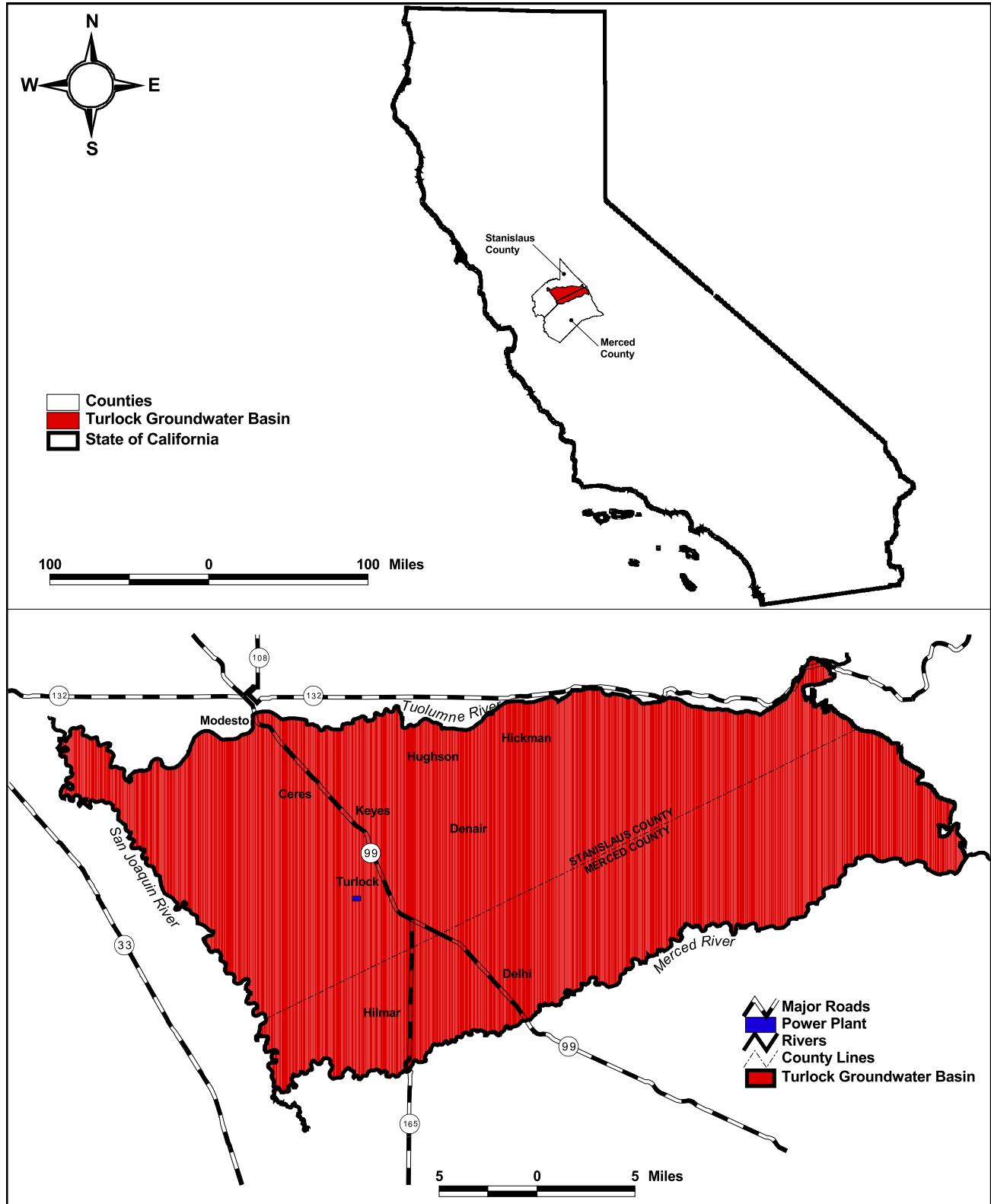
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- Williamson, A. K., Prudic, D. E., and Swain, L. A., 1985, Ground-water flow in the Central Valley, California: U.S. Geological Survey Open File Report 85-345.

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- Figure 3 Diagram showing west-east cross-section showing hydrogeologic units within the groundwater basin.
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- Figure 5 Map showing depth to groundwater in shallow aquifer for October 1991.
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- Table 5. Potential drawdown in existing private irrigation wells in area.
- Table 6. Sensitivity of drawdown to aquifer-parameter values.



**Figure 1 Geographic Location
of Power Plant within
Turlock Groundwater Basin**

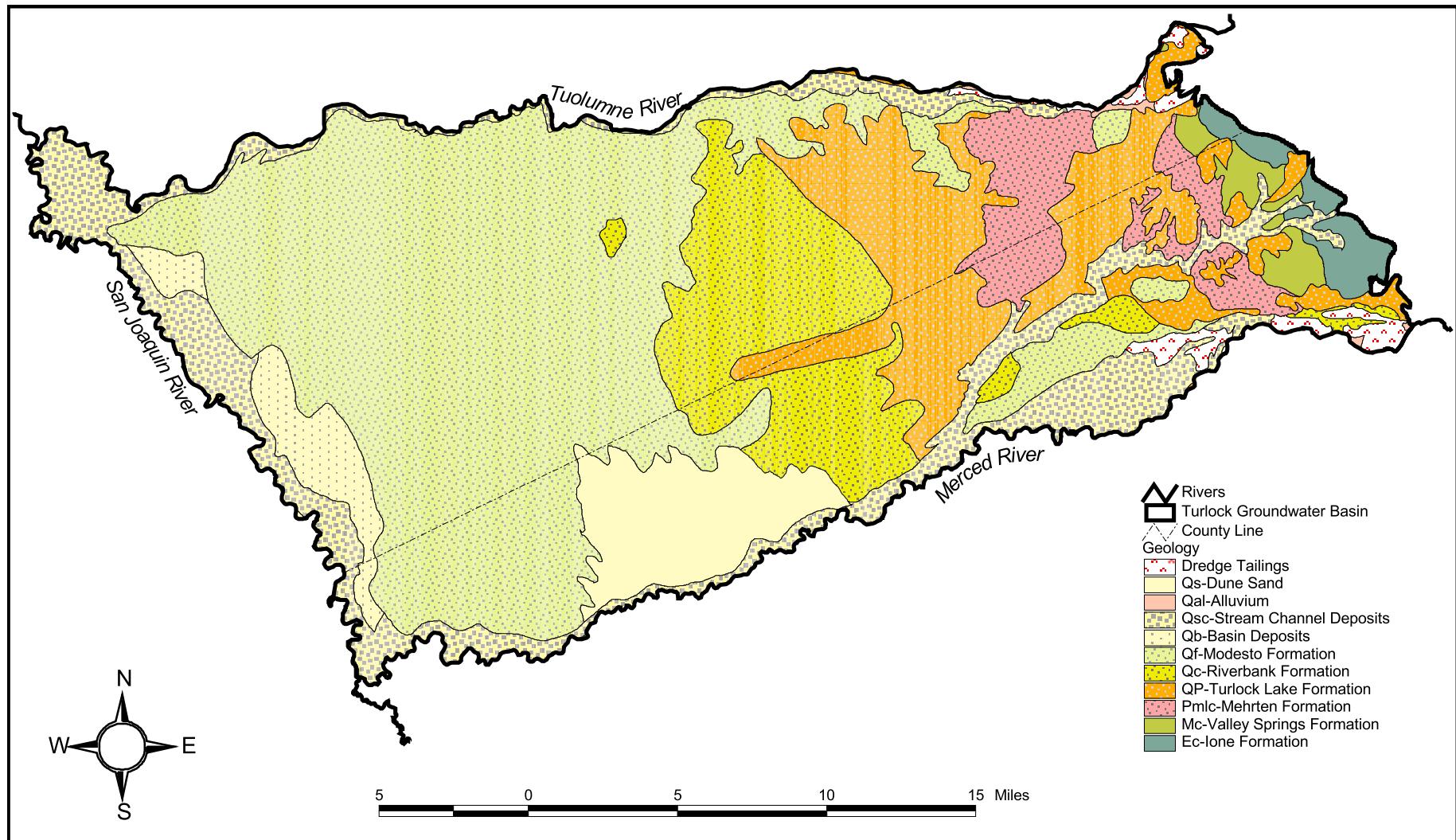


Figure 2 Hydrogeologic Units within the Turlock Groundwater Basin

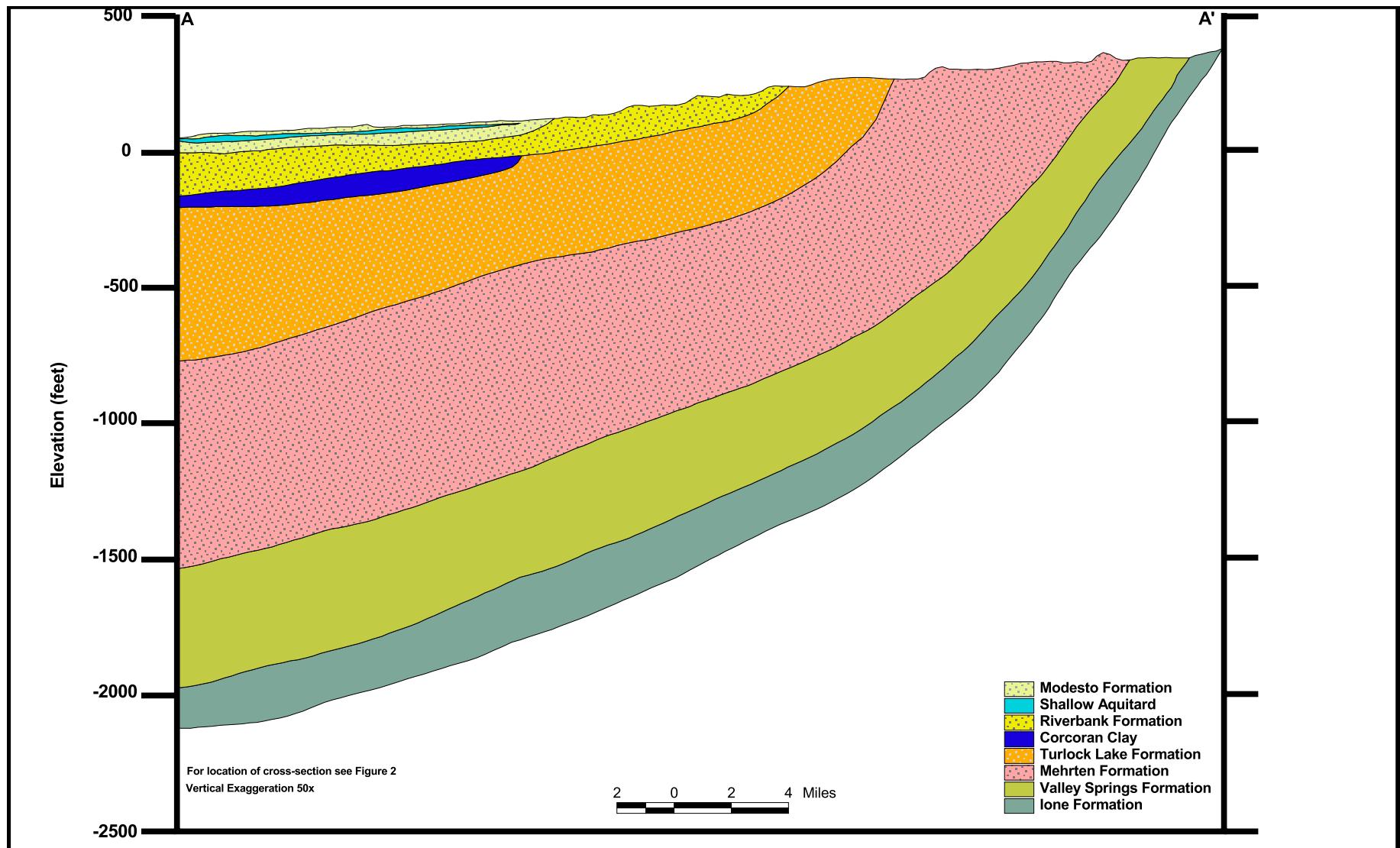
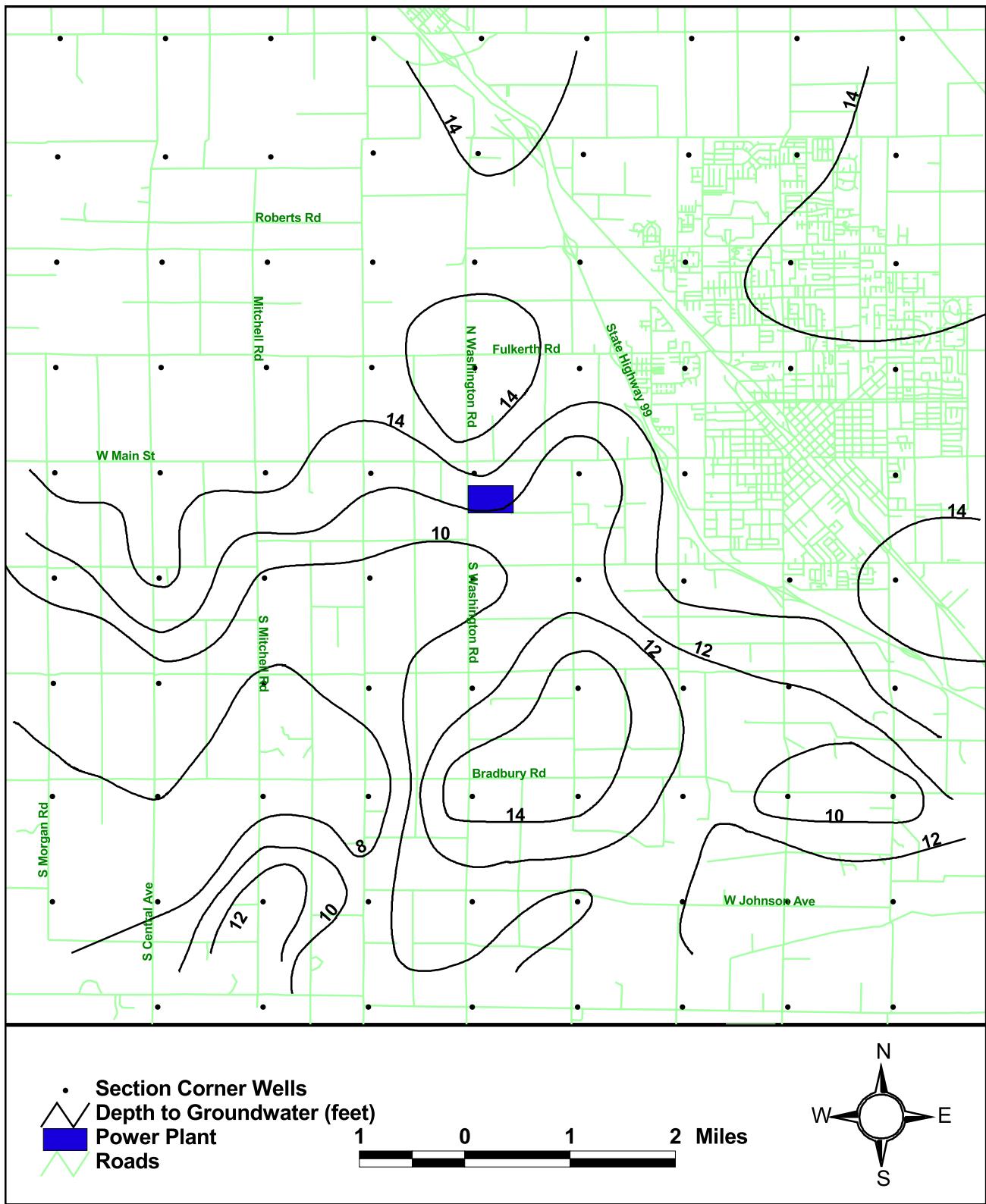
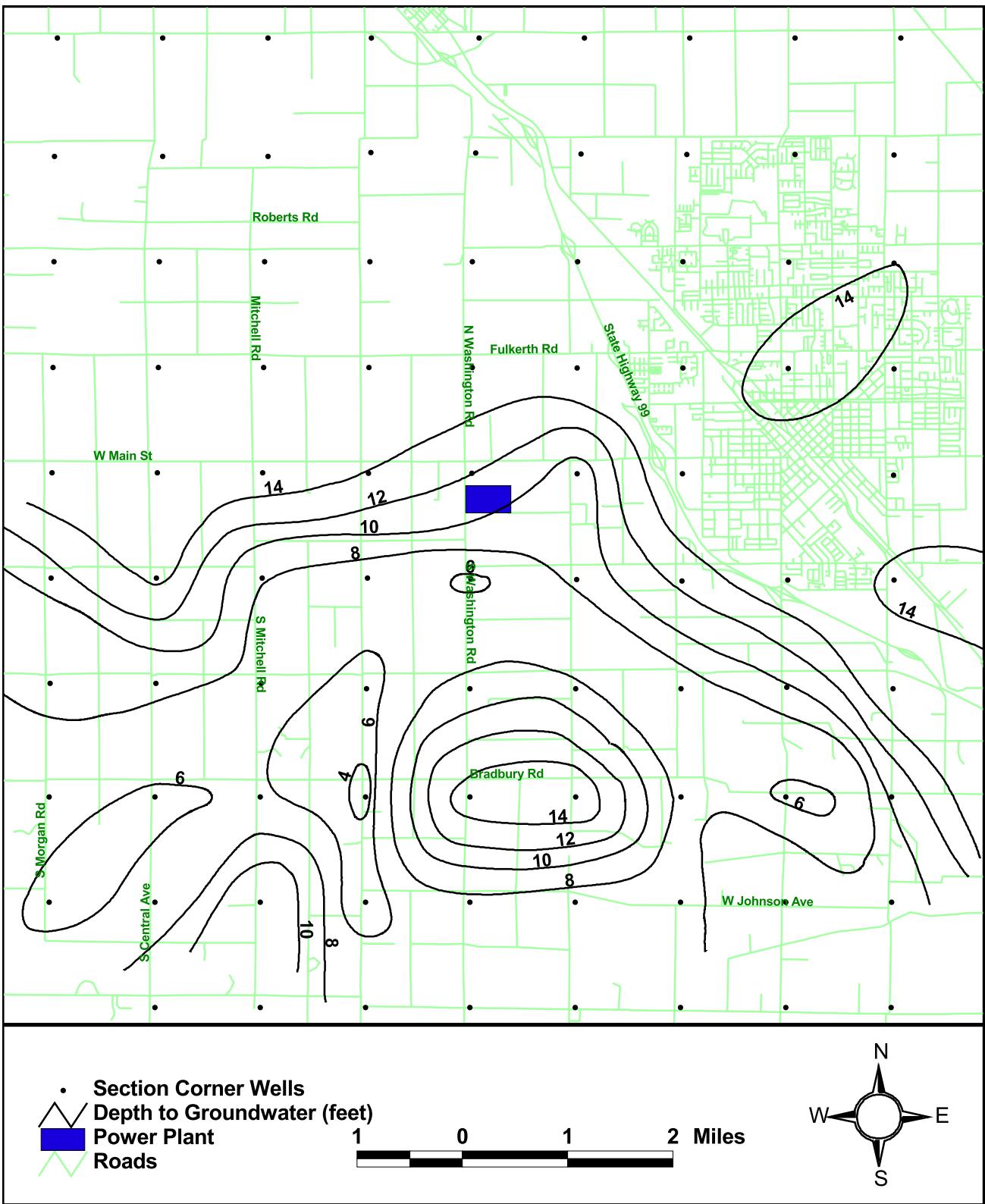


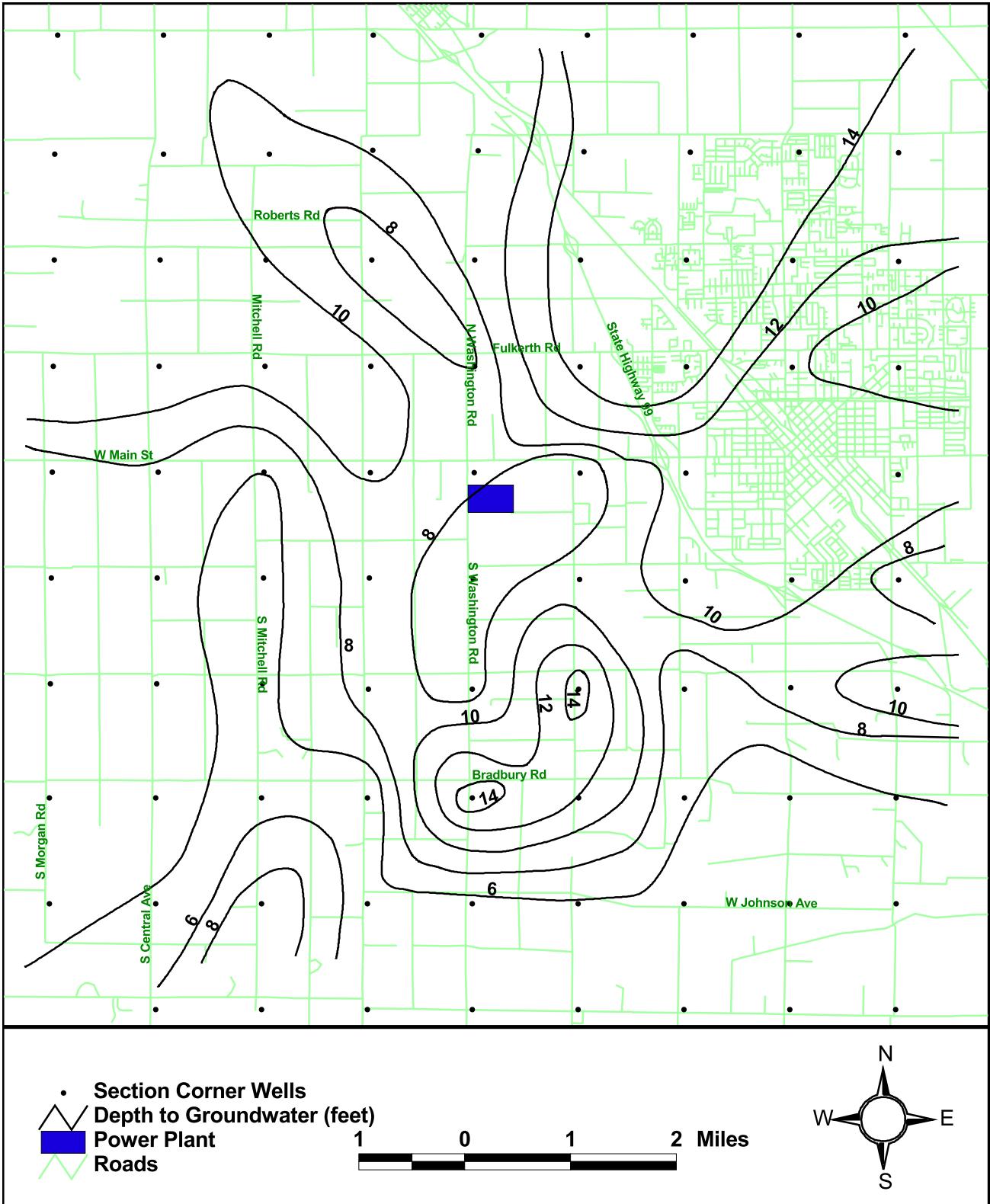
Figure 3 East-West Cross-Section Showing Hydrogeologic Units within the Groundwater Basin



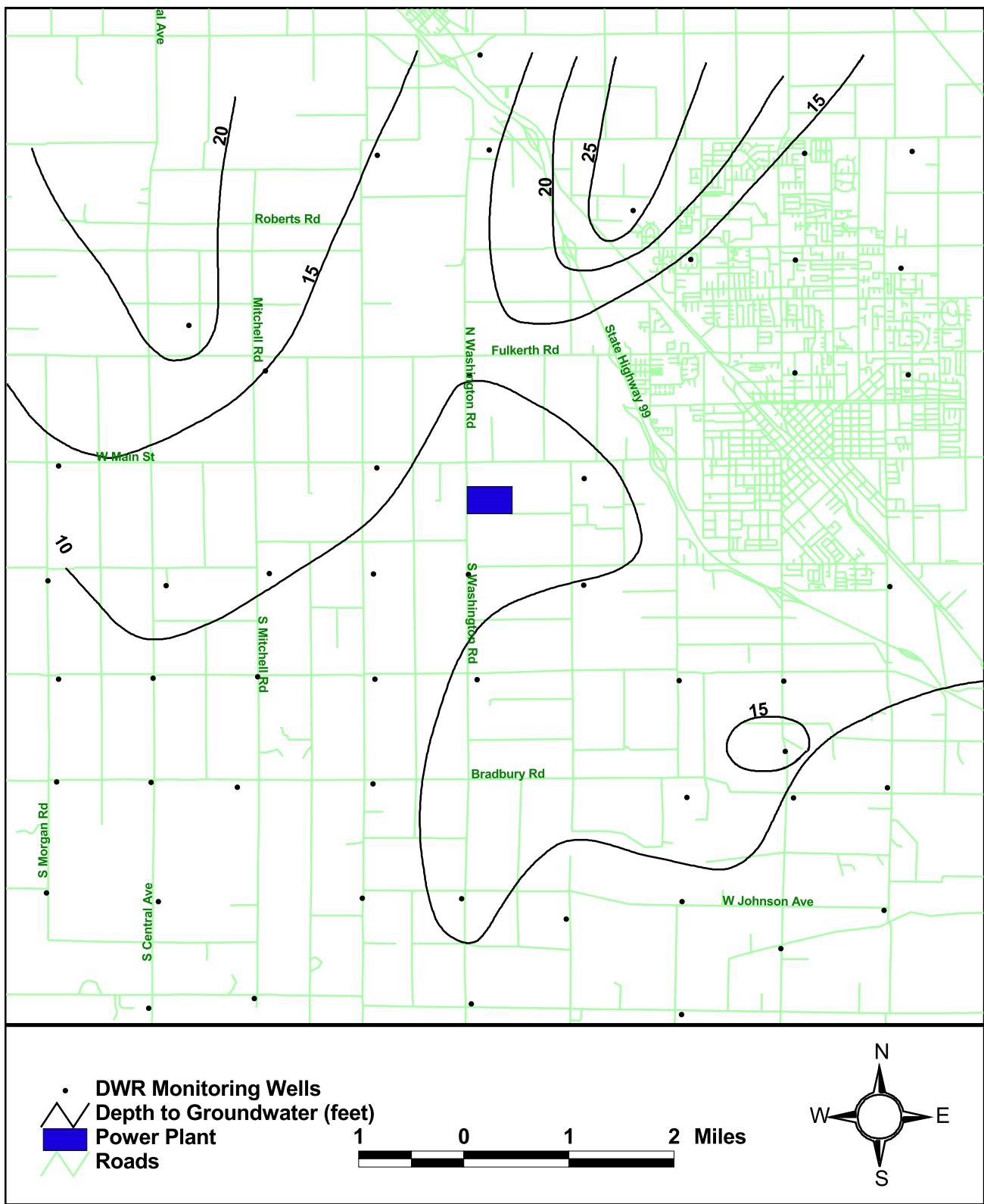
**Figure 4 Depth to Groundwater
in Shallow Aquifer November, 1977**



**Figure 5 Depth to Groundwater
in Shallow Aquifer October, 1991**



**Figure 6 Depth to Groundwater
in Shallow Aquifer October, 2001**



**Figure 7 Depth to Groundwater
in Upper Aquifer November, 1977**

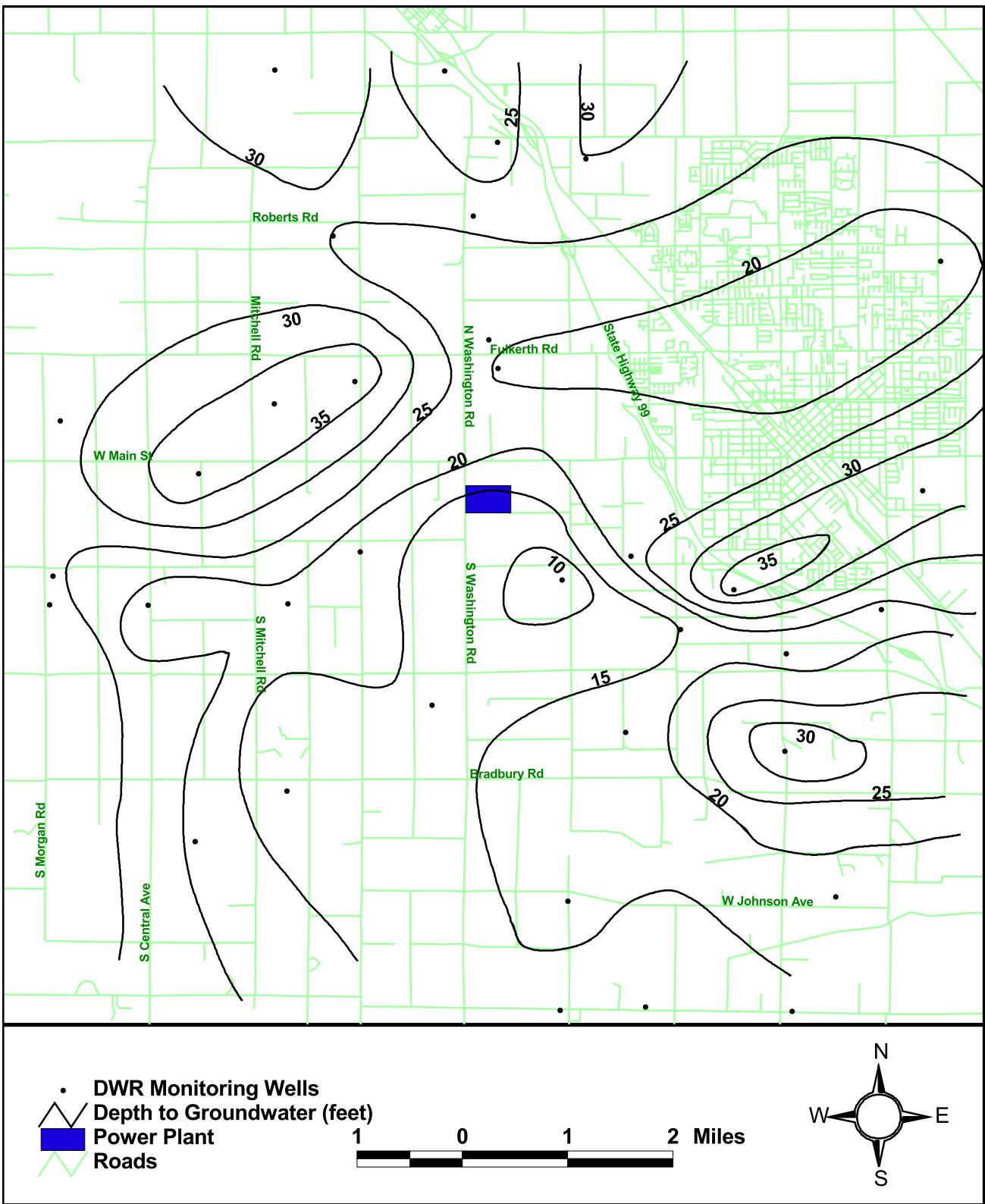


Figure 8 Depth to Groundwater in Upper Aquifer October, 1991

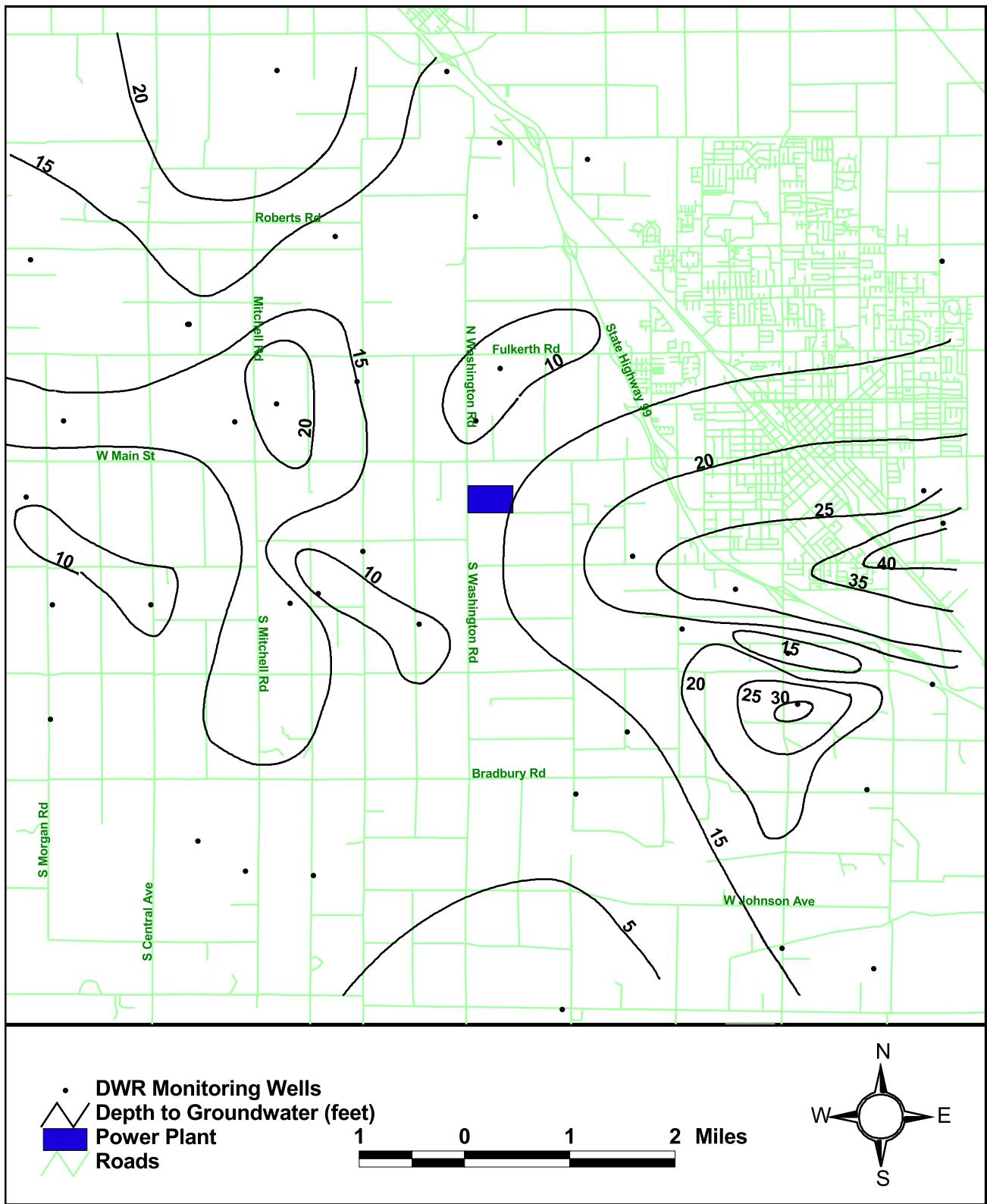


Figure 9 Depth to Groundwater in Upper Aquifer October, 2001

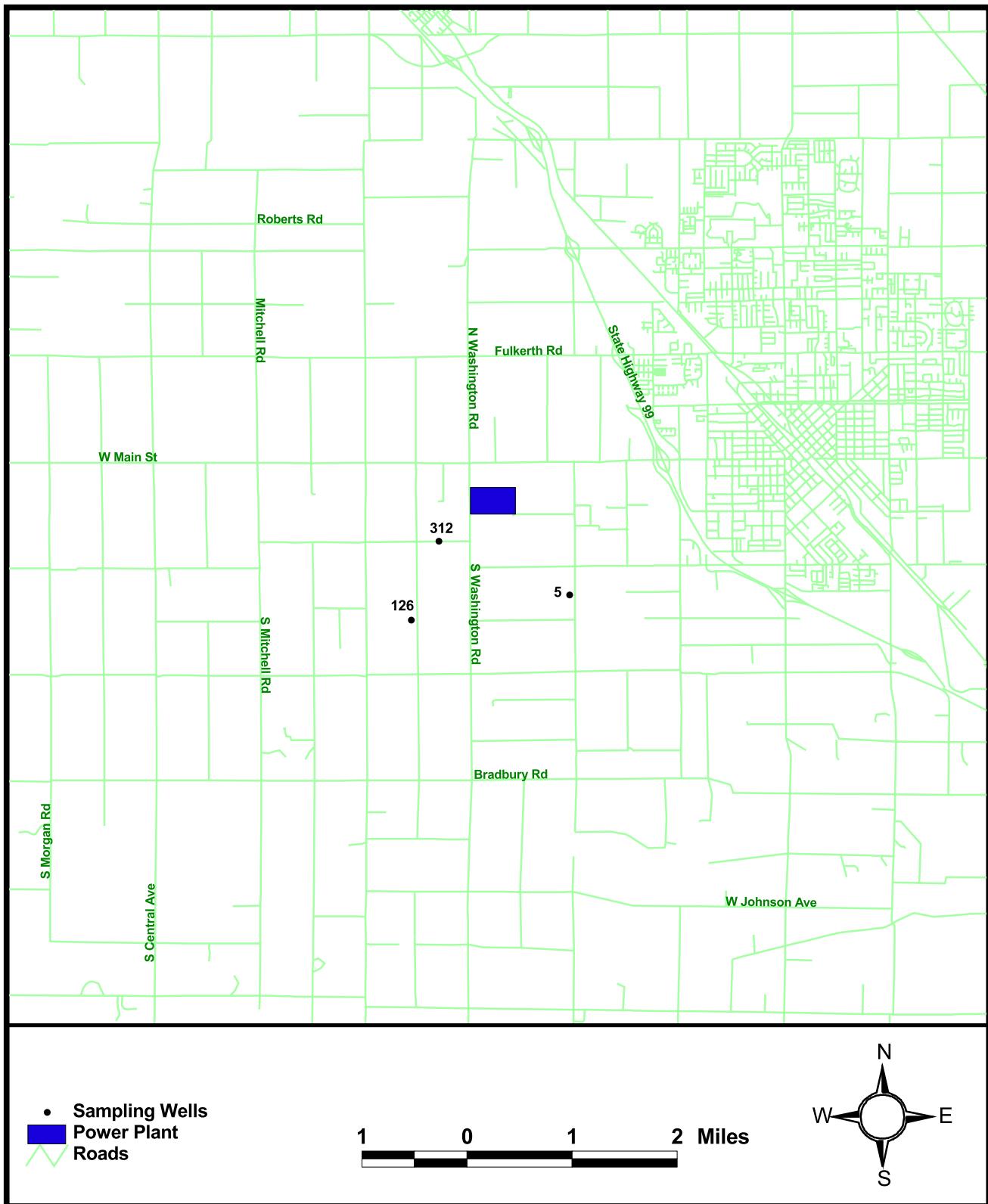
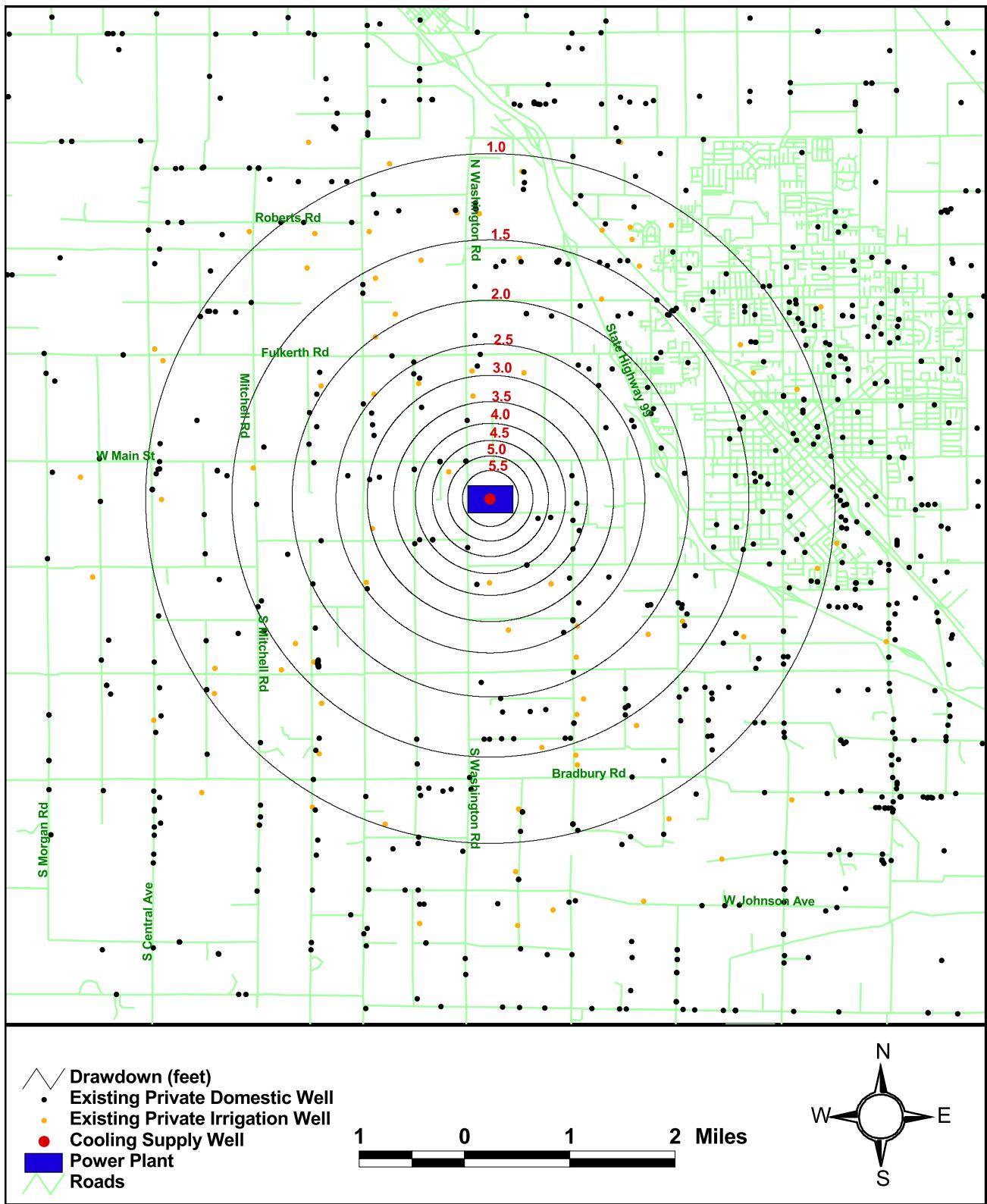
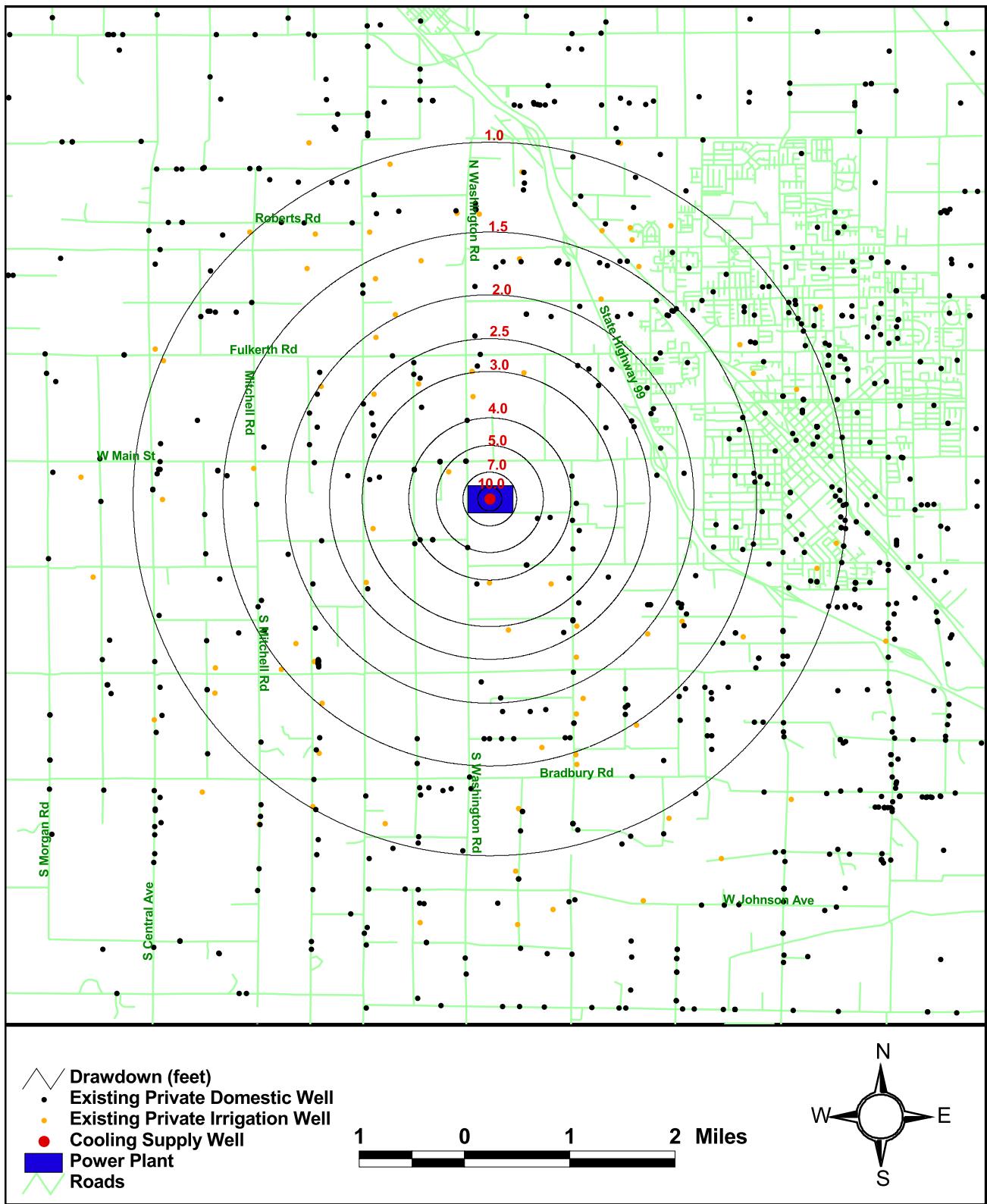


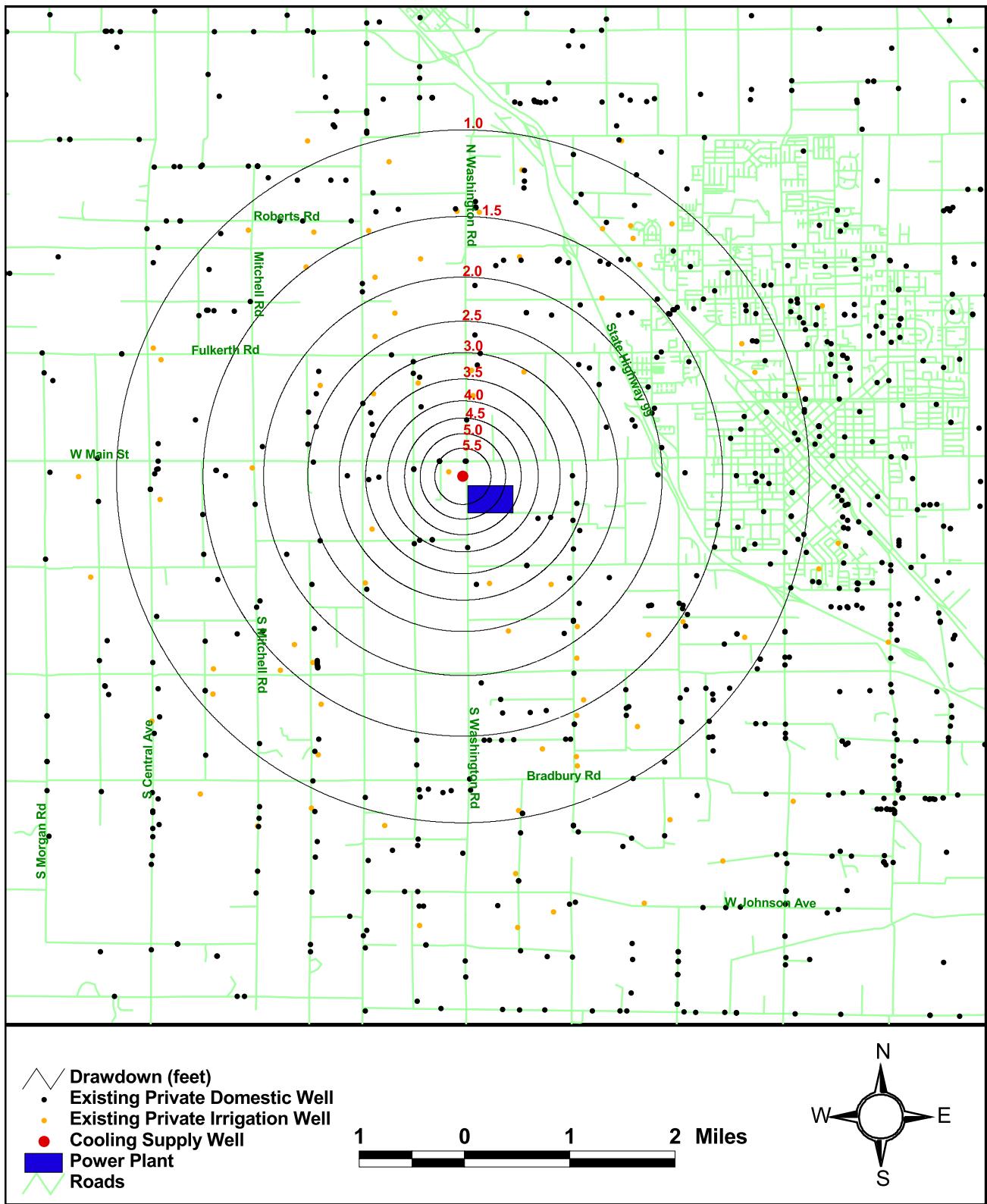
Figure 10 Location of Water-Quality Sampling Wells



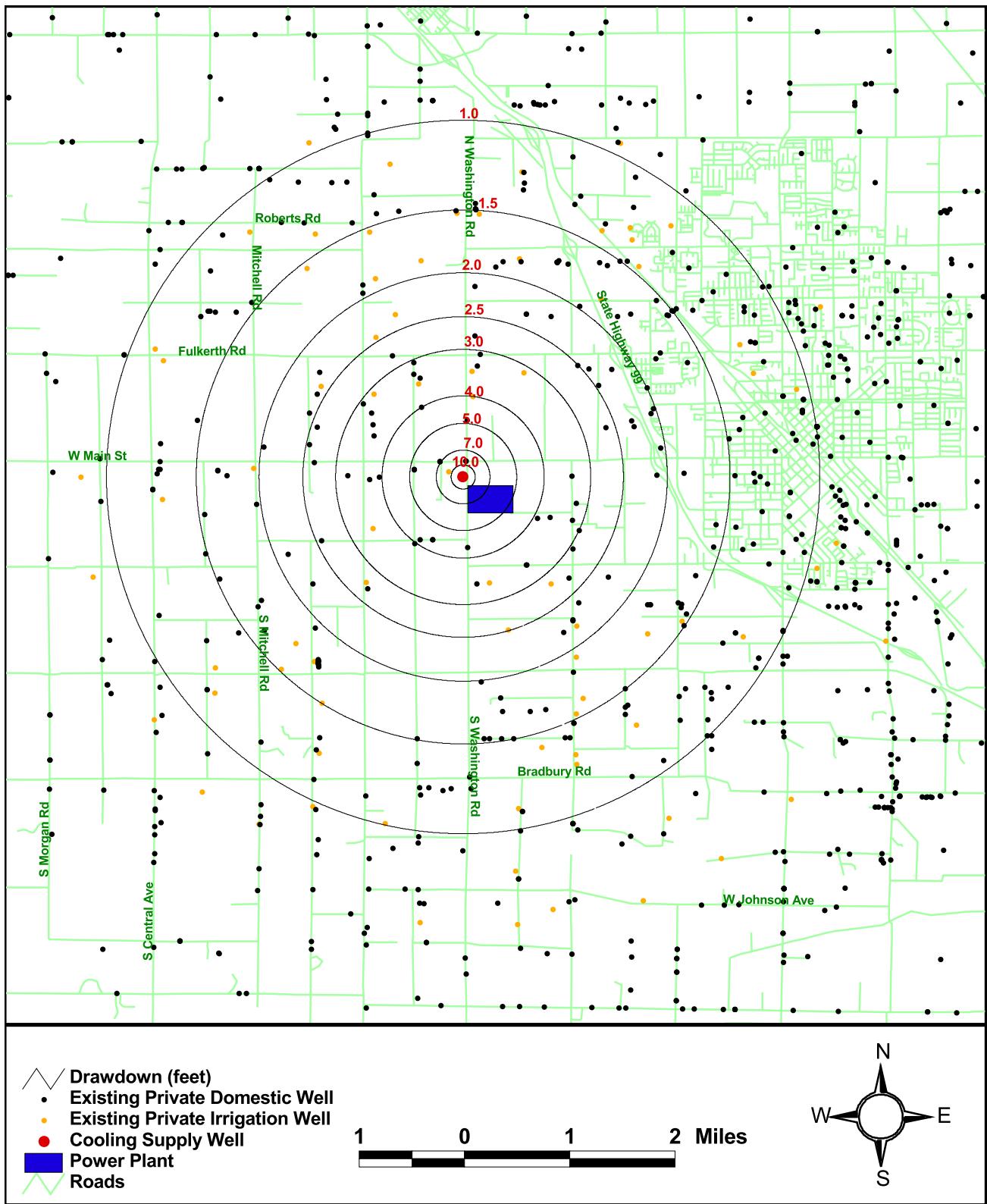
**Figure 11 Drawdown
in Shallow Aquifer after 5 Years
with WEC Site Well**



**Figure 12 Drawdown
in Upper Aquifer after 5 Years
with WEC Site Well**



**Figure 13 Drawdown
in Shallow Aquifer after 5 Years
with South Washington Well**



**Figure 14 Drawdown
in Upper Aquifer after 5 Years
with South Washington Well**

**Table 1. Average Hydraulic Conductivity within the
Turlock Groundwater Basin
(Feet per Day)**

Hydrogeologic Unit	Number of Specific-Capacity Tests	Average Horizontal Hydraulic Conductivity
Modesto Formation	17	407.8
Riverbank Formation	109	86.7
Turlock Lake Formation	175	46.5
Mehrten Formation	61	22.7

Table 2. Groundwater-Quality within Power-Plant Area

Parameter	Units	Title 22 MCL	Well		
			5	126	312
Aluminum	ug/L	1000	44	72	69
Antimony	ug/L	6	<50	<50	<50
Arsenic	ug/L	10	<10	<10	<10
Barium	ug/L	1000	130	124	217
Beryllium	ug/L	4	<5	<5	<5
Cadmium	ug/L	5	<3	<3	<3
Chromium	ug/L	50	<10	<10	<10
Mercury	ug/L	2	<0.4	0.4	0.8
Nickel	ug/L	100	<10	<10	<10
Selenium	ug/L	50	<100	<100	<100
Thallium	ug/L	2	<10	<10	<10
Fluoride	mg/L	2000	<0.1	<0.1	<0.1
Cobalt	ug/L	na	<5	<5	<5
Copper	ug/L	1300	<10	<10	<10
Lead	ug/L	15	<10	<10	<10
Molybdenum	ug/L	na	<10	<10	<10
Silver	ug/L	100	<10	<10	<10
Zinc	ug/L	5000	<10	<10	<10
Boron	ug/L	na	95	110	143
Calcium	mg/L	na	58	79	88
Magnesium	mg/L	na	21	26	32
Sodium	mg/L	na	48	109	102
Potassium	mg/L	na	2.7	4	4.1
Alkalinity	mg/L	na	268	268	380
Sulfate	mg/L	500	29	84	42
Chloride	mg/L	500	16	62	37
Iron 90	ug/L	300	90	<40	<40
Manganese	ug/L	50	<10	<10	11
Ammonia as Nitrogen	mg/L	na	<0.3	<0.3	<0.3
Nitrate	mg/L	45	64	125	149
Nitrite	mg/L	1	<2	<2	<2
Phosphorus	mg/L	na	<0.1	<0.1	<0.1
Strontium	mg/L	na	0.9	1.3	1.3
Silica	mg/L	na	25.6	25.7	25.8
Lithium	mg/L	na	<0.1	<0.1	<0.1
Total Organic Carbon	mg/L	na	1.9	2.4	3.7
Total Dissolved Solids	mg/L	500	420	640	720
Electrical Conductivity	umhos/cm	1600	690	1190	1160

na indicates analyte is not a regulated Title 22 constituent

**Table 3. Potential Drawdown in Existing Private Domestic Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
118 N Blaker Rd	189638	6425783	2002859	Certain	125	125	105	12/10/1985	0.75	0.80	0.87	0.92
737 S Blaker Rd	98314	6425828	2000697	Certain	147	147	107	6/26/1979	0.77	0.82	0.87	0.93
3024 S Blaker Rd	250555	6425893	1992753	Certain	152	152	132	8/15/1988	0.66	0.71	0.69	0.74
10407 S Bradbury Rd	246990	6425983	1986207	Certain	150	150	90	5/20/1982	0.00	0.00	0.00	0.00
3312 S Blaker Rd	247491	6426160	1991483	Certain	175	175	155	8/4/1988	0.00	0.00	0.00	0.00
3307 S Blaker Rd	811823	6426161	1991478	Certain	165	165	nd	2/17/1999	0.00	0.00	0.00	0.00
1550 S B St	191167	6426263	1993736	Certain	106	106	86	5/28/1986	0.72	0.77	0.76	0.81
3418 S Blaker Rd	129532	6426345	1991051	Certain	84	84	64	8/31/1978	0.00	0.00	0.00	0.00
10007 Fulkerth Rd	128975	6426990	2008062	Certain	121	121	81	12/29/1978	0.73	0.78	0.89	0.94
10007 Fulkerth Rd	149365	6426990	2008062	Certain	75	75	65	5/18/1976	0.73	0.78	0.89	0.94
1912 E Taylor Rd	426340	6427860	2018791	Certain	160	160	nd	4/12/1993	0.00	0.00	0.00	0.00
7725 Central Ave	70222	6428250	2014317	Certain	110	110	100	4/21/1972	0.00	0.00	0.72	0.77
501 S Central Ave	51225	6428435	2001318	Certain	70	69	50	3/18/1970	1.00	1.05	1.11	1.16
507 S Central Ave	66754	6428436	2001298	Certain	nd	77	67	2/9/1971	1.00	1.05	1.11	1.16
6025 S Central Ave	498206	6428485	1982565	Certain	155	155	nd	5/14/1992	0.00	0.00	0.00	0.00
9730 W Bradbury Rd	148629	6428520	1986167	Certain	88	88	73	7/28/1976	0.00	0.00	0.00	0.00
5780 S Central Ave	495115	6428526	1983011	Certain	75	75	nd	2/15/1990	0.00	0.00	0.00	0.00
5525 S Central Ave	64867	6428538	1983958	Certain	70	nd	nd	4/15/1987	0.00	0.00	0.00	0.00
3030 S Central Ave	251141	6428541	1992649	Certain	160	160	120	6/6/1987	0.88	0.93	0.89	0.95
5443 S Central Ave	96258	6428542	1984367	Certain	178	178	158	7/21/1980	0.00	0.00	0.00	0.00
5221 S Central Ave	811790	6428551	1985180	Certain	100	100	nd	12/3/1998	0.00	0.00	0.00	0.00
5200 S Central Ave	145903	6428551	1985254	Certain	80	80	60	4/9/1976	0.00	0.00	0.00	0.00
8331 Central Ave	154233	6428571	2012632	Certain	165	165	125	10/16/1984	0.00	0.00	0.83	0.89
5824 S Central Ave	96695	6428612	1989112	Certain	158	158	94	4/21/1981	0.73	0.78	0.72	0.77
2325 E Taylor Rd	47909	6428627	2017408	Certain	255	255	215	5/2/1977	0.00	0.00	0.00	0.00
219 S Central Ave	47907	6428648	2002086	Certain	270	270	90	7/18/1977	1.01	1.07	1.13	1.18
219 S Central Ave	65090	6428739	2002305	Certain	140	140	120	8/20/1987	1.01	1.07	1.13	1.19
2225 Central Ave	21038	6428750	1994966	Certain	68	nd	nd	5/22/1969	0.96	1.02	1.00	1.06
219 Central Ave	516483	6428803	2002326	Certain	142	142	nd	2/16/1998	1.02	1.08	1.14	1.20
7936 S Central Ave	154241	6428807	2013364	Certain	120	120	100	11/2/1984	0.00	0.00	0.81	0.87
3513 S Central Ave	21047	6428810	1991358	Certain	84	nd	nd	11/25/1969	0.85	0.90	0.85	0.91
306 N Central Ave	29338	6428810	2002708	Certain	130	nd	nd	12/2/1969	1.02	1.07	1.14	1.20
4906 S Central Ave	495222	6428816	1985844	Certain	190	190	nd	10/15/1993	0.00	0.00	0.00	0.00
506 N Central Ave	252808	6428825	2003598	Certain	140	140	120	9/15/1987	1.00	1.06	1.13	1.19
5601 S Central Ave	381849	6428862	1984569	Certain	180	180	160	12/10/1992	0.00	0.00	0.00	0.00

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(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
3825 S Central Ave	76520	6428891	1989947	Certain	84	84	74	11/8/1972	0.79	0.85	0.79	0.84
2331 Roberts Rd	370330	6429230	2014714	Certain	295	295	275	7/3/1990	0.00	0.00	0.77	0.82
2466 E Taylor Rd	99498	6429623	2017417	Certain	74	74	64	12/2/1974	0.00	0.00	0.00	0.00
2506 E Taylor Rd	64880	6429904	2017420	Certain	112	112	92	4/23/1987	0.00	0.00	0.00	0.00
2406 Roberts Rd	151158	6429905	2014714	Certain	142	140	120	8/7/1975	0.00	0.00	0.82	0.87
2408 Roberts Rd	129788	6429920	2014715	Certain	140	140	106	5/24/1978	0.00	0.00	0.82	0.87
PO Box 949	191158	6430677	2004779	Approx	300	300	280	1/7/1986	1.14	1.19	1.33	1.39
8655 Moffett Rd	243235	6430852	2009985	Certain	94	94	74	10/18/1982	0.95	1.00	1.13	1.19
2654 E Taylor Rd	325386	6430946	2017429	Certain	170	170	150	4/23/1990	0.00	0.00	0.71	0.76
7236 Moffett Rd	168846	6431015	2017491	Certain	300	300	280	7/7/1987	0.00	0.00	0.71	0.76
813 S Moffett Rd	29166	6431037	2000053	Certain	137	137	124	10/20/1977	1.25	1.31	1.41	1.47
1424 S Moffett Rd	164923	6431092	1998068	Certain	130	130	110	8/8/1986	1.24	1.30	1.35	1.41
2719 S Moffett Rd	580320	6431152	1993712	Certain	160	160	nd	6/28/1995	1.13	1.18	1.14	1.20
3431 S Moffett Rd	326871	6431166	1991252	Certain	120	120	100	9/11/1989	1.03	1.08	1.01	1.07
3431 S Moffett Rd	326872	6431166	1991252	Certain	140	140	120	9/12/1989	1.03	1.08	1.01	1.07
4419 S Moffett Rd	98947	6431185	1988030	Certain	75	75	65	6/6/1974	0.86	0.92	0.82	0.88
8601 Moffet Rd	304062	6431228	2010260	Certain	120	120	100	6/20/1989	0.96	1.02	1.14	1.20
PO Box 7	495255	6431319	2010258	Approx	330	330	nd	1/11/1994	0.97	1.02	1.15	1.21
PO Box 32	340945	6431352	2012279	Approx	155	155	135	4/23/1990	0.86	0.92	1.05	1.11
2642 E Tuolumne Rd	96280	6431597	2010218	Certain	190	190	170	9/9/1980	0.99	1.05	1.17	1.23
8718 W Main St	226864	6431705	2002262	Certain	125	125	105	9/4/1981	1.32	1.39	1.52	1.59
8702 W Main St	150826	6431712	2002248	Certain	130	nd	nd	6/23/1985	1.33	1.39	1.52	1.59
9018 W Linwood Ave	246989	6431796	1996796	Certain	160	160	120	5/24/1982	1.31	1.37	1.39	1.45
PO Box 576	22681	6431859	2020924	Approx	119	119	109	2/28/1977	0.00	0.00	0.00	0.00
PO Box 645	227049	6431941	2014084	Approx	138	140	120	12/28/1981	0.79	0.84	0.99	1.04
8506 W Main St	87171	6432182	2001993	Certain	89	89	79	2/12/1974	1.40	1.46	1.59	1.66
2807 E Tuolumne Rd	326998	6432624	2010205	Certain	185	185	165	3/9/1990	1.06	1.12	1.28	1.34
8825 Simmons Rd	53725	6432756	1994093	Certain	150	150	130	8/13/1979	1.31	1.37	1.33	1.39
2872 E Taylor Rd	326979	6433311	2017436	Certain	170	170	150	2/2/1990	0.00	0.00	0.84	0.89
2700 E Tuolumne Rd	290656	6433414	2010694	Certain	190	190	170	11/3/1988	1.09	1.15	1.33	1.40
718 S Mitchell Rd	475237	6433669	2000561	Certain	173	173	nd	9/12/1995	1.63	1.70	1.79	1.86
6612 Prairie Flower Rd	283476	6433709	1981146	Certain	156	156	146	9/15/1988	0.00	0.00	0.00	0.00
2213 S Mitchell Rd	495283	6433743	1995415	Certain	160	160	nd	3/1/1994	1.52	1.58	1.55	1.62
2912 E Taylor Rd	326846	6433777	2017437	Certain	160	160	140	8/17/1989	0.66	0.71	0.86	0.92
2912 E Taylor Rd	433827	6433777	2017437	Certain	200	50	nd	8/19/1991	0.66	0.71	0.86	0.92

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2912 E Taylor Rd	83942	6433777	2017437	Certain	62	46	36	8/22/1973	0.66	0.71	0.86	0.92
2912 E Taylor Rd	98349	6433777	2017437	Certain	80	80	70	9/10/1974	0.66	0.71	0.86	0.92
6112 S Mitchell Rd	495182	6433784	1982237	Certain	200	200	nd	7/12/1993	0.00	0.00	0.00	0.00
5436 S Mitchell Rd	334938	6433818	1984473	Certain	185	185	165	4/20/1990	0.80	0.85	0.71	0.77
5712 S Mitchell Rd	154207	6433863	1984872	Certain	195	195	175	11/20/1984	0.83	0.88	0.75	0.80
5701 S Mitchell Rd	86192	6433877	1985472	Certain	120	120	105	7/20/1979	0.87	0.92	0.79	0.84
4419 S Mitchell Rd	96919	6433882	1988617	Certain	175	175	135	6/24/1980	1.07	1.13	1.02	1.08
2230 S Mitchell Rd	245970	6433908	1995723	Certain	125	125	105	3/3/1982	1.56	1.62	1.59	1.66
700 N Mitchell Rd	304056	6434035	2003435	Certain	160	160	140	6/19/1989	1.62	1.68	1.86	1.93
8407 Simmons Rd	96263	6434059	1994225	Certain	138	138	123	8/6/1980	1.49	1.56	1.49	1.56
2914 Taylor Rd	347506	6434324	2016867	Certain	120	120	100	6/22/1990	0.73	0.78	0.93	0.99
3243 Roberts Rd	142808	6434891	2014715	Certain	120	120	100	9/12/1978	0.92	0.97	1.12	1.18
7606 Clayton Rd	187152	6435244	1998060	Certain	170	170	150	8/25/1986	1.84	1.91	1.97	2.04
PO Box 1814	51219	6435760	2016750	Approx	81	78	63	2/18/1970	0.81	0.86	1.01	1.07
3437 Roberts Rd	64846	6436041	2014710	Certain	150	150	130	2/23/1987	0.98	1.03	1.18	1.24
313 N Prairie Flower Rd	246530	6436308	2003566	Certain	350	nd	nd	6/3/1985	1.98	2.05	2.36	2.43
PO Box 663	344936	6436324	2005155	Approx	285	285	265	7/18/1990	1.83	1.90	2.26	2.33
6401 S Prairie Flower Rd	64825	6436487	1981194	Certain	135	135	115	1/27/1986	0.67	0.72	0.00	0.00
1731 S Prairie Flower Rd	822543	6436495	1996556	Certain	125	125	nd	6/3/1999	2.02	2.09	2.06	2.13
4919 S Prairie Flower Rd	46483	6436533	1986745	Certain	114	114	84	12/14/1977	1.10	1.16	1.01	1.06
313 N Prairie Flower Rd	26563	6436556	2002660	Certain	76	76	36	7/2/1977	2.10	2.17	2.44	2.51
Turlock	115630	6436615	1994344	Approx	108	nd	nd	6/25/1965	1.82	1.89	1.79	1.86
#1 Redondo St	70217	6436630	1985226	Certain	61	61	51	4/3/1972	0.99	1.05	0.89	0.95
PO Box 710	247395	6436651	1988216	Approx	110	110	90	7/30/1982	1.22	1.28	1.13	1.19
5931 S Prairie Flower Rd	46541	6436674	1982952	Certain	122	122	102	9/20/1977	0.82	0.87	0.71	0.76
5481 Grassy Run Rd	374551	6436704	2006084	Approx	156	156	136	6/7/1991	1.81	1.88	2.25	2.32
PO Box 6053	70774	6436705	2004445	Approx	113	113	93	2/25/1980	1.98	2.05	2.40	2.47
3107 S Prairie Flower Rd	157634	6436751	1992528	Certain	87	87	62	6/5/1976	1.68	1.75	1.61	1.67
3107 S Prairie Flower Rd	86056	6436751	1992572	Certain	165	165	125	1/8/1979	1.69	1.76	1.61	1.68
3107 S Prairie Flower Rd	334909	6436751	1992675	Certain	145	145	125	1/30/1990	1.70	1.77	1.62	1.69
4218 Prairie Flower Rd	29203	6436754	1983704	Certain	283	283	268	10/24/1978	0.88	0.93	0.77	0.83
3100 Prairie Flower Rd	822519	6436756	1992600	Certain	110	110	nd	4/30/1999	1.69	1.76	1.62	1.68
3107 Prairie Flower Rd	243974	6436762	1992755	Certain	180	180	140	5/28/1983	1.71	1.77	1.63	1.70
3107 S Prairie Flower Rd	484005	6436773	1992683	Certain	275	275	100	8/24/1991	1.70	1.77	1.63	1.69
3107 Prairie Flower Rd	580202	6436780	1992424	Certain	160	160	nd	7/27/1995	1.68	1.74	1.60	1.66

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3107 S Prairie Flower Rd	289681	6436781	1992470	Certain	268	268	228	1/16/1989	1.68	1.75	1.60	1.67
3107 S Prairie Flower Rd	243207	6436781	1992397	Certain	95	95	75	9/21/1982	1.67	1.74	1.60	1.66
4313 Prairie Flower Rd	252929	6436828	1988825	Certain	119	119	99	3/1/1988	1.30	1.37	1.18	1.24
1330 Prairie Flower Rd	76015	6436832	2007187	Certain	240	240	200	6/22/1981	1.73	1.80	2.15	2.22
7000 Clayton Rd	290667	6436914	1998741	Certain	175	175	155	11/17/1988	2.24	2.31	2.38	2.45
Livingston	92807	6437176	2020890	Approx	122	122	61	5/6/1974	0.00	0.00	0.74	0.79
PO Box 216	334966	6437442	2016737	Approx	222	222	182	8/26/1989	0.88	0.94	1.08	1.14
3643 Warner Rd	481186	6437559	2019507	Certain	135	20	nd	6/5/1991	0.66	0.71	0.86	0.92
5000 Escar	65055	6437643	2019402	Approx	117	117	97	3/13/1987	0.68	0.73	0.87	0.93
3737 Warner Rd	46500	6437721	2020173	Certain	127	127	107	1/6/1978	0.00	0.00	0.81	0.86
3700 W Taylor Rd	86583	6438195	2016740	Approx	130	nd	nd	3/27/1972	0.91	0.97	1.11	1.17
6725 W Main St	495221	6438253	2001992	Certain	150	150	nd	10/13/1993	2.51	2.58	2.97	3.05
6718 Elaine Rd	247375	6438395	1979974	Certain	120	120	80	7/21/1982	0.00	0.00	0.00	0.00
3901 Roberts Rd	168831	6438453	2014709	Certain	120	120	100	6/12/1987	1.08	1.14	1.34	1.40
8342 Faith Home Rd	187200	6439004	2011581	Certain	160	160	140	12/4/1986	1.45	1.51	1.78	1.84
8413 Faith Home Rd	325321	6439008	2011159	Certain	140	140	100	11/7/1989	1.50	1.56	1.83	1.90
836 N Faith Home Rd	83970	6439033	2005597	Certain	75	75	65	5/3/1973	2.29	2.36	2.87	2.94
7337 S Faith Home Rd	150867	6439064	1979012	Certain	67	nd	nd	11/1/1985	0.00	0.00	0.00	0.00
4930 S Faith Home Rd	250595	6439151	1985913	Certain	126	126	106	9/19/1988	1.15	1.21	1.03	1.09
7130 Faith Home Rd	366567	6439227	1979289	Certain	148	148	128	3/16/1991	0.00	0.00	0.00	0.00
2124 S Faith Home Rd	96270	6439234	1996323	Certain	190	195	175	8/21/1980	2.57	2.64	2.50	2.57
6643 Faith Home Rd	252871	6439240	2020213	Certain	160	160	140	12/4/1987	0.00	0.00	0.85	0.90
6618 Faith Home Rd	146829	6439240	2020095	Certain	57	57	47	8/11/1975	0.67	0.72	0.86	0.91
6912 Faith Home Rd	197523	6439243	2019202	Certain	175	175	155	2/7/1986	0.74	0.79	0.94	0.99
6955 Faith Home Rd	374590	6439243	2019091	Certain	250	250	235	7/12/1991	0.75	0.80	0.95	1.00
6224 S Faith Home Rd	65066	6439295	1981224	Certain	155	155	135	3/30/1987	0.77	0.82	0.00	0.00
5818 S Faith Home Rd	226871	6439306	1982769	Certain	85	85	65	9/24/1981	0.90	0.95	0.77	0.82
231 S Faith Home Rd	498216	6439342	2001793	Certain	340	340	nd	6/4/1992	2.86	2.93	3.35	3.45
PO Box 1803	226551	6439438	2005142	Approx	125	125	105	10/6/1981	2.42	2.49	3.06	3.14
1100 N Faith Home Rd	516467	6439507	2004561	Certain	180	180	nd	12/12/1997	2.52	2.59	3.18	3.25
4809 Zeering Rd	21664	6439553	2016109	Approx	120	135	110	12/13/1976	1.01	1.07	1.21	1.27
836 N Faith Home Rd	76519	6439559	2004004	Certain	43	43	34	11/3/1972	2.63	2.70	3.28	3.36
6001 W Zeering Rd	22419	6439690	2015172	Certain	103	103	93	1/21/1977	1.09	1.15	1.34	1.41
PO Box 1867	21483	6439829	2001920	Certain	73	73	63	9/10/1976	3.00	3.08	3.57	3.69
24238 S Mohler Rd	125778	6440060	2020784	Certain	83	83	70	1/9/1975	0.00	0.00	0.82	0.87

**Table 3. Potential Drawdown in Existing Private Domestic Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
5825 Fulkerth Rd	370333	6440477	2008018	Certain	320	320	300	7/6/1990	2.09	2.16	2.64	2.71
100 S Krinley Ave	71015	6440519	1983283	Certain	100	100	85	2/12/1980	0.98	1.03	0.84	0.89
5341 Zeering Rd	347508	6440807	2015278	Approx	155	130	85	4/14/1990	1.12	1.17	1.38	1.44
5725 Ehrlich Rd	96076	6441117	1981213	Certain	80	80	60	11/7/1980	0.81	0.87	0.67	0.72
1500 Commons Rd	112000	6441564	2007681	Certain	190	140	120	7/7/1975	2.29	2.36	2.92	3.00
1307 N Commons Rd	90552	6441565	2007106	Certain	145	145	135	11/1/1973	2.40	2.47	3.09	3.16
224 S Commons Rd	125302	6441585	2002320	Certain	80	80	60	7/29/1975	3.56	3.68	4.47	4.78
230 S Commons Rd	66757	6441586	2002301	Certain	73	73	63	4/12/1971	3.57	3.68	4.48	4.78
1230 S Commons Rd	227714	6441604	1998594	Certain	91	91	71	10/21/1981	3.72	3.85	3.67	3.80
4206 S Commons Rd	326886	6441721	1988782	Certain	110	110	100	9/28/1989	1.65	1.71	1.42	1.49
4600 S Commons Rd	66790	6441734	1987547	Certain	85	nd	nd	5/12/1971	1.48	1.54	1.25	1.31
Rt 1 Box 775	111859	6441774	1983533	Approx	64	64	56	10/10/1975	1.03	1.08	0.88	0.93
5531 Ehrlich Rd	29336	6441787	1981210	Certain	90	nd	nd	12/7/1969	0.83	0.88	0.68	0.73
PO Box 2385	87387	6441807	1983848	Approx	95	nd	nd	8/15/1973	1.06	1.11	0.91	0.96
5625 W Bradbury Rd	580167	6441842	1986316	Certain	120	120	nd	5/30/1995	1.31	1.37	1.12	1.18
23467 W Short Ave	374558	6441852	1980505	Certain	130	130	110	6/14/1991	0.77	0.82	0.00	0.00
5525 Clayton Rd	191181	6441863	1998775	Certain	95	95	75	6/16/1986	3.86	4.01	3.81	3.95
Turlock	718337	6441866	2006901	Approx	240	240	nd	7/23/1999	2.47	2.54	3.19	3.27
6630 Foote Rd	24565	6441868	2020862	Certain	142	142	130	3/25/1977	0.00	0.00	0.84	0.90
4908 Glenmoor Wy	569323	6441897	1985946	Approx	120	120	nd	4/20/1994	1.26	1.32	1.09	1.15
1101 Commons Rd	245936	6441955	2005432	Certain	112	112	97	8/27/1982	2.87	2.95	3.75	3.89
5725 Ehrlich Rd	340954	6442065	1980494	Certain	100	100	80	4/24/1990	0.77	0.82	0.00	0.00
5518 W Bradbury Rd	422625	6442307	1986329	Certain	115	115	50	12/13/1991	1.33	1.39	1.13	1.19
Ceres	147232	6442498	2020858	Approx	110	110	106	9/13/1978	0.67	0.72	0.85	0.90
PO Box 4278	498327	6442498	2020858	Approx	385	385	nd	10/21/1992	0.67	0.72	0.85	0.90
PO Box 889	275139	6442498	2020858	Approx	140	140	120	12/3/1988	0.67	0.72	0.85	0.90
Turlock	17351	6442498	2020858	Approx	80	80	60	4/20/1969	0.67	0.72	0.85	0.90
5326 Clayton Ave	346760	6442504	1998784	Certain	174	174	154	8/15/1990	4.18	4.41	3.99	4.16
5324 Clayton Ave	153475	6442510	1998784	Certain	nd	nd	nd	2/25/1985	4.18	4.41	3.99	4.17
5213 W Main St	52841	6442879	2002712	Certain	83	nd	nd	3/3/1970	3.93	4.09	5.23	6.14
5213 W Main St	153473	6442879	2002712	Certain	157	20	nd	2/23/1985	3.93	4.09	5.23	6.14
5213 W Main St	53667	6442879	2002712	Certain	250	250	220	10/8/1979	3.93	4.09	5.23	6.14
PO Box 35	149381	6443032	1986167	Approx	75	75	65	5/3/1976	1.33	1.39	1.13	1.18
5319 W Bradbury Rd	245907	6443443	1986270	Certain	80	80	60	6/16/1982	1.36	1.42	1.14	1.20
5201 Zeering Rd	347507	6443669	2015302	Approx	155	150	85	4/6/1990	1.17	1.23	1.45	1.51

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5019 Christofferson Rd	219499	6444023	1983140	Certain	115	115	95	8/28/1984	1.03	1.08	0.86	0.92
4813 W Main St	498316	6444161	2002718	Certain	237	237	nd	9/22/1992	4.40	4.68	5.84	8.80
4800 W Main St	219045	6444197	2002719	Certain	118	118	98	9/4/1984	4.41	4.69	5.85	8.87
601 N Washington Rd	326842	6444231	2004767	Certain	235	235	215	8/16/1989	3.46	3.56	4.56	4.90
1318 S Washington Rd	284295	6444276	1998398	Certain	228	228	208	9/20/1988	4.96	5.57	4.10	4.31
4631 S Washington Rd	704844	6444368	1986853	Certain	105	105	nd	7/2/1998	1.46	1.52	1.19	1.25
5107 W Bradbury Rd	76861	6444426	1986280	Certain	91	91	71	5/18/1981	1.38	1.44	1.14	1.20
PO Box 352	361911	6444637	2011496	Approx	255	255	235	8/29/1990	1.72	1.78	2.10	2.17
5672 Almaden Express	125365	6444638	2009019	Approx	120	120	100	4/28/1975	2.21	2.28	2.72	2.79
4113 N Washington Rd	501989	6444659	2015418	Certain	140	33	nd	3/16/1993	1.17	1.23	1.43	1.50
4218 W Washington Rd	247365	6444666	2015673	Certain	125	125	105	6/25/1982	1.15	1.20	1.40	1.46
4113 N Washington Rd	150880	6444673	2015396	Certain	110	110	90	10/4/1985	1.17	1.23	1.44	1.50
4113 N Washington Rd	192248	6444691	2015365	Certain	82	82	62	8/15/1986	1.17	1.23	1.44	1.50
Turlock	71008	6444719	1996553	Approx	250	250	225	1/26/1980	4.08	4.27	3.25	3.33
1706 N Washington Rd	99416	6444760	2007505	Certain	60	60	50	9/22/1974	2.56	2.63	3.21	3.29
4591 Fulkerth Rd	813196	6444906	2008083	Certain	220	220	nd	12/7/1998	2.43	2.50	3.02	3.10
Turlock	21006	6444953	1991636	Approx	72	nd	nd	1/3/1969	2.34	2.41	1.91	1.98
4600 Idaho Rd	26566	6445097	1988781	Certain	81	81	61	7/5/1977	1.74	1.81	1.47	1.53
4519 Idaho Rd	465292	6445353	1988783	Certain	105	105	nd	11/23/1993	1.75	1.82	1.46	1.53
4500 W Monte Vista Ave	247486	6445688	2012484	Certain	145	145	125	8/1/1988	1.58	1.64	1.86	1.93
20271 W Johnson St	64868	6445770	1980515	Certain	250	250	230	4/14/1987	0.80	0.85	0.00	0.00
4330 Silva Rd	53672	6445920	1990826	Certain	80	80	70	10/26/1979	2.16	2.23	1.75	1.82
4318 Idaho Rd	250459	6445979	1988789	Certain	275	275	255	5/24/1988	1.75	1.82	1.46	1.52
11113 Copperopolis	475304	6446020	1990142	Approx	118	118	nd	3/11/1996	2.01	2.08	1.65	1.72
1201 W Monte Vista Ave	361925	6446056	2012752	Certain	230	230	200	9/25/1990	1.54	1.60	1.80	1.87
4124 Idaho Rd	174576	6446585	1988795	Certain	95	95	75	8/29/1985	1.74	1.81	1.45	1.51
4816 W Barnhart Rd	197526	6446615	2020639	Certain	245	245	230	2/26/1986	0.71	0.76	0.87	0.92
9579 Hultberg Rd	197505	6446819	1981748	Certain	110	110	80	11/27/1985	0.91	0.96	0.73	0.78
9579 Hultberg Rd	21231	6446819	1981748	Certain	110	110	95	11/10/1976	0.91	0.96	0.73	0.78
2219 Barnhart Rd	304094	6446901	2020579	Certain	170	170	150	7/7/1989	0.71	0.76	0.87	0.93
5612 Hultberg Rd	128977	6446917	1984156	Certain	230	230	190	11/9/1978	1.12	1.18	0.94	0.99
4113 Monte Vista Ave	303904	6446945	2012743	Certain	220	220	200	1/20/1989	1.53	1.60	1.78	1.85
5837 Hultberg Rd	250497	6447009	1985124	Certain	274	276	254	6/24/1988	1.21	1.27	1.02	1.08
6025 Hultberg Rd	29204	6447023	1985122	Certain	82	82	67	11/1/1978	1.21	1.27	1.02	1.08
PO Box 2996	164787	6447072	2016364	Approx	125	125	90	6/8/1987	1.08	1.14	1.26	1.32

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PO Box 1910	433892	6447100	2017239	Approx	310	310	nd	10/22/1991	1.01	1.06	1.16	1.22
2180 Enterprise Blvd	168920	6447105	2016707	Approx	220	220	200	11/6/1987	1.05	1.11	1.21	1.27
4200 W Monte Vista Ave	289643	6447216	2010120	Certain	110	110	90	11/9/1988	1.95	2.02	2.31	2.38
Turlock	21019	6447216	2010120	Approx	nd	61	51	4/4/1969	1.95	2.02	2.31	2.38
3928 W Linwood Ave	243208	6447226	1997510	Certain	145	145	85	9/29/1982	4.48	4.78	3.34	3.43
3925 W Linwood Ave	475261	6447239	1997510	Certain	265	265	nd	11/3/1995	4.47	4.78	3.33	3.42
1576 N Nelinder Ave	148610	6447403	1990155	Certain	76	76	61	9/9/1976	1.98	2.05	1.62	1.68
PO Box 845	128904	6447590	2020737	Approx	100	100	90	3/17/1978	0.69	0.74	0.85	0.90
4512 Barnhart Rd	325370	6447614	2020664	Certain	135	135	115	3/28/1990	0.70	0.75	0.86	0.91
4454 Barnhart Rd	145997	6447767	2020640	Certain	97	97	87	5/21/1976	0.70	0.75	0.86	0.91
3800 Ruble Rd	28121	6447786	1999865	Certain	76	75	60	2/18/1969	5.04	5.72	3.93	4.09
4401 W Barnhart Rd	21018	6447896	2020629	Certain	72	75	65	4/3/1969	0.70	0.75	0.85	0.91
4042 Barnhart Rd	174101	6448175	2020637	Certain	105	105	85	4/22/1985	0.70	0.75	0.85	0.90
3831 Silva Rd	53652	6448191	1990257	Certain	80	80	nd	8/27/1979	1.97	2.04	1.60	1.67
3631 Buble Rd	250458	6448421	1999914	Certain	245	245	225	5/24/1988	4.63	4.99	3.70	3.83
PO Box 1437	346797	6448470	2009998	Approx	155	155	135	10/29/1990	1.92	1.99	2.23	2.30
4042 Barnhart Rd	227722	6448632	2020801	Certain	238	238	218	11/20/1981	0.68	0.73	0.83	0.88
3686 E Monte Vista Ave	427232	6448758	2012726	Certain	173	65	nd	8/10/1991	1.49	1.56	1.71	1.77
3707 E Monte Vista Ave	21313	6448771	2012713	Certain	nd	99	79	12/18/1976	1.49	1.56	1.71	1.78
3425 E Monte Vista Ave	290637	6448850	2012803	Certain	225	225	205	10/18/1988	1.48	1.54	1.69	1.76
Drawer A	275714	6449088	1994123	Approx	223	223	203	5/27/1988	2.79	2.86	2.20	2.27
3300 Idaho Rd	498308	6449162	1988821	Certain	285	285	nd	9/22/1992	1.68	1.75	1.36	1.42
3525 W Monte Vista Ave	706199	6449307	2012620	Certain	80	80	nd	9/10/1998	1.49	1.55	1.69	1.76
21817 Johnson Rd	580237	6449354	1980586	Certain	110	110	nd	10/20/1995	0.78	0.83	0.00	0.00
3515 Linwood Ave	64886	6449370	1996865	Certain	220	220	200	5/1/1987	3.51	3.62	2.72	2.79
3218 Idaho Rd	250407	6449419	1988823	Certain	300	300	260	4/8/1988	1.67	1.73	1.35	1.41
424 S Tegner Rd	245992	6449512	2001985	Certain	175	175	155	5/5/1982	3.77	3.91	3.44	3.54
1031 S Tegner Rd	29307	6449540	1999764	Certain	173	173	161	1/7/1978	3.97	4.13	3.23	3.31
3113 Taylor Rd	53673	6449544	2018017	Certain	140	140	130	10/26/1979	0.91	0.96	1.04	1.10
1424 S Tegner Rd	704833	6449552	1998327	Certain	220	220	nd	5/29/1998	3.80	3.94	2.99	3.07
5831 S Tegner Rd	89379	6449552	1984518	Certain	85	85	75	10/9/1973	1.12	1.17	0.92	0.98
5831 S Tegner Rd	145706	6449552	1984518	Certain	90	90	70	11/21/1977	1.12	1.17	0.92	0.98
5831 S Tegner Rd	53714	6449552	1984518	Certain	115	115	95	8/16/1979	1.12	1.17	0.92	0.98
2406 S Tegner Rd	516164	6449561	1994764	Certain	180	180	nd	3/4/1998	2.88	2.96	2.26	2.33
2419 S Tegner Rd	580346	6449562	1994715	Certain	230	230	nd	8/22/1995	2.87	2.95	2.25	2.32

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3306 S Tegner Rd	822809	6449570	1992130	Certain	260	260	nd	5/8/1999	2.26	2.33	1.78	1.85
4018 S Tegner Rd	580274	6449600	1989569	Certain	250	250	nd	3/23/1995	1.76	1.83	1.44	1.50
4019 S Tegner Rd	99478	6449600	1989569	Certain	73	73	63	11/3/1974	1.76	1.83	1.44	1.50
10069 W Tegner Rd	76858	6449663	1980679	Certain	110	110	90	5/13/1981	0.78	0.83	0.00	0.00
3919 N Golden State Blvd	47957	6449665	2015629	Certain	190	190	160	6/28/1977	1.11	1.17	1.27	1.33
Turlock	23000	6449737	2000611	Approx	127	124	113	7/15/1977	3.86	4.01	3.26	3.34
2624 White Rd	96256	6449788	1984206	Certain	255	255	235	7/16/1980	1.08	1.14	0.89	0.94
1901 N Tegner Rd	29175	6449811	2007541	Certain	140	140	125	11/4/1977	2.32	2.39	2.52	2.59
11807 Valley Home Rd	306511	6449841	1995617	Approx	165	165	125	8/24/1987	3.04	3.12	2.38	2.45
4331 S Shirk Rd	247066	6449868	1999245	Approx	140	140	120	1/8/1983	3.78	3.92	3.06	3.14
PO Box 3838	150804	6449905	2010510	Approx	180	nd	nd	6/14/1985	1.75	1.82	1.97	2.04
4600 W Tegner Rd	168872	6449945	2016045	Certain	215	215	195	8/12/1987	1.07	1.12	1.20	1.26
1331 Diane Dr	144492	6450355	2007363	Approx	100	100	80	3/1/1978	2.29	2.36	2.46	2.53
1001 Dianne Rd	243225	6450845	2006532	Certain	113	113	93	10/28/1982	2.38	2.45	2.49	2.56
PO Box 2968	409155	6450898	2012705	Approx	180	180	nd	2/11/1993	1.40	1.46	1.57	1.64
3436 Barnhart Rd	70458	6450987	2020636	Certain	nd	70	60	6/1/1972	0.00	0.00	0.78	0.84
3842 N Mt View Rd	90452	6451192	2014642	Certain	75	71	55	7/24/1974	1.15	1.21	1.31	1.37
PO Box 625	21345	6451202	2004405	Approx	128	128	108	3/7/1977	2.73	2.80	2.70	2.77
2655 W Monte Vista Ave	433927	6451289	2012544	Certain	140	140	nd	1/3/1992	1.40	1.46	1.56	1.63
Turlock	21031	6451343	1996898	Approx	105	nd	nd	5/14/1969	2.91	2.99	2.33	2.40
3000 Eye St	60861	6451518	2007345	Approx	70	67	56	3/25/1971	2.14	2.21	2.26	2.33
5324 Mountain View Rd	128974	6451714	2019455	Certain	101	101	81	12/22/1978	0.73	0.79	0.86	0.91
PO Box 3838	129517	6451804	2010005	Approx	120	120	80	7/21/1978	1.69	1.76	1.81	1.88
4961 Mt View Rd	811832	6451833	2018760	Certain	115	115	nd	3/9/1999	0.79	0.84	0.91	0.97
2525 E Monte Vista Ave	250485	6451923	2012778	Certain	285	285	265	6/15/1988	1.33	1.39	1.48	1.55
6107 Mountain View Rd	128683	6451947	2020976	Certain	120	120	100	6/2/1978	0.00	0.00	0.73	0.78
PO Box 949	532844	6452019	1983486	Approx	120	120	nd	8/12/1997	0.96	1.02	0.76	0.82
3501 S Kilroy Rd	168903	6452183	1991298	Certain	258	258	238	9/26/1987	1.80	1.87	1.48	1.54
3800 S Kilroy Rd	580313	6452185	1990370	Certain	250	250	nd	6/13/1995	1.69	1.76	1.36	1.43
3918 S Kilroy Rd	495232	6452186	1990005	Certain	245	245	nd	11/2/1993	1.65	1.72	1.32	1.38
2406 E Monte Vista Ave	147201	6452291	2012788	Certain	130	130	118	8/30/1978	1.30	1.36	1.45	1.52
3607 S Kilroy Rd	290691	6452323	1990460	Certain	255	255	235	12/13/1988	1.69	1.76	1.36	1.43
PO Box 354	96740	6452395	2020734	Approx	125	125	105	5/7/1980	0.00	0.00	0.73	0.78
21321 White Rd	153496	6452457	1983882	Certain	225	nd	nd	5/28/1985	0.98	1.04	0.78	0.83
2442 Tuolumne Rd	580338	6452458	2010123	Certain	220	220	nd	8/11/1995	1.62	1.69	1.73	1.80

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601 Century Blvd	149382	6452499	2004764	Approx	72	72	62	5/4/1976	2.38	2.45	2.34	2.41
2307 Bradbury Rd	498386	6452526	1986877	Certain	221	221	nd	2/22/1993	1.23	1.29	1.02	1.08
Turlock	128911	6452606	2015483	Approx	140	140	120	3/21/1978	1.04	1.09	1.14	1.20
700 W Walnut Rd	125873	6452628	2004458	Certain	87	87	67	11/10/1975	2.40	2.47	2.34	2.41
PO Box 127	149802	6452696	2017006	Approx	107	107	97	12/15/1975	0.91	0.96	1.02	1.07
2612 E Barnhart Rd	247369	6453208	2020659	Certain	151	151	131	6/24/1982	0.00	0.00	0.71	0.76
2171 Aspenwood Dr	153482	6453289	2006421	Certain	275	nd	nd	3/8/1985	2.01	2.08	2.03	2.10
2407 W Glenwood Rd	374401	6453305	1995501	Certain	235	235	215	12/20/1990	2.25	2.32	1.80	1.87
2407 Glenwood Ave	71046	6453439	1995523	Certain	215	215	200	6/23/1980	2.23	2.30	1.79	1.85
2406 Glenwood Ave	147207	6453456	1995516	Certain	175	175	167	7/28/1978	2.22	2.29	1.78	1.85
725 N Tully Rd	580335	6453479	2005112	Certain	290	290	nd	8/9/1995	2.16	2.23	2.10	2.17
2211 Solitude Ave	164340	6453593	2005354	Certain	155	155	135	11/20/1986	2.10	2.17	2.06	2.13
2500 Barnhart Rd	96255	6453600	2020818	Certain	117	117	102	7/2/1980	0.00	0.00	0.68	0.73
1980 Cody Ct	580254	6453735	2007887	Certain	255	255	nd	2/8/1995	1.76	1.83	1.79	1.86
2021 W Tuolumne Rd	426304	6453759	2010808	Certain	215	215	nd	12/31/1992	1.43	1.50	1.53	1.59
2007 W Main St	304075	6453775	2002031	Certain	95	95	75	6/27/1989	2.38	2.45	2.16	2.23
2325 E Taylor Rd	46937	6453938	2018150	Certain	293	293	248	8/28/1977	0.77	0.82	0.88	0.93
1890 Fulkerth Rd	498263	6453952	2008171	Certain	315	315	nd	7/14/1992	1.71	1.77	1.75	1.81
600 N Tully Rd	65053	6453973	2003392	Certain	203	203	183	3/7/1987	2.24	2.31	2.09	2.16
10526 Goulart Rd	252977	6454106	1984012	Certain	245	245	225	5/7/1988	0.93	0.98	0.73	0.78
Turlock	70460	6454113	1987696	Approx	nd	63	53	1/7/1972	1.21	1.28	1.01	1.07
2630 W Tuolumne Ave	96664	6454294	2010069	Certain	158	158	148	11/12/1980	1.47	1.53	1.54	1.61
2007 W Tuolumne Ave	53749	6454367	2010051	Certain	90	90	70	4/1/1980	1.46	1.53	1.54	1.60
2618 N Golden State Blvd	226896	6454525	2010284	Certain	225	225	205	10/12/1981	1.42	1.49	1.50	1.56
1560 Springville	65095	6454553	2013211	Certain	185	185	165	5/1/1987	1.13	1.19	1.20	1.26
2700 N Golden State Blvd	252874	6454602	2010262	Certain	245	245	205	12/14/1987	1.42	1.48	1.49	1.55
2310 N Walnut Rd	21245	6454738	2010388	Certain	153	158	138	10/28/1976	1.39	1.46	1.46	1.53
2207 S Walnut Rd	340995	6454835	1995608	Certain	290	290	270	6/1/1990	1.96	2.03	1.62	1.69
3607 S Walnut Rd	326943	6454889	1990899	Certain	240	240	220	11/27/1989	1.50	1.57	1.19	1.25
Turlock	21046	6454956	1989707	Approx	72	75	65	11/24/1967	1.37	1.43	1.11	1.16
1800 Glenwood Ln	21016	6455004	1995359	Certain	nd	nd	nd	2/21/1969	1.90	1.97	1.58	1.65
1800 Glenwood Ln	90892	6455021	1995529	Certain	101	nd	nd	7/11/1975	1.91	1.98	1.59	1.66
1600 W Main St	416500	6455140	2002124	Certain	110	110	nd	5/18/1994	2.07	2.14	1.85	1.92
PO Box 588	304059	6455142	1994465	Approx	160	160	140	6/16/1989	1.79	1.86	1.49	1.56
3318 S Walnut Ave	275702	6455213	1991289	Certain	290	290	270	5/17/1988	1.51	1.57	1.19	1.25

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3730 N Walnut Ave	326823	6455229	2016307	Certain	120	120	100	7/28/1989	0.86	0.92	0.95	1.00
4219 N Walnut Ave	340925	6455259	1995061	Certain	175	175	155	4/7/1990	1.82	1.89	1.53	1.59
1424 Circus Ct	475338	6455320	2007673	Certain	330	330	nd	5/15/1996	1.60	1.67	1.61	1.68
2820 Brevard Ln	86188	6455386	2012423	Certain	190	190	175	7/10/1979	1.14	1.20	1.20	1.26
2500 Hampton Rd	340918	6455575	2010317	Certain	275	275	255	3/30/1990	1.32	1.38	1.37	1.44
1465 Ellerd RD	326964	6455716	1996985	Certain	232	232	212	1/12/1990	1.89	1.96	1.60	1.67
1518 Bradbury Rd	22727	6455728	1986020	Certain	140	140	120	5/9/1977	1.01	1.06	0.81	0.86
5724 N Walnut Rd	22675	6455906	2021039	Certain	140	140	130	2/18/1977	0.00	0.00	0.00	0.00
PO Box 275	197503	6456019	1980416	Approx	245	245	100	11/16/1985	0.00	0.00	0.00	0.00
1200 W Tuolumne Rd	89363	6456038	2010803	Certain	142	142	132	10/6/1973	1.22	1.28	1.28	1.34
4641 Crowell Rd	370304	6456089	2018875	Certain	360	360	340	6/7/1990	0.00	0.00	0.72	0.77
3513 S Soderquist Rd	226557	6456175	1991375	Certain	77	77	57	11/6/1981	1.41	1.47	1.14	1.20
4012 S Soderquist Rd	150833	6456320	1988932	Certain	245	nd	nd	7/25/1985	1.17	1.23	0.97	1.03
3931 S Soderquist Rd	498375	6456343	1989723	Certain	240	240	nd	2/2/1993	1.23	1.29	1.02	1.08
3336 S Soderquist Rd	110633	6456514	1991090	Certain	55	55	45	6/17/1975	1.35	1.41	1.10	1.16
3912 S Soderquist Rd	326843	6456521	1988941	Certain	230	230	210	8/17/1989	1.16	1.22	0.96	1.02
4124 S Soderquist Rd	495290	6456531	1988238	Certain	240	240	nd	3/9/1994	1.11	1.17	0.92	0.97
3336 S Soderquist Rd	287260	6456541	1990791	Certain	180	180	160	3/8/1989	1.32	1.38	1.08	1.14
2740 Crowell Rd	290690	6456595	2011229	Certain	205	205	185	12/20/1988	1.15	1.21	1.19	1.25
1151 Williams Rd	168885	6456616	1998423	Certain	175	175	155	8/27/1987	1.78	1.85	1.55	1.62
1004 Mae St	580300	6456750	1999545	Certain	240	240	nd	5/5/1995	1.78	1.85	1.57	1.64
913 W Greenway Ave	290632	6457098	1993587	Certain	175	175	155	10/14/1988	1.48	1.55	1.19	1.25
Oslo Rd	76606	6457163	1980416	Approx	96	96	76	12/19/1972	0.00	0.00	0.00	0.00
805 W Minnesota Ave	168960	6457250	2012125	Certain	270	270	250	1/15/1988	1.05	1.11	1.09	1.15
PO Box 432	46478	6457358	1991371	Approx	100	100	80	12/3/1977	1.28	1.34	1.06	1.11
752 Julia	21035	6457410	2003853	Approx	110	nd	nd	5/21/1969	1.60	1.67	1.49	1.56
839 W Main St	146266	6457698	2001997	Certain	145	145	125	7/9/1975	1.62	1.69	1.47	1.54
5532 Copeland Ln	22994	6457727	1994094	Approx	90	90	70	7/11/1977	1.44	1.50	1.17	1.23
565 Santa Clara	326931	6457727	1994094	Approx	245	245	225	11/10/1989	1.44	1.50	1.17	1.23
Livermore	29343	6457759	1999422	Approx	70	70	60	6/28/1978	1.63	1.70	1.43	1.49
20426 W Johnson Ave	66756	6457898	1980450	Certain	nd	71	61	2/11/1971	0.00	0.00	0.00	0.00
671 Park St	96093	6457923	2004323	Certain	117	117	97	2/25/1981	1.51	1.57	1.41	1.47
512 Montana Ave	822557	6458086	1998292	Certain	205	285	nd	6/24/1999	1.57	1.64	1.34	1.41
809 N Broadway	252886	6458090	2004933	Certain	245	245	225	1/11/1988	1.45	1.52	1.37	1.43
2041 Julie Ave	129507	6458170	2010483	Certain	140	140	100	6/21/1978	1.09	1.15	1.11	1.17

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2141 Julie Ave	495108	6458172	2010229	Certain	255	255	nd	3/25/1993	1.11	1.17	1.12	1.18
Modesto	92530	6458400	2020777	Approx	102	102	82	5/8/1974	0.00	0.00	0.00	0.00
520 Pedros Rd	86940	6458486	2008725	Certain	85	85	65	2/15/1974	1.17	1.22	1.16	1.22
471 Clark St	191200	6458615	1998569	Certain	170	170	150	7/23/1986	1.50	1.56	1.28	1.34
528 E Main St	85104	6458652	2002117	Certain	nd	70	50	5/26/1973	1.48	1.55	1.33	1.39
2141 Georgia Wy	548989	6458677	2010080	Certain	151	28	nd	8/8/1995	1.08	1.14	1.09	1.15
607 W Clausen Rd	64861	6458679	1989615	Certain	nd	255	235	4/2/1987	1.06	1.12	0.87	0.92
647 Columbiam	89364	6458694	2001692	Certain	65	65	55	10/8/1973	1.49	1.55	1.33	1.39
547 Pedros Rd	96261	6458700	2008687	Certain	157	157	137	7/27/1980	1.15	1.21	1.14	1.20
547 Pedros Rd	147227	6458717	2008687	Certain	113	113	93	8/30/1978	1.15	1.21	1.14	1.20
217 Coren St	86910	6458738	1992338	Approx	85	85	65	11/4/1973	1.19	1.25	1.01	1.07
632 W Greenway	468098	6458886	1992824	Certain	160	160	nd	12/7/1995	1.20	1.26	1.02	1.08
632 W Greenway	244079	6458886	1992824	Certain	265	nd	nd	5/21/1984	1.20	1.26	1.02	1.08
528 E Main St	85102	6458977	2001953	Certain	80	80	60	5/24/1973	1.44	1.50	1.29	1.35
509 Vermont Ave	219457	6459060	2000186	Certain	120	120	100	6/19/1984	1.45	1.51	1.26	1.32
304 W Minnesota Ave	128930	6459088	2011495	Certain	126	126	114	5/28/1978	0.97	1.03	0.99	1.05
448 W Clausen Rd	576605	6459120	1989612	Certain	220	220	nd	12/16/1996	1.03	1.08	0.84	0.89
232 20th Century Blvd	128969	6459128	2007724	Certain	240	140	100	11/6/1978	1.16	1.22	1.14	1.20
565 Santa Clara	76536	6459174	1986094	Approx	64	64	54	11/30/1972	0.82	0.87	0.00	0.00
378 W Syracuse	325303	6459208	2005155	Certain	190	190	170	10/17/1989	1.29	1.35	1.20	1.26
430 Columbia	158179	6459324	2001593	Certain	nd	95	70	10/28/1976	1.40	1.46	1.23	1.29
30272 E Orange Ave	146253	6459398	1997570	Approx	100	100	88	7/8/1975	1.37	1.43	1.16	1.22
221 W Minnesota Ave	145640	6459414	2011509	Certain	60	60	35	1/26/1978	0.95	1.01	0.97	1.02
733 N Broadway	326887	6459717	2003251	Certain	85	85	75	9/29/1989	1.30	1.36	1.18	1.24
20751 W Fowler Rd	289683	6459718	1983067	Certain	115	115	95	1/6/1989	0.00	0.00	0.00	0.00
855 Geer Rd	96742	6460109	2005995	Certain	100	100	80	5/6/1980	1.15	1.21	1.11	1.16
855 Geer Rd	147243	6460109	2005995	Certain	145	145	133	10/5/1978	1.15	1.21	1.11	1.16
858 Geer Rd	168804	6460109	2006008	Certain	285	285	265	5/21/1987	1.15	1.21	1.11	1.16
1445 Lander Ave	409128	6460109	1998151	Certain	272	272	nd	10/13/1992	1.28	1.34	1.11	1.17
9725 Lander Ave	29334	6460111	1978994	Certain	98	nd	nd	12/5/1969	0.00	0.00	0.00	0.00
9725 Lander Ave	29334	6460111	1978994	Certain	98	nd	nd	12/5/1969	0.00	0.00	0.00	0.00
2620 Lander Ave	576604	6460113	1994179	Certain	220	220	nd	12/3/1996	1.16	1.21	0.99	1.04
2609 Lander Ave	96716	6460113	1994217	Certain	154	154	134	4/11/1980	1.16	1.22	0.99	1.05
3007 Lander Ave	197584	6460120	1992917	Certain	180	180	160	6/9/1986	1.11	1.17	0.93	0.99
3125 Lander Ave	370321	6460125	1992547	Certain	225	225	205	6/29/1990	1.09	1.15	0.92	0.97

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20167 W Fowler Rd	326913	6460133	1983108	Certain	130	130	120	10/20/1989	0.00	0.00	0.00	0.00
10117 Lander Ave	247378	6460135	1980587	Certain	116	116	76	7/28/1982	0.00	0.00	0.00	0.00
4000 Lander Ave	148628	6460141	1989587	Certain	70	70	60	7/16/1976	0.95	1.01	0.77	0.82
4136 Lander Ave	67729	6460146	1989127	Certain	100	100	80	4/4/1971	0.93	0.98	0.74	0.79
4200 Lander Ave	287266	6460155	1988879	Certain	215	215	195	3/9/1989	0.92	0.97	0.73	0.78
10218 Lander Ave	64857	6460161	1981252	Certain	285	285	265	3/25/1987	0.00	0.00	0.00	0.00
10218 Lander Ave	498381	6460161	1981252	Certain	200	200	nd	2/4/1993	0.00	0.00	0.00	0.00
10218 Lander Ave	498204	6460161	1981252	Certain	210	210	nd	5/18/1992	0.00	0.00	0.00	0.00
10218 Lander Ave	475360	6460161	1981252	Certain	210	210	nd	6/24/1996	0.00	0.00	0.00	0.00
10218 N Lander Ave	145508	6460161	1981252	Certain	154	154	144	2/11/1976	0.00	0.00	0.00	0.00
10430 Lander Ave	247096	6460214	1982624	Certain	195	195	155	3/20/1984	0.00	0.00	0.00	0.00
737 E Monte Vista Ave	251120	6460255	2012476	Certain	122	122	102	5/27/1987	0.84	0.89	0.86	0.91
2700 Lander Ave	187161	6460339	1992922	Certain	210	210	190	9/18/1986	1.09	1.15	0.92	0.97
30 W Minnesota Ave	46474	6460408	2010714	Certain	156	156	138	11/26/1977	0.92	0.98	0.93	0.98
2080 Temple Ave	63834	6460412	2010186	Certain	98	98	88	2/15/1973	0.95	1.01	0.95	1.00
2125 Gulf Rd	22939	6460413	1996378	Certain	216	216	201	3/20/1977	1.19	1.25	1.04	1.10
605 Lander Ave	21036	6460442	1999960	Certain	nd	60	50	5/21/1969	1.25	1.31	1.11	1.17
605 Lander Ave	29333	6460442	1999974	Certain	71	nd	nd	12/4/1969	1.25	1.31	1.11	1.17
605 Lander Ave	21040	6460476	2001170	Certain	nd	nd	nd	12/25/1969	1.24	1.30	1.12	1.18
605 Lander Ave	66714	6460480	2001149	Certain	60	60	50	9/7/1970	1.24	1.30	1.12	1.18
3424 Geer Rd	250471	6460592	2013464	Certain	235	235	215	6/7/1988	0.76	0.81	0.78	0.84
447 E Center St	326807	6460597	2004122	Certain	100	100	80	7/17/1989	1.17	1.23	1.10	1.15
2618 Geer Rd	250470	6460727	2010797	Certain	225	225	205	6/6/1988	0.90	0.95	0.90	0.95
225 Rutgers Ave	89340	6460740	2010606	Certain	nd	76	66	9/25/1973	0.91	0.96	0.91	0.96
837 9th St	46463	6460765	1998814	Certain	126	126	100	10/28/1977	1.20	1.26	1.07	1.12
388 N Golden State Blvd	40433	6460765	2003770	Certain	142	142	132	10/19/1976	1.16	1.22	1.08	1.14
2000 Loyola Wy	83937	6460857	2009895	Certain	97	97	89	7/17/1973	0.93	0.99	0.92	0.98
225 Rutgers Ave	89968	6461037	2009631	Certain	103	103	93	2/22/1974	0.93	0.99	0.92	0.98
5018 N Geer Rd	525362	6461043	2018197	Certain	290	290	nd	5/3/1997	0.00	0.00	0.00	0.00
837 8th ST	576638	6461074	1999056	Certain	160	160	nd	3/12/1997	1.17	1.23	1.04	1.10
900 N Palm St	488671	6461089	2005285	Certain	400	405	nd	2/20/1992	1.09	1.15	1.04	1.09
900 N Palm St	488675	6461093	2005166	Certain	370	375	nd	2/3/1992	1.10	1.16	1.04	1.09
335 North Ave	249232	6461133	2009273	Certain	215	215	195	2/16/1984	0.94	1.00	0.93	0.98
333 E Canal Dr	99466	6461139	2005821	Certain	105	105	95	10/28/1974	1.07	1.13	1.02	1.08
333 E Canal Dr	149503	6461139	2005821	Certain	88	84	nd	1/12/1976	1.07	1.13	1.02	1.08

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333 E Canal Dr	85831	6461139	2005821	Certain	70	70	50	6/18/1973	1.07	1.13	1.02	1.08
475 Elmwood Ct	303920	6461195	1998153	Certain	200	200	180	2/13/1989	1.15	1.21	1.02	1.07
1860 Loyola Wy	90644	6461245	2008534	Certain	130	nd	nd	1/24/1974	0.97	1.02	0.94	1.00
PO Box 878	226367	6461500	1996712	Approx	160	160	140	3/27/1981	1.10	1.16	0.96	1.01
215 N Thor St	569308	6461626	2003573	Certain	380	380	nd	1/11/1994	1.09	1.15	1.01	1.07
465 Hanover Ave	129764	6461662	2009525	Certain	110	110	90	4/7/1978	0.89	0.94	0.87	0.93
2106 N Denair Ave	90613	6461736	2010368	Certain	121	121	111	1/2/1974	0.85	0.90	0.84	0.89
355 E Linwood Ave	516475	6461809	1996678	Certain	220	220	nd	12/24/1997	1.08	1.13	0.93	0.99
528 E Main St	148105	6461811	2004455	Certain	85	85	65	7/1/1976	1.06	1.11	0.99	1.04
528 E Main St	145946	6461811	2004455	Certain	98	98	78	5/23/1976	1.06	1.11	0.99	1.04
528 E Main St	151199	6461811	2004455	Certain	100	100	80	2/3/1976	1.06	1.11	0.99	1.04
528 E Main St	148101	6461811	2004455	Certain	100	100	80	6/4/1976	1.06	1.11	0.99	1.04
528 E Main St	148211	6461811	2004455	Certain	100	100	80	6/26/1976	1.06	1.11	0.99	1.04
528 E Main St	151189	6461811	2004455	Certain	100	100	80	2/1/1976	1.06	1.11	0.99	1.04
528 E Main St	111956	6461811	2004455	Certain	101	101	80	3/12/1975	1.06	1.11	0.99	1.04
528 E Main St	111955	6461811	2004455	Certain	102	102	80	3/11/1975	1.06	1.11	0.99	1.04
528 E Main St	21699	6461811	2004455	Certain	110	110	80	1/15/1977	1.06	1.11	0.99	1.04
528 E Main St	23311	6461811	2004455	Certain	106	106	86	2/13/1977	1.06	1.11	0.99	1.04
528 E Main St	92539	6461811	2004455	Certain	135	135	115	5/17/1974	1.06	1.11	0.99	1.04
528 E Main St	99676	6461811	2004455	Certain	140	140	120	12/7/1974	1.06	1.11	0.99	1.04
528 E Main St	25157	6461811	2004455	Certain	140	140	120	8/2/1977	1.06	1.11	0.99	1.04
528 E Main St	25192	6461811	2004455	Certain	140	140	120	10/3/1977	1.06	1.11	0.99	1.04
528 E Main St	85109	6461811	2004455	Certain	nd	152	122	6/9/1973	1.06	1.11	0.99	1.04
528 E Main St	25193	6461811	2004455	Certain	144	144	124	10/4/1977	1.06	1.11	0.99	1.04
528 E Main St	111991	6461811	2004455	Certain	160	160	140	6/27/1975	1.06	1.11	0.99	1.04
528 E Main St	151190	6461811	2004455	Certain	160	160	140	2/2/1976	1.06	1.11	0.99	1.04
528 E Main St	151166	6461811	2004455	Certain	160	160	140	8/19/1975	1.06	1.11	0.99	1.04
1525 Glenwood Ave	158900	6461816	1996666	Certain	94	94	85	8/23/1976	1.08	1.13	0.93	0.99
3431 Santos Ct	226383	6461849	2014484	Certain	145	145	125	4/13/1981	0.00	0.00	0.00	0.00
259 N Palm St	437607	6461850	2003948	Certain	240	240	nd	11/27/1996	1.06	1.12	0.99	1.04
590 Ashland Ave	475267	6462127	2012418	Certain	155	155	nd	11/21/1995	0.71	0.76	0.72	0.77
19632 Johnson Rd	66761	6462222	1980154	Certain	nd	62	52	2/17/1971	0.00	0.00	0.00	0.00
1930 N Denair	66767	6462240	2008663	Certain	69	69	59	2/24/1971	0.88	0.94	0.86	0.91
1321 I St	98955	6462300	1986038	Approx	92	92	82	4/15/1974	0.00	0.00	0.00	0.00
530 Glen Haven Ct	96926	6462362	2007570	Certain	83	83	63	6/30/1980	0.91	0.97	0.88	0.93

**Table 3. Potential Drawdown in Existing Private Domestic Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
565 Glen Haven Ct	150885	6462405	2007557	Certain	302	302	282	10/11/1985	0.91	0.97	0.87	0.93
600 Glenwood Ave	251217	6462411	1995439	Certain	184	184	164	7/13/1987	1.00	1.06	0.85	0.90
350 Strathaven Ct	481197	6462411	2008037	Certain	212	20	nd	7/3/1991	0.89	0.95	0.86	0.91
1940 Rohrer Rd	98321	6462433	2008569	Certain	100	100	80	6/22/1979	0.87	0.92	0.84	0.90
POBox 457	70496	6462461	1982986	Approx	60	60	50	2/28/1972	0.00	0.00	0.00	0.00
1224 E 5th	70494	6462493	2002981	Approx	67	nd	nd	2/26/1972	1.02	1.08	0.94	0.99
501 Golden State Blvd	77036	6462580	2001426	Certain	217	217	193	7/15/1981	1.03	1.09	0.93	0.99
35 Shawnee Ct	326987	6462649	2006953	Approx	310	310	290	2/20/1990	0.91	0.97	0.87	0.92
PO Box 2106	111934	6462728	2015249	Approx	140	140	130	11/25/1975	0.00	0.00	0.00	0.00
125 G ST	359703	6462757	2000963	Certain	161	161	155	11/7/1990	1.02	1.08	0.91	0.97
1663 Meadow Ln	144461	6462790	1980319	Approx	70	70	50	1/12/1978	0.00	0.00	0.00	0.00
1645 Amberwood Dr	498348	6462828	1996373	Certain	303	303	nd	11/17/1992	0.98	1.04	0.84	0.89
875 E Canal Dr	289680	6462833	2005825	Certain	180	180	160	1/19/1989	0.93	0.99	0.88	0.93
nd	187124	6462854	1995392	Approx	310	310	290	7/25/1986	0.96	1.02	0.81	0.86
400 E Clausen Rd	498340	6462863	1991208	Certain	85	85	nd	11/11/1992	0.82	0.88	0.00	0.00
PO Box 670	24264	6462873	2014211	Approx	210	nd	nd	2/3/1969	0.00	0.00	0.00	0.00
Turlock	111997	6462880	1983222	Approx	80	80	60	7/4/1975	0.00	0.00	0.00	0.00
583 S Center St	246974	6462964	2001262	Certain	187	187	127	4/26/1982	1.00	1.06	0.90	0.95
124 H St	197546	6462965	2000748	Certain	200	200	180	3/21/1986	1.00	1.06	0.90	0.95
4 Carter Lakeway	22606	6462987	1988733	Approx	60	60	48	2/21/1977	0.70	0.75	0.00	0.00
PO Box 1805	476370	6462987	1988733	Approx	265	265	nd	7/2/1987	0.70	0.75	0.00	0.00
1749 N Olive Ave	252952	6462994	2007989	Certain	173	173	153	4/11/1988	0.85	0.90	0.81	0.86
PO Box 580	187122	6463004	1999920	Approx	220	220	200	7/18/1986	1.00	1.06	0.89	0.94
1749 N Olive Ave	197599	6463021	2007989	Certain	210	210	190	6/27/1986	0.85	0.90	0.81	0.86
19610 Bradbury Rd	154072	6463026	1986145	Certain	113	113	93	10/3/1984	0.00	0.00	0.00	0.00
Turlock	86985	6463047	1999388	Approx	104	104	74	9/17/1973	1.00	1.05	0.88	0.93
Turlock	21206	6463047	1999388	Approx	156	156	143	1/11/1977	1.00	1.05	0.88	0.93
1019 E Linwood Ave	125376	6463057	1997628	Certain	82	82	74	6/7/1975	0.98	1.04	0.85	0.90
2189 W Crane Rd	29316	6463096	2003915	Approx	192	142	127	1/11/1978	0.96	1.01	0.88	0.93
Turlock	52241	6463097	2010034	Approx	113	110	90	9/3/1970	0.76	0.81	0.74	0.79
Turlock	48939	6463097	2010034	Approx	182	182	162	2/7/1978	0.76	0.81	0.74	0.79
Turlock	29558	6463097	2010034	Approx	nd	nd	nd	11/28/1967	0.76	0.81	0.74	0.79
132 I St	149811	6463130	2000518	Certain	140	140	120	11/26/1975	0.99	1.05	0.88	0.93
607 W Clausen Rd	96089	6463138	1988553	Certain	236	236	216	9/22/1980	0.68	0.73	0.00	0.00
1233 5th St	96254	6463156	1998475	Certain	150	150	135	7/8/1980	0.98	1.04	0.85	0.91

**Table 3. Potential Drawdown in Existing Private Domestic Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
1233 5th St	29341	6463156	1998475	Certain	99	nd	nd	12/21/1969	0.98	1.04	0.85	0.91
3501 Colorado Ave	495262	6463183	2014513	Certain	80	80	nd	1/21/1994	0.00	0.00	0.00	0.00
813 Runyon Dr	125297	6463211	2007853	Certain	80	80	60	7/23/1975	0.84	0.89	0.80	0.85
10455 N Lana Ln	128964	6463226	1981268	Certain	162	162	122	11/29/1978	0.00	0.00	0.00	0.00
837 E Glenwood Ln	76007	6463231	1995433	Certain	165	165	145	7/2/1981	0.93	0.98	0.78	0.83
PO Box 304	66764	6463243	1999746	Approx	110	nd	nd	2/20/1971	0.98	1.04	0.86	0.92
19425 W Clausen Rd	501532	6463262	1988635	Certain	156	70	nd	2/12/1993	0.68	0.73	0.00	0.00
PO Box 2521	168873	6463264	1995401	Approx	240	240	220	8/13/1987	0.92	0.98	0.77	0.83
Stevenson	29341	6463269	1999340	Approx	60	60	52	7/6/1978	0.98	1.04	0.85	0.91
1018 S First St	168984	6463278	2000555	Certain	230	230	210	3/11/1988	0.98	1.03	0.87	0.92
1263 Pioneer Ave	111886	6463362	2007362	Certain	80	80	70	9/24/1975	0.84	0.89	0.80	0.85
1263 Pioneer Ave	111887	6463362	2007362	Certain	80	80	70	9/25/1975	0.84	0.89	0.80	0.85
1076 Pioneer Ave	66718	6463370	2006766	Certain	154	nd	nd	9/13/1970	0.86	0.91	0.81	0.86
PO Box 368	83106	6463451	1982982	Approx	125	125	105	8/19/1980	0.00	0.00	0.00	0.00
3001 N Inys	96279	6463577	2009988	Approx	154	154	142	9/10/1980	0.72	0.77	0.70	0.75
911 Tornell Ave	125854	6463584	2010534	Certain	72	72	52	10/6/1975	0.70	0.75	0.68	0.73
936 W Monte Vista Ave	54349	6463592	2012760	Certain	100	100	80	10/31/1979	0.00	0.00	0.00	0.00
4850 Bridgeport Dr	507735	6463670	2012299	Approx	985	nd	nd	9/23/1996	0.00	0.00	0.00	0.00
Turlock	70488	6463710	2020751	Approx	60	60	50	3/2/1972	0.00	0.00	0.00	0.00
912 Glenwood Ave	326915	6463715	1995507	Certain	70	70	60	10/24/1989	0.89	0.94	0.74	0.79
Barnhart Rd	76605	6463722	2020613	Approx	95	nd	nd	12/18/1972	0.00	0.00	0.00	0.00
1113 E Glenwood Ave	243976	6463723	1996302	Certain	75	75	55	5/23/1983	0.90	0.96	0.76	0.81
1019 E Linwood Ave	246496	6463742	1996623	Certain	97	97	77	2/3/1983	0.91	0.96	0.77	0.82
1019 E Linwood Ave	22749	6463745	1996610	Certain	110	110	91	6/17/1977	0.91	0.96	0.76	0.82
1020 E Linwwod Ave	111222	6463769	1996608	Certain	57	57	48	3/11/1975	0.91	0.96	0.76	0.81
1240 S First St	547564	6463794	1999692	Certain	305	305	nd	10/6/1994	0.93	0.99	0.81	0.87
821 Pioneer Dr	76553	6463849	2005177	Certain	100	100	80	4/4/1973	0.86	0.92	0.80	0.85
913 E Warner Ave	158177	6463964	2019286	Certain	nd	91	76	10/23/1976	0.00	0.00	0.00	0.00
PO Box 1998	219472	6463967	1995374	Approx	215	215	155	7/19/1984	0.86	0.92	0.71	0.76
19478 W Bradbury Rd	168913	6463979	1986197	Certain	232	232	212	10/22/1987	0.00	0.00	0.00	0.00
901 S Minaret Ave	150842	6464325	2000534	Certain	182	nd	nd	8/2/1985	0.88	0.94	0.77	0.83
2150 Colorado Ave	22750	6464347	2008975	Certain	109	109	89	6/18/1977	0.70	0.75	0.67	0.72
1360 E Harding Rd	31055	6464356	1991249	Certain	180	180	160	1/14/1988	0.71	0.76	0.00	0.00
1412 S 1st St	250600	6464358	1999130	Certain	350	350	310	9/20/1988	0.88	0.93	0.76	0.81
1412 S 1st St	110595	6464358	1999130	Certain	42	42	27	4/9/1975	0.88	0.93	0.76	0.81

**Table 3. Potential Drawdown in Existing Private Domestic Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
1400 Cahill Ave	129528	6464486	2003681	Certain	92	92	72	8/17/1978	0.84	0.89	0.76	0.81
1266 E Linwood Ave	149833	6464487	1996637	Certain	60	60	50	1/12/1976	0.84	0.90	0.70	0.75
3237 Colorado Ave	334927	6464554	2012939	Certain	130	130	110	3/19/1990	0.00	0.00	0.00	0.00
1660 Carleton Dr	344915	6464665	2009459	Certain	145	145	125	6/12/1990	0.00	0.00	0.00	0.00
1100 Sierra Dr	66713	6464713	2006629	Certain	120	nd	nd	9/5/1970	0.75	0.80	0.70	0.75
Denis Wy	86989	6464735	1985342	Approx	76	76	56	9/29/1973	0.00	0.00	0.00	0.00
4718 Colorado Ave	190849	6464736	2016727	Certain	132	132	112	5/2/1986	0.00	0.00	0.00	0.00
868 Alpha St	92544	6464749	2000950	Certain	105	105	85	9/3/1974	0.85	0.90	0.74	0.79
Denis Wy	92531	6464911	1985342	Approx	80	80	60	5/9/1974	0.00	0.00	0.00	0.00
2020 Belhaven Pl	129791	6464921	2009933	Certain	110	110	90	5/30/1978	0.00	0.00	0.00	0.00
1405 E Linwood Ave	247472	6464972	1997642	Certain	242	nd	nd	12/10/1982	0.81	0.87	0.68	0.73
2181 Carleton Dr	145688	6465013	2009105	Certain	150	150	130	3/23/1978	0.00	0.00	0.00	0.00
2621 Greeley Ct	303974	6465043	2010646	Certain	290	290	270	4/15/1989	0.00	0.00	0.00	0.00
10444 Lana Ln	251247	6465052	1982705	Certain	225	225	205	9/17/1987	0.00	0.00	0.00	0.00
19300 Bradbury Rd	226987	6465058	1985884	Certain	170	170	155	10/20/1981	0.00	0.00	0.00	0.00
10443 Lana Ln	498363	6465059	1982696	Certain	250	250	nd	12/30/1992	0.00	0.00	0.00	0.00
10440 Lana Ln	704866	6465066	1982687	Certain	252	252	nd	7/29/1998	0.00	0.00	0.00	0.00
10439 Lana Ln	247487	6465072	1982677	Certain	245	245	225	8/2/1988	0.00	0.00	0.00	0.00
19077 Fowler Rd	252820	6465086	1983003	Certain	220	220	200	9/29/1987	0.00	0.00	0.00	0.00
10410 Lana Ln	488287	6465165	1982546	Certain	260	260	nd	3/2/1992	0.00	0.00	0.00	0.00
19099 Denis Wy	129539	6465214	1985330	Certain	141	141	101	9/6/1978	0.00	0.00	0.00	0.00
19099 Denis Wy	148604	6465214	1985330	Certain	58	58	nd	7/30/1976	0.00	0.00	0.00	0.00
19099 Denis Wy	149354	6465214	1985330	Certain	147	147	137	2/19/1976	0.00	0.00	0.00	0.00
1113 N Berkeley Ave	250583	6465301	2006730	Certain	130	130	110	9/1/1988	0.70	0.75	0.00	0.00
1441 E Monte Vista Ave	532888	6465358	2012737	Certain	160	160	nd	10/31/1997	0.00	0.00	0.00	0.00
1441 E Monte Vista Ave	582962	6465373	2012722	Certain	177	177	nd	2/21/1994	0.00	0.00	0.00	0.00
19055 W Denis Wy	219670	6465379	1985325	Certain	238	258	238	7/24/1984	0.00	0.00	0.00	0.00
2618 Golf Rd	576618	6465395	1994307	Certain	220	220	nd	2/6/1997	0.72	0.77	0.00	0.00
2530 Golf Rd	325357	6465395	1994584	Certain	270	270	255	2/20/1990	0.72	0.78	0.00	0.00
2230 Golf Rd	246437	6465397	1995525	Certain	238	238	210	8/23/1983	0.74	0.80	0.00	0.00
1719 Golf Rd	66768	6465403	1997240	Certain	63	63	53	2/25/1971	0.77	0.82	0.00	0.00
1624 Golf Rd	346703	6465404	1997539	Certain	262	262	222	5/21/1990	0.77	0.83	0.00	0.00
3024 Golf Rd	172982	6465410	1992879	Certain	175	175	165	10/26/1987	0.68	0.73	0.00	0.00
3331 Golf Rd	495143	6465411	1991573	Certain	225	225	nd	5/12/1993	0.00	0.00	0.00	0.00
1526 Sycamore St	98339	6465416	2002922	Certain	84	84	74	10/4/1974	0.77	0.82	0.68	0.73

**Table 3. Potential Drawdown in Existing Private Domestic Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
2000 Belhaven Pl	145605	6465436	2008661	Certain	155	155	135	1/11/1978	0.00	0.00	0.00	0.00
3400 Golf Rd	576769	6465454	1991181	Certain	225	225	nd	10/2/1996	0.00	0.00	0.00	0.00
19016 Dennis Wy	65011	6465521	1985321	Certain	240	240	200	1/12/1986	0.00	0.00	0.00	0.00
10453 Golf Link Rd	158186	6465523	1982685	Certain	nd	152	132	11/11/1976	0.00	0.00	0.00	0.00
10329 N Golf Link Rd	290606	6465531	1987976	Certain	240	240	220	9/27/1988	0.00	0.00	0.00	0.00
10435 Golf Rd	252819	6465539	1987971	Certain	225	225	205	9/29/1987	0.00	0.00	0.00	0.00
10532 N Golf Link Rd	173112	6465545	1987488	Certain	250	250	230	4/23/1985	0.00	0.00	0.00	0.00
9312 N Golf Rd	247463	6465591	1989117	Certain	nd	nd	nd	7/1/1983	0.00	0.00	0.00	0.00
10589 Golf Link Rd	433867	6465604	1985119	Certain	245	245	nd	9/25/1991	0.00	0.00	0.00	0.00
11007 Golf Rd	144459	6465604	1986863	Certain	111	111	91	1/18/1978	0.00	0.00	0.00	0.00
10619 Golf Link Rd	252881	6465608	1985240	Certain	270	270	250	12/31/1987	0.00	0.00	0.00	0.00
10661 Golf Link Rd	173141	6465613	1985624	Certain	390	390	270	6/7/1985	0.00	0.00	0.00	0.00
nd	66743	6465648	1989772	Approx	100	100	90	5/8/1971	0.00	0.00	0.00	0.00
3823 N Hwy 59	516973	6465708	1995050	Approx	228	232	nd	10/18/1997	0.71	0.76	0.00	0.00
9596 Golf Rd	22621	6465712	1988799	Certain	107	107	80	7/25/1977	0.00	0.00	0.00	0.00
Winton	66742	6465717	1993770	Approx	nd	60	50	5/7/1971	0.68	0.73	0.00	0.00
11751 N Golf Link Rd	129529	6465778	1986296	Certain	185	185	145	8/18/1978	0.00	0.00	0.00	0.00
2300 Block	23336	6465797	2011277	Approx	140	140	120	3/22/1977	0.00	0.00	0.00	0.00
11351 N Golf Link Rd	580258	6465804	1986509	Certain	300	300	nd	2/22/1995	0.00	0.00	0.00	0.00
11318 Golf Rd	96906	6465809	1986616	Certain	175	175	155	5/22/1980	0.00	0.00	0.00	0.00
948 S Berkeley Ave	111857	6465812	1998766	Certain	52	52	42	9/9/1975	0.75	0.80	0.00	0.00
948 S Berkeley Ave	29342	6465815	1998506	Certain	198	nd	nd	12/7/1969	0.75	0.80	0.00	0.00
2813 Berkeley Ave	99774	6465822	2011296	Certain	206	206	193	7/2/1974	0.00	0.00	0.00	0.00
5901 Golf Link Rd	26581	6465823	1995582	Certain	81	81	61	7/18/1977	0.71	0.76	0.00	0.00
948 S Berkeley Ave	29342	6465824	1998631	Certain	198	nd	nd	12/7/1969	0.75	0.80	0.00	0.00
2219 N Berkeley Ave	85838	6465826	2009490	Certain	325	nd	nd	6/18/1973	0.00	0.00	0.00	0.00
2901 N Berkley Ave	147218	6465856	2008900	Certain	138	138	128	8/11/1978	0.00	0.00	0.00	0.00
1613 E Tuolumne Ave	247071	6465886	2009825	Certain	140	140	120	1/31/1983	0.00	0.00	0.00	0.00
10619 Golf Rd	250574	6465893	1987749	Certain	250	250	230	8/31/1988	0.00	0.00	0.00	0.00
1631 E Tuloumne	197569	6465915	2009843	Certain	218	218	198	5/8/1986	0.00	0.00	0.00	0.00
19199 Bradbury Rd	22903	6465966	1985889	Certain	65	65	55	2/13/1977	0.00	0.00	0.00	0.00
19141 Bradbury Rd	157631	6465997	1985903	Certain	95	95	85	6/1/1976	0.00	0.00	0.00	0.00
19141 Bradbury Rd	192230	6465998	1985891	Certain	225	223	195	7/18/1986	0.00	0.00	0.00	0.00
1685 El Capitan Wy	146817	6466001	2005504	Certain	143	143	128	8/1/1975	0.67	0.72	0.00	0.00
1801 East Ave	129518	6466071	2002922	Certain	120	120	80	7/12/1978	0.71	0.76	0.00	0.00

**Table 3. Potential Drawdown in Existing Private Domestic Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
16 Soderstrom Ln	129763	6466146	2002889	Certain	155	155	135	4/4/1978	0.71	0.76	0.00	0.00
1719 E Monte Vista Ave	65054	6466175	2012460	Certain	285	285	265	3/9/1987	0.00	0.00	0.00	0.00
1900 Paulson Rd	22431	6466409	1997399	Certain	160	160	135	2/9/1977	0.69	0.74	0.00	0.00
24 Soderstrom Ln	814870	6466490	2001839	Certain	270	270	nd	3/23/1999	0.69	0.74	0.00	0.00
18851 E Clausen Rd	246972	6466657	1988736	Certain	300	300	240	5/3/1982	0.00	0.00	0.00	0.00
2000 Brier Rd	148621	6466745	2000295	Certain	89	89	74	9/17/1976	0.67	0.72	0.00	0.00
2261 Golden State Blvd	76017	6466745	1995863	Certain	300	300	260	6/10/1981	0.00	0.00	0.00	0.00

nd indicates data not available from well driller's report

**Table 4. Potential Drawdown in Existing Private Irrigation Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
1685 El Capitan Wy	33805	6426035.18	1989138.08	Approximate	250	235	135	5/27/1977	0.75	0.81	0.75	0.80
813 S Moffett Rd	325323	6426060.41	1999690.51	Approximate	230	225	135	11/22/1989	0.68	0.73	0.79	0.84
547 Pedros Rd	24809	6426060.41	1999690.51	Approximate	240	240	90	5/25/1977	0.71	0.77	0.78	0.84
8505 Central Ave	71101	6426060.67	2010291.64	Approximate	nd	52	nd	3/21/1972	0.84	0.90	1.01	1.07
Bradbury Rd	26158	6431242.08	1983676.24	Approximate	217	217	30	7/3/1977	0.73	0.78	0.68	0.73
6006 S Central Ave	47939	6431242.08	1983676.24	Approximate	330	330	90	8/16/1977	0.79	0.85	0.71	0.76
1431 N Central Ave	250438	6431279.08	2010257.92	Approximate	365	365	100	4/23/1988	0.90	0.95	1.06	1.12
118 N Blaker Rd	290610	6431295.67	2004942.97	Approximate	160	160	120	9/28/1988	1.58	1.64	1.78	1.85
731 S Central Ave	325356	6431306.86	1999628.00	Approximate	125	125	115	2/16/1990	1.04	1.10	1.15	1.20
3431 S Moffett Rd	374491	6431307.61	1989086.56	Approximate	200	200	120	4/5/1991	1.05	1.10	1.03	1.09
5213 W Main St	21314	6431326.32	1994371.38	Approximate	nd	158	132	12/22/1976	1.11	1.16	1.10	1.16
2866 Robert Rd	54410	6431441.22	2015595.78	Approximate	273	270	140	10/18/1979	0.86	0.92	1.06	1.12
5202 S Faith Home Rd	495263	6436577.98	1989034.86	Approximate	65	65	nd	1/19/1994	1.00	1.05	0.90	0.95
4413 Prairie Flower Rd	47999	6436577.98	1989034.86	Approximate	360	360	90	7/26/1977	1.21	1.27	1.12	1.18
880 S Kirby Rd	433988	6436615.08	1994344.07	Approximate	nd	290	nd	4/28/1992	2.60	2.68	2.55	2.62
313 N Prairie Flower Rd	26589	6436615.08	1994344.07	Approximate	157	157	97	7/1/1977	1.80	1.87	2.25	2.32
3107 S Prairie Flower Rd	252984	6436615.08	1994344.07	Approximate	270	270	150	5/11/1988	1.67	1.74	1.60	1.67
3107 S Prairie Flower Rd	24670	6436615.08	1994344.07	Approximate	270	270	50	5/5/1977	1.64	1.71	1.60	1.67
3107 S Prairie Flower Rd	24674	6436615.08	1994344.07	Approximate	280	280	nd	5/14/1977	1.45	1.51	1.40	1.46
Ceres	21328	6436674.35	2010178.90	Approximate	nd	100	80	1/17/1977	1.15	1.21	1.45	1.51
936 W Monte Vista Ave	24605	6436798.22	2015501.43	Approximate	360	360	90	6/16/1977	1.04	1.10	1.28	1.34
6631 S Central Ave	76870	6436798.22	2015501.43	Approximate	410	410	128	5/13/1981	1.15	1.21	1.45	1.52
Hilmar	22988	6437175.66	2020889.82	Approximate	150	nd	nd	5/1/1977	0.68	0.73	0.88	0.93
1105 S Faith Home Rd	66746	6439499.33	1999330.72	Approximate	nd	nd	nd	5/6/1971	2.97	3.05	3.16	3.24
5672 Almaden Express	125355	6439564.77	2006090.83	Approximate	165	165	45	1/14/1975	2.30	2.37	2.91	2.99
9243 Merced Ave	46498	6441646.14	1978094.04	Approximate	244	244	184	1/4/1977	0.68	0.73	0.00	0.00
7613 W Main St	87162	6441773.53	1983533.42	Approximate	155	155	35	3/28/1974	1.07	1.13	0.94	0.99
1419 N Commons Rd	433901	6441813.07	2006615.78	Approximate	395	395	nd	10/31/1991	2.52	2.59	3.27	3.35
2801 S Prairie Flower Rd	252997	6441883.33	1988980.48	Approximate	380	380	220	5/24/1988	1.51	1.57	1.40	1.46
8413 Faith Home Rd	569169	6442033.05	2010121.21	Approximate	143	143	nd	8/5/1994	1.82	1.89	2.33	2.40
4112 N Walnut Ave	24663	6442033.05	2010121.21	Approximate	332	332	140	4/16/1977	1.75	1.82	2.21	2.28
8413 Faith Home Rd	33834	6442033.05	2010121.21	Approximate	373	360	135	7/22/1977	1.45	1.52	1.78	1.85
1852 River Rd	75762	6442107.43	2015490.70	Approximate	78	nd	nd	6/25/1971	1.45	1.52	1.77	1.84
6955 Faith Home Rd	433977	6442107.43	2015490.70	Approximate	140	140	nd	4/13/1992	0.90	0.96	1.10	1.15
5700 Zeering Rd	569318	6442107.43	2015490.70	Approximate	348	348	nd	4/18/1994	1.18	1.24	1.46	1.53

**Table 4. Potential Drawdown in Existing Private Irrigation Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
5213 W Main St	10124	6443324.58	2002187.33	Approximate	300	300	108	//0	4.33	4.59	5.61	7.39
4800 Fulkerth Rd	22995	6444478.73	2007252.22	Approximate	294	294	180	7/11/1977	2.63	2.70	3.31	3.40
PO Box 1803	226552	6444531.18	2005978.33	Approximate	162	162	112	10/13/1981	3.04	3.12	3.89	4.04
4207 W Simmons Rd	46290	6446316.17	1994242.21	Approximate	492	492	80	2/7/1978	3.11	3.19	2.46	2.53
9579 Hultberg Rd	22925	6446845.24	1977982.38	Approximate	138	138	24	4/1/1977	0.70	0.75	0.00	0.00
5831 S Tegner Rd	27004	6446845.24	1977982.38	Approximate	300	300	90	9/22/1977	0.76	0.81	0.00	0.00
5612 Hultberg Rd	35535	6447031.82	1983427.03	Approximate	200	nd	nd	7/18/1977	0.94	1.00	0.76	0.82
9579 N Hultberg Rd	168987	6447031.82	1983427.03	Approximate	320	320	230	4/2/1988	1.23	1.29	1.04	1.10
	35522	6447083.84	2007160.05	Approximate	205	nd	nd	5/25/1977	2.65	2.73	3.13	3.21
5612 Hultberg Rd	22932	6447191.97	1988934.47	Approximate	133	133	24	4/20/1977	1.65	1.72	1.34	1.40
5601 E Keyes Rd	24299	6447213.96	1994256.23	Approximate	120	120	nd	7/29/1969	3.70	3.83	2.83	2.91
1320 N Quincy Rd	168945	6447213.96	1994256.23	Approximate	220	220	160	3/7/1988	4.18	4.41	3.25	3.33
700 Sloat	90887	6447326.46	2015490.68	Approximate	136	132	nd	4/16/1975	1.51	1.58	1.76	1.83
4907 S Hwy 99	98326	6447326.46	2015490.68	Approximate	160	160	112	8/1/1974	1.18	1.24	1.36	1.42
5000 Esmar Rd	27005	6447326.46	2015490.68	Approximate	270	270	180	8/16/1977	1.00	1.06	1.16	1.22
4218 N Washington Rd	33802	6447326.46	2015490.68	Approximate	395	390	90	5/16/1977	1.19	1.25	1.47	1.54
4212 S Tegner Rd	22992	6449700.25	1987966.51	Approximate	330	330	210	7/12/1977	1.54	1.60	1.21	1.28
Tegner Rd	22625	6449728.79	1992879.07	Approximate	282	282	204	8/7/1977	2.39	2.46	1.88	1.95
3706 S Tegner Rd	22984	6449735.42	1990024.09	Approximate	264	264	72	1/1/1977	1.82	1.89	1.49	1.55
3406 S Tegner Rd	495157	6449741.96	1991132.74	Approximate	360	360	nd	6/11/1993	1.94	2.01	1.57	1.64
Turlock	495157	6449741.96	1991132.74	Approximate	360	360	nd	6/11/1993	1.94	2.01	1.57	1.64
4313 Tegner Rd	147961	6449759.55	1987492.41	Approximate	170	nd	nd	10/26/1979	1.47	1.53	1.17	1.23
2419 Tegner Rd	33816	6449759.55	1994438.95	Approximate	399	389	160	6/15/1977	2.76	2.83	2.17	2.24
22338 Short Rd	46529	6452297.20	1983331.22	Approximate	144	144	48	9/19/1977	0.98	1.03	0.78	0.83
21330 Johnson Ave	36315	6452297.20	1983331.22	Approximate	170	nd	nd	6/23/1977	0.69	0.74	0.00	0.00
4112 N Walnut Ave	24665	6452500.46	2010109.65	Approximate	340	340	140	4/23/1977	1.64	1.71	1.79	1.86
2219 W Monte Vista Ave	145652	6452500.46	2010109.65	Approximate	390	390	120	12/19/1977	1.30	1.36	1.43	1.50
PO Box 1318	582777	6452605.76	2015483.32	Approximate	125	27	nd	7/8/1994	1.17	1.23	1.31	1.37
3612 Mt View Ave	89357	6452605.76	2015483.32	Approximate	152	152	38	8/16/1973	0.79	0.84	0.91	0.97
4118 N Kilroy Rd	24684	6452605.76	2015483.32	Approximate	233	233	20	5/27/1977	1.12	1.18	1.24	1.30
10218 N Lander Ave	131009	6452605.76	2015483.32	Approximate	320	292	176	1/20/1978	1.03	1.09	1.11	1.17
Simmons Rd	85429	6453321.77	1994038.96	Approximate	211	211	37	5/11/1977	2.06	2.13	1.66	1.73
2136 S Walnut Ave	26166	6455041.71	1994694.30	Approximate	264	264	50	8/25/1977	1.82	1.89	1.53	1.59
20694 Johnson Rd	36311	6457586.65	1983268.57	Approximate	200	nd	nd	6/28/1977	0.70	0.75	0.00	0.00
9001 N Lander Ave	326962	6457586.65	1983268.57	Approximate	240	235	80	12/1/1989	0.71	0.76	0.00	0.00

**Table 4. Potential Drawdown in Existing Private Irrigation Wells in Area
(Feet)**

Well Address	DWR File Number	X	Y	Certainty of Location	Completed Depth	Depth to Bottom of Lowest Screen	Depth to Top of Highest Screen	Completion Date	Drawdown in Shallow Aquifer with WEC Site Well	Drawdown in Upper Aquifer with WEC Site Well	Drawdown in Shallow Aquifer with South Washington Well	Drawdown in Upper Aquifer with South Washington Well
4018 Swanson Rd	437539	6457727.21	1994094.05	Approximate	180	180	nd	7/20/1996	1.38	1.44	1.13	1.19
15760 N Ave	29212	6457794.80	2004721.77	Approximate	236	234	162	12/5/1978	1.25	1.31	1.20	1.26
1119 Pedros Rd	146260	6457810.30	2010076.55	Approximate	160	160	110	6/3/1975	1.22	1.28	1.21	1.27
11913 W East Ave	287352	6463012.21	1994061.97	Approximate	460	460	250	5/5/1989	0.71	0.76	0.00	0.00
1129 9th St	66752	6463047.34	1999387.87	Approximate	nd	nd	nd	2/3/1971	1.09	1.15	0.95	1.00
700 Crane Rd	66741	6463047.34	1999387.87	Approximate	nd	nd	nd	5/4/1971	1.02	1.07	0.89	0.94
101 Wayside	46286	6463070.33	2004680.61	Approximate	425	425	110	12/21/1977	1.08	1.14	1.04	1.10
421 E Olive Ave	90457	6463096.76	2010034.41	Approximate	146	146	126	9/23/1974	0.82	0.87	0.81	0.86

nd indicates data not available from well driller's report

Table 5. Parameter Values Used in Drawdown Calculation

Parameter	Value
Horizontal hydraulic conductivity	100
Vertical hydraulic conductivity	0.055
Specific storage	0.0001
Specific yield	0.1
Aquifer thickness	152.5
Pumping well depth to top of screen	50
Pumping well depth to bottom of screen	162.5
Shallow-aquifer monitoring well depth to top of screen	10
Shallow-aquifer monitoring well depth to bottom of screen	11
Shallow-aquifer monitoring well distance	Variable
Upper-aquifer monitoring well depth to top of screen	106
Upper-aquifer monitoring well depth to bottom of screen	107
Upper-aquifer monitoring well distance	Variable

**Table 6. Sensitivity of Drawdown to Aquifer-Parameter Values
(Feet)**

Parameter	Drawdown for Baseline		Drawdown with Reduced Parameter Value		Drawdown with Increased Parameter Value	
	Distance 0.25 Miles	Distance 2.0 Miles	Distance 0.25 Miles	Distance 2.0 Miles	Distance 0.25 Miles	Distance 2.0 Miles
Horizontal hydraulic conductivity	5.0	1.9	8.4	2.5	3.0	1.3
Vertical hydraulic conductivity	5.0	1.9	5.2	2.0	4.9	1.9
Specific storage	5.0	1.9	5.1	2.0	4.9	1.8
Specific yield	5.0	1.9	5.7	2.5	4.4	1.4