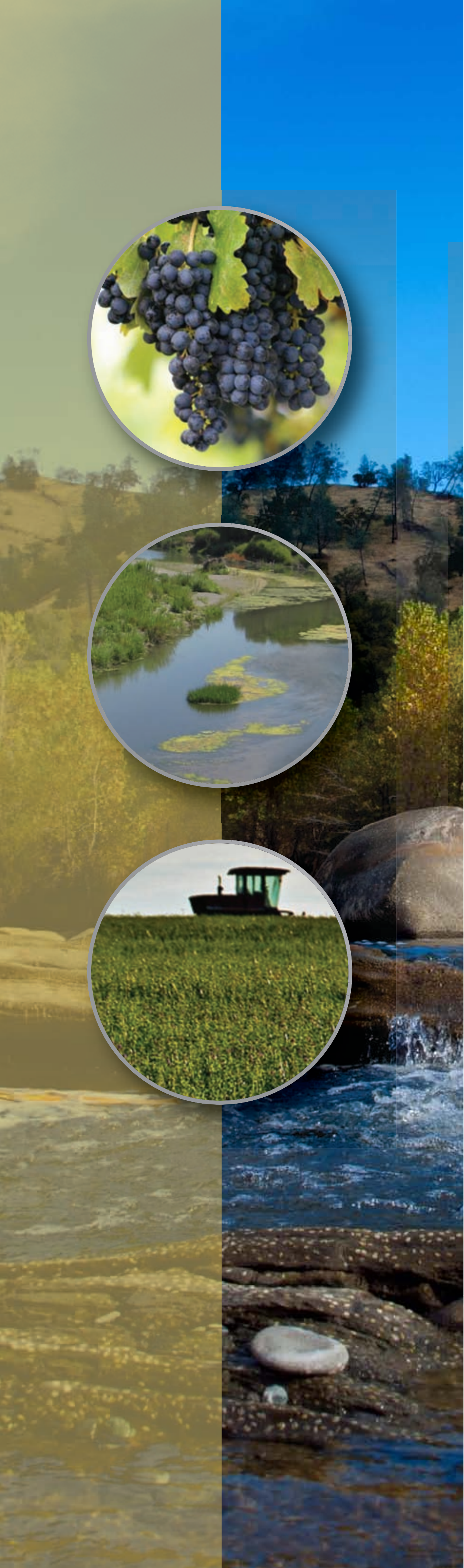

TECHNICAL MEMORANDUM

USING YOLO COUNTY INTERGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM) FOR

EVALUATION OF HYDROLOGIC EFFECTS OF

REGIONAL SURFACE WATER SUPPLY PROJECT & CACHE CREEK GROUNDWATER RECHARGE AND RECOVERY PROJECT

Prepared for:

Yolo County Flood Control and Water Conservation District

City of Woodland

City of Davis

Prepared by: RMC Water and Environment

October 2011

RMC
Water and Environment

October 4, 2011

Max Stevenson
Yolo County Flood Control and Water Conservation District
34274 State Highway 16
Woodland, CA 95695

Subject: Simulations of Regional Surface Water Supply Project and CCGRRP, Technical Memorandum

Dear Mr. Stevenson:

We are pleased to provide you with the Technical Memorandum (TM) of "Evaluation of Hydrologic Effects of Regional Water Resources Project: Regional Surface Water Supply Project and Cache Creek Groundwater Recharge and Recovery Project". We appreciate the opportunity to have worked with you, the Water Resources Association of Yolo County (WRA), and the Cities of Woodland and Davis.

The work resulting in this TM was performed using the Yolo County Integrated Groundwater and Surface water Model (YCIGSM). This model has proven to be a comprehensive, defensible and robust analytical tool for simulation of water resources projects in Yolo County. The model can play a strategic role in evaluation of impacts of other water resources projects, such as those condisdered under the Yolo IRWMP, including the environmental impacts in support of EIR/EIS activities.

This TM is the deliverable to meet the requirements for the contract funded by the DWR Local Groundwater Assistance (AB 303) grant.

The attached TM provides the following:

- Overview of YCIGSM;
- Description of the scenarios;
- Results of the analysis of the Regional Water Supply Project;
- Results of the analysis of the CCGRRP; and
- Summary and conclusion of findings, and recommendations for future work.

Please contact us should you have any questions about this report.

Sincerely,

Reza Namvar, Ph.D., P.E.
Project Manager

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Using Yolo County Integrated Groundwater and Surface water Model (YCIGSM)

For

Evaluation of Hydrologic Effects of
Regional Water Resources Projects:

Regional Surface Water Supply Project
&
Cache Creek Groundwater Recharge and Recovery Project

Technical Memorandum

October 2011

1 Purpose

This technical memorandum (TM) presents the assumptions, description, and analysis of four water resources projects for the Yolo County Flood Control and Water Conservation District (YCFCWCD) and the Cities of Woodland and Davis. These projects were analyzed using the Yolo County Integrated Groundwater and Surface water Model (YCIGSM). The following subjects are presented in this TM:

- Project Background
    - Overview of YCIGSM
    - Description of Water Resources Projects
- Scope of Work
- Baseline Conditions
- Simulation of Regional Surface Water Supply Project
- Simulation of Cache Creek Groundwater Recharge and Recovery Project
- Conclusions and Recommendations

2 Project Background

The analysis of the water resources projects presented in this TM was performed as part of the requirements of an AB303 Grant from California Department of Water Resources (DWR) for YCFCWCD. The water resources projects include:

- Regional Surface Water Supply Project which will replace groundwater supply with surface water from the Sacramento River to the cities of Woodland and Davis
- Cache Creek Groundwater Recharge and Recovery Project (CCGRRP)

Development of the scenarios and analysis of the results were performed in coordination with YCFCWCD and other project stakeholders. The following coordination and review meetings were held with the stakeholders:

- Kickoff Meeting with YCFCWCD, City of Davis (Public Works Department), and City of Woodland (Public Works Department) – April 1, 2011
- Meeting with City of Woodland (Public Works Department) – April 29, 2011
- Meeting with City of Davis (Public Works Department) – May 24, 2011

- Meeting with YCFCWCD – July 25, 2011
- Final Meeting with YCFCWCD, City of Davis (Public Works Department) and City of Woodland (Public Works Department) – August 10, 2011

A summary of those who attended the meetings is provided in Appendix A. In addition to the above meetings, several conference calls were held with the City of Woodland's consultant, West Yost Associates, to obtain the water supply and demand data and project information for development of the scenarios. Also, the latest Urban Water Management Plans (2010 UWMP) of Woodland and Davis were used to obtain the future water supply and demand estimates.

2.1 YoloIGSM

Analysis of the water resources projects was performed using the YCIGSM model. YCIGSM was developed in 2006 as an analytical tool for evaluation of water resouces projects in Yolo County (WRIME, 2006). YCIGSM has been used for analysis of an earlier version of the CCGRRP and evaluation of the environmental impact of a proposed development project in the vicinity of Cache Creek in Capay Valley.

YCIGSM simulates groundwater flow, surface water flow, stream-aquifer interaction, and land and water use processes. This model covers 884 square miles of Yolo County (Figure 1) and is bound to Sacramento River to the east, Colusa County to the north, and Solano County to the south. The model also extends into the Capay Valley. The model grid consists of 2,840 nodes and 3,068 elements grouped into 24 subregions representing the major urban areas, water purveyors, and hydrological areas (Figure 2). YCIGSM grid is further refined in subregions representing the cities of Woodland and Davis and the area along Cache Creek for improved model capabilities for simulation of water resources projects (Table 1).

Major rivers and creeks in Yolo County are represented by 424 stream nodes and 27 stream reaches in YCIGSM (Figure 3). More than 50% of the stream reaches are used to represent the Cache Creek downstream of the Capay Dam. This additional refinement was developed for simulation of CCGRRP.

YCIGSM uses 30 years of hydrologic data from 1971 to 2000 and was calibrated with observed data from 105 groundwater wells and 10 stream flow gages.

2.2 Water Resources Management Projects

The location of the water resources management projects that were simulated in this study are shown in Figure 1. The analysis consists of simulation of two scenarios for CCGRRP and two scenarios for Regional Surface Water Supply Project. The projects details are provided in the following subsections.

2.2.1 Cache Creek Groundwater Recharge and Recovery Project

Significant stream/aquifer interaction exists along Cache Creek downstream of Capay Dam to Yolo Bypass. Historical data indicate that, other than the segment in the vicinity of Interstate Highway 505, Cache Creek is a losing stream and significant percentages of high streamflows are recharged to groundwater. This provides important recharge, particularly after wet years and high streamflows, allowing for recovery of otherwise declining groundwater levels.

CCGRRP's main objective is to enhance the recharge capabilities of Cache Creek by increasing direct recharge and/or lowering groundwater levels that will result in increased available aquifer storage to recive higher volumes of recharged water. Enhanced direct recharge was evaluated in a previous study by directing a portion of high winter streamflows to adjacent aggregate mining pits.

The current study simulates increased groundwater pumping in the vicinity of Cache Creek in summer times (Figure 1). This will lower the groundwater levels and result in enhanced Cache Creek streambed recharge in winter times and during high streamflows. The objective of the simulations is to quantify the increases in Cache Creek recharge rates and changes in aquifer storage. Details of the CCGRRP simulations are presented in Section 6.

2.2.2 Regional Surface Water Supply Project

The cities of Woodland and Davis rely on groundwater for meeting the municipal water demands. The City of Woodland uses shallow wells while the City of Davis uses deeper wells with better water quality. The recent regulations on wastewater quality requires the cities of Davis and Woodland to improve the quality of the treated wastewater before it is discharged. The solution pursued by Woodland and Davis is to replace the groundwater with high quality surface water from Sacramento River. Changing the source water will result in acceptable wastewater quality.

The Regional Surface Water Supply Project consists of a water intake structure, a raw water pipeline, a water treatment plant, and treated water pipelines to Woodland and Davis (Figure 1). Replacement of groundwater with surface water from Sacramento River was simulated in this study. The objective of the simulations is to quantify the impact of the project on groundwater levels and changes in aquifer storage. Details of the Regional Surface Water Supply Project are presented in Section 5.

3 Scope of Work

The main objective of this study is to evaluate the impact of the CCGRRP and Regional Surface Water Supply projects using the YCIGSM. The scope of work consisted on the following tasks:

- Task 1 – Develop and evaluate revised CCGRRP scenarios,
- Task 2 – Develop and evaluate Regional Surface Water Supply Project scenarios,
- Task 3 – Project management, and
- Task 4 – Preparation of technical memorandum (TM).

A total of four scenarios (two per tasks 1 and 2) were prepared in this study. Additionally, a new 2017 baseline conditions simulation was developed as a frame of reference for evaluation of the impact of the project scenarios.

4 Baseline Conditions

A baseline conditions simulation is usually used as a frame of reference for the project scenarios. Comparison of the results of the project scenarios and baseline simulation will show the impact of the projects. A previous YCIGSM study (WRIME, 2006) included development of a baseline conditions simulation that represented the year 2000 conditions. For this study, a new 2017 baseline conditions simulation was developed, corresponding to the planned initial surface water deliveries. Surface water delivery to the cities of Woodland and Davis is scheduled to begin in 2016; however, the first full year of surface water delivery of 2017 was selected for the baseline conditions simulation. The baseline conditions simulation represents the 2017 water demand rates of the cities of Davis and Woodland and UC Davis. Details of the baseline conditions simulation is presented in the following subsections. The differences of the 2000 and 2017 baselines are presented in subsection 4.4.

4.1 Land Use and Water Demand

Land use surveys of 1973, 1976, 1981, 1989, and 1997 are available from DWR for Yolo County. The latest land use of 1997 was used for development of the 2017 baseline conditions (2017 Baseline) simulation. The land use conditions within the sphere of influence of cities of Davis and Woodland were kept the same as the latest land use survey; however, the water demand rates were adjusted to represent the 2017 water demand levels. Estimates of 2017 urban water demands are presented in subsection 4.3.

Agricultural water demands were estimated based on the level of development fixed at the 1997 land use conditions. However, changes in irrigation water demands due to hydrologic variability for the period October 1970 through September 2000 was estimated. This estimation takes into account evapotranspiration, irrigation efficiency, and soil moisture requiremet data from the historical model data sets.

Groundwater pumping to meet agricultural water demands is estimated based on the difference between agricultural water demands and surface water supplies.

Initial groundwater levels are equal to the September 2000 levels as determined by the calibration YCIGSM.

4.2 Hydrologic Conditions

Similar to the 2000 Baseline, the 2017 Baseline incorporates hydrologic data from October 1970 through September 2000 obtained from the YCIGSM historical calibration model run.

Surface water diversion data for the 1971-2000 period were incorporated from the historical model. Similarly, stream inflow data for the 1971-2000 period were incorporated from the historical model, except for the Cache Creek inflow data. Two sets of Cache Creek inflow data are available:

- Historical - Historical (1971-2000) stream inflow data were used for YCIGSM calibration. Flow at Rumsey is based on USGS and DWR gages at Rumsey. Capay release is based on recorded observations and flow records at Rumsey and Yolo gages.
- 2000 Baseline – Flow at Rumsey and Capay releases are based on Cache Creek System Operation Model estimated stream flows.

Annual Cache Creek stream inflows and Capay releases for Historical and 2000 Baseline conditions are illustrated in Figures 4 and 5. Cache Creek stream flow rates for 2000 Baseline are significantly lower than the Historcal rates. Cache Creek recharge rates for the Capay Dam to Settling Basin segment of the river is, in part, dependent on Capay releases. YCIGSM was used to quantify the Cache Creek recharge rates for the Historical and 2000 Baseline stream flow rates. Annual Cache Creek recharge rates for Historical and 2000 Baseline are shown in Figure 6. The average recharge rate of 1971-2000 for the Historical and 2000 Baseline Capay releases are 37,800 AFY and 33,600 AFY, respectively.; however, higher percentages of Capay releases are recharged for the 2000 Baseline streamflows. This is due to spread of high streamflows over longer periods for the 2000 Baseline. Cache Creek recharge rates in dry to normal years is approximately 10,000 AFY to 20,000 AFY. However, the recharge rates significantly increase to 80,000 AFY or more with high streamflow rates in wet years. Similarly, a previous study evaluated the Cache Creek groundwater recharge rates for 1959-1979 period and showed that the estimated Cache Creek groundwater recharge rates could be as high as 115,000 AFY in wet years (Figure 7).

Both Historical and 2000 Baseline Cache Creek stream inflow rates were used for analysis of the CCGRRP.

4.3 Urban Water Demand

Urban water demands in 2017 Baseline simulation are equal to the year 2000 values used in the historical YCIGSM model, except for Cities of Woodland and Davis and UC Davis. Installation of water meters and implementation of conservation measures for cities of Davis and Woodland are expected to reduce the water demand in the near future. Water demand is expected to decrease 20% by year 2020.

The Regional Surface Water Supply Project was simulated as the following scenarios:

- 2017 Conditions Scenario – First full year of surface water delivery as Phase I of the project.
- 2040 Conditions Scenario – Operation of surface water delivery project at full capacity.

The latest urban water management plans (UWMPs) of Woodland and Davis were used to estimate the urban water demand of the 2017 and 2040 Scenarios. For the 2017 Baseline, the urban water demand was met by groundwater pumping, while for the 2017 and 2040 Scenarios the urban water demand was met by available surface water and groundwater. The following subsections present the details of the urban water demands of Woodland and Davis and UC Davis.

4.3.1 Urban Water Demand for City of Woodland

The annual water demand estimates for 2017 and 2040 conditions were obtained from the City of Woodland 2010 UWMP (Table 2). As shown in Table 2, the 2010 UWMP provides estimates of urban water demand in 5 year increments for years 2015 to 2035 and for various hydrological year types. A 1.1% growth rate was assumed from 2015 to 2035. Using linear interpolation and extrapolation techniques, urban water demands for 2017 and 2040 were obtained from UWMP rates. Urban water demands of 15,080 AFY and 19,450 AFY for the average year type were used for the 2017 and 2040 Scenarios.

The monthly distribution of urban demand was obtained from 2005-2010 monthly pumping production data from City of Woodland (Figure 8). These monthly percentages were used to calculate the monthly demand rates for the 2017 and 2040 Scenarios.

For the 2017 Baseline, the monthly urban water demand will be met by pumping from existing and future municipal wells. Based on the information from the Public Works Department of City of Woodland, there will be seven active municipal wells in 2017 and 2040 (Figure 9). The monthly pumping rates will be distributed to these wells based on well capacities.

4.3.2 Urban Demand for City of Davis

The annual and monthly water demands for City of Davis were obtained from the 2010 UWMP. The urban water demand was estimated to be 13,315 AFY in 2017 and increased at 1% per year to 16,700 AFY in 2040. The monthly demand rates for 2017 and 2040 are illustrated in Figure 10. Based on the information from the Public Works Department of City of Davis, there will be five active municipal wells in 2017 and 2040 (Figure 9). The monthly pumping rates will be distributed to these wells based on well capacities.

4.3.3 Urban Demand for UC Davis

The annual water demands for UC Davis were obtained from the Woodland-Davis Water Supply Project Draft EIR. The urban water demand was estimated to be 3,200 AFY in 2017 and increased at 1% per year to 4,015 AFY in 2040. The demand growth rate based on 1% student population growth rate estimate from the Historical Campus Population Records. The monthly demand rates for 2017 and 2040 are based on City of Davis monthly demand ratios. The monthly pumping rates will be distributed to the existing UC Davis municipal wells (Figure 9) based on well capacities.

4.4 2000 versus 2017 Baseline Conditions

The main differences between the new 2017 Baseline and previous 2000 Baseline simulations are the small decreases in 2017 urban water demands for UC Davis and cities of Woodland and Davis and shifting of municipal pumping to wells in the eastern areas of cities of Woodland and Davis. The impact of these differences are shown in the groundwater level difference contour map of Figure 11. This map shows the groundwater levels at the end of 2017 Baseline minus the groundwater levels at the end of 2000 Baseline simulations which correposnds to Fall 2000 hydrological conditions. Higher groundwater levels are observed on the western parts of Woodland and Davis due to lower pumping rates. Lower groundwater levels are observed on the eastern parts of the cities due to shifting of pumping to wells on the east side of the cities.

5 Simulation of Regional Surface Water Supply Project

The Regional Surface Water Supply Project consists of a water intake at Sacramento River, a raw water pipeline, a water treatment plant, and treated water pipelines to the cities of Woodland and Davis (Figure 1). The Regional Surface Water Supply Project was simulated as two scenarios representing the intial and final phases of the project. The two scenarios are as follows:

- 2017 Conditions Scenario – Phase I of the Project with first full year of surface water delivery.
- 2040 Conditions Scenario – Project at full capacity.

Details of projected urban water demands and water treatment plant capacitiy are provided in Table 3. The annual capacity of the treatment plant is sufficiently higher than the annual urban demand; however, the monthly urban water demands in July and August exceed the plant capacity (Figure 12). Additionally, the available surface water rights are sometimes less than the plant capacity. The deficiency of urban water demand will be met by groundwater. Details of project water rights and distribution of treated surface water are explained in the following subsections.

5.1 Project Water Rights

The surface water rights for the Regional Surface Water Supply Project consists of the following water rights from Sacramento River:

- Primary (30358) Water Rights – Consists of 45,000 AFY of Sacramento River water; however, this water is not available during Term 91 curtailments.
- Conaway Preservation Group (CPG) Water Right: Consists of 10,000 AFY during April through October with only 7,500 AFY being available during July through September. These rates are respectively reduced by 25% to 7,500 AFY and 5,625 AFY during Shasta critical years.

The project water rights are subject to Term 91 curtailments and Shasta critical years. The future occurrence of these limitations are unknown; however, in a recent study by MBK Engineers the CalSim II model was used to estimate the future occurrences of Term 91 and critical years (Chris Malone, Personal Communications, West Yost Associates, 2011). MBK Engineers used 1922-2002 historical hydrology with assumed future Term 91 criteria and estimated the annual occurrences of the water rights limitations (Figure 13). Figure 13 shows that no Term 91 is expected to be called for years with wet hydrological conditions of 1982 and 1998 On the other hand, seven months of Term 91 occurred for years with dry hydrological conditions of 1977 and 1992. Four Shasta critical years (1977, 1991, 1992, and 1994) occurred between 1970 and 2002. The montly distribution of Term 91 curtailments and Shasta critical years from October 1969 to September 2000 is presented in Figure 14. Term 91 daily curtailment data for 1984-2009 with monthly and annual totals are shown Table 4. The highest number of days with Term 91 curtailments occurred in 1992 and 2008.

5.2 Distribution of Treated Surface Water

Monthly water rights availability information, as shown in Figure 14, was used to determine the available surface water for the 2017 and 2040 Scenarios of the Regional Surface Water Supply Project. Distribution of surface water in 2017 when plant capacity is expected to be 40 million gallons per day (MGD) is as follows:

- City of Davis = 16 MGD
- City of Woodland = 23 MGD
- UC Davis = Maximum of 2000 AFY (1.8 MGD) or 4.5% of available water

Based on the above rates, the available surface water for 2017 and 2040 scenarios was distributed according to the following percentages:

- City of Davis = 39.2%
- City of Woodland = 56.4%
- UC Davis = maximum of 4.4% of available water or 2000 AFY

The available surface water for any given month was distributed to each location based on the above ratios. The available surface water for each location was compared to the monthly demand. If surface water is less than the monthly demand then groundwater is used to supplement the surface water;

otherwise, no groundwater is used for that month. Maximum allowable groundwater use as percentage of total demand, based on wastewater quality requirements, are a follows:

- City of Davis = 65%
- City of Woodland = 30%
- UC Davis = 65%

At times the available surface water will not be sufficient to meet the maximum groundwater use requirements. If available, sources other than groundwater should be used to meet the remaining demand; however, for Scenarios 2017 and 2040, no other sources of water are assumed to be available and excess groundwater was assumed will be used to meet the demand.

Monthly distribution of surface water and groundwater to the City of Woodland for the 2040 scenario and for a few selected hydrological year types is shown in Table 5. The top row of Table 5 show the monthly demand of 2040 Scenario. There are four rows of supply for each hydrologic year type:

- Primary Surface Water Supply (30358)
- CPG Surface Water Supply
- Allowable Groundwater Use
- Excess Groundwater Use

The months with no 30358 or CPG water are grayed out in Table 5. For each month, the demand is met by the above supply sources in the order listed. Table 5 provides water distribution for several representative hydrological years and a wet and dry hydrological conditions are explained here:

- 1982 – Wet hydrological conditions – All of the demand is met by 30358 water. No CPG or groundwater is used.
- 1992 – Dry hydrological conditions – 30358 water is only available during January to April and December. CPG water is available at the reduced rate only. Allowable groundwater and excess groundwater is used to meet the demand during May to November.

The average annual supply and demand rates for 30 years of simulation for the 2017 and 2040 simulations are provided in Tables 6 and 7, respectively. As shown in these tables, the surface water is not sufficient to meet the urban demands. In 2017, 741 AFY of excess groundwater is used to meet the demand. The excess groundwater use is increased to 1,539 AFY for the 2040 Scenario.

Detailed tables of monthly distribution of supply and demand for the 2017 and 2040 Scenarios and for each project is provided in Appendix B.

The available surface water for the 2017 and 2040 Scenarios are less than the capacity of the Regional Water Treatment Facility (RWTF) in winter times. The average unused capacity of RWTF for 2017 and 2040 Scenarios is shown in Table 8. Detailed monthly unused capacity of RWTF is provided in Appendix B. The unused RWTF capacity could be used for treatment and recharge of available surface water that could be used in summer times when available surface water is not sufficient to meet the urban demand. Aquifer Storage and Recovery (ASR) or similar projects could be used for this purpose. Currently, the City of Woodland is evaluating the feasibility of additing an ASR project to the Regional Surface Water Supply Project to fulfill their urban demand.

5.3 Impact of Regional Surface Water Supply Project

Sacramento River water delivery to the cities of Woodland and Davis will result in significantly less groundwater pumping from the municipal wells and higher groundwater levels. Changes in groundwater levels north of Woodland are also expected to impact Cache Creek streamflows. Detailed project impacts are presented in the following subsections.

5.3.1 Rise in Groundwater Elevations

Reduced groundwater pumping in the 2017 and 2040 Scenarios results in significantly higher groundwater elevations. This impact could be observed in groundwater level hydrographs and head difference contour maps. Simulated groundwater elevations at several observation wells in the cities of Woodland and Davis show similar rise in groundwater levels. Hydrographs of two of these wells are presented here.

Simulated groundwater elevations and changes in groundwater elevations in observation well 57 in Woodland are shown in Figures 15 and 16. Figure 15 shows a map with the location of well 57 and four sets of simulated groundwater elevations. The left part of the chart shows the simulated groundwater elevations for the historical calibration run (1970-2000) and the right part of the chart shows simulated groundwater elevations for the 2017 Baseline and 2017 and 2040 Scenarios (years 1 to 30 of the simulations). Simulated groundwater elevations for 2017 and 2040 Scenarios are significantly higher than those of the 2017 Baseline and rise to 45 ft, msl in wet years.

The increases in groundwater elevations in well 57 for the 2017 and 2040 Scenarios over the 2017 Baseline conditions are shown in Figure 16. The groundwater elevation increase changes from 1 foot to approximately 35 feet. The groundwater elevation increase for the 2040 Scenario is a few feet less than that of 2017 Scenario. This is due to the fact that, even though the 2040 Scenario has more surface water imported to Woodland; however, groundwater pumping for the 2040 Scenario is higher by approximately 1,500 AFY (Tables 6 and 7).

Simulated groundwater elevations and changes in groundwater elevations in observation well 76 in Davis are shown in Figures 17 and 18. Simulated groundwater elevations for the 2017 and 2040 Scenarios are higher than those of the 2017 Baseline and rise to 30 ft, msl in wet years (Figure 17). The groundwater elevation increase changes from 1 foot to approximately 28 feet (Figure 18). Similar to well 57, the elevation increases in well 76 for the 2040 Scenario is a few feet less than that of the 2017 Scenario. Groundwater pumping in Davis for the 2040 Scenario is approximately 1,200 AFY higher than 2017 Scenario rates (Tables 6 and 7).

Head difference contour maps of Figures 19 and 20 show the extent of the impact of surface water delivery project on groundwater elevations. For 2017 Scenario, groundwater elevation increase within the city of Woodland is more than 20 feet (Figure 19). The five foot contour line extends to approximately 2 miles outside the city limits. Similarly, groundwater elevation increase within the city of Davis is more than 10 feet. The five foot contour line extends 1 to 3 miles outside Davis sphere of influence. The groundwater elevation increases for 2040 Scenarios are slightly less than those of 2017 Scenario but similar pattern of groundwater elevation increase can be observed in Figure 20.

The Regional Surface Water Supply Project provides significant amounts of surface water to cities of Davis and Woodland; however, due to water rights and facilities constraints, groundwater will be used to supplement the surface water (Tables 6 and 7). Groundwater use is limited to the allowable rates so the wastewater quality criteria will not be violated. As shown in Tables 6 and 7, unless other water sources are available, excess groundwater should be used to meet the water demand. In winter times, excess water rights and facilities capacity could be used to produce and store additional treated surface water. This water could be used to meet the demand in summer months when available surface water and allowable groundwater is not sufficient to meet the demand. A method of surface water storage being considered by City of Woodland is to store the water underground using techniques such as the Aquifer Storage and Recovery (ASR). However, high groundwater elevations of the 2017 and 2040 Scenarios indicate that aquifer storage may not be sufficient for ASR and similar underground storage projects.

5.3.2 Increase in Cache Creek Flows

Cache Creek runs approximately two miles north of Woodland. Significant stream-aquifer interaction exists between Cache Creek and the underlying aquifer. Groundwater levels in wells in Woodland area, such as Woodland well 12, change as a result of changes in Cache Creeks flows. Similarly, increases in groundwater elevations will reduce the Cache Creek groundwater recharge and result in higher flows in Cache Creek.

The Regional Surface Water Supply Project will result in higher groundwater elevations in the vicinity of Cache Creek and lower Cache Creek groundwater recharge causing an increase in Cache Creek flows. Figures 21 and 22 show the annual and average increases in Cache Creek flow due to the 2017 and 2014 Scenarios. The 2017 and 2040 Scenarios results in 3,540 AFY and 3,470 AFY increases in Cache Creek flows, respectively.

6 Simulation of Cache Creek Groundwater Recharge and Recovery Project

Historical data and previous YCIGSM modeling efforts indicate that a high level of stream-aquifer interaction exists between Cache Creek and the underlying aquifer and that low groundwater levels will recover with recharge from high Cache Creek flows. This feature of Cache Creek is used to develop the Cache Creek Groundwater Recharge and Recovery Project (CCGRRP). CCGRRP is simulated as two scenarios.

As explained in subsection 4.2, two sets of Cache Creek streamflow data are available. Both of these data sets, the historical and 2000 Baseline, are used for analysis of CCGRRP scenarios. Due to similarities of these two streamflow data, the impact of CCGRRP is only shown for 2000 Baseline streamflows in subsections 6.2.1 and 6.2.2. However, the Cache Creek Scenarios water budget of subsection 6.2.3 presents the water budget for both streamflow data sets.

6.1 CCGRRP Scenarios

CCGRRP, as simulated in this study, consists of summer time groundwater pumping in the vicinity of the Moore and West Adams canals (Figure 9). The summer time groundwater pumping will lower the groundwater levels and will result in increased Cache Creek groundwater recharge in the following winter.

CCGRRP is simulated as two scenarios:

- Low Pumping Scenario – This scenario consists of groundwater pumping at 10,000 AFY for delivery to Moore Canal.
- High Pumping Scenario – This scenario consists of the Low Pumping Scenario plus additional 10,000 AFY groundwater pumping for delivery to West Adams Canal.

Groundwater pumpings for these scenarios only occur when YCFCWCD is making more than 100,000 AFY of surface water deliveries. Therefore, using the historical delivery data, no project groundwater pumping will occur in years 7 and 19-21 of simulation which corresponds to 1977 and 1989-1991 hydrological conditions. Annual groundwater pumping and water deliveries for Moore and West Adams canals for Low Pumping and High Pumping Scenarios are illustrated in Figures 23, 24, and 25. Annual groundwater pumpings for Low Pumping and High Pumping Scenarios are limited to 10,000 AFY and 20,000 AFY, respectively. The remaining deliveries to Moore and West Adams canals are provided from Cache Creek.

6.2 Impact of CCGRRP

CCGRRP groundwater pumping is expected to lower the groundwater levels in the vicinity of Cache Creek and result in increased Cache Creek groundwater recharge. This will also result in lower streamflows in Cache Creek. Detailed project impacts are presented in the following subsections.

6.2.1 Reduction of Cache Creek Streamflows

The increased groundwater recharge will result in reduced Cache Creek streamflows. This is shown in change in streamflow hydrographs at several points along Cache Creek from Capay Dam to Moore Siphon (Figures 26, 27, and 28). These figures show the changes in Cache Creek monthly streamflow rates due to groundwater pumping of the Low Pumping and High Pumping CCGRRP Scenarios. The maps show the location of the stream nodes, the green line show the streamflow changes for Low Pumping Scenario, and the dashed red line show the streamflow changes for High Pumping Scenario. The High Pumping Scenario resulted in lower streamflows in all three locations. The Low Pumping Scenario resulted in significant streamflow reduction in location 192 only. At streamflow location 192, Cache Creek streamflows are reduced by a maximum of 50 cfs for the Low Pumping Scenario and by a maximum of 110 cfs for the High Pumping Scenario. Figures 26, 27, and 28 show the impact of the CCGRRP project on reduction of 2000 Baseline streamflows. The impact of the CCGRRP project on reduction of Historical streamflows is similar to these figures and is not shown here.

6.2.2 Changes in Groundwater Elevations

Impacts of the CCGRRP Project on groundwater elevations are shown by groundwater elevation hydrographs at two observation wells along the Cache Creek and two observation wells to the north and south of the Cache Creek (Figures 29, 30, 31, and 32). The left side of the hydrographs show the groundwater elevations for the historical calibration simulation (1970-2000). The right side of the hydrographs show the groundwater elevations for the 2017 Baseline simulation and Low Pumping and High Pumping Scenarios for years 1 to 30 of the simulations. As shown by the calibration and 2017 Baseline hydrographs, groundwater levels drop during dry years but recovers during wet years. The hydrographs of the Observation Well 28 show significant reduction in groundwater elevations for both Low Pumpig and High Pumping Scenarios; however, the groundwater elevations rise to 2017 Baseline levels. The impact of the Low Pumping Scenario is not very significant at observation wells 14, 19, and 50. This is due to the fact that most of the Low Pumpig Scenario impacts are observed east of Interstate Highway 505. This is shown in the groundwater level difference contour map of Figure 33. The biggest impact are observed along the Cache Creek between Highways 505 and 5. Groundwater elevations reduction area extends east to city of Woodland where 2 to 4 deep of drop is shown in Figure 33. The extent of the impact of the High Pumping Scenario on groundwater elevations is shown in the groundwater level difference contour map of Figure 34. Most of the impact is limited to the area along Cache Creek and extends 3 to 4 miles to the north and 3 to 4 miles to the south. Groundwater elevations reduction in Woodland is 4 to 8 feet for High Pumping Scenario.

6.2.3 CCGRRP Scenarios Water budget

The impacts of the CCGRRP Scenarios are summarized in the a water budget table (Table 9). As explained earlier, both Cache Creek streamflow data sets of 2000 Baseline and Historical conditions were used for CCGRRP Scenarios. These are shown by two rows of water budgets for each CCGRRP Scenario of Table 9. The water budget table shows the averages of water budget components for 30 years of simulation. The increased groundwater pumping of CCGRRP Scenarios are balanced off by changes in Cache Creek groundwater recharge, increases in nearby streams groundwater recharge, decreases in aquifer storage, and miscellaneous changes.

Cache Creek groundwater recharge increases in the Capay Dam to Moore Siphon section resulting in lower streamflows downstream from Moore Siphon which in turn will result in lower Cache Creek groundwater recharge in the Moore siphon to Settling Basin section.

Lower groundwater elevations of the CCGRRP Scenarios result in increased groundwater recharge from Yolo Bypass, Willow Slough, Sacramento River, and Colusa Basin Drain. However, increased groundwater recharge from Cache Creek and other rivers and canals is not sufficient to compensate for the increased groundwater pumping. Thus, aquifer storage will be reduced and groundwater levels will be lowered. Groundwater elevation decreases in the vicinity of the Cache Creek are significant but, as expected, they recover soon after high streamflow rates. However, groundwater elevation decreases away from the Cache Creek are not as significant but recover at significantly slower rates.

Aquifer storage loss for the Low Pumping Scenario changes from 1,240 to 1,690 AFY or 15% to 20% of the CCGRRP groundwater pumping for Historical and Baseline Cache Creek streamflows, respectively. Aquifer storage loss for the High Pumping Scenario changes from 3,000 to 4,090 AFY or 17% to 24% of the CCGRRP groundwater pumping for Historical and Baseline Cache Creek streamflows, respectively.

7 Conclusions and Recommendations

The Yolo County Integrated Groundwater and Surface water Model (YCIGSM) covers nearly all of Yolo County and has been calibrated for the 1970-2000 hydrologic time period. It is the model of choice for assessing various water resources scenarios and a reliable tool for water resources planning and management. In this study, the YCIGSM was used to assess the impact of the Cache Creek Groundwater Recharge and Recovery Project (CCGRRP) and Regional Surface Water Supply projects. The following sections provide the conclusions and recommendations of this study.

7.1 Conclusions

Four YCIGSM simulations were developed to evaluate the impact of the Regional Surface Water Supply and the CCGRRP projects. The simulations for the Regional Surface Water Supply Project consist of the following scenarios:

- 2017 Scenario representing the Phase I of the project in 2017 indicating the first full year of surface water delivery, and
- 2040 Scenario representing the project at full capacity.

The simulations for the CCGRRP consisted of the following scenarios:

- Low Pumping Scenario with 10,000 AFY groundwater pumping for delivery to Moore Canal, and
- High Pumping Scenario with 20,000 AFY groundwater pumping for delivery to Moore Canal and West Adams Canal.

The conclusions of the simulations of these two important regional water resources projects are provided in the following subsections.

7.1.1 Regional Surface Water Supply Project

The Regional Surface Water Supply Project will provide surface water from Sacramento River to Woodland, Davis, and UC Davis to help meet existing and future water demands, improve drinking water quality, and improve the quality of treated wastewater.

Project Water Rights – The project water rights include 45,000 AFY of Primary (30358) water rights and 10,000 AFY of Conaway Preservation Group (CPG) water rights. These water rights are subject to Term 91 Curtailments and Shasta Critical Year conditions.

Available Surface Water – Water deliveries will be limited during summer and dry periods. Groundwater will continue to be used when water demand cannot be met with surface water supplies alone. The long-term average surface water delivery for the 30-year simulation period of the 2017 and 2040 scenarios were 83% and 79% of water demand, respectively.

Groundwater Elevations – The Regional Surface Water Supply Project will result in reduced groundwater pumping and a rise in groundwater elevations. Groundwater levels in Woodland and Davis area are estimated to have a maximum rise of approximately 30 feet, under the project conditions, to an elevation of approximately 45 ft and 30 ft, msl in wet years, respectively. Groundwater elevation rises are highest in the Woodland and Davis area and gradually reduce to non-project conditions within two miles outside the cities. See Section 5.3.1 for more detail.

Cache Creek Streamflows – The impact area of the project extends north to Cache Creek where groundwater elevations are estimated to be approximately 10 feet higher than the non-project conditions. This will result in lower recharge rates from Cache Creek to groundwater and consequently, higher streamflows. See Section 5.3.2 for more detail.

Impact on CCGRRP – The impact area of the project extends to eastern parts of the CCGRRP where groundwater elevations could be approximately 5 feet higher than the non-proejct conditions. This is in contrast to the CCGRRP project objective of enhancing Cache Creek groundwater recharge by pumping groundwater and lowering the groundwater levels.

7.1.2 CCGRRP Project

Historical data indicate that significant stream-aquifer interaction exists along Cache Creek from the Capay Dam to the Settling Basin. High Cache Creek streamflows provide large quantities of groundwater recharge resulting in significant rises in groundwater levels. The concept of CCGRRP was developed based on the stream-aquifer interaction characteristics of Cache Creek. The purpose of the CCGRRP project is to enhance groundwater recharge along Cache Creek by pumping groundwater and lowering the groundwater levels in the vicinity of the river. This will increase the available aquifer storage for additional groundwatger recharge. The premise is that the long-term average of CCGRRP groundwater pumping would be offset by the additional recharge from Cache Creek, and adverse impacts on groundwater storage would be minimal. The pumped groundwater would be available for YCFCWCD use.

Groundwater Pumping – The CCGRRP simulations included a Low Pumping Scenario with 10,000 AFY of groundwater pumping at Moore Siphon area and a High Pumping Scenario with 20,000 AFY of groundwater pumping at Moore Siphon (10,000 AFY) and West Adams (10,000 AFY) areas.

Cache Creek Recharge - The results of the two CCGRRP scenarios indicated that the long-term average groundwater recharge along Cache Creek from the Capay Dam to Moore Siphon increases by more than 6,000 AFY and 13,000 AFY for the Low Pumping and High Pumping Scenarios, respectively. Increased Cache Creek recharge upstream of Moore Siphon will reduce Cache Creek flows past this point resulting in approximately 2000 AFY to 4000 AFY less groundwater recharge from Moore Siphon to Settling Basin for the Low Pumping and High Pumping Scenarios, respectively.

Groundwater Elevations – The impact of the CCGRRP on groundwater elevations is greatest along Cache Creek. Groundwater levels in the vicinity of Cache Creek respond quickly to changes in streamflows. However, changes to groundwater levels further away from the river (1 to 2 miles) show slower response to changes in streamflows.

Groundwater Storage – The simulations showed that the long-term average Cache Creek groundwater recharge is not sufficient to offset the pumped groundwater, as conceptualized. Approximately 15% to 24% of pumped groundwater comes from aquifer storage for the Low Pumping and High Pumping scenarios, respectively.

Impact on the Regional Surface Water Delivery Project – The simulations showed that the impact area of CCGRRP extends east to Woodland area where the long-term groundwater levels could drop by up to 8 feet as a result of CCGRRP groundwater pumping.

7.1.3 Cumulative Impact Analysis

Simulations of the two important regional projets of CCGRRP and Regional Surface Water Supply Project were performed individually. However, the simulations showed that the impacted area of these projects overlap in the Woodland and Cache Creek area north and northwest of Woodland. CCGRRP results in lower groundwater levels in Woodland area, while the Regional Surface Water Supply Project results in higher groundwater levels in Woodland and the surrounding area. In contrast, the Regional Surface Water Supply Project produces higher groundwater levels in Moore Siphon area while the objective of the CCGRRP is to have lower groundwater levels in this area. Therefore, additional simulations of both projects and their cumulative impact analysis is needed.

7.2 Recommendations

The Water Resources Association of Yolo County (WRA) developed the Yolo County's Integrated Regional Water Management Plan (IRWMP) in 2007 (www.yolowra.org). This plan describes several integrated actions that would improve water resources management in Yolo County. The projects simulated in this study are part of this regional planning. Funding for analysis and simulation of the regional water resources projects could be pursued through external funding sources such as the Local Groundwater Assistance Program (AB303) grants. YCIGSM is a very reliable analytical tool and has been the model of choice for simulation and evaluation of an assortment of the future projects. Based on the results of this study and recommended projects of the Yolo County's IRWMP, the following recommendations are provided for future analysis and consideration.

- **Cumulative Impact Analysis -** The individual simulations of the CCGRRP and Regional Surface Water Supply Project showed that the impact areas of these projects overlap and each project impacts the other. As both of these projects are planned to be implemented in the near future, it is recommended to simulate the projects in combined scenarios and perform cumulative impact analyses. Additional combined simulations may be performed to optimize the operation and management of the projects.
- **Reoperation of Upstream Reservoirs for CCGRRP Optimization -** Simulation of CCGRRP using the historical Cache Creek flows showed that the long-term Cache Creek groundwater recharge is not sufficient to fully compensate for the extracted groundwater. Cache Creek groundwater recharge is, in part, dependent on streamflow pattern. High streamflows with short durations result in less groundwater recharge than more moderate streamflows with longer durations. Operation of CCGRRP Project could be optimized by reoperation of the upstream Clear Lake reservoir to provide timely streamflows for maximized groundwater recharge. IGSM model has a reservoir operation module that can be installed and developed for the operation of reservoirs. With the added reservoir operation module, YCIGSM would be capable of simulating the Clear Lake Reservoir operations, thereby optimizing CCGRRP groundwater recharge, so that the impacts on groundwater storage are minimized.
- **Stormwater Recharge –** This project includes installation of automated water control and flow measurement gates in the canals for measuring losses to groundwater in summer and stormwater recharge activities in winter. IGSM model is capable of simulation of daily streamflows, daily canal operations, and estimation of canal seepage and groundwater recharge. YCIGSM simulates all of the major rivers and canals in the model area. Its capabilities for simulation of stormwater recharge in YCFCWCD canals could be enhanced by simulating the following canals:
    - Hungry Hollow Canal,
    - West Adams Canal,
    - Winters Canal,
    - Cottonwood South Canal,
    - Yolo Central Canal,
    - Pleasant Prairie Canal, and
    - Walnut Canal.
- **YCIGSM Improvements** – YCIGSM has been the model of choice for assessing various water resources projects in Yolo County. YCIGSM capabilities could be enhanced by further refining the model calibration to recent hydrologic and hydrogeologic data and adding new model features such as reservoir operation. The following list provides a summary of potential improvements of YCIGSM:
    - Incorporation of selected irrigation canals,

  - Refinement of model grid to enable the simulation of site specific projects,
  - Extension of model hydrologic simulation period through 2011,
  - Update of the model land and water use data through 2011, and
  - Linkage of YCIGSM to Sacramento county IGSM model.

- **Installation of CCGRRP Wells** – CCGRRP includes 10,000 AFY of groundwater pumping in the vicinity of Moore Canal and 10,000 AFY of groundwater pumping in the vicinity of West Adams Canal. The groundwater may be pumped by approximately twenty 1000 gpm shallow wells per site. YCIGSM may be used to optimize the location and operation of these wells. The following components of CCGRRP could be included in the initial phase of the project:

  - Installation of shallow pilot wells in the vicinity of Cache Creek with a capacity of 200-500 gpm.
  - Installation of monitoring wells to observe impact of groundwater pumping and Cache Creek recharge on groundwater levels.
  - Performing aquifer pumping test to obtain site specific aquifer parameter data.
  - Enhancement of YCIGSM calibration to new project data.
  - Simulation of CCGRRP pilot wells and pumping impact on Cache Creek groundwater recharge.
  - Simulation of CCGRRP full project using the enhanced YCIGSM.

Table 1. YCIGSM Grid Summary

Model Area	Element Size (acres)			No. of Elements
	Min	Max	Avg	
Woodland	57	158	115	110
Davis	26	143	94	93
UC Davis	23	154	71	54
Entire Model	17	659	185	3068

Total Model Area = 884 square miles
No. of Nodes = 2,840
No. of Subregions = 24

Table 2. City of Woodland Annual Urban Demand (AFY)
(1.1% growth for average year type)

		Rates from 2010 UWMP					Estimated Based on 2010 UWMP	
Source of Data	**Year Type**	**2015**	**2020**	**2025**	**2030**	**2035**	**2017**	**2040**
Woodland-UWMP- Table 7-2	Average Year	16,400	15,650	16,600	17,550	18,500	**15,080**	**19,450**
Woodland-UWMP- Table 7-5	Single Dry Year	16,400	13,453	13,821	14,190	14,579	13,224	14,948
Woodland-UWMP- Table 7-8	Multiple Dry Year - First Year	16,400	15,650	16,600	17,550	18,500	15,080	19,450
Woodland-UWMP- Table 7-8	Multiple Dry Year - Second Year	16,400	15,783	16,600	17,550	18,500	15,197	19,384
Woodland-UWMP- Table 7-8	Multiple Dry Year - Third Year	16,400	13,453	13,821	14,190	14,579	13,224	14,948

Source: City of Woodland 2010 UWMP, West Yost Associates

Table 3. Annual Urban Water Demand and Surface Water Treatment Plant Capacity

Urban Demand (AFY)		
Urban Area	**2017 First Full Year of Surface Water Delivery**	**2040 Regional Surface Water Supply Project at Full Capacity**
City of Woodland	15,080	19,450
City of Davis	13,315	16,700
UC Davis	3,200	4,015
Total	31,595	40,165
Treatment Plant Capacity		
Capacity (MGD)	40	52
Capacity (AFY)	44,820	58,270

Table 4. Term 91 Daily Data

(Number of days per month with Term 91 Curtailments)

Year	May	June	July	Aug	Sept	Oct	Nov	Total
1984		8	31	31				70
1985	14	30	31	31				106
1986			29	6				35
1987	19	30	31	31				111
1988		9	31	31	7			78
1989		9	31	31				71
1990	17	30	31	31				109
1991		20	31	31				82
1992	10	30	31	31	30	31	15	178
1993			4	31				35
1994		15	31	31				77
1995	0	0	0	0	0	0	0	0
1996			9	20				29
1997		12	31	24				67
1998	0	0	0	0	0	0	0	0
1999		1	31	18				50
2000		2	31	17				50
2001		26	31	31				88
2002		13	31	31		21	15	111
2003			28	31				59
2004	2	30	31	31				94
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	16	30	31	31				108
2008		28	31	31	30	31	15	166
2009		19	31	31				81
Total	78	342	628	612	67	83	45	1855

Table 5. Distribution of Monthly Supply and Demand (AF/month) for City of Woodland for Representative Years

	Calendar Year		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand	2040 Monthly Demand Distribution Monthly demands do not change and is set to Year 2040 demand levels		949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092	1,643	1,201	1,007	19,450
Supply	Calendar Year	Monthly Supply Distribution													
	1970	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895					1,643	1,201	1,007	**10,108**
		CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
		Allowable Groundwater Use	0	0	0	0	0	701	750	723	627	0	0	0	**2,803**
		Excess Groundwater Use	0	0	0	0	0	227	256	233	186	0	0	0	**902**
		Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
	1976	Primary Surface Water Supply (30358)	949	898	1,156	1,359					2,092		1,201	1,007	**8,662**
		CPG Surface Water Supply					468	556	2,142	2,086		385			**5,637**
		Allowable Groundwater Use	0	0	0	0	568	701	359	326	0	493	0	0	**2,447**
		Excess Groundwater Use	0	0	0	0	858	1,081	0	0	0	765	0	0	**2,704**
		Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
	1977 Shasta Critical Year	Primary Surface Water Supply (30358)	949	898	1,156								1,201	1,007	**5,211**
		CPG Surface Water Supply				215	280	332	1,121	1,091	958	230			**4,228**
		Allowable Groundwater Use	0	0	0	408	568	701	750	723	627	493	0	0	**4,272**
		Excess Groundwater Use	0	0	0	737	1,047	1,305	630	597	506	920	0	0	**5,739**
		Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
	1982	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092	1,643	1,201	1,007	**19,450**
		CPG Surface Water Supply													**0**
		Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
		Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
		Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
	1992 Shasta Critical Year	Primary Surface Water Supply (30358)	949	898	1,156	1,359								1,007	**5,369**
		CPG Surface Water Supply					351	417	1,121	1,091	958	289			**4,228**
		Allowable Groundwater Use	0	0	0	0	568	701	750	723	627	493	360	0	**4,224**
		Excess Groundwater Use	0	0	0	0	975	1,220	630	597	506	861	841	0	**5,629**
		Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
	1995	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092			1,007	**16,606**
		CPG Surface Water Supply										1,409			**1,409**
		Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	234	360	0	**594**
		Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	841	0	**841**
		Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**

Table 6. 2017 Supply and Demand (AFY)
(30-year simulation average)

		Woodland	Davis	UC Davis	Total
Total Demand		**15,080**	**13,315**	**3,200**	**31,595**
Supply	Primary Surface Water Supply (30358)	9,388	8,088	1,377	18,853
	CPG Surface Water Supply	4,141	2,997	341	7,480
	Subtotal	**13,529**	**11,085**	**1,718**	**26,333**
	Allowable Groundwater Use	1,049	2,095	1,377	4,521
	Excess Groundwater Use	502	135	104	741
	Subtotal	**1,551**	**2,230**	**1,482**	**5,262**
	Total Supply	**15,080**	**13,315**	**3,200**	**31,595**

Table 7. 2040 Supply and Demand (AFY)
(30-year simulation average)

		Woodland	Davis	UC Davis	Total
Total Demand		**19,450**	**16,700**	**4,015**	**40,165**
Supply	Primary Surface Water Supply (30358)	12,108	10,231	1,771	24,110
	CPG Surface Water Supply	4,314	3,024	344	7,683
	Subtotal	**16,423**	**13,255**	**2,115**	**31,793**
	Allowable Groundwater Use	1,892	3,235	1,705	6,833
	Excess Groundwater Use	1,135	210	195	1,539
	Subtotal	**3,027**	**3,445**	**1,900**	**8,372**
	Total Supply	**19,450**	**16,700**	**4,015**	**40,165**

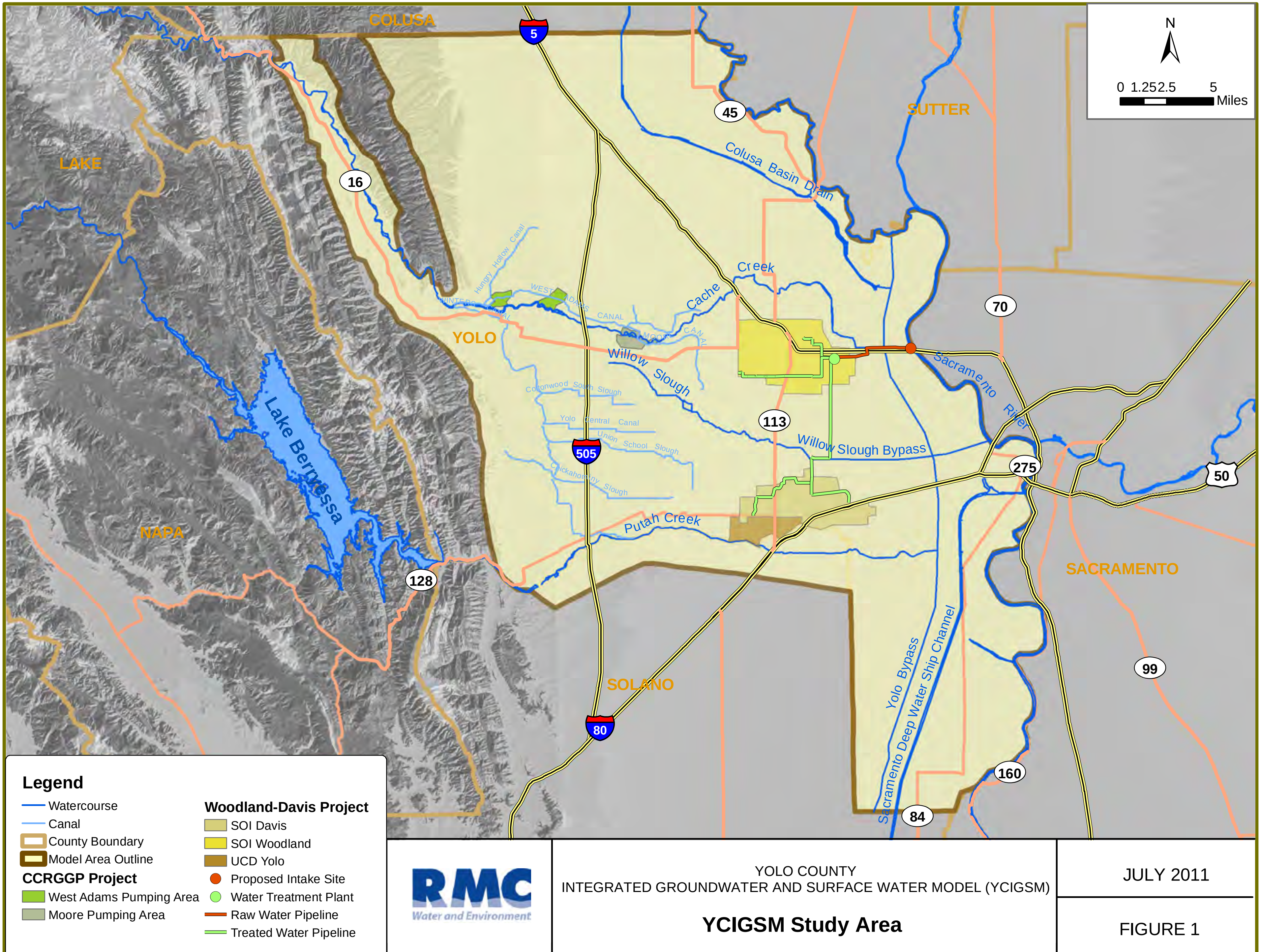
Table 8. Available Regional Water Treatment Facility (RWTF) Capacity, AFY

(30-year Simulation Average)

	2017	2040
RWTF Capacity	44,800	58,200
Treated Surface Water	26,300	31,800
Unused Capacity	18,500	26,400

Table 9. CCGRRP Scenarios Water Budget (AFY)
(30-year simulation average)

Project	Capacity Releases	Increased Groundwater Pumping	Changes in Cache Creek Recharge		Changes in Nearby Streams Recharge				Changes in Aquifer Storage	Balance (Misc. Changes)
			Capay Dam to Moore Siphon	Moore Siphon to Settling Basin	Yolo Bypass	Willow Slough	Sac River	Colusa Basin Drain		
Low Pumping - Moore Canal Only	**Baseline**	8,560	6,210	-2,340	1,140	230	480	720	-1,690	430
	Historical	8,560	6,280	-1,470	1,040	190	370	570	-1,240	340
High Pumping - Moore & West Adams Canals	**Baseline**	17,330	13,090	-4,840	1,830	330	820	1,220	-4,090	790
	Historical	17,330	13,600	-3,450	1,670	280	630	970	-3,000	630



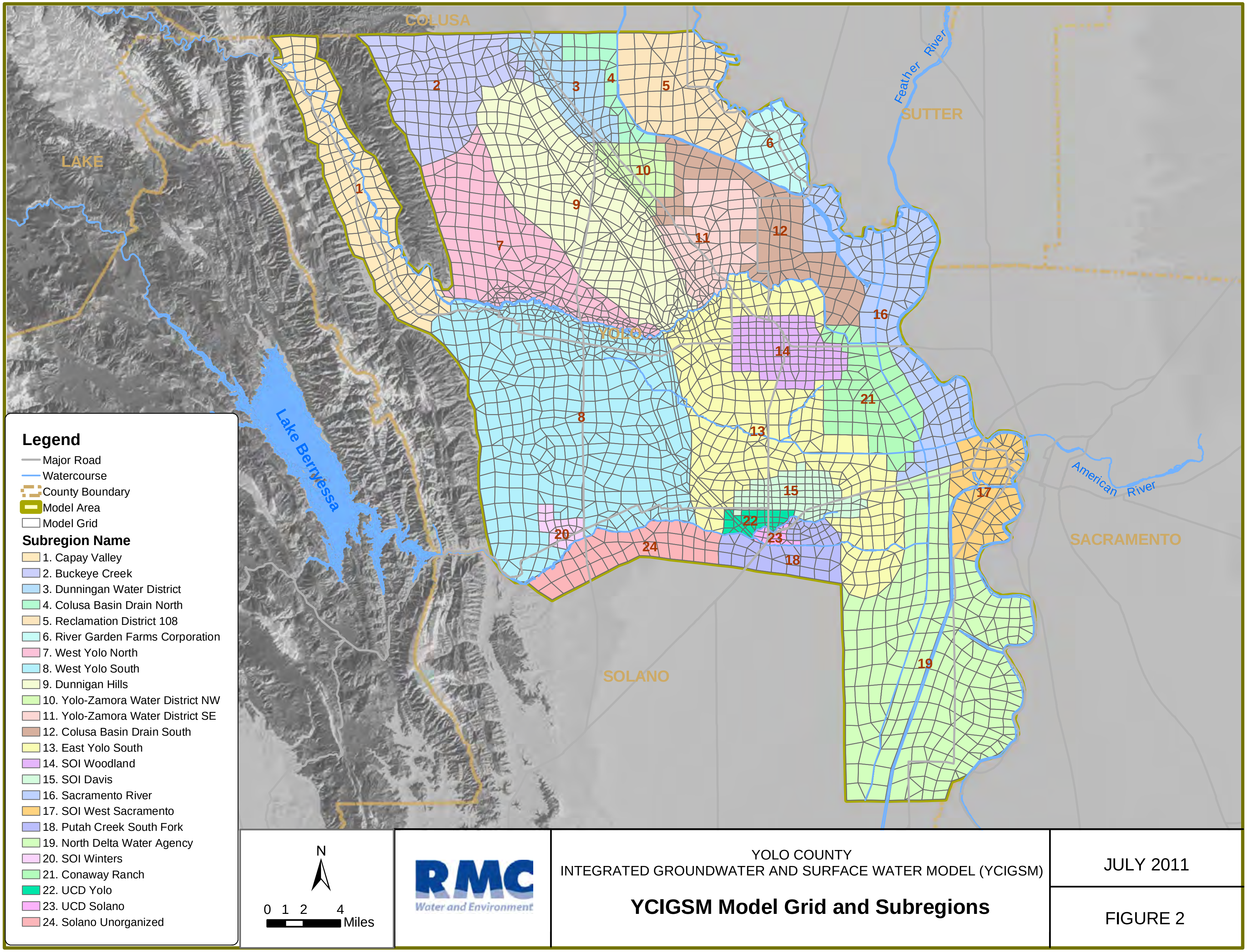
RMC Water and Environment

YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

YCIGSM Study Area

JULY 2011

FIGURE 1



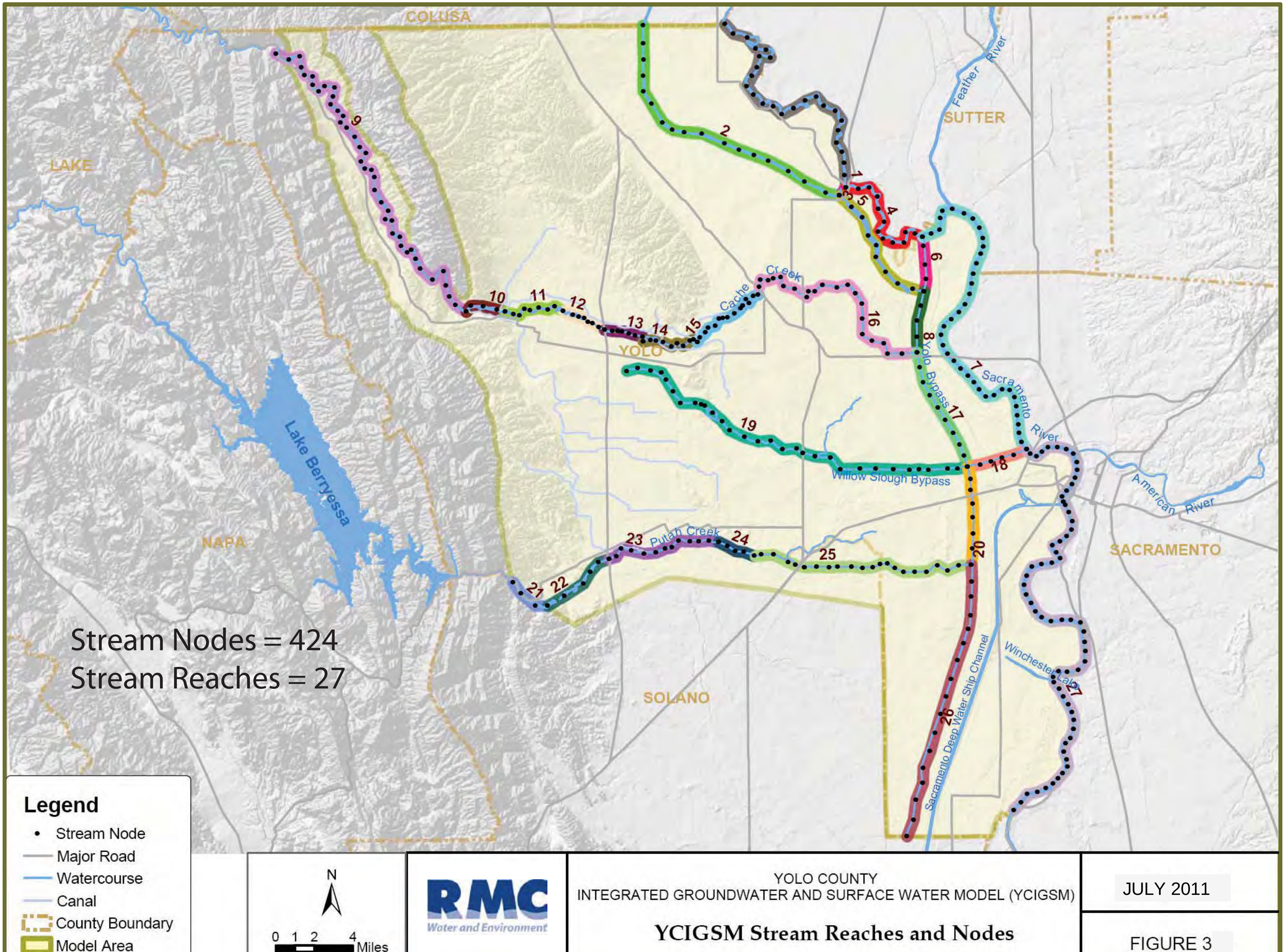
RMC Water and Environment

YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

YCIGSM Model Grid and Subregions

JULY 2011

FIGURE 2



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YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

YCIGSM Stream Reaches and Nodes

JULY 2011

FIGURE 3

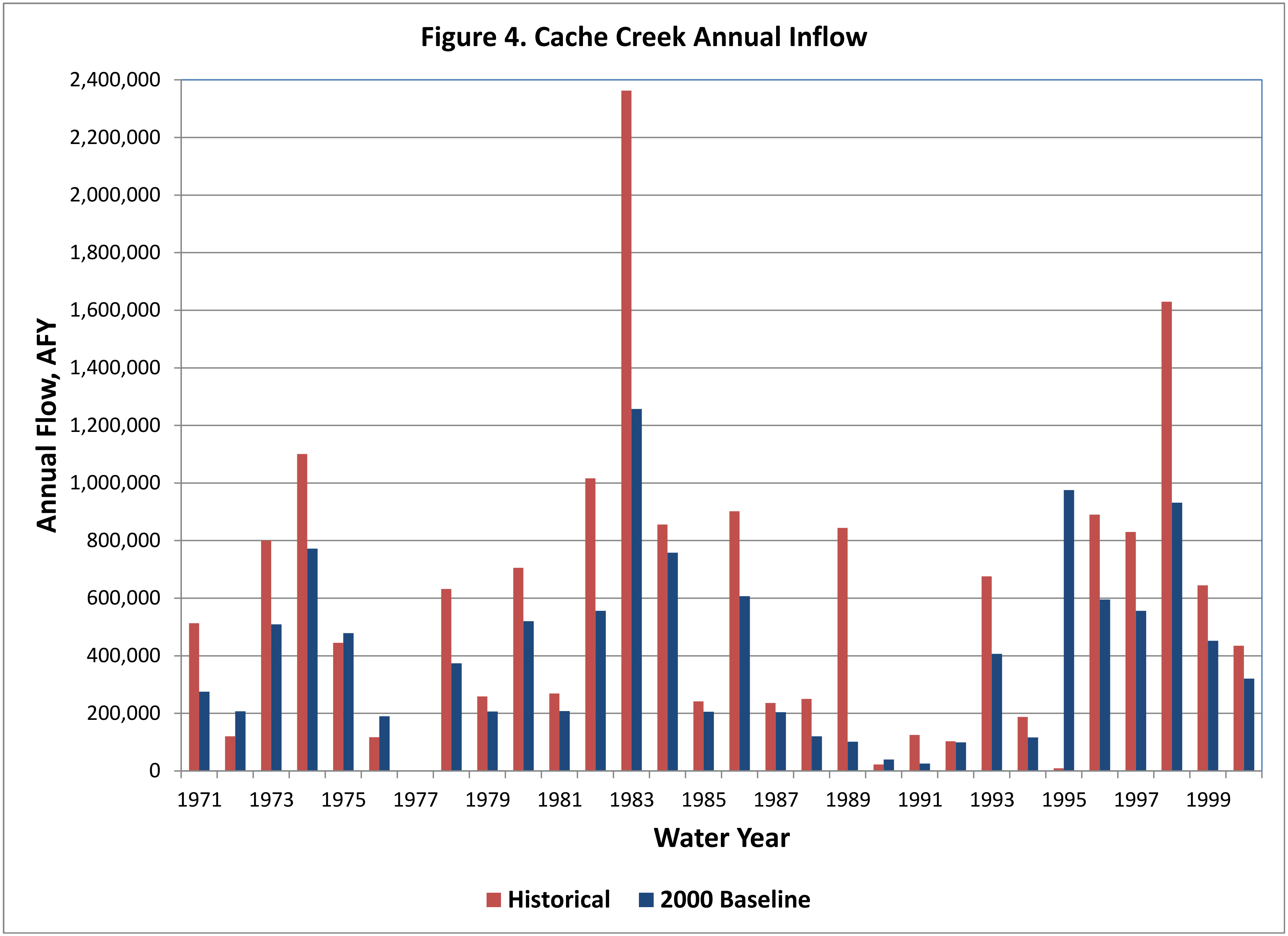


Figure 4. Cache Creek Annual Inflow
Annual Flow, AFY
2,400,000
2,200,000
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
Water Year
Historical
2000 Baseline

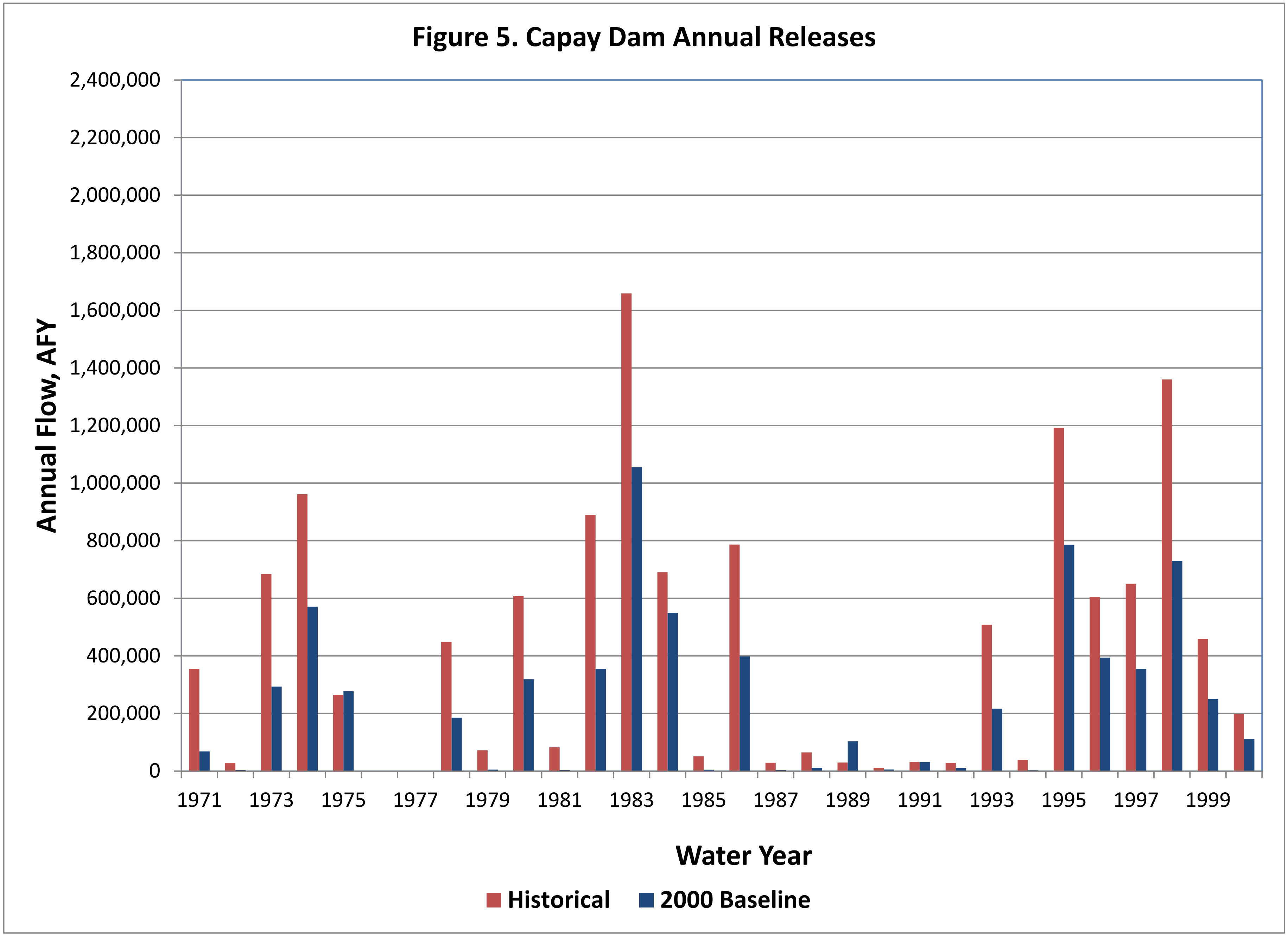


Figure 5. Capay Dam Annual Releases
Annual Flow, AFY
2,400,000
2,200,000
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
Water Year
Historical
2000 Baseline

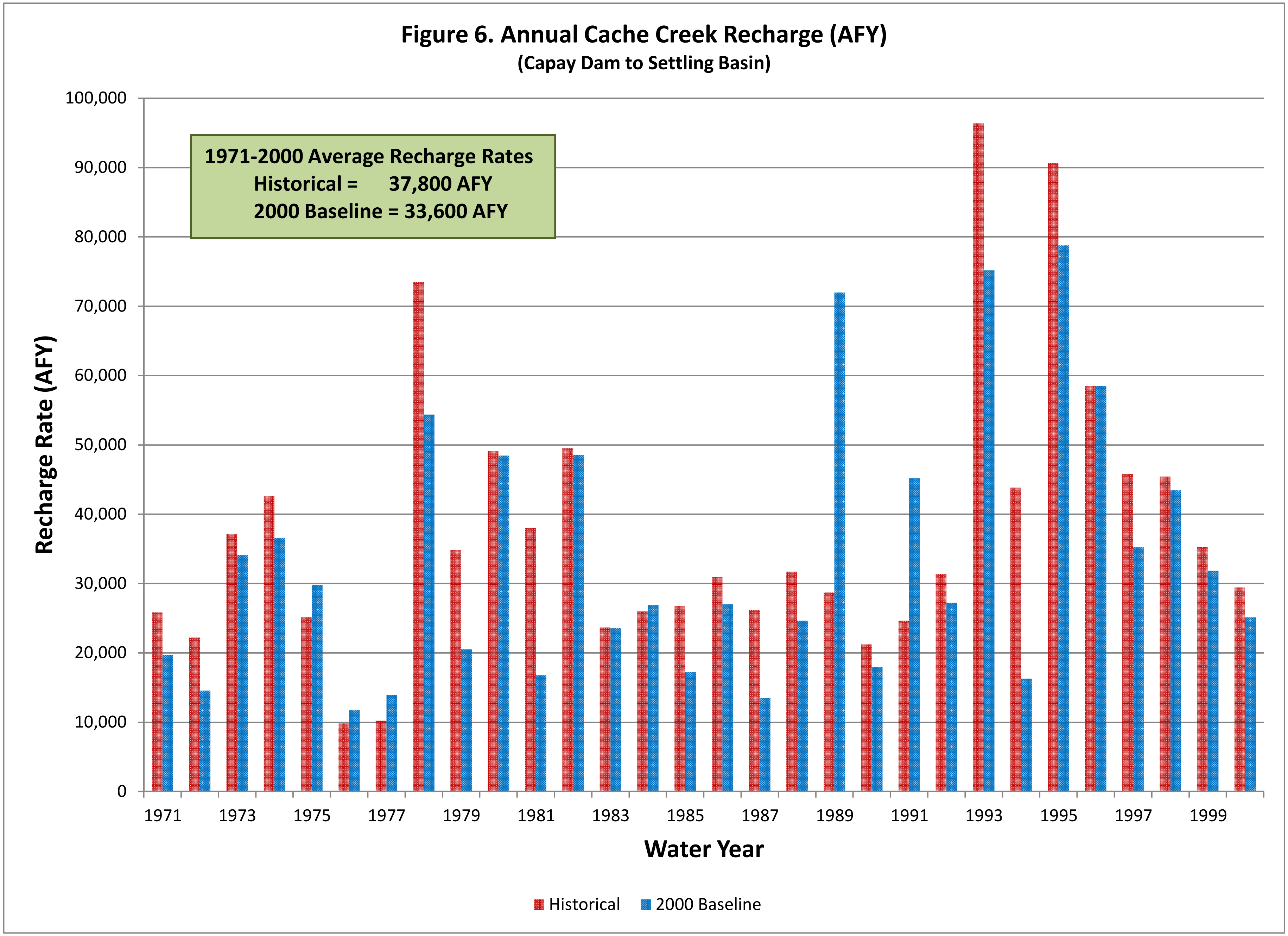


Figure 6. Annual Cache Creek Recharge (AFY)
(Capay Dam to Settling Basin)
1971-2000 Average Recharge Rates
Historical = 37,800 AFY
2000 Baseline = 33,600 AFY
Recharge Rate (AFY)
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
Water Year
Historical
2000 Baseline

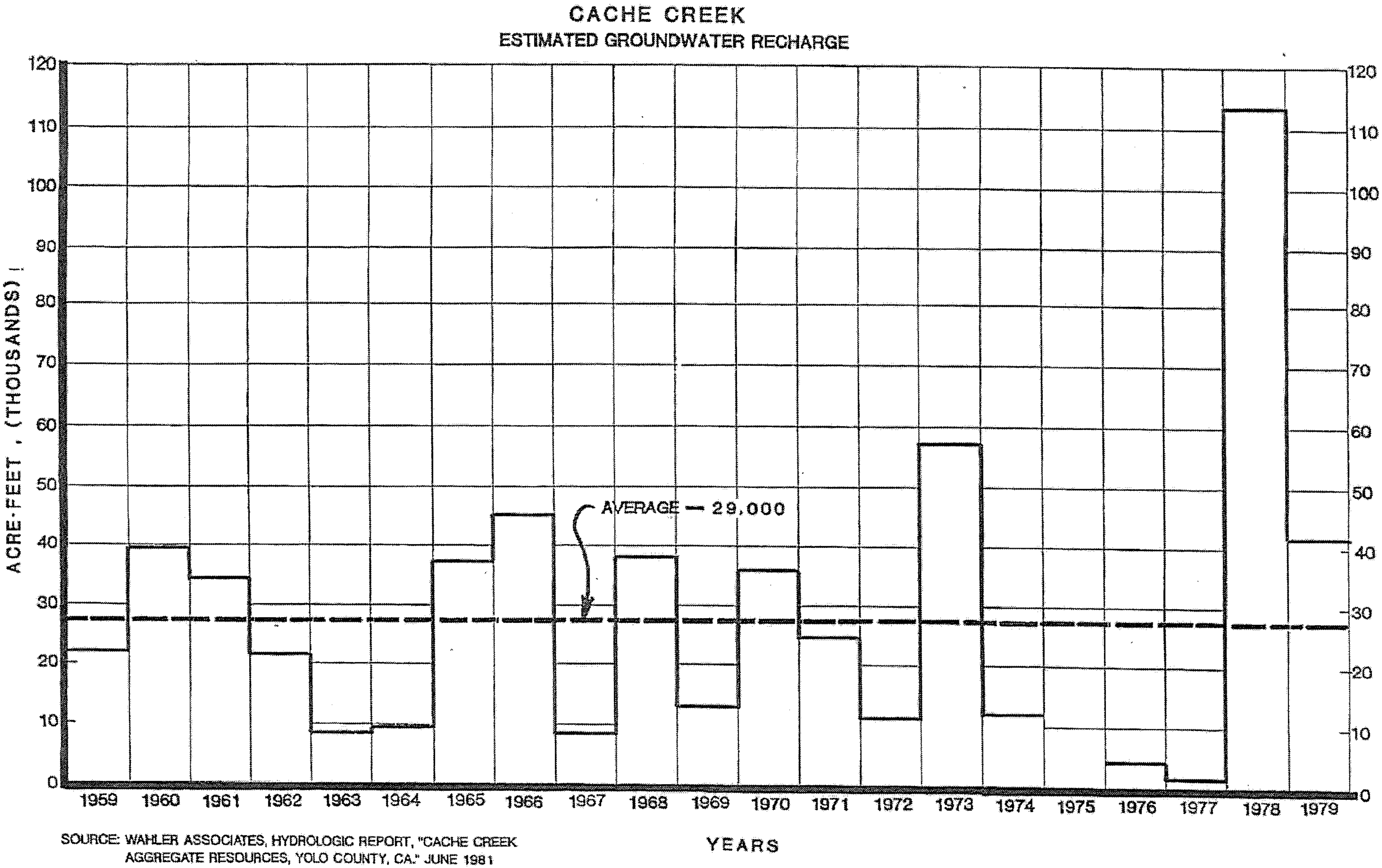
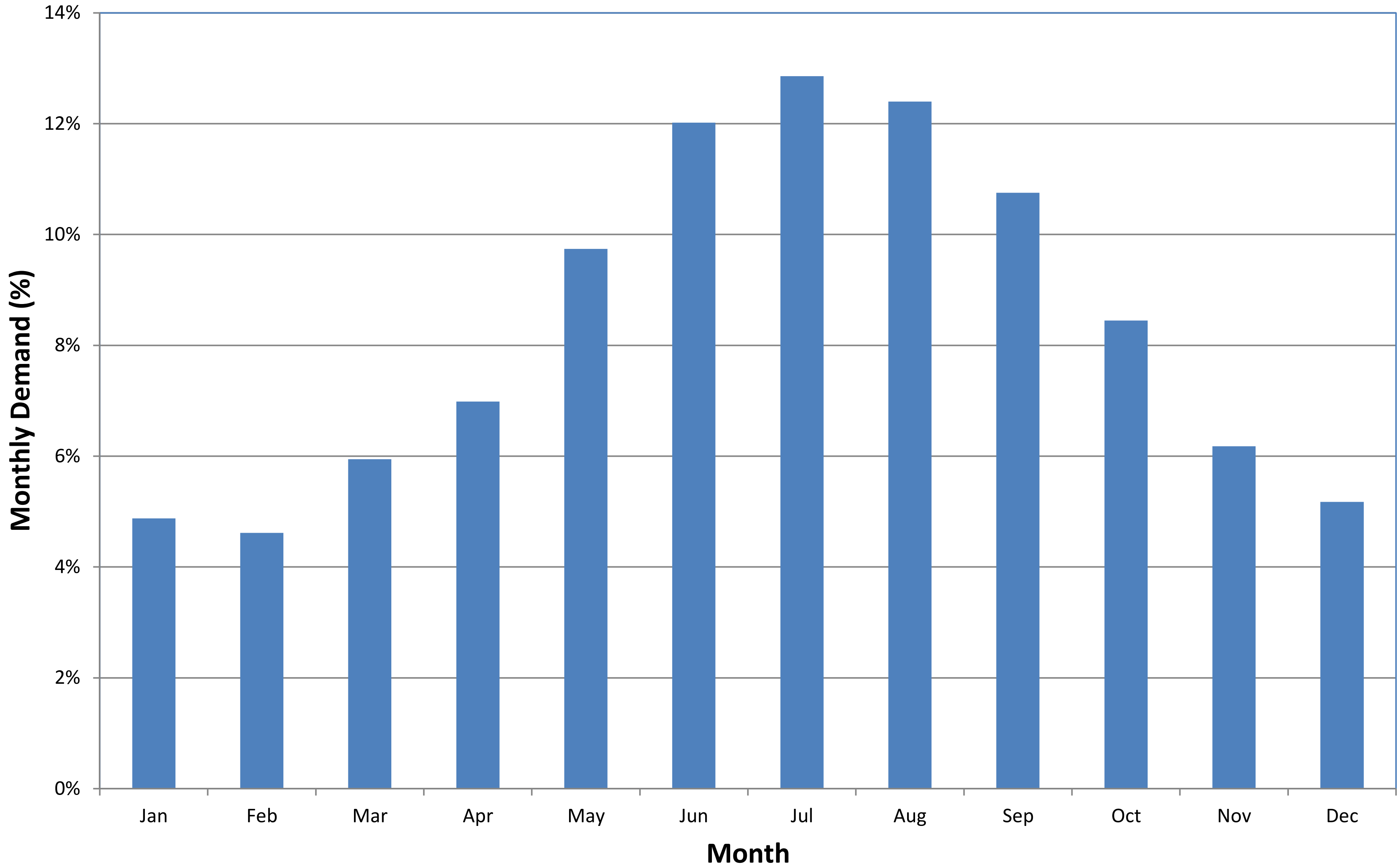


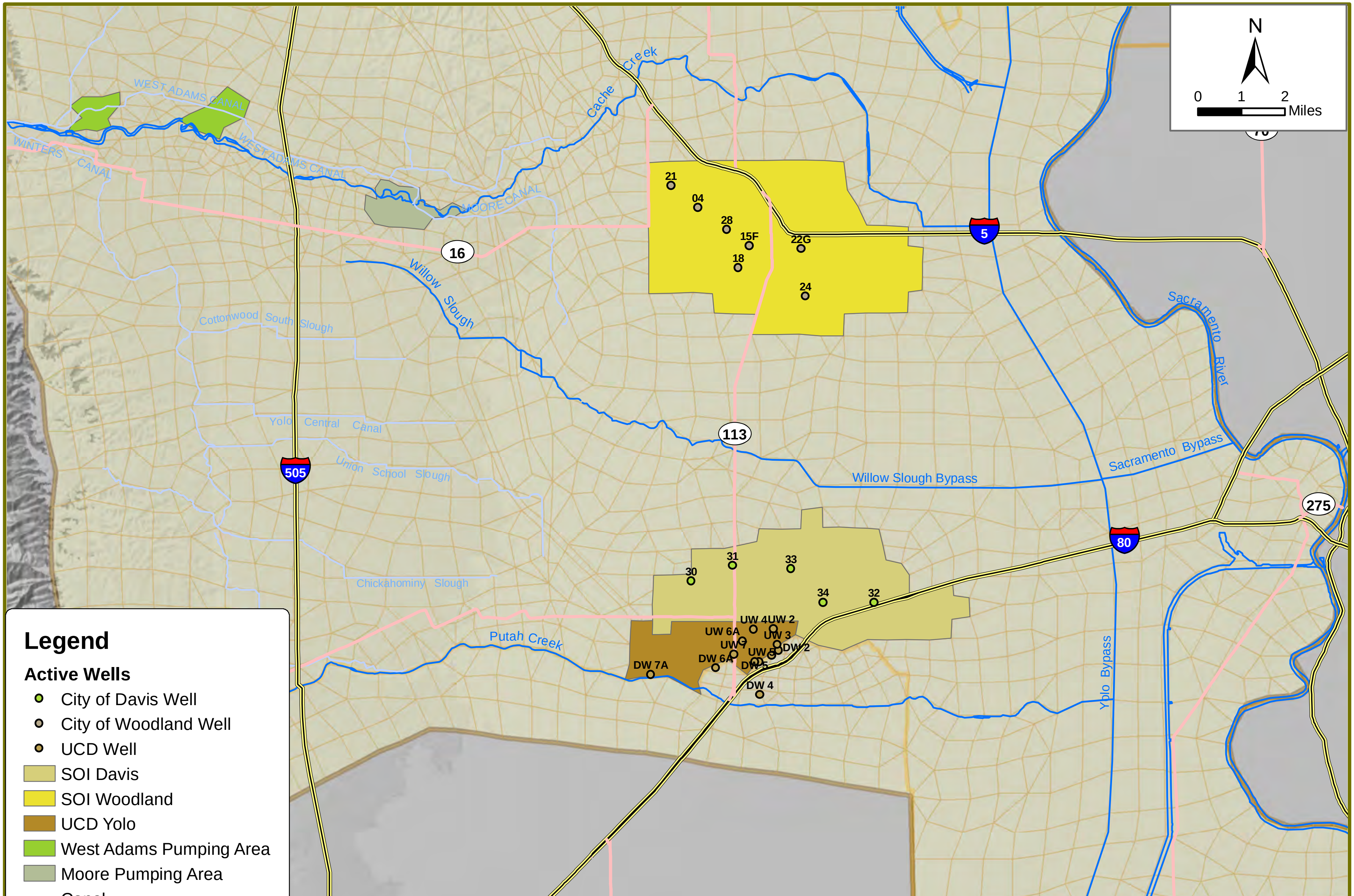
Figure 7. Historical Cache Creek Estimated Groundwater Recharge

Figure 8. City of Woodland Monthly Urban Demand

(Based on 2005-2010 monthly pumping ratios)

(source: City of Woodland Production Records from "March 2011 Production Reports.xls")





RMC Water and Environment

YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

Location of Future Municipal Wells and CCGRRP Pumping

SEPTEMBER 2011

FIGURE 9

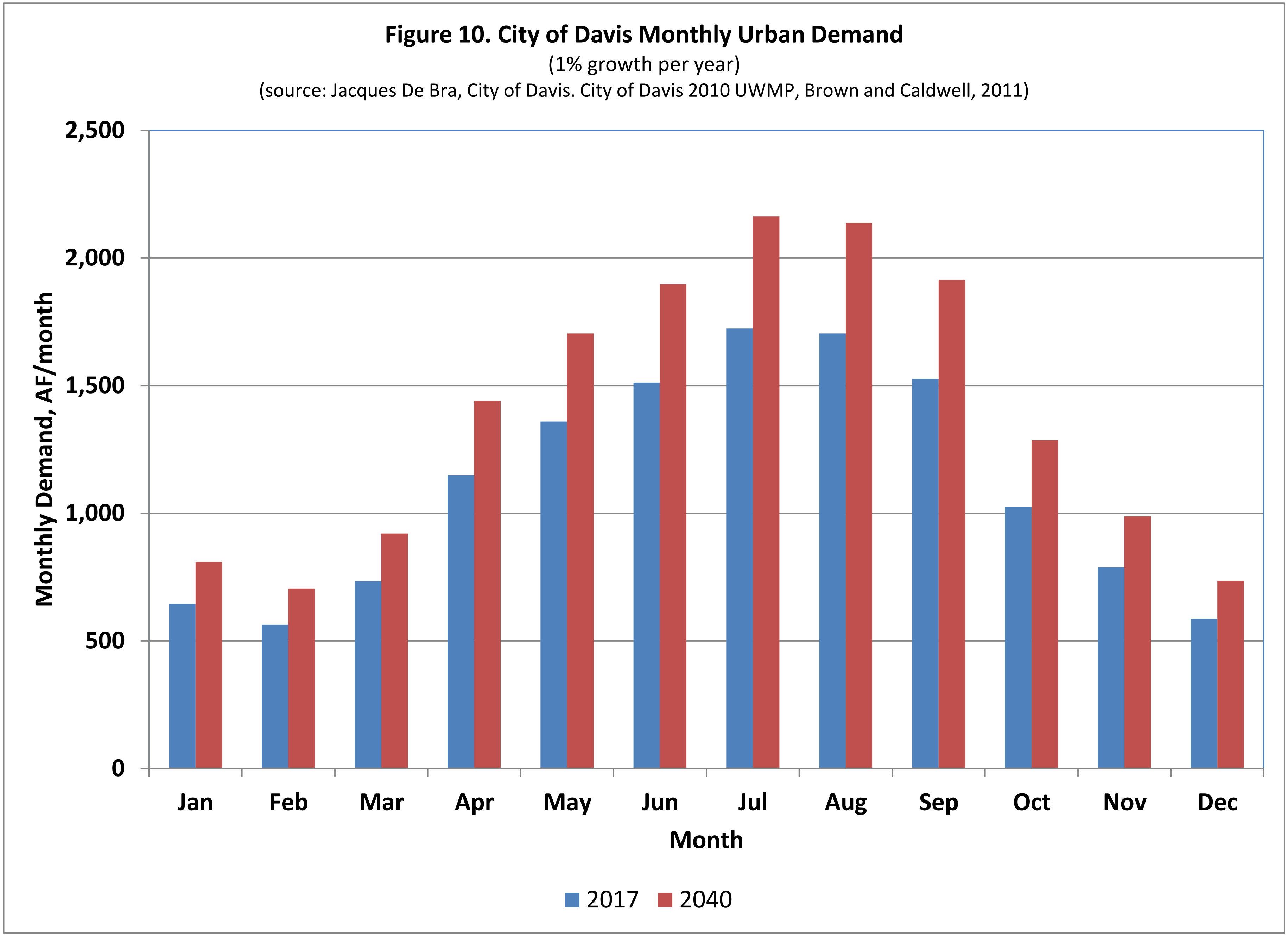
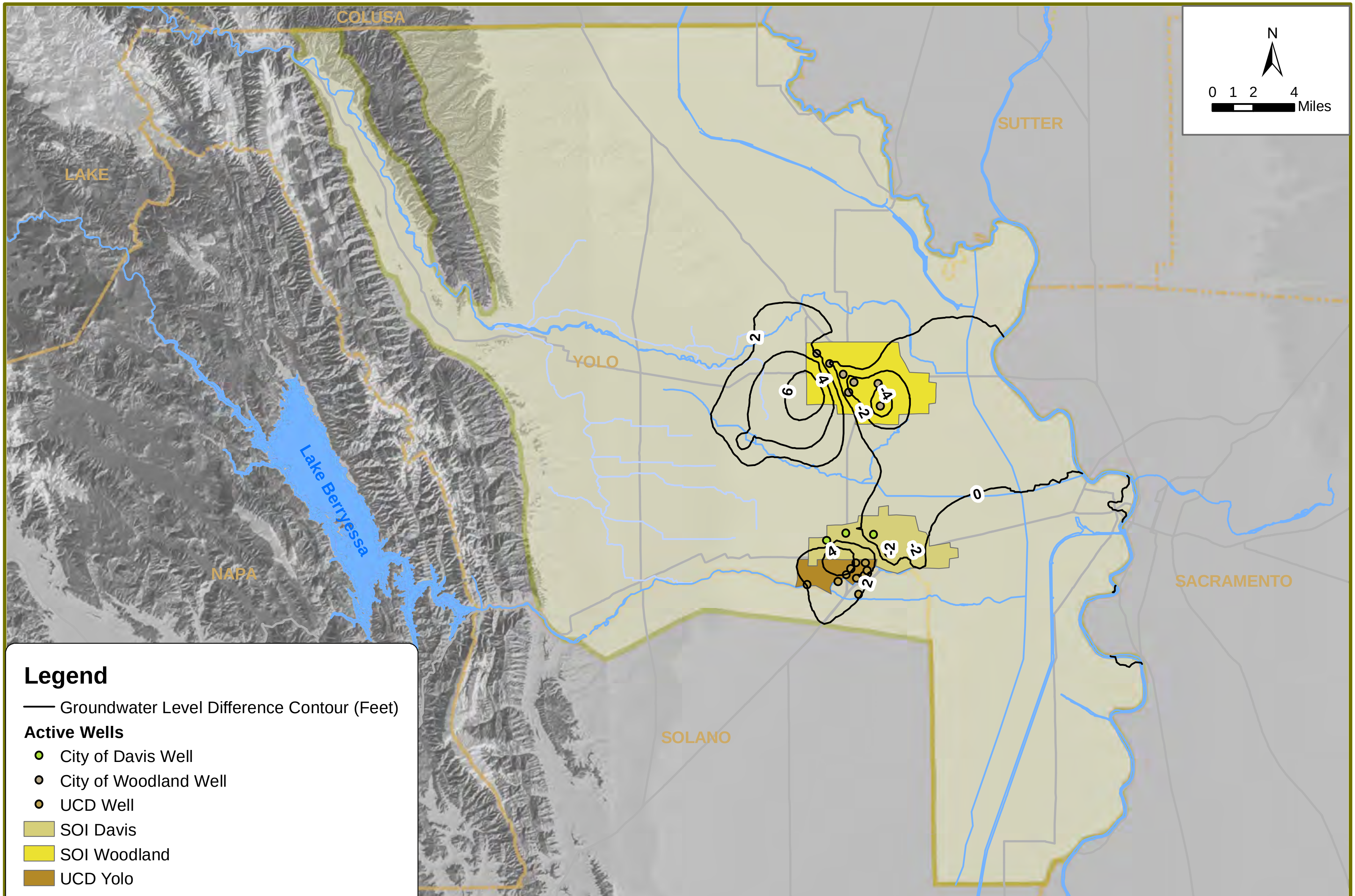


Figure 10. City of Davis Monthly Urban Demand
(1% growth per year)
(source: Jacques De Bra, City of Davis. City of Davis 2010 UWMP, Brown and Caldwell, 2011)
Monthly Demand, AF/month
2,500
2,000
1,500
1,000
500
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month
2017
2040



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YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

YCIGSM Baseline 2017 Condition
Fall-2000 Groundwater Level Difference Contours

SEPTEMBER 2011

FIGURE 11

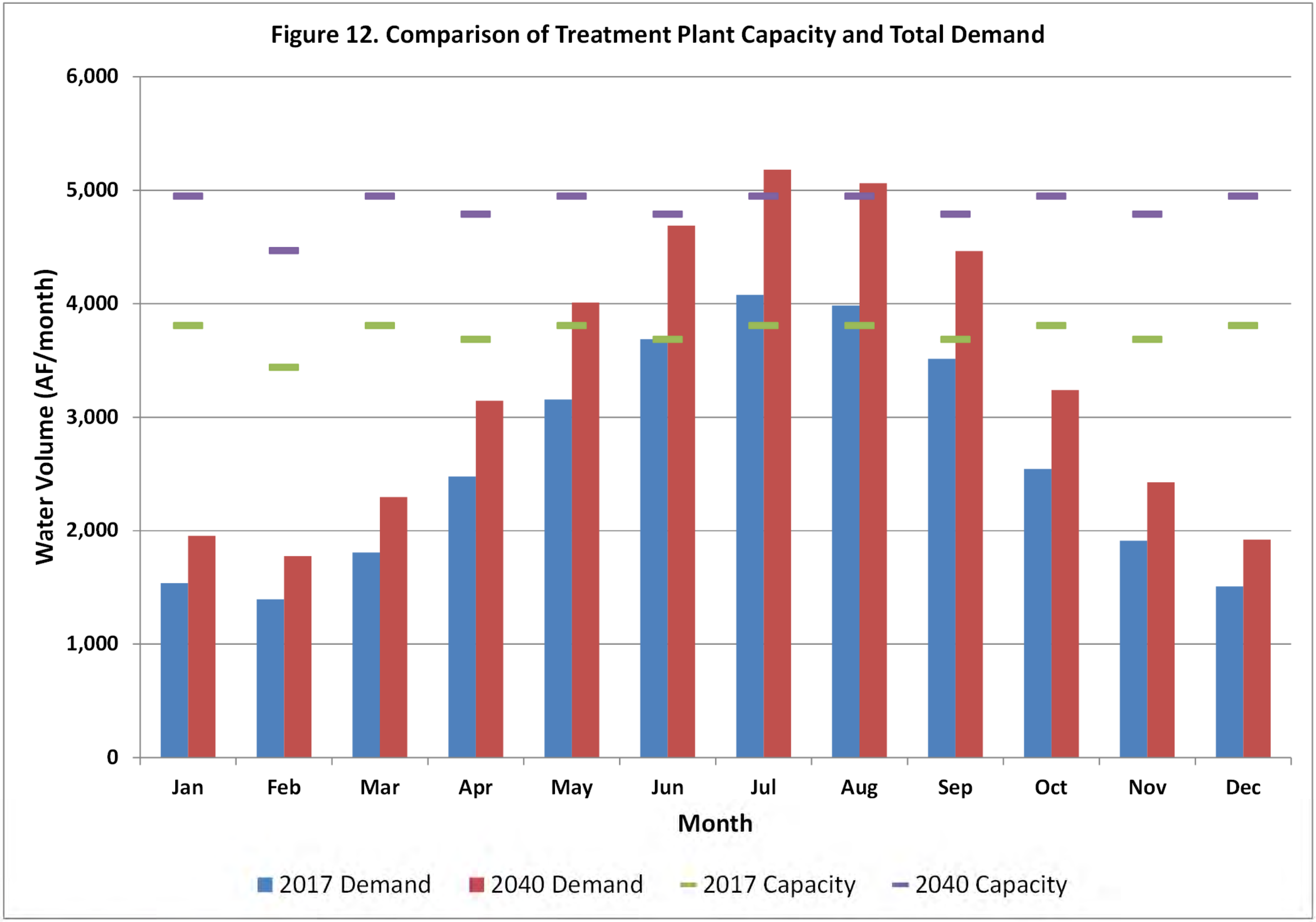

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Figure 13. Term 91 Curtailment Periods and Shasta Critical Years, 1922-2002

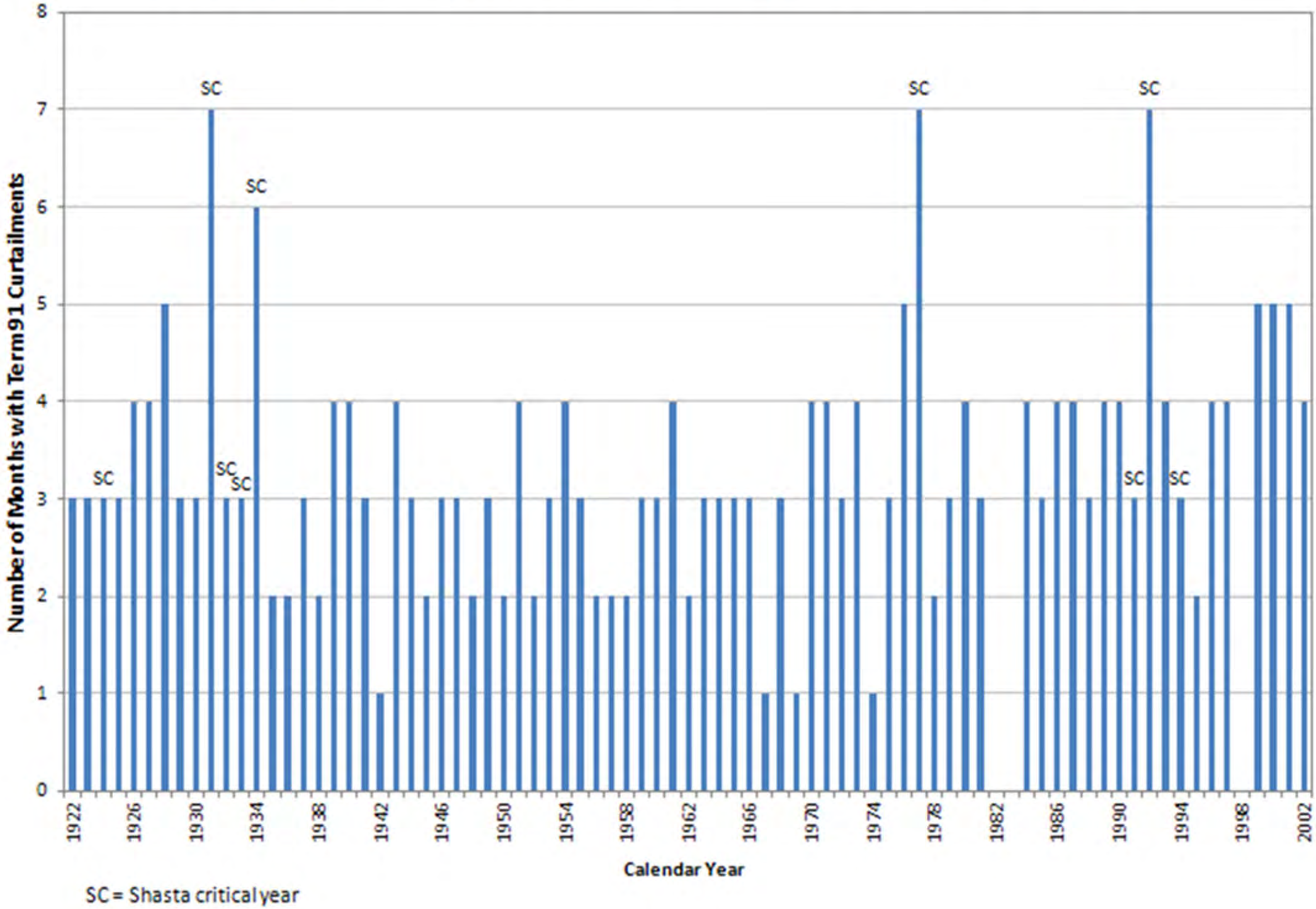
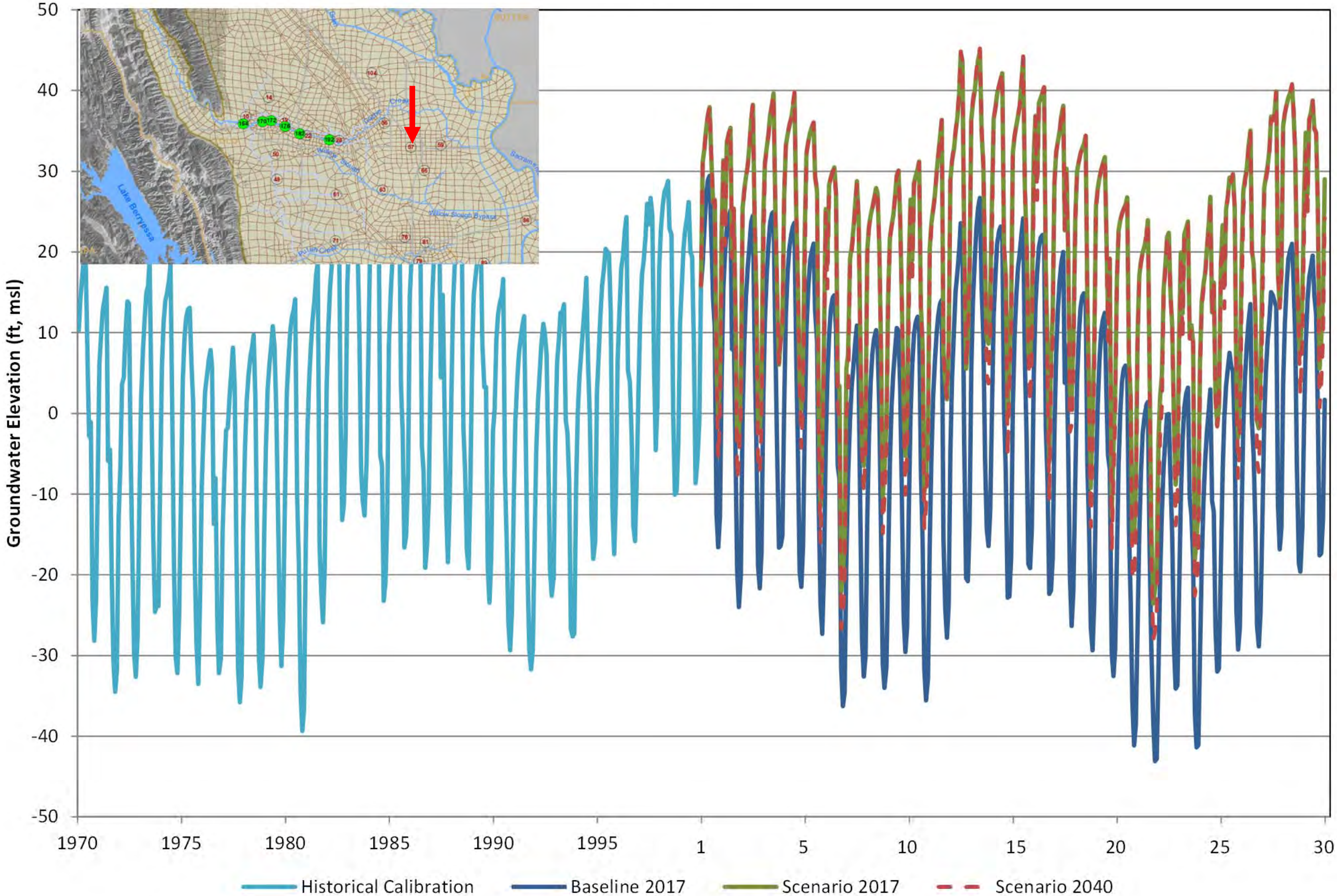


Figure 14. Shasta Critical Years and Monthly Term 91 Curtailments for 1969 to 2000.

Months with Term 91 Curtailments
Years with Shasta Critical Years

Shasta Critical	Water year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	1969												
	1970												
	1971												
	1972												
	1973												
	1974												
	1975												
	1976												
SC	1977												
	1978												
	1979												
	1980												
	1981												
	1982												
	1983												
	1984												
	1985												
	1986												
	1987												
	1988												
	1989												
	1990												
SC	1991												
SC	1992												
	1993												
SC	1994												
	1995												
	1996												
	1997												
	1998												
	1999												
	2000												

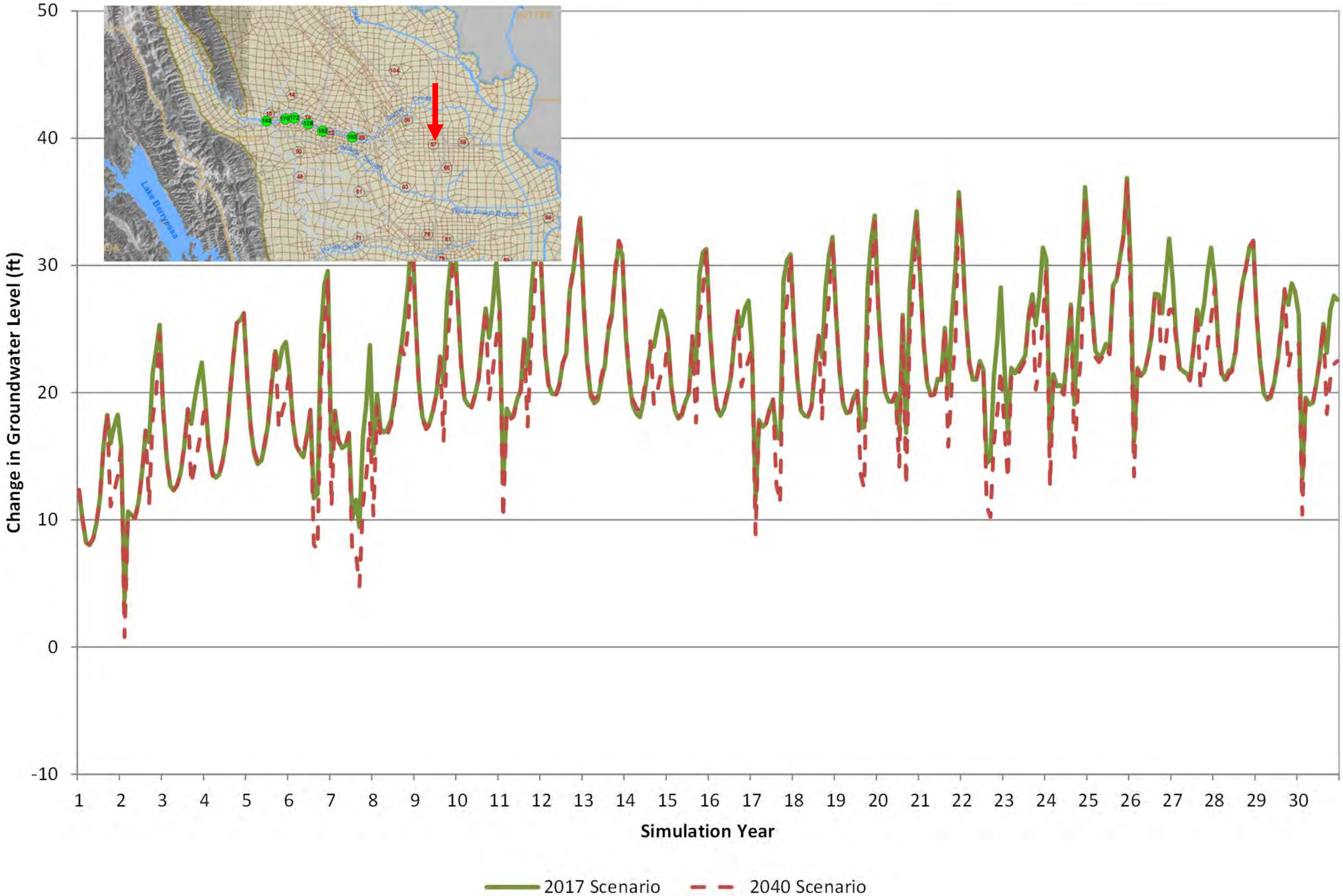
Figure 15. Simulated Groundwater Elevations at Calibration Well 57 in Woodland
(Layer 2)



GSE - 60 ft, Layer 1 Thickness - 110 ft, Layer 2 Thickness - 1440 ft, Layer 3 Thickness - 1277

September 2011

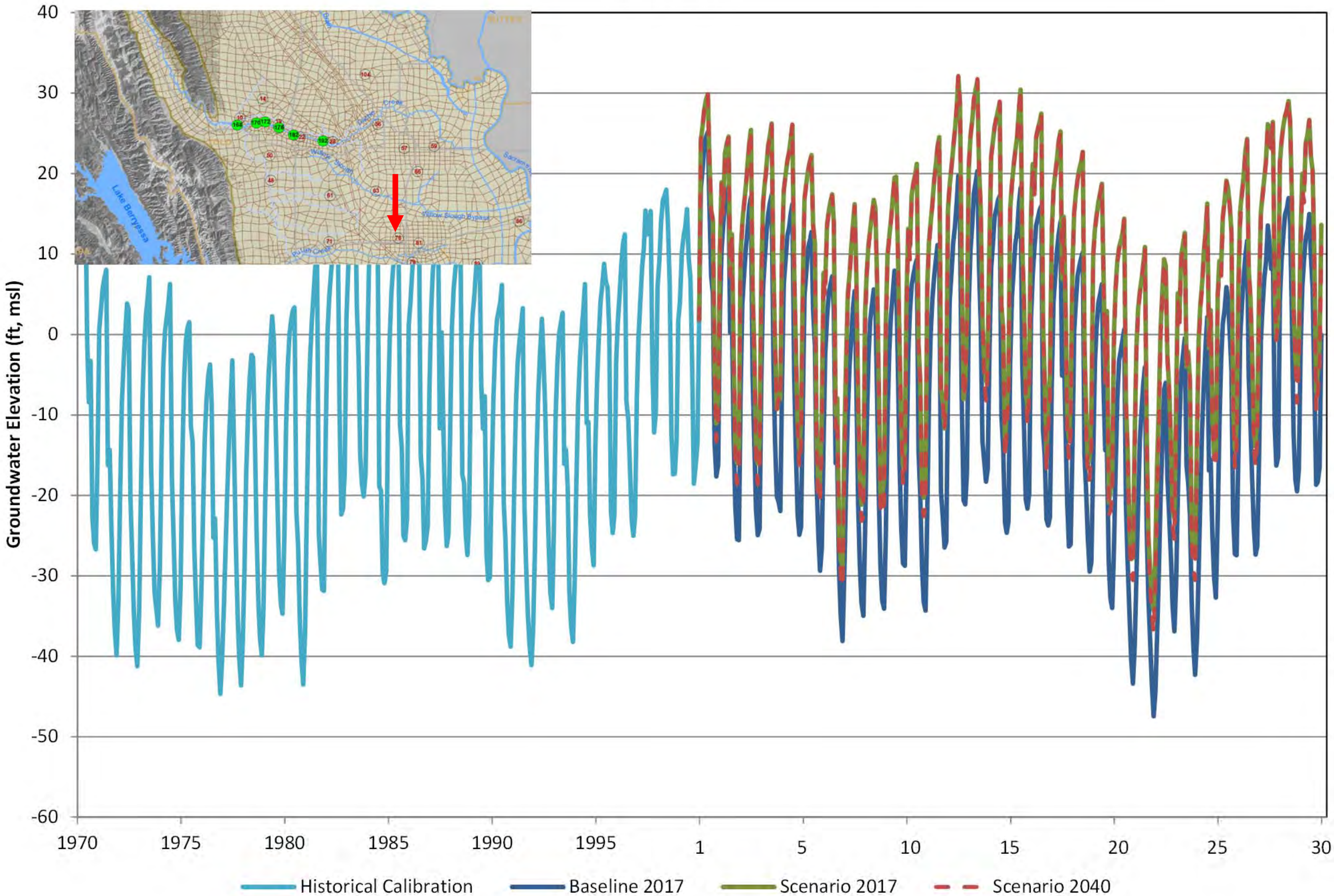
Figure 16. Change in Groundwater Levels at Observation Well 57 in Woodland
(Layer 2)



RMC Water and Environment

September 2011

Figure 17. Simulated Groundwater Elevations at Calibration Well 76 in Davis
(Layer 2)

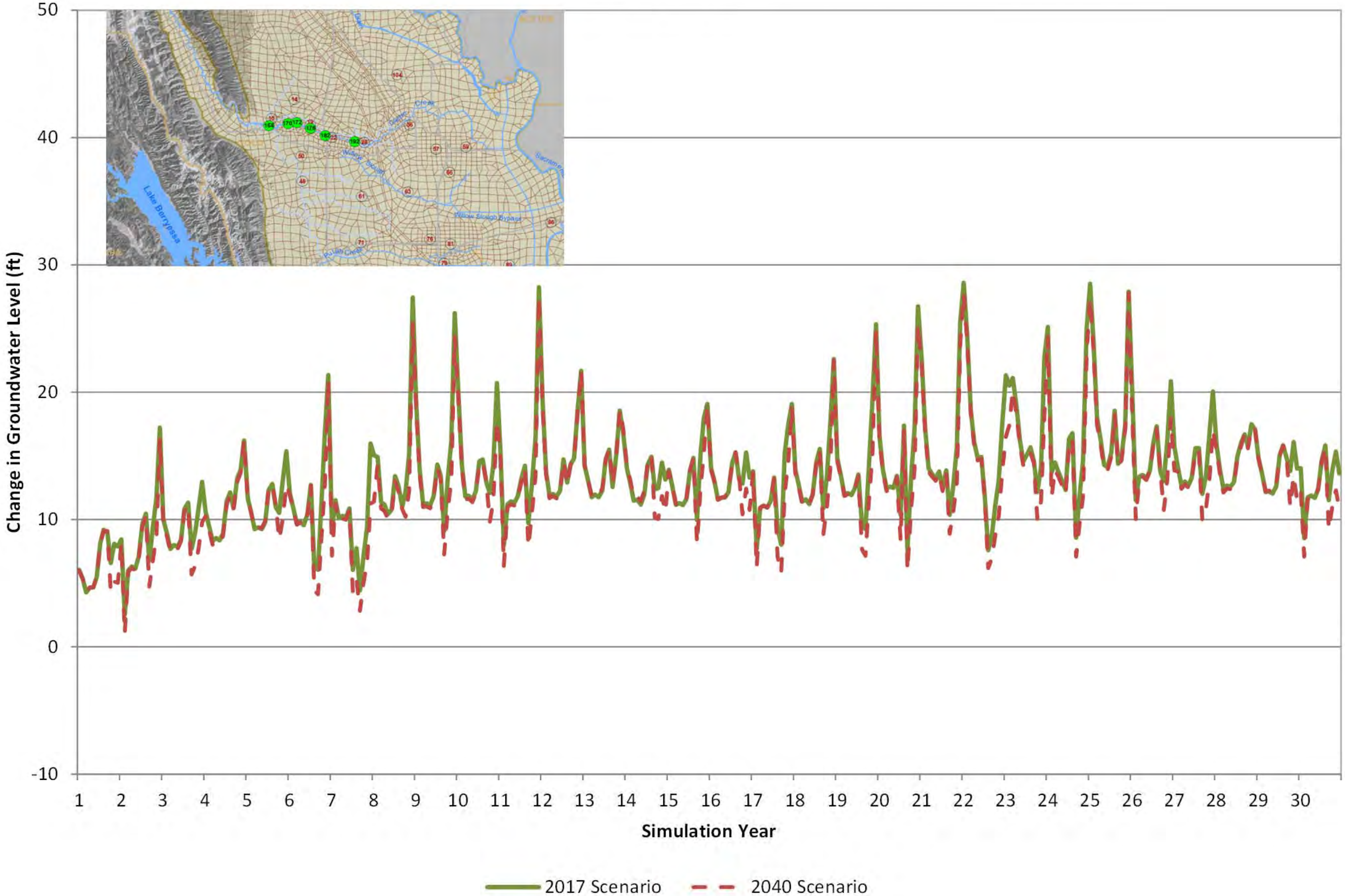


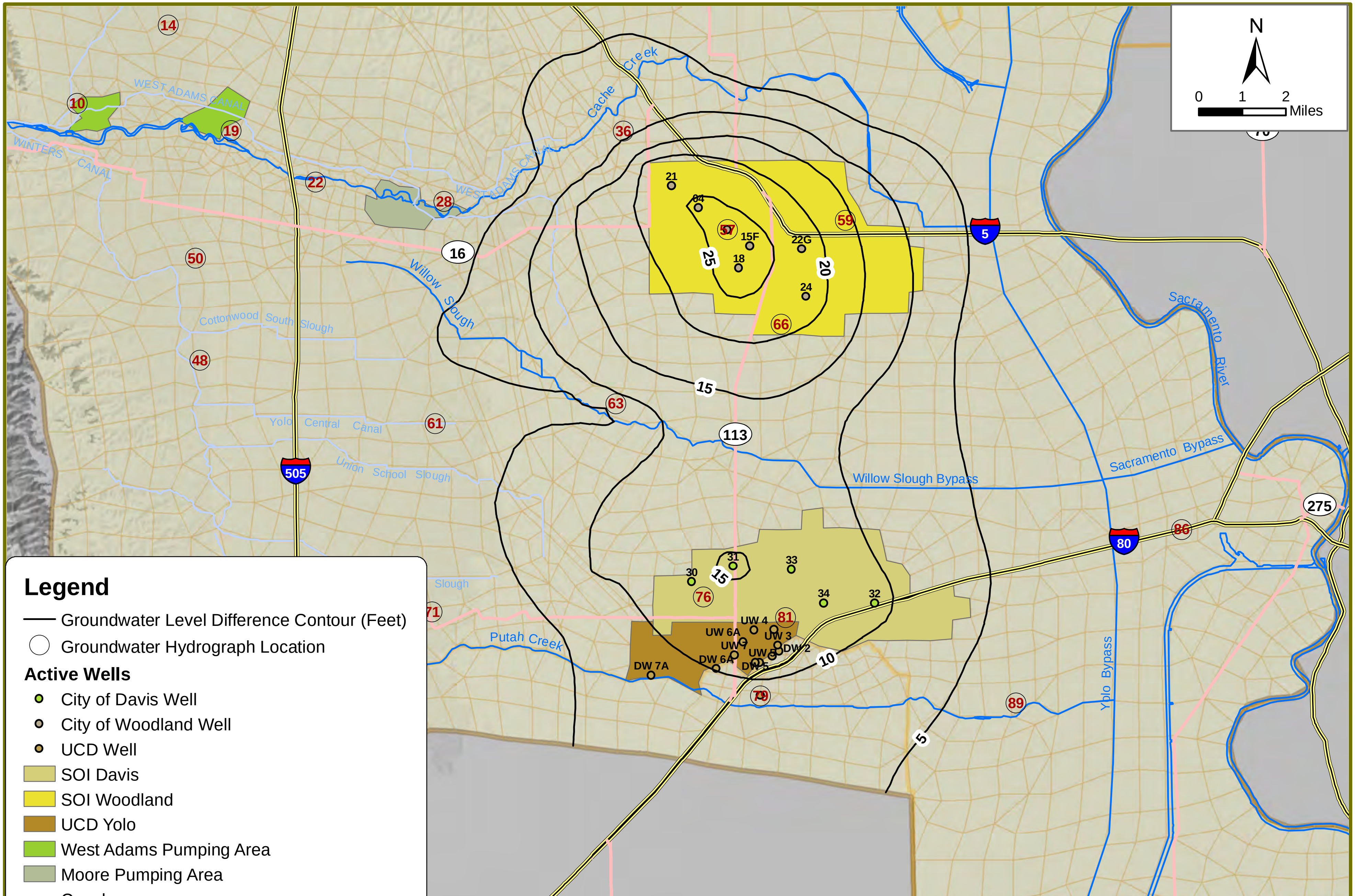
GSE - 60 ft, Layer 1 Thickness - 80 ft, Layer 2 Thickness - 1640 ft, Layer 3 Thickness - 1160

RMC Water and Environment

September 2011

Figure 18. Change in Groundwater Levels at Observation Well 76 in Davis
(Layer 2)





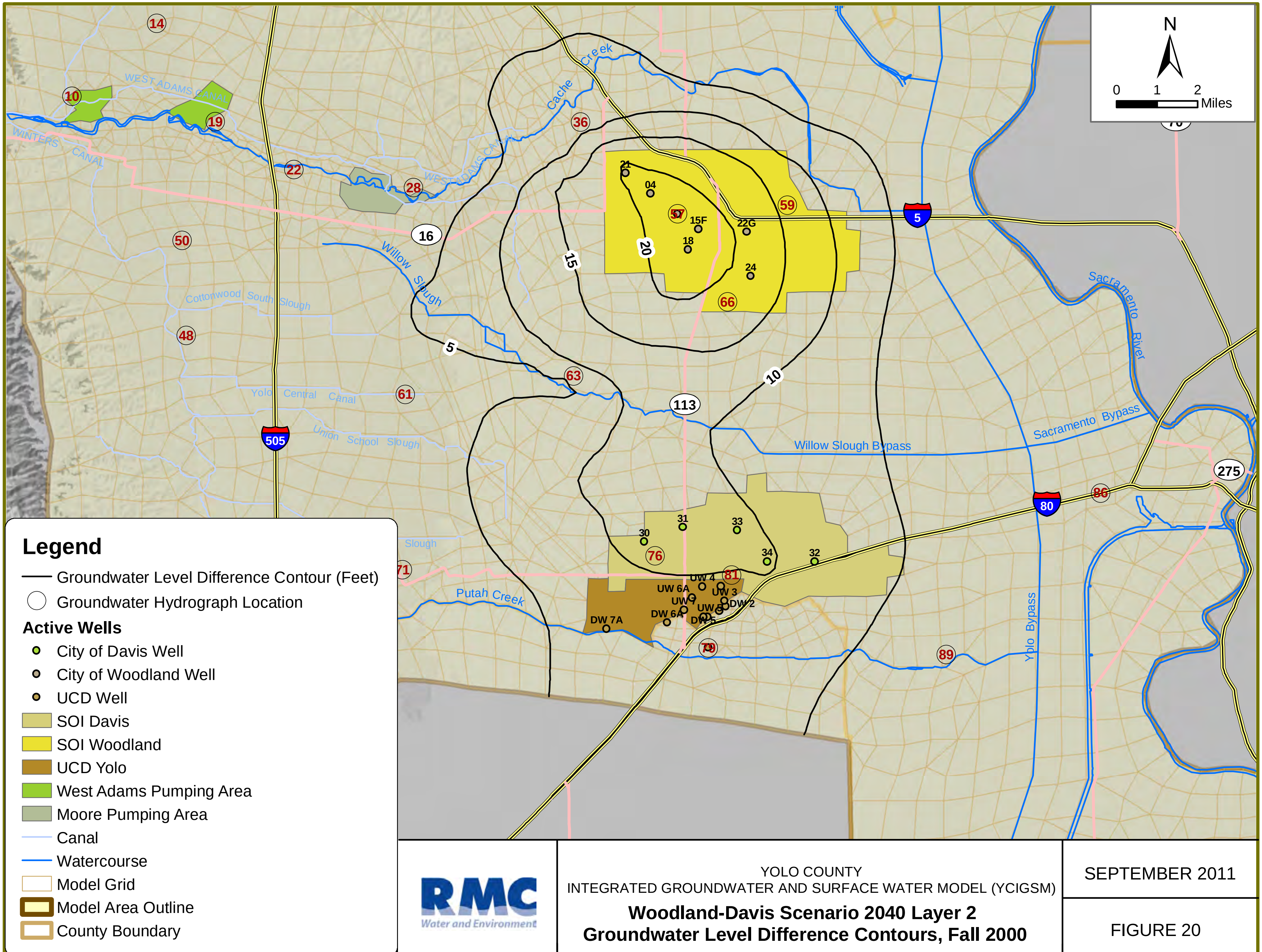
YOLO COUNTY

INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

Woodland-Davis Scenario 2017 Layer 2
Groundwater Level Difference Contours, Fall 2000

SEPTEMBER 2011

FIGURE 19

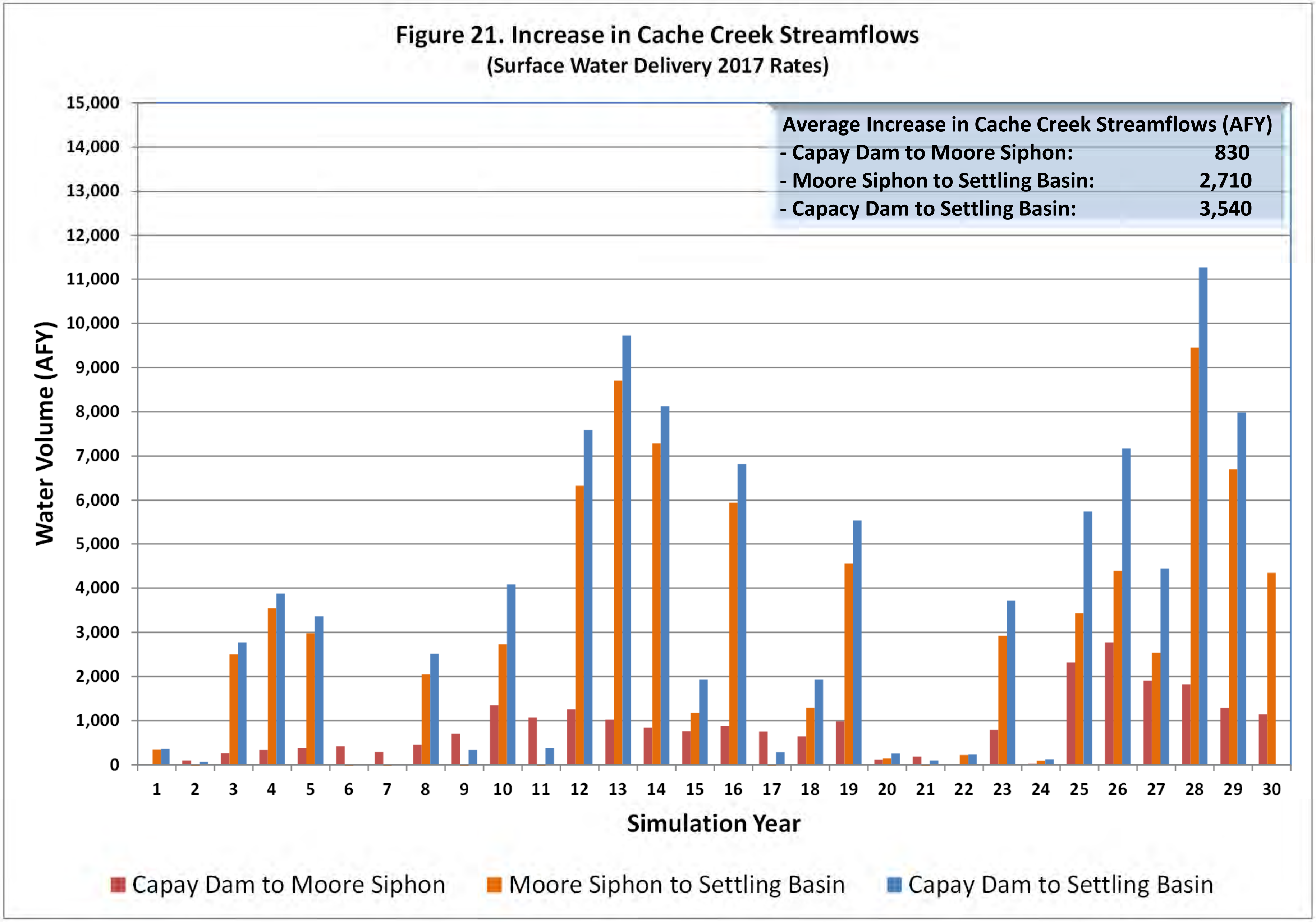


YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

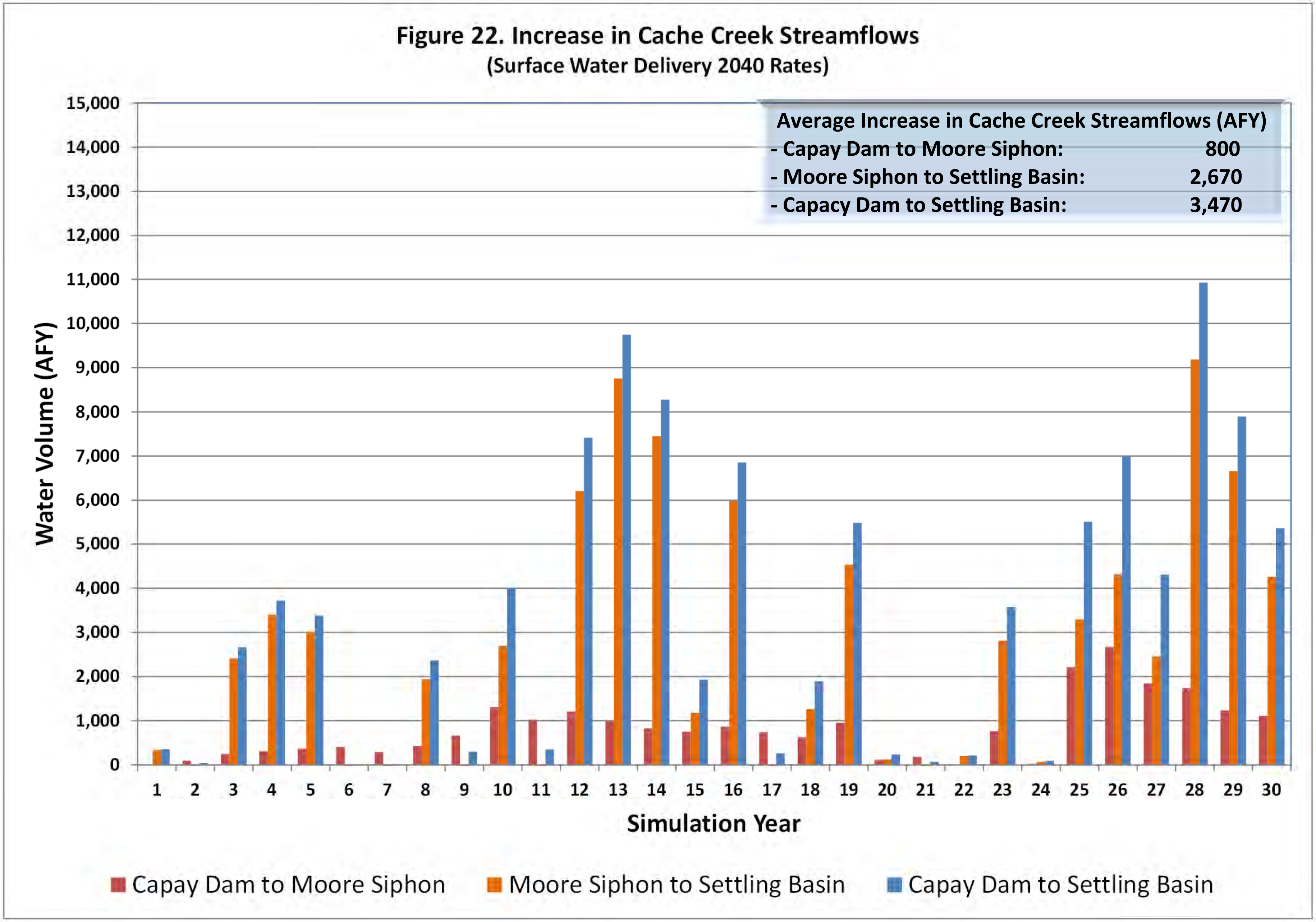
Woodland-Davis Scenario 2040 Layer 2
Groundwater Level Difference Contours, Fall 2000

SEPTEMBER 2011

FIGURE 20

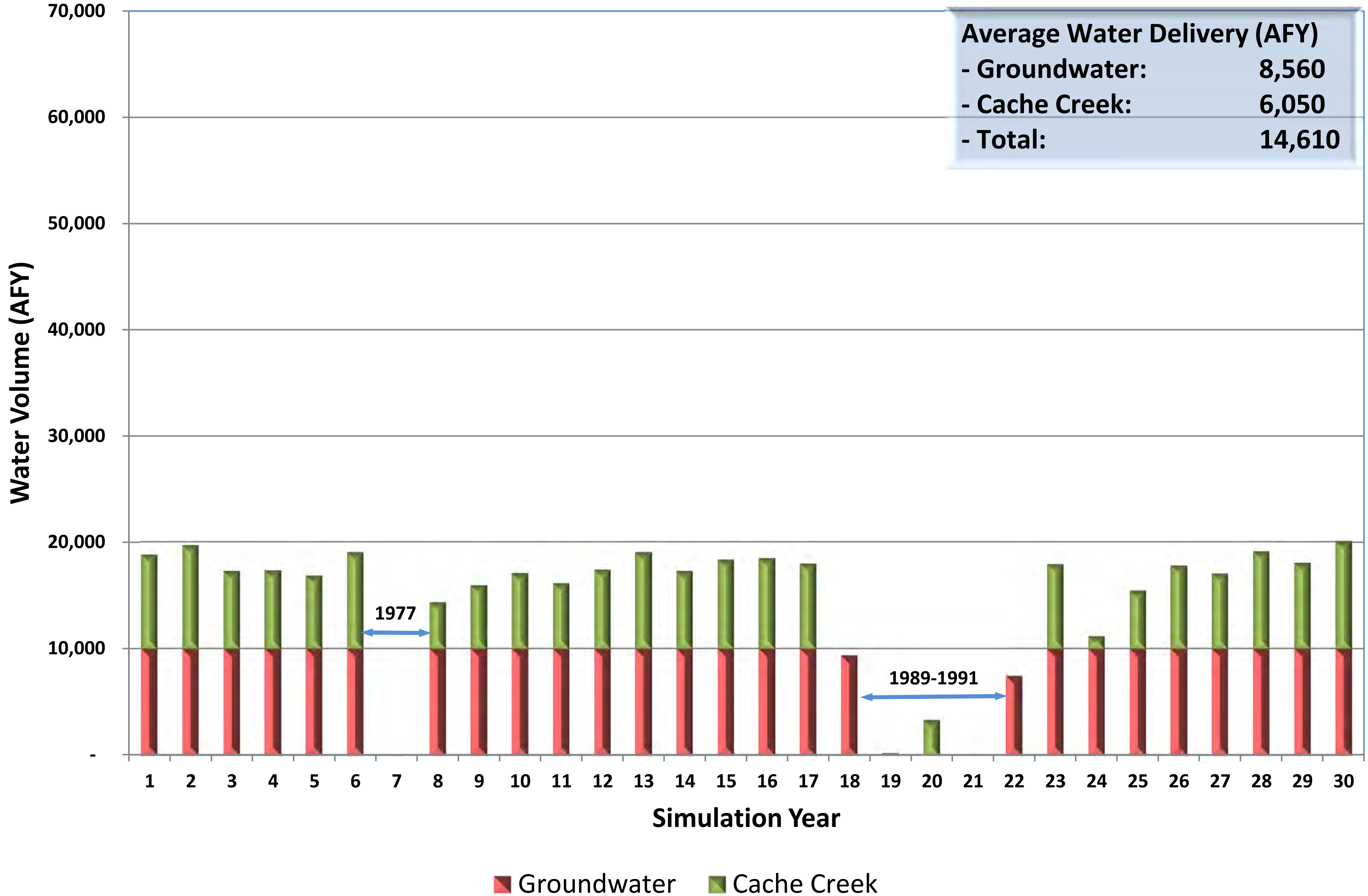


RMC Water and Environment



RMC Water and Environment

Figure 23. Water Delivery to Moore Canal



RMC Water and Environment

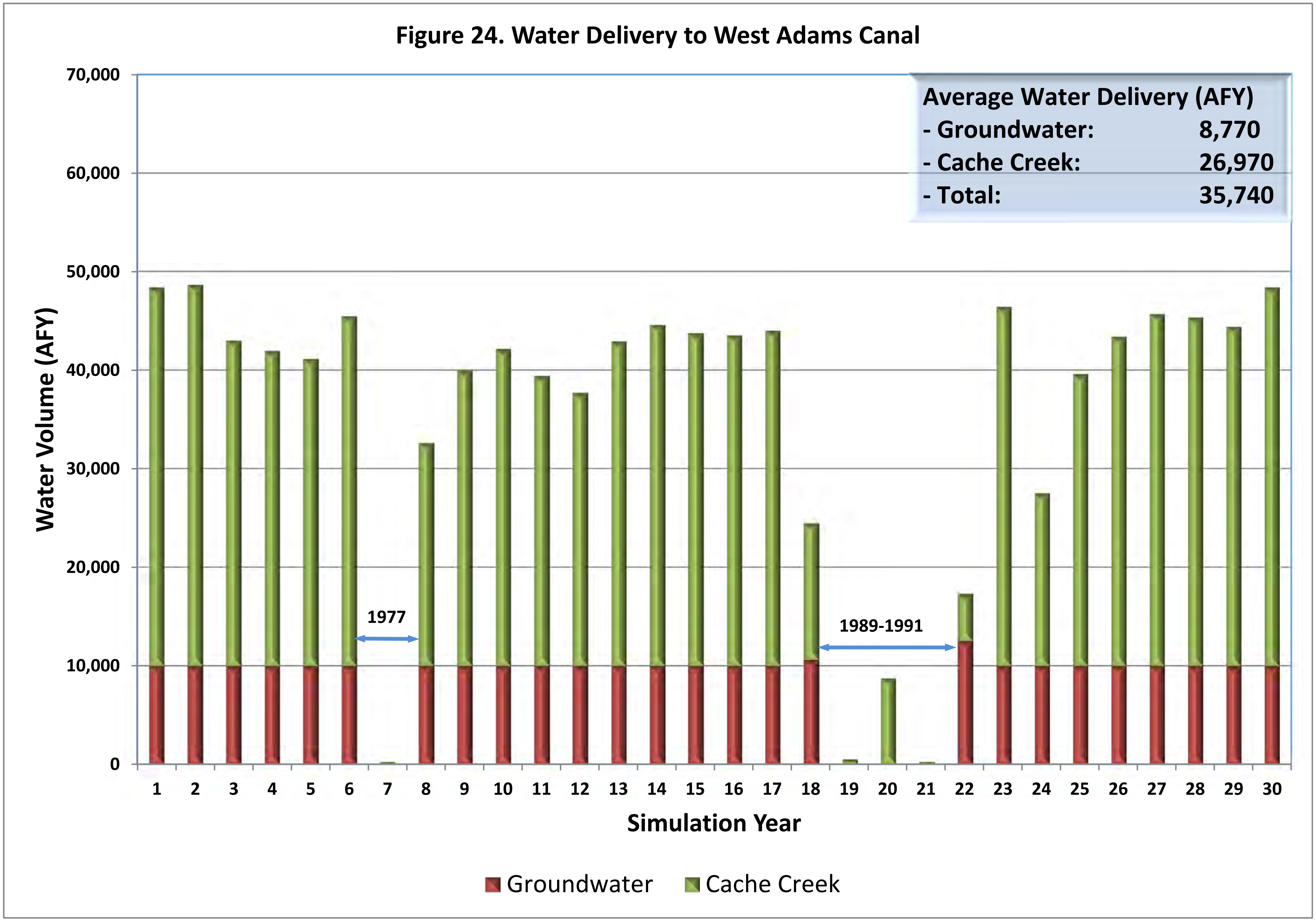


Figure 24. Water Delivery to West Adams Canal
Average Water Delivery (AFY)
- Groundwater: 8,770
- Cache Creek: 26,970
- Total: 35,740
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Water Volume (AFY)
1977
1989-1991
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Simulation Year
Groundwater
Cache Creek

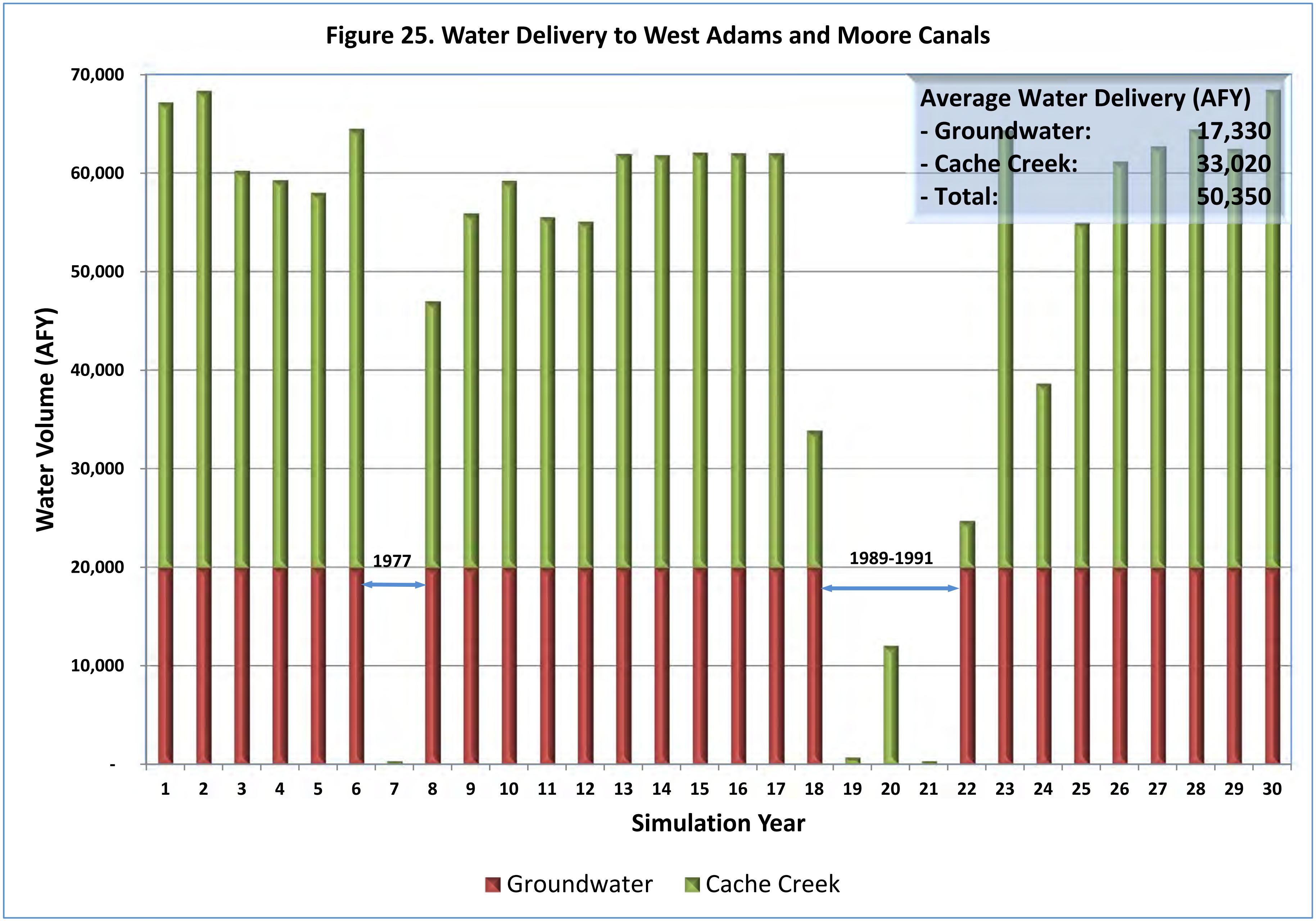
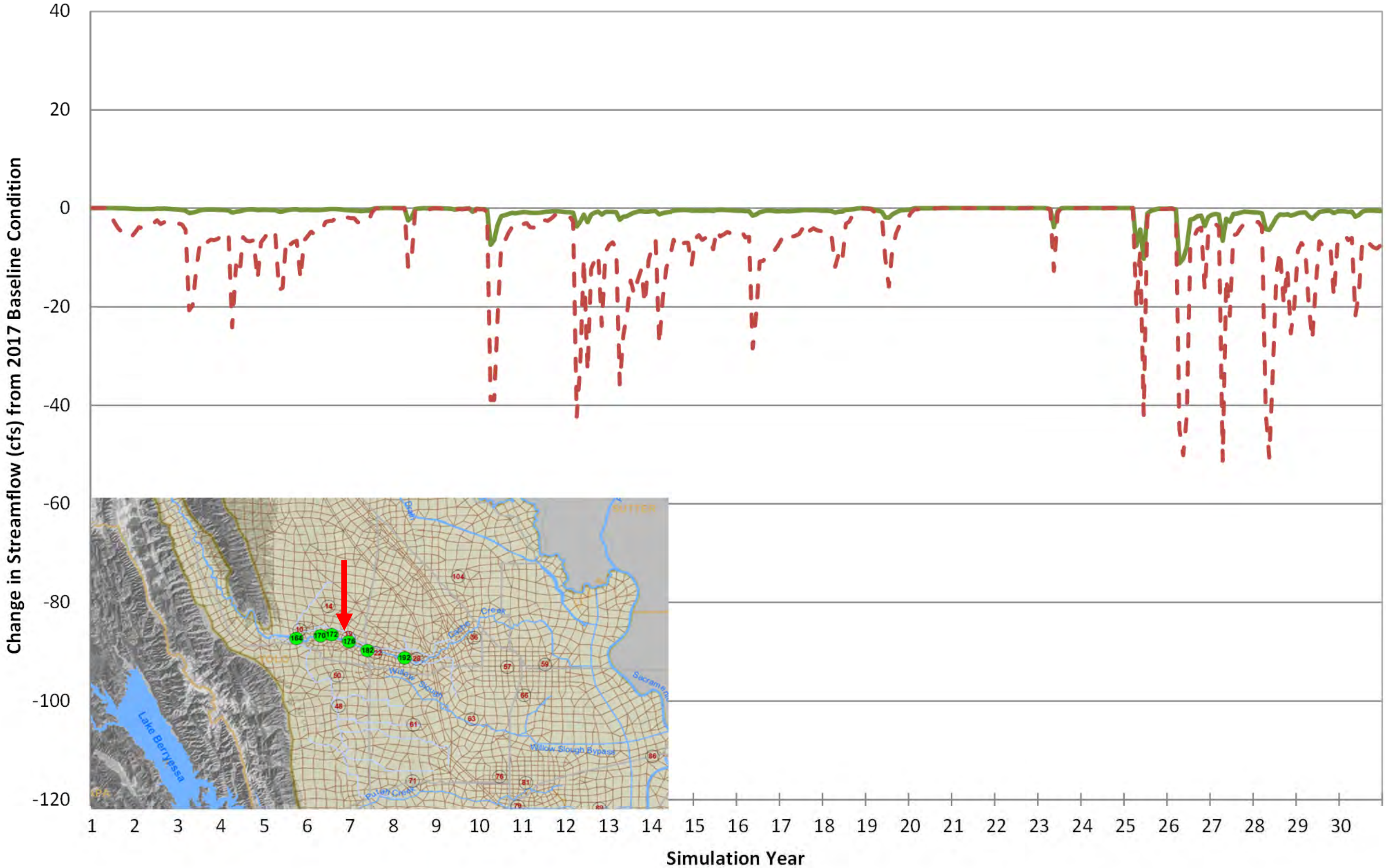


Figure 25. Water Delivery to West Adams and Moore Canals
Average Water Delivery (AFY)
- Groundwater: 17,330
- Cache Creek: 33,020
- Total: 50,350
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
Water Volume (AFY)
1977
1989-1991
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Simulation Year
Groundwater
Cache Creek

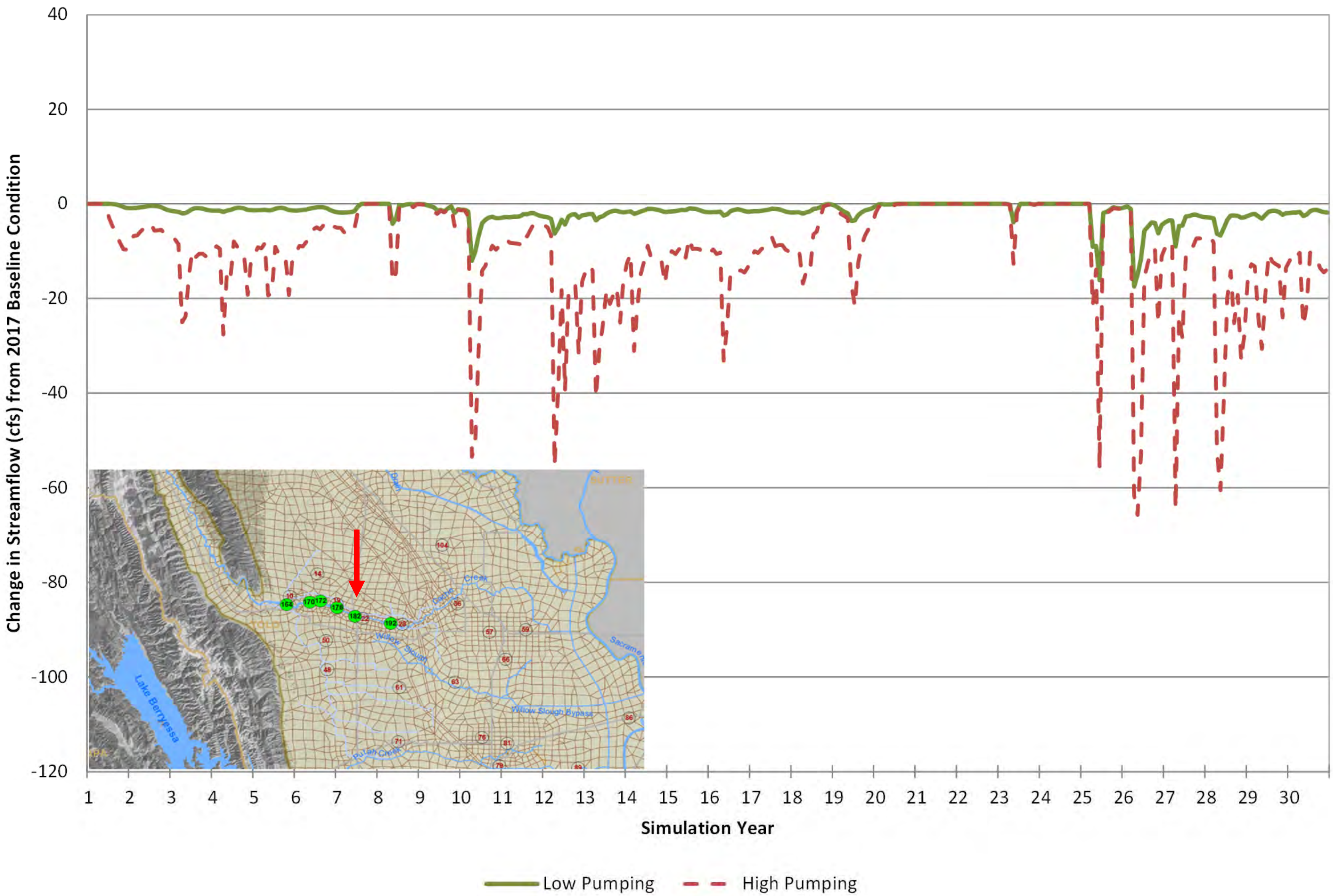
Figure 26. Simulated Streamflow Changes at Location 176
(Project minus 2017 Baseline)



Note: Year 1 of simulation corresponds to water year 1971

September 2011

Figure 27. Simulated Streamflow Changes at Location 182
(Project minus 2017 Baseline)

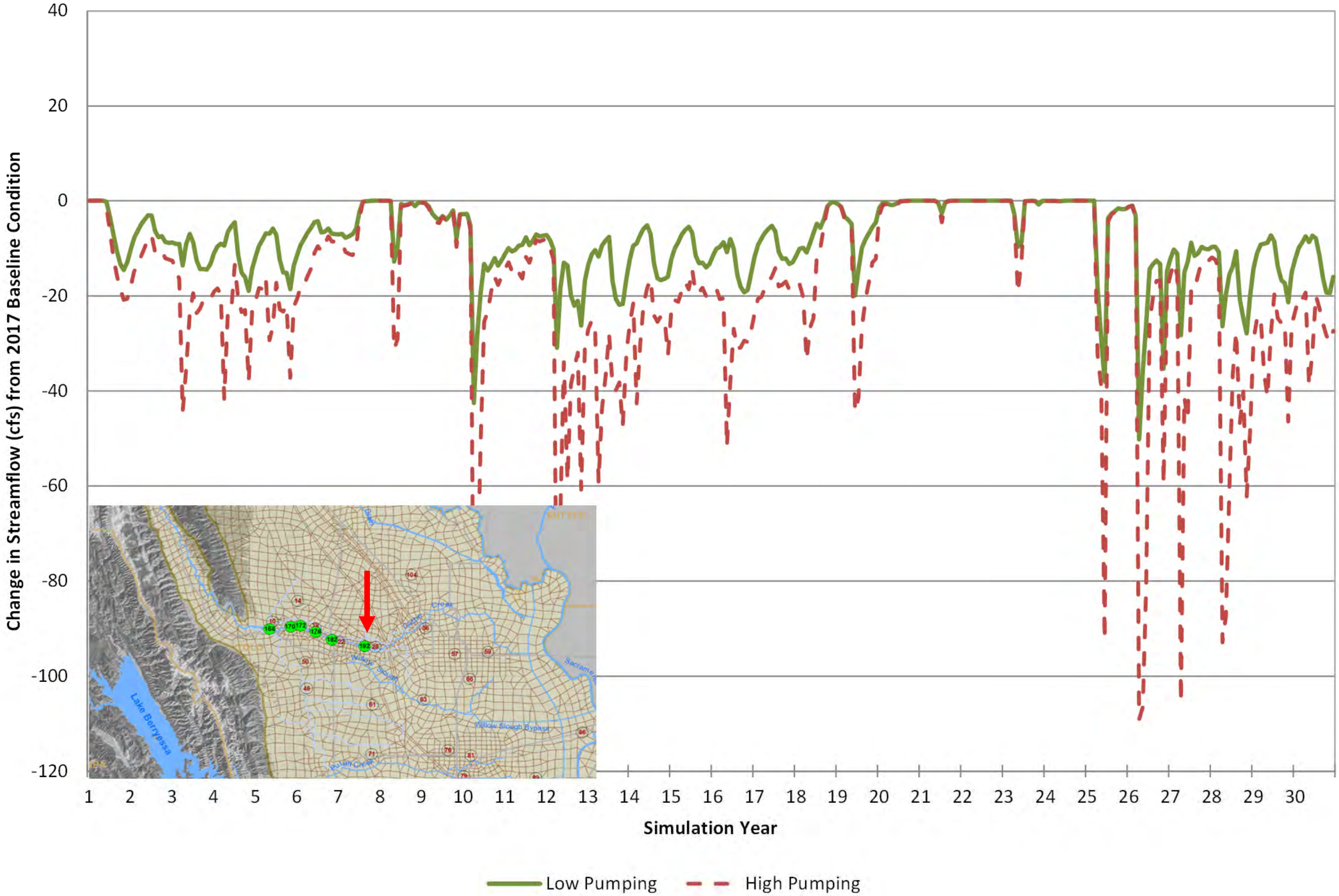


Note: Year 1 of simulation corresponds to water year 1971

September 2011

Figure 28. Simulated Streamflow Changes at Location 192

(Project minus 2017 Baseline)



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Note: Year 1 of simulation corresponds to water year 1971

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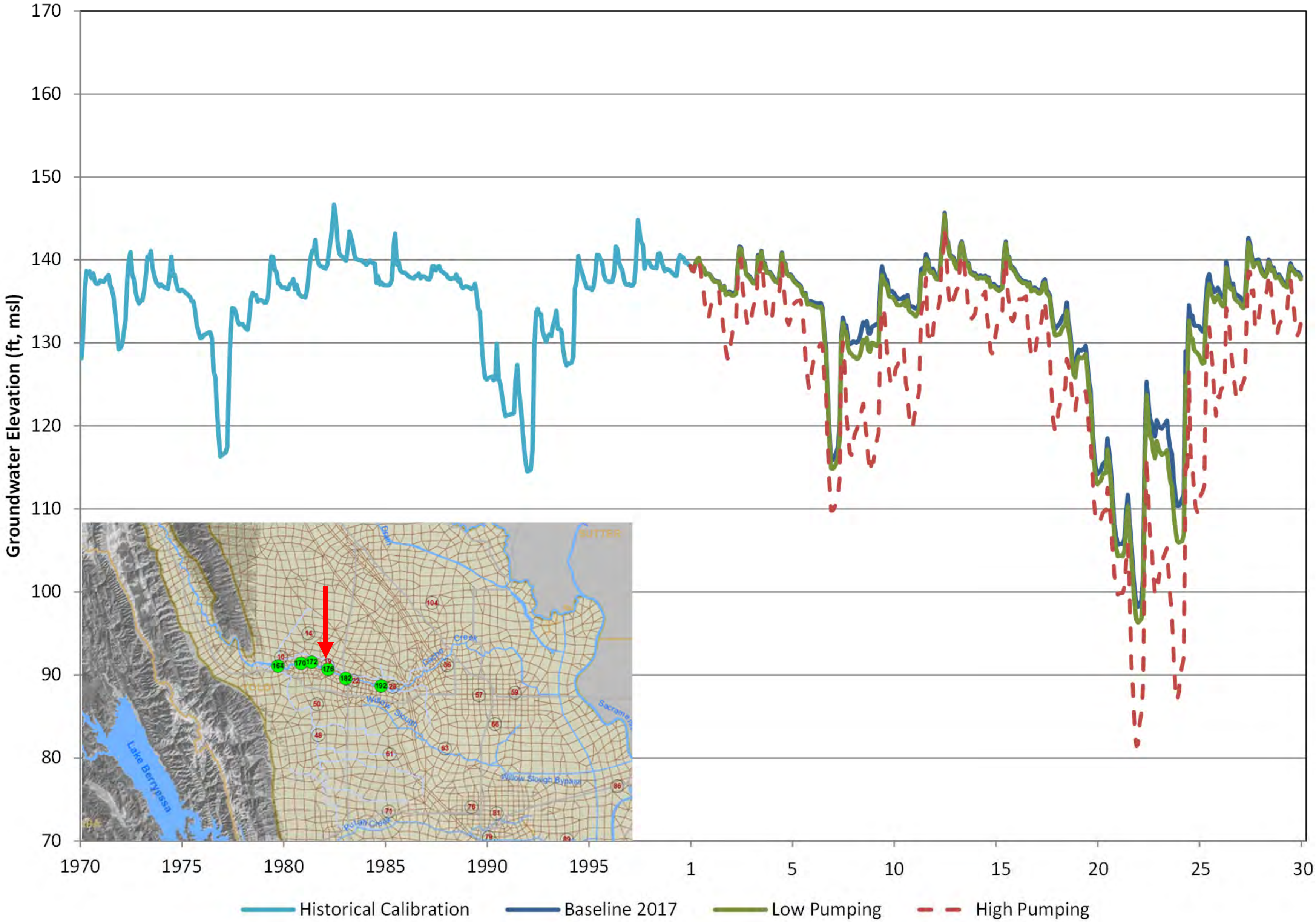
Figure 29. Simulated Groundwater Elevations at Calibration Well 19
(Layer 2)



GSE - 160 ft, Layer 1 Thickness - 110 ft, Layer 2 Thickness - 1080 ft, Layer 3 Thickness - 850

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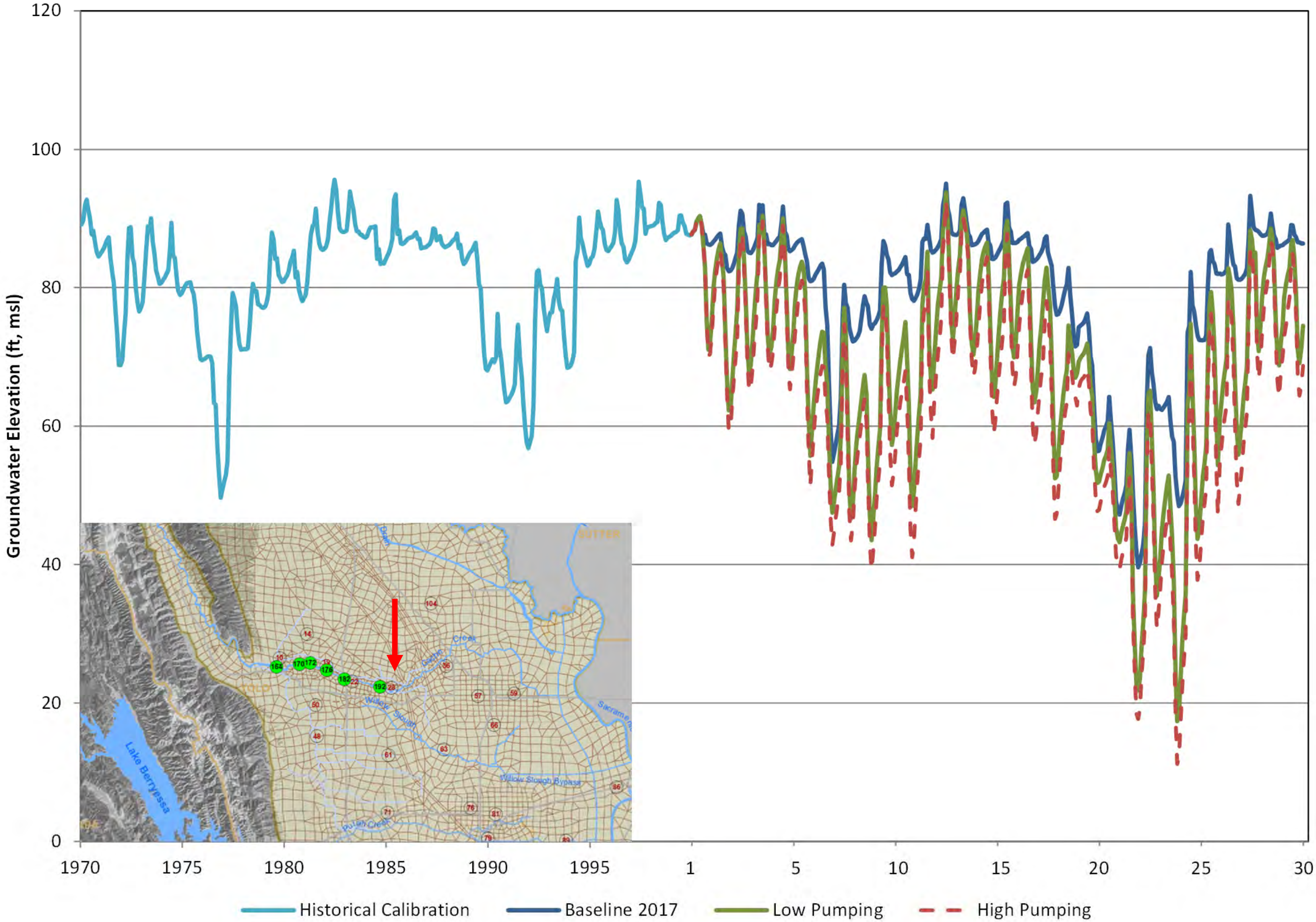
Figure 30. Simulated Groundwater Elevations at Calibration Well 28
(Layer 2)



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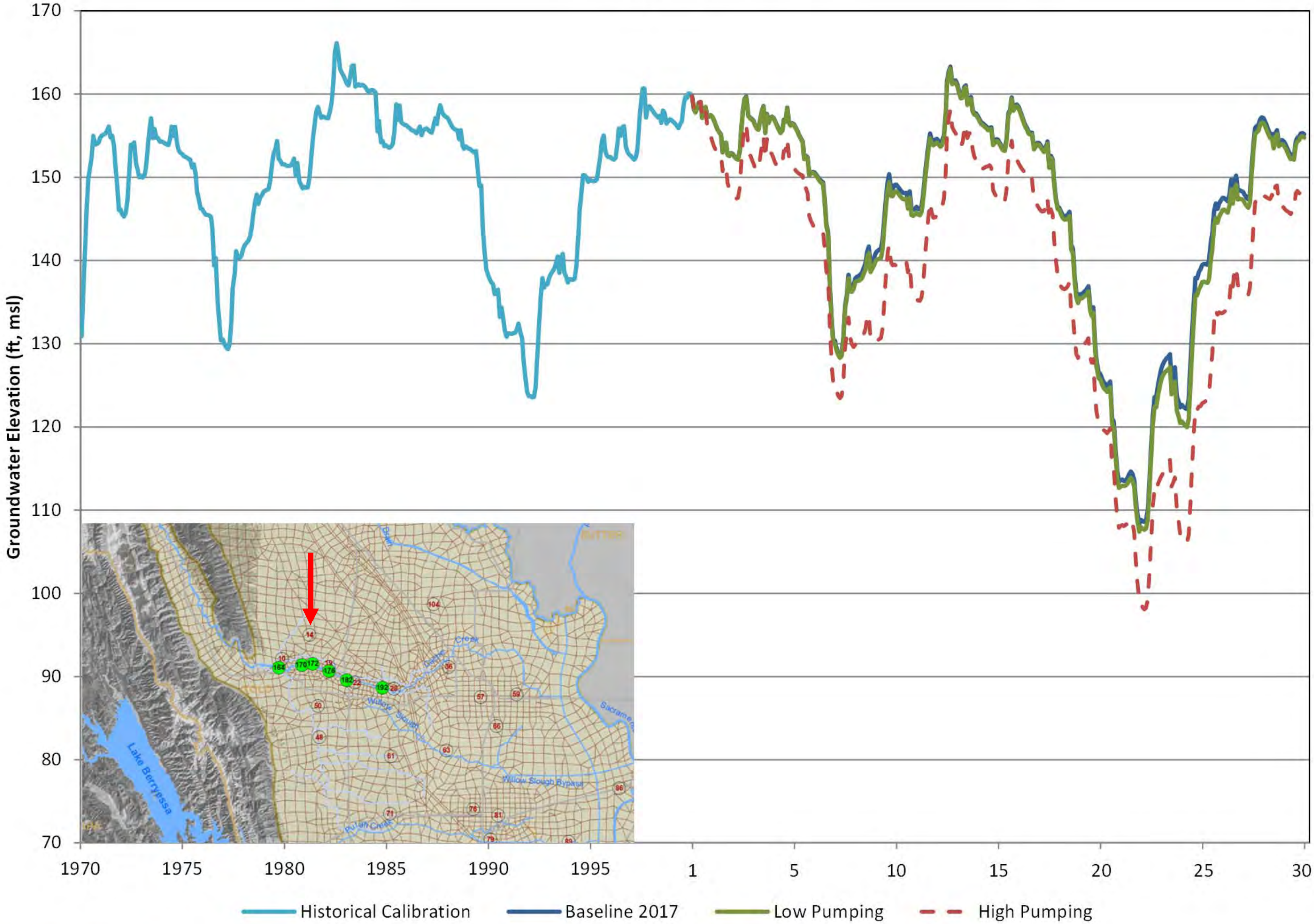
GSE - 120 ft, Layer 1 Thickness - 40 ft, Layer 2 Thickness - 1390 ft, Layer 3 Thickness - 1010

September 2011

Figure 31. Simulated Groundwater Elevations at Calibration Well 14
(Layer 2)



GSE - 190 ft, Layer 1 Thickness - 190 ft, Layer 2 Thickness - 790 ft, Layer 3 Thickness - 620

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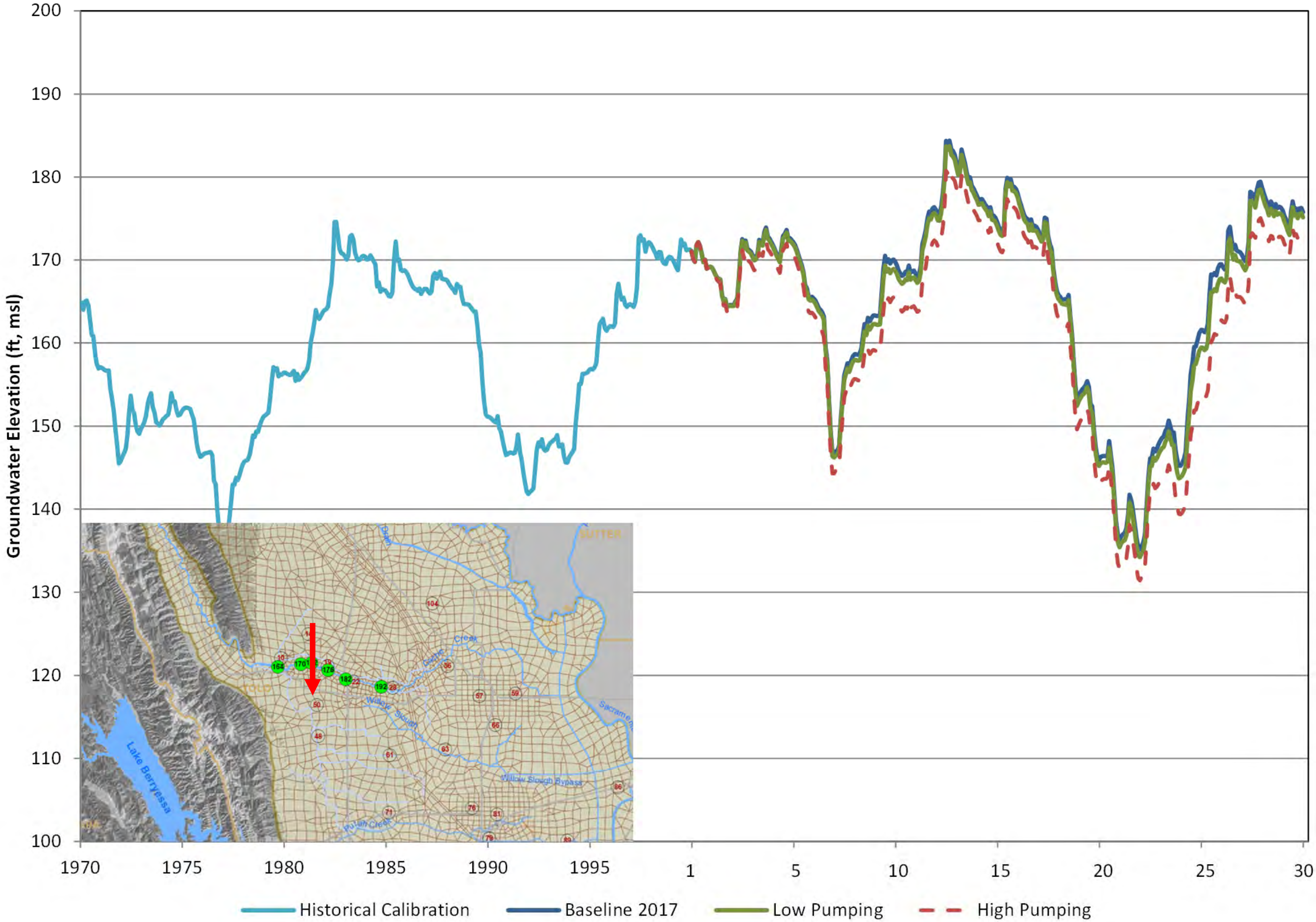
September 2011

Figure 32. Simulated Groundwater Elevations at Calibration Well 50
(Layer 2)



GSE - 190 ft, Layer 1 Thickness - 40 ft, Layer 2 Thickness - 1060 ft, Layer 3 Thickness - 720

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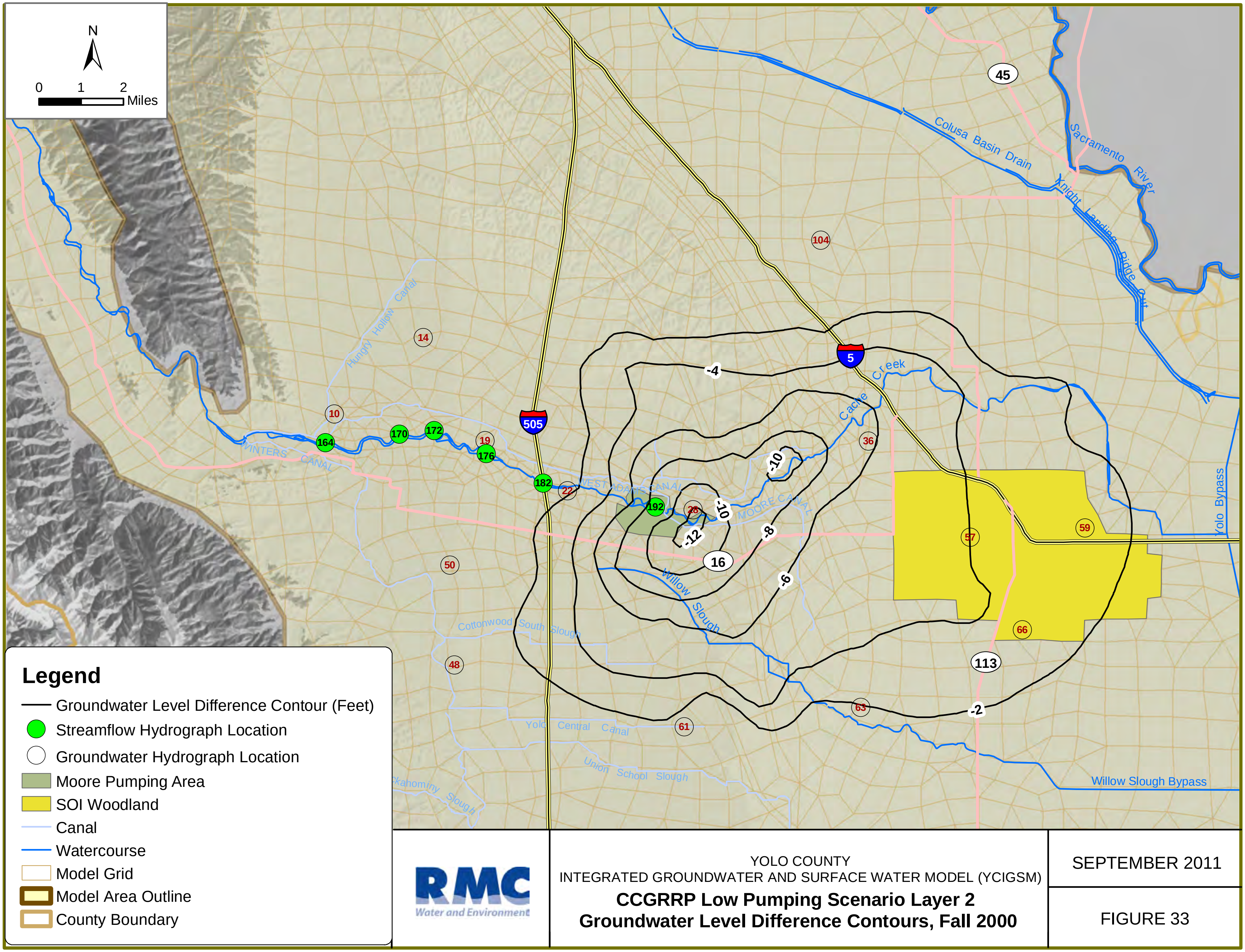


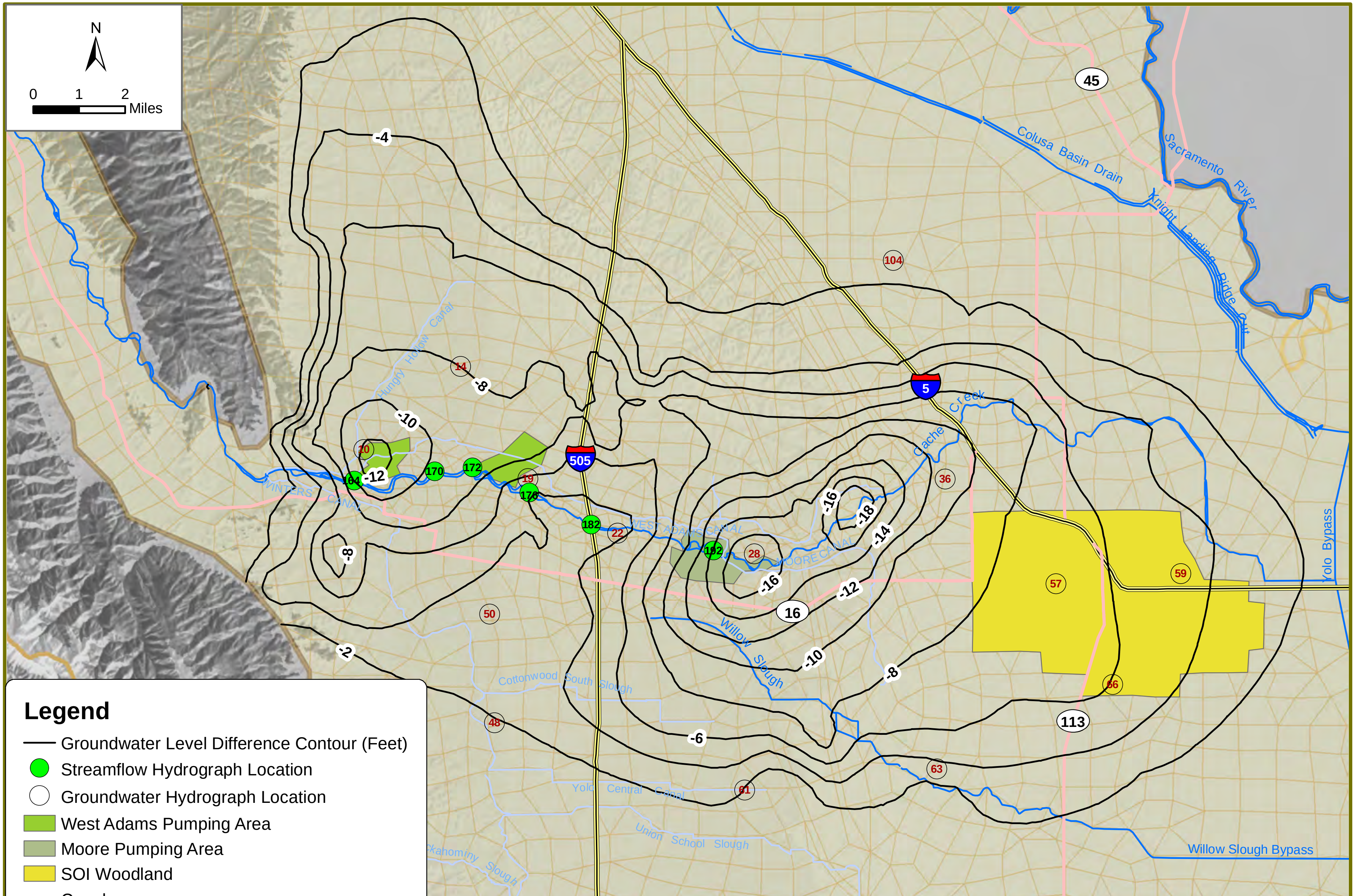
YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

CCGRRP Low Pumping Scenario Layer 2
Groundwater Level Difference Contours, Fall 2000

SEPTEMBER 2011

FIGURE 33

RMC Water and Environment



Legend

- Groundwater Level Difference Contour (Feet)
- Streamflow Hydrograph Location
- Groundwater Hydrograph Location
- West Adams Pumping Area
- Moore Pumping Area
- SOI Woodland
- Canal
- Watercourse
- Model Grid
- Model Area Outline
- County Boundary

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YOLO COUNTY
INTEGRATED GROUNDWATER AND SURFACE WATER MODEL (YCIGSM)

CCGRRP High Pumping Scenario Layer 2
Groundwater Level Difference Contours, Fall 2000

SEPTEMBER 2011

FIGURE 34

Appendix A – Project Meetings

Project Meetings

- Kickoff Meeting with YCFCWCD, City of Davis (Public Works Department), and City of Woodland (Public Works Department) – April 1, 2011
    - Attendees
        - YCFCWCD
            - Max Stevenson
        - City of Woodland
            - Liz Houck
        - RMC/WRIME
            - Ali Taghavi
            - Reza Namvar
            - Jon Traum
- Meeting with City of Woodland (Public Works Department), April 29, 2011
    - Attendees
        - City of Woodland
            - Akin Okupe
        - RMC/WRIME
            - Reza Namvar
- Meeting with City of Davis (Public Works Department), May 24, 2011
    - Attendees
        - City of Davis
            - Jacques DeBra
        - YCFCWCD
            - Max Stevenson
        - RMC/WRIME
            - Reza Namvar
- Meeting with YCFCWCD – July 25, 2011
    - Attendees
        - YCFCWCD
            - Max Stevenson
        - RMC/WRIME
            - Reza Namvar
- Final Meeting with YCFCWCD, City of Davis (Public Works Department) and City of Woodland (Public Works Department) – August 10, 2011
    - Attendees (please see the attendance sheet on next page)
        - YCFCWCD
            - Max Stevenson
        - City of Davis
            - Jacques DeBra
        - City of Woodland
            - Mark Cocke
            - Clara Olmedo
            - Akin Okupe
        - RMC/WRIME
            - Ali Taghavi
            - Reza Namvar
            - Timothy Weigand

16SM MTG

Date: 8-10-11

RIME Water Resources & Information Management Engineering, Inc.

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Akin Okupe	~~Aokup~~ Akin.okupe@cityofwoodland.org
Reza Namvar	rnamvar@rmcwater.com

Appendix B – Water Supply Availability Tables

Table B1. Total Surface Water Availability for 2017 Scenario (AF/month)

Supply

Simulation Year	Calendar Year	Hydrological Conditions for Supply Availability: CPG Total (ac-ft)	CPG Jul-Sep (ac-ft)	Term 91 Curtailment Periods, months	Monthly Supply Distribution	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
0	1969	10,000	7,500	1	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530		2,469	1,884	1,507	**26,506**
					CPG Surface Water Supply									3,229				**3,229**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**3,600**	**3,530**	**3,229**	**2,469**	**1,884**	**1,507**	**29,735**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*207*	*276*	*455*	*1,338*	*1,800*	*2,299*	*15,087*
1	1970	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	**15,955**
					CPG Surface Water Supply						2,500	2,651	2,581	2,268				**10,000**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**2,651**	**2,581**	**2,268**	**2,469**	**1,884**	**1,507**	**25,955**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*-*	*1,156*	*1,226*	*1,416*	*1,338*	*1,800*	*2,299*	*17,683*
2	1971	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	**17,491**
					CPG Surface Water Supply							2,651	2,581	2,268				**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**2,651**	**2,581**	**2,268**	**2,469**	**-**	**1,507**	**24,991**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*1,156*	*1,226*	*1,416*	*1,338*	*3,684*	*2,299*	*19,831*
3	1972	10,000	7,500	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	**19,184**
					CPG Surface Water Supply						2,500	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**28,765**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*16,057*
4	1973	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	**15,955**
					CPG Surface Water Supply						2,500	2,651	2,581	2,268				**10,000**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**2,651**	**2,581**	**2,268**	**2,469**	**1,884**	**1,507**	**25,955**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*1,156*	*1,226*	*1,416*	*1,338*	*1,800*	*2,299*	*18,867*
5	1974	10,000	7,500	1	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530		2,469	1,884	1,507	**26,506**
					CPG Surface Water Supply									3,229				**3,229**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**3,600**	**3,530**	**3,229**	**2,469**	**1,884**	**1,507**	**29,735**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*207*	*276*	*455*	*1,338*	*1,800*	*2,299*	*15,087*
6	1975	10,000	7,500	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469	1,884	1,507	**19,375**
					CPG Surface Water Supply							2,651	2,581	2,268				**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**2,651**	**2,581**	**2,268**	**2,469**	**1,884**	**1,507**	**26,875**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*1,156*	*1,226*	*1,416*	*1,338*	*1,800*	*2,299*	*17,947*
7	1976	10,000	7,500	5	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367					3,229		1,884	1,507	**13,718**
					CPG Surface Water Supply					831	985	3,597	3,484		683			**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**831**	**985**	**3,597**	**3,484**	**3,229**	**683**	**1,884**	**1,507**	**23,298**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*2,976*	*2,699*	*210*	*323*	*455*	*3,123*	*1,800*	*2,299*	*21,524*
8	1977	7,500	5,625	7	Primary Surface Water Supply (30358)	1,536	1,395	1,800								1,884	1,507	**8,122**
					CPG Surface Water Supply				381	497	589	1,988	1,936	1,701	408			**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**381**	**497**	**589**	**1,988**	**1,936**	**1,701**	**408**	**1,884**	**1,507**	**15,622**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*3,303*	*3,310*	*3,095*	*1,818*	*1,871*	*1,983*	*3,399*	*1,800*	*2,299*	*29,200*
9	1978	10,000	7,500	2	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420			3,229	2,469	1,884	1,507	**22,604**
					CPG Surface Water Supply							3,597	3,484					**7,081**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**29,685**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*15,137*
10	1979	10,000	7,500	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	**19,184**
					CPG Surface Water Supply						2,500	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**28,765**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*16,057*
11	1980	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	**17,491**
					CPG Surface Water Supply							2,651	2,581	2,268				**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**2,651**	**2,581**	**2,268**	**2,469**	**-**	**1,507**	**24,991**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*1,156*	*1,226*	*1,416*	*1,338*	*3,684*	*2,299*	*19,831*
12	1981	10,000	7,500	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	**19,184**
					CPG Surface Water Supply						2,500	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**28,765**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*16,057*
13	1982	10,000	7,500	0	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229	2,469	1,884	1,507	**29,735**
					CPG Surface Water Supply													**-**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**3,600**	**3,530**	**3,229**	**2,469**	**1,884**	**1,507**	**29,735**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*207*	*276*	*455*	*1,338*	*1,800*	*2,299*	*15,087*
14	1983	10,000	7,500	0	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229	2,469	1,884	1,507	**29,735**
					CPG Surface Water Supply													**-**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**3,600**	**3,530**	**3,229**	**2,469**	**1,884**	**1,507**	**29,735**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*207*	*276*	*455*	*1,338*	*1,800*	*2,299*	*15,087*
15	1984	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	**15,955**
					CPG Surface Water Supply						2,500	2,651	2,581	2,268				**10,000**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**2,651**	**2,581**	**2,268**	**2,469**	**1,884**	**1,507**	**25,955**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*1,156*	*1,226*	*1,416*	*1,338*	*1,800*	*2,299*	*18,867*
16	1985	10,000	7,500	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	**19,184**
					CPG Surface Water Supply						2,500	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**28,765**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*16,057*
17	1986	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	**17,491**
					CPG Surface Water Supply							2,651	2,581	2,268				**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**2,651**	**2,581**	**2,268**	**2,469**	**-**	**1,507**	**24,991**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*1,156*	*1,226*	*1,416*	*1,338*	*3,684*	*2,299*	*19,831*
18	1987	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367					3,229	2,469	1,884	1,507	**16,186**
					CPG Surface Water Supply					1,144	1,356	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**1,144**	**1,356**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**25,767**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*2,663*	*2,328*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*19,055*
19	1988	10,000	7,500	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	**19,184**
					CPG Surface Water Supply						2,500	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**28,765**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*16,057*
20	1989	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367					3,229	2,469	1,884	1,507	**16,186**
					CPG Surface Water Supply					1,144	1,356	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**1,144**	**1,356**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**25,767**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*2,663*	*2,328*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*19,055*
21	1990	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800		2,998				3,229	2,469	1,884	1,507	**16,817**
					CPG Surface Water Supply				983		1,517	3,597	3,484					**9,581**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**983**	**2,998**	**1,517**	**3,597**	**3,484**	**3,229**	**2,469**	**1,884**	**1,507**	**26,398**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*2,701*	*809*	*2,167*	*210*	*323*	*455*	*1,338*	*1,800*	*2,299*	*18,424*
22	1991	7,500	5,625	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	**19,184**
					CPG Surface Water Supply						1,875	2,850	2,775					**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**1,875**	**2,850**	**2,775**	**3,229**	**2,469**	**1,884**	**1,507**	**26,684**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,809*	*957*	*1,032*	*455*	*1,338*	*1,800*	*2,299*	*18,138*
23	1992	7,500	5,625	7	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367								1,507	**8,605**
					CPG Surface Water Supply					623	739	1,988	1,936	1,701	513			**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**623**	**739**	**1,988**	**1,936**	**1,701**	**513**	**-**	**1,507**	**16,105**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*3,183*	*2,945*	*1,818*	*1,871*	*1,983*	*3,294*	*3,684*	*2,299*	*28,717*
24	1993	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	**17,491**
					CPG Surface Water Supply							2,651	2,581	2,268				**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**2,651**	**2,581**	**2,268**	**2,469**	**-**	**1,507**	**24,991**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*1,156*	*1,226*	*1,416*	*1,338*	*3,684*	*2,299*	*19,831*
25	1994	7,500	5,625	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	**19,184**
					CPG Surface Water Supply						1,875	2,850	2,775					**7,500**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**1,875**	**2,850**	**2,775**	**3,229**	**2,469**	**1,884**	**1,507**	**26,684**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,809*	*957*	*1,032*	*455*	*1,338*	*1,800*	*2,299*	*18,138*
26	1995	10,000	7,500	2	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229			1,507	**25,382**
					CPG Surface Water Supply										2,365			**2,365**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**3,600**	**3,530**	**3,229**	**2,365**	**-**	**1,507**	**27,747**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*207*	*276*	*455*	*1,442*	*3,684*	*2,299*	*17,075*
27	1996	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420					1,884	1,507	**16,907**
					CPG Surface Water Supply							2,651	2,581	2,268	2,365			**9,865**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**2,651**	**2,581**	**2,268**	**2,365**	**1,884**	**1,507**	**26,771**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*1,156*	*1,226*	*1,416*	*1,442*	*1,800*	*2,299*	*18,051*
28	1997	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	**15,955**
					CPG Surface Water Supply						2,500	2,651	2,581	2,268				**10,000**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**2,651**	**2,581**	**2,268**	**2,469**	**1,884**	**1,507**	**25,955**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*1,156*	*1,226*	*1,416*	*1,338*	*1,800*	*2,299*	*18,867*
29	1998	10,000	7,500	0	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229	2,469	1,884	1,507	**29,735**
					CPG Surface Water Supply													**-**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**3,600**	**3,530**	**3,229**	**2,469**	**1,884**	**1,507**	**29,735**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*207*	*276*	*455*	*1,338*	*1,800*	*2,299*	*15,087*
30	1999	10,000	7,500	5	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420						1,507	**15,023**
					CPG Surface Water Supply							2,651	2,581	2,268	2,365			**9,865**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**3,420**	**2,651**	**2,581**	**2,268**	**2,365**	**-**	**1,507**	**24,887**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*264*	*1,156*	*1,226*	*1,416*	*1,442*	*3,684*	*2,299*	*19,935*
31	2000	10,000	7,500	5	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469		1,507	**14,071**
					CPG Surface Water Supply						2,500	2,651	2,581	2,268				**10,000**
					Total Surface Water Supply	**1,536**	**1,395**	**1,800**	**2,367**	**2,998**	**2,500**	**2,651**	**2,581**	**2,268**	**2,469**	**-**	**1,507**	**24,071**
					Unused RWTF Capacity	*2,271*	*2,044*	*2,007*	*1,317*	*809*	*1,184*	*1,156*	*1,226*	*1,416*	*1,338*	*3,684*	*2,299*	*20,751*
1969-2000 Annual Average		**9,688**	**7,266**	**3**	**Primary Surface Water Supply (30358)**													**18,853**
					CPG Surface Water Supply													**7,480**
					Total Surface Water Supply													**26,333**
					Unused RWTF Capacity													***18,452***

Table B2. Distribution of Supply and Demand for City of Woodland for 2017 Scenario (AF/month)

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand					**2017 Monthly Demand Distribution** **Monthly demands do not change and is set to Year 2017 demand levels**	736	696	896	1,054	1,469	1,813	1,939	1,870	1,622	1,274	932	780	**15,080**
Supply		**Hydrological Conditions for Supply Availability**																
Simulation Year	**Calendar Year**	**CPG Total (ac-ft)**	**CPG Jul-Sep (ac-ft)**	**Term 91 Curtailment Periods, months**	**Monthly Supply Distribution**													
0	1969	1,622	1,622	1	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813	1,939	1,870		1,274	932	780	**13,458**
					CPG Surface Water Supply									1,622				**1,622**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
1	1970	5,637	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469					1,274	932	780	**7,837**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	403	445	415	343	0	0	0	**1,606**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
2	1971	4,228	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813				1,274		780	**8,718**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	445	415	343	0	279	0	**1,482**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	652	0	**652**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
3	1972	5,218	3,809	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469				1,622	1,274	932	780	**9,459**
					CPG Surface Water Supply						1,409	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	0	0	403	0	0	0	0	0	0	**403**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
4	1973	5,637	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469					1,274	932	780	**7,837**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	403	445	415	343	0	0	0	**1,606**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
5	1974	1,622	1,622	1	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813	1,939	1,870		1,274	932	780	**13,458**
					CPG Surface Water Supply									1,622				**1,622**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
6	1975	4,228	4,228	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813				1,274	932	780	**9,650**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	445	415	343	0	0	0	**1,203**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
7	1976	5,218	3,809	5	Primary Surface Water Supply (30358)	736	696	896	1,054					1,622		932	780	**6,716**
					CPG Surface Water Supply					469	556	1,939	1,870		385			**5,218**
					Allowable Groundwater Use	0	0	0	0	441	544	0	0	0	382	0	0	**1,367**
					Excess Groundwater Use	0	0	0	0	560	713	0	0	0	506	0	0	**1,780**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
8	1977	4,228	3,171	7	Primary Surface Water Supply (30358)	736	696	896								932	780	**4,040**
					CPG Surface Water Supply				215	280	332	1,121	1,091	959	230			**4,228**
					Allowable Groundwater Use	0	0	0	316	441	544	582	561	487	382	0	0	**3,312**
					Excess Groundwater Use	0	0	0	523	748	937	236	217	177	662	0	0	**3,500**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
9	1978	3,809	3,809	2	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813			1,622	1,274	932	780	**11,271**
					CPG Surface Water Supply							1,939	1,870					**3,809**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
10	1979	5,218	3,809	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469				1,622	1,274	932	780	**9,459**
					CPG Surface Water Supply						1,409	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	0	0	403	0	0	0	0	0	0	**403**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
11	1980	4,228	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813				1,274		780	**8,718**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	445	415	343	0	279	0	**1,482**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	652	0	**652**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
12	1981	5,218	3,809	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469				1,622	1,274	932	780	**9,459**
					CPG Surface Water Supply						1,409	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	0	0	403	0	0	0	0	0	0	**403**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
13	1982	0	0	0	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813	1,939	1,870	1,622	1,274	932	780	**15,080**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
14	1983	0	0	0	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813	1,939	1,870	1,622	1,274	932	780	**15,080**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
15	1984	5,637	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469					1,274	932	780	**7,837**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	403	445	415	343	0	0	0	**1,606**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
16	1985	5,218	3,809	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469				1,622	1,274	932	780	**9,459**
					CPG Surface Water Supply						1,409	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	0	0	403	0	0	0	0	0	0	**403**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
17	1986	4,228	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813				1,274		780	**8,718**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	445	415	343	0	279	0	**1,482**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	652	0	**652**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
18	1987	5,218	3,809	4	Primary Surface Water Supply (30358)	736	696	896	1,054					1,622	1,274	932	780	**7,990**
					CPG Surface Water Supply					645	764	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	0	441	544	0	0	0	0	0	0	**985**
					Excess Groundwater Use	0	0	0	0	384	504	0	0	0	0	0	0	**888**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
19	1988	5,218	3,809	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469				1,622	1,274	932	780	**9,459**
					CPG Surface Water Supply						1,409	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	0	0	403	0	0	0	0	0	0	**403**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
20	1989	5,218	3,809	4	Primary Surface Water Supply (30358)	736	696	896	1,054					1,622	1,274	932	780	**7,990**
					CPG Surface Water Supply					645	764	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	0	441	544	0	0	0	0	0	0	**985**
					Excess Groundwater Use	0	0	0	0	384	504	0	0	0	0	0	0	**888**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
21	1990	5,218	3,809	4	Primary Surface Water Supply (30358)	736	696	896		1,469				1,622	1,274	932	780	**8,405**
					CPG Surface Water Supply				554		855	1,939	1,870					**5,218**
					Allowable Groundwater Use	0	0	0	316	0	544	0	0	0	0	0	0	**860**
					Excess Groundwater Use	0	0	0	184	0	414	0	0	0	0	0	0	**597**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
22	1991	4,228	3,171	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469				1,622	1,274	932	780	**9,459**
					CPG Surface Water Supply						1,057	1,607	1,564					**4,228**
					Allowable Groundwater Use	0	0	0	0	0	544	332	305	0	0	0	0	**1,182**
					Excess Groundwater Use	0	0	0	0	0	212	0	0	0	0	0	0	**212**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
23	1992	4,228	3,171	7	Primary Surface Water Supply (30358)	736	696	896	1,054								780	**4,163**
					CPG Surface Water Supply					351	417	1,121	1,091	959	289			**4,228**
					Allowable Groundwater Use	0	0	0	0	441	544	582	561	487	382	279	0	**3,275**
					Excess Groundwater Use	0	0	0	0	677	852	236	217	177	603	652	0	**3,414**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
24	1993	4,228	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813				1,274		780	**8,718**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	445	415	343	0	279	0	**1,482**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	652	0	**652**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
25	1994	4,228	3,171	3	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469				1,622	1,274	932	780	**9,459**
					CPG Surface Water Supply						1,057	1,607	1,564					**4,228**
					Allowable Groundwater Use	0	0	0	0	0	544	332	305	0	0	0	0	**1,182**
					Excess Groundwater Use	0	0	0	0	0	212	0	0	0	0	0	0	**212**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
26	1995	1,274	0	2	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813	1,939	1,870	1,622			780	**12,875**
					CPG Surface Water Supply										1,274			**1,274**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	279	0	**279**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	652	0	**652**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
27	1996	5,502	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813					932	780	**8,376**
					CPG Surface Water Supply							1,495	1,455	1,278	1,274			**5,502**
					Allowable Groundwater Use	0	0	0	0	0	0	445	415	343	0	0	0	**1,203**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
28	1997	5,637	4,228	4	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469					1,274	932	780	**7,837**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	403	445	415	343	0	0	0	**1,606**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
29	1998	0	0	0	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813	1,939	1,870	1,622	1,274	932	780	**15,080**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
30	1999	5,502	4,228	5	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469	1,813						780	**7,444**
					CPG Surface Water Supply							1,495	1,455	1,278	1,274			**5,502**
					Allowable Groundwater Use	0	0	0	0	0	0	445	415	343	0	279	0	**1,482**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	652	0	**652**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
31	2000	5,637	4,228	5	Primary Surface Water Supply (30358)	736	696	896	1,054	1,469					1,274		780	**6,905**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	403	445	415	343	0	279	0	**1,885**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	652	0	**652**
					Total Supply	**736**	**696**	**896**	**1,054**	**1,469**	**1,813**	**1,939**	**1,870**	**1,622**	**1,274**	**932**	**780**	**15,080**
1969-2000 Annual Average		**4,141**	**3,273**	**3**	**Primary Surface Water Supply (30358)**													**9,388**
					CPG Surface Water Supply													**4,141**
					Allowable Groundwater Use													**1,049**
					Excess Groundwater Use													**502**
					Total Supply													**15,080**

Table B3. Distribution of Supply and Demand for City of Davis for 2017 Scenario (AF/month)

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand					**2017 Monthly Demand Distribution** **Monthly demands do not change and is set to Year 2017 demand levels**	645	563	734	1,149	1,359	1,512	1,724	1,704	1,526	1,025	788	586	**13,315**
Supply		**Hydrological Conditions for Supply Availability**			**Monthly Supply Distribution**													
Simulation Year	**Calendar Year**	**CPG Total (ac-ft)**	**CPG Jul-Sep (ac-ft)**	**Term 91 Curtailment Periods, months**														
0	1969	1,443	1,443	1	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443	1,491	1,491		1,025	788	586	**11,274**
					CPG Surface Water Supply									1,443				**1,443**
					Allowable Groundwater Use	0	0	0	0	0	69	233	213	83	0	0	0	**598**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
1	1970	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359					1,025	788	586	**6,849**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	685	693	638	0	0	0	**2,549**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
2	1971	2,938	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443				1,025		586	**7,504**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	69	685	693	638	0	512	0	**2,597**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	276	0	**276**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
3	1972	3,917	2,938	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359				1,443	1,025	788	586	**8,292**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	235	255	83	0	0	0	**1,106**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
4	1973	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359					1,025	788	586	**6,849**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	685	693	638	0	0	0	**2,549**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
5	1974	1,443	1,443	1	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443	1,491	1,491		1,025	788	586	**11,274**
					CPG Surface Water Supply									1,443				**1,443**
					Allowable Groundwater Use	0	0	0	0	0	69	233	213	83	0	0	0	**598**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
6	1975	2,938	2,938	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443				1,025	788	586	**8,292**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	69	685	693	638	0	0	0	**2,085**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
7	1976	3,917	2,938	5	Primary Surface Water Supply (30358)	645	563	734	1,149					1,443		788	586	**5,908**
					CPG Surface Water Supply					326	386	1,489	1,449		268			**3,917**
					Allowable Groundwater Use	0	0	0	0	883	983	235	255	83	666	0	0	**3,106**
					Excess Groundwater Use	0	0	0	0	150	143	0	0	0	91	0	0	**384**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
8	1977	2,938	2,203	7	Primary Surface Water Supply (30358)	645	563	734								788	586	**3,316**
					CPG Surface Water Supply				149	194	231	779	758	666	160			**2,938**
					Allowable Groundwater Use	0	0	0	747	883	983	945	946	860	666	0	0	**6,030**
					Excess Groundwater Use	0	0	0	253	281	299	0	0	0	199	0	0	**1,031**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
9	1978	2,938	2,938	2	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443			1,443	1,025	788	586	**9,735**
					CPG Surface Water Supply							1,489	1,449					**2,938**
					Allowable Groundwater Use	0	0	0	0	0	69	235	255	83	0	0	0	**642**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
10	1979	3,917	2,938	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359				1,443	1,025	788	586	**8,292**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	235	255	83	0	0	0	**1,106**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
11	1980	2,938	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443				1,025		586	**7,504**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	69	685	693	638	0	512	0	**2,597**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	276	0	**276**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
12	1981	3,917	2,938	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359				1,443	1,025	788	586	**8,292**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	235	255	83	0	0	0	**1,106**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
13	1982	0	0	0	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443	1,491	1,491	1,443	1,025	788	586	**12,717**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	69	233	213	83	0	0	0	**598**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
14	1983	0	0	0	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443	1,491	1,491	1,443	1,025	788	586	**12,717**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	69	233	213	83	0	0	0	**598**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
15	1984	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359					1,025	788	586	**6,849**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	685	693	638	0	0	0	**2,549**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
16	1985	3,917	2,938	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359				1,443	1,025	788	586	**8,292**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	235	255	83	0	0	0	**1,106**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
17	1986	2,938	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443				1,025		586	**7,504**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	69	685	693	638	0	512	0	**2,597**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	276	0	**276**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
18	1987	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149					1,443	1,025	788	586	**6,933**
					CPG Surface Water Supply					448	531	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	883	981	235	255	83	0	0	0	**2,437**
					Excess Groundwater Use	0	0	0	0	28	0	0	0	0	0	0	0	**28**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
19	1988	3,917	2,938	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359				1,443	1,025	788	586	**8,292**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	235	255	83	0	0	0	**1,106**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
20	1989	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149					1,443	1,025	788	586	**6,933**
					CPG Surface Water Supply					448	531	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	883	981	235	255	83	0	0	0	**2,437**
					Excess Groundwater Use	0	0	0	0	28	0	0	0	0	0	0	0	**28**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
21	1990	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734		1,359				1,443	1,025	788	586	**7,143**
					CPG Surface Water Supply				385		594	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	747	0	918	235	255	83	0	0	0	**2,238**
					Excess Groundwater Use	0	0	0	17	0	0	0	0	0	0	0	0	**17**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
22	1991	2,938	2,203	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359				1,443	1,025	788	586	**8,292**
					CPG Surface Water Supply						734	1,116	1,087					**2,938**
					Allowable Groundwater Use	0	0	0	0	0	778	608	617	83	0	0	0	**2,085**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
23	1992	2,938	2,203	7	Primary Surface Water Supply (30358)	645	563	734	1,149								586	**3,677**
					CPG Surface Water Supply					244	290	779	758	666	201			**2,938**
					Allowable Groundwater Use	0	0	0	0	883	983	945	946	860	666	512	0	**5,795**
					Excess Groundwater Use	0	0	0	0	231	240	0	0	0	158	276	0	**905**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
24	1993	2,938	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443				1,025		586	**7,504**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	69	685	693	638	0	512	0	**2,597**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	276	0	**276**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
25	1994	2,938	2,203	3	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359				1,443	1,025	788	586	**8,292**
					CPG Surface Water Supply						734	1,116	1,087					**2,938**
					Allowable Groundwater Use	0	0	0	0	0	778	608	617	83	0	0	0	**2,085**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
26	1995	979	0	2	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443	1,491	1,491	1,443			586	**10,904**
					CPG Surface Water Supply										979			**979**
					Allowable Groundwater Use	0	0	0	0	0	69	233	213	83	46	512	0	**1,156**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	276	0	**276**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
27	1996	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443					788	586	**7,267**
					CPG Surface Water Supply							1,039	1,011	888	979			**3,917**
					Allowable Groundwater Use	0	0	0	0	0	69	685	693	638	46	0	0	**2,131**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
28	1997	3,917	2,938	4	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359					1,025	788	586	**6,849**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	685	693	638	0	0	0	**2,549**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
29	1998	0	0	0	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443	1,491	1,491	1,443	1,025	788	586	**12,717**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	69	233	213	83	0	0	0	**598**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
30	1999	3,917	2,938	5	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359	1,443						586	**6,479**
					CPG Surface Water Supply							1,039	1,011	888	979			**3,917**
					Allowable Groundwater Use	0	0	0	0	0	69	685	693	638	46	512	0	**2,643**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	276	0	**276**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
31	2000	3,917	2,938	5	Primary Surface Water Supply (30358)	645	563	734	1,149	1,359					1,025		586	**6,061**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	533	685	693	638	0	512	0	**3,061**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	276	0	**276**
					Total Supply	**645**	**563**	**734**	**1,149**	**1,359**	**1,512**	**1,724**	**1,704**	**1,526**	**1,025**	**788**	**586**	**13,315**
1969-2000 Annual Average		**2,997**	**2,385**	**3**	**Primary Surface Water Supply (30358)**													**8,088**
					CPG Surface Water Supply													**2,997**
					Allowable Groundwater Use													**2,095**
					Excess Groundwater Use													**135**
					Total Supply													**13,315**

Table B4. Distribution of Supply and Demand for UC Davis for 2017 Scenario (AF/month)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand — 2017 Monthly Demand Distribution Monthly demands do not change and is set to Year 2017 demand levels	155	135	176	276	327	363	414	410	367	246	189	141	**3,200**

Supply — Hydrological Conditions for Supply Availability

Simulation Year	Calendar Year	CPG Total (ac-ft)	CPG Jul-Sep (ac-ft)	Term 91 Curtailment Periods, months	Monthly Supply Distribution	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
0	1969	164	164	1	Primary Surface Water Supply (30358)	155	135	170	164	170	164	170	170		170	164	141	**1,773**
					CPG Surface Water Supply				0	0	0	0	0	164	0			**164**
					Allowable Groundwater Use	0	0	7	112	157	199	245	240	202	77	25	0	**1,263**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
1	1970	446	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170					170	164	141	**1,269**
					CPG Surface Water Supply						112	118	115	101				**446**
					Allowable Groundwater Use	0	0	7	112	157	236	269	266	238	77	25	0	**1,387**
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	**98**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
2	1971	335	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170	164				170		141	**1,269**
					CPG Surface Water Supply							118	115	101				**335**
					Allowable Groundwater Use	0	0	7	112	157	199	269	266	238	77	123	0	**1,448**
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	66	0	**148**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
3	1972	446	335	3	Primary Surface Water Supply (30358)	155	135	170	164	170				164	170	164	141	**1,433**
					CPG Surface Water Supply						112	169	165					**446**
					Allowable Groundwater Use	0	0	7	112	157	236	245	245	202	77	25	0	**1,305**
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	**16**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
4	1973	446	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170					170	164	141	**1,269**
					CPG Surface Water Supply						112	118	115	101				**446**
					Allowable Groundwater Use	0	0	7	112	157	236	269	266	238	77	25	0	**1,387**
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	**98**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
5	1974	164	164	1	Primary Surface Water Supply (30358)	155	135	170	164	170	164	170	170		170	164	141	**1,773**
					CPG Surface Water Supply									164				**164**
					Allowable Groundwater Use	0	0	7	112	157	199	245	240	202	77	25	0	**1,263**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
6	1975	335	335	3	Primary Surface Water Supply (30358)	155	135	170	164	170	164				170	164	141	**1,433**
					CPG Surface Water Supply							118	115	101				**335**
					Allowable Groundwater Use	0	0	7	112	157	199	269	266	238	77	25	0	**1,350**
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	0	0	**82**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
7	1976	446	335	5	Primary Surface Water Supply (30358)	155	135	170	164					164		164	141	**1,094**
					CPG Surface Water Supply					37	44	169	165		30			**446**
					Allowable Groundwater Use	0	0	7	112	212	236	245	245	202	160	25	0	**1,444**
					Excess Groundwater Use	0	0	0	0	77	83	0	0	0	56	0	0	**216**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
8	1977	335	251	7	Primary Surface Water Supply (30358)	155	135	170								164	141	**765**
					CPG Surface Water Supply				17	22	26	89	86	76	18			**335**
					Allowable Groundwater Use	0	0	7	179	212	236	269	266	238	160	25	0	**1,594**
					Excess Groundwater Use	0	0	0	80	92	101	56	57	53	68	0	0	**507**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
9	1978	335	335	2	Primary Surface Water Supply (30358)	155	135	170	164	170	164			164	170	164	141	**1,598**
					CPG Surface Water Supply							169	165					**335**
					Allowable Groundwater Use	0	0	7	112	157	199	245	245	202	77	25	0	**1,268**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
10	1979	446	335	3	Primary Surface Water Supply (30358)	155	135	170	164	170				164	170	164	141	**1,433**
					CPG Surface Water Supply						112	169	165					**446**
					Allowable Groundwater Use	0	0	7	112	157	236	245	245	202	77	25	0	**1,305**
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	**16**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
11	1980	335	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170	164				170		141	**1,269**
					CPG Surface Water Supply							118	115	101				**335**
					Allowable Groundwater Use	0	0	7	112	157	199	269	266	238	77	123	0	**1,448**
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	66	0	**148**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
12	1981	446	335	3	Primary Surface Water Supply (30358)	155	135	170	164	170				164	170	164	141	**1,433**
					CPG Surface Water Supply						112	169	165					**446**
					Allowable Groundwater Use	0	0	7	112	157	236	245	245	202	77	25	0	**1,305**
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	**16**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
13	1982	0	0	0	Primary Surface Water Supply (30358)	155	135	170	164	170	164	170	170	164	170	164	141	**1,937**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	7	112	157	199	245	240	202	77	25	0	**1,263**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
14	1983	0	0	0	Primary Surface Water Supply (30358)	155	135	170	164	170	164	170	170	164	170	164	141	**1,937**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	7	112	157	199	245	240	202	77	25	0	**1,263**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
15	1984	446	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170					170	164	141	**1,269**
					CPG Surface Water Supply						112	118	115	101				**446**
					Allowable Groundwater Use	0	0	7	112	157	236	269	266	238	77	25	0	**1,387**
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	**98**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
16	1985	446	335	3	Primary Surface Water Supply (30358)	155	135	170	164	170				164	170	164	141	**1,433**
					CPG Surface Water Supply						112	169	165					**446**
					Allowable Groundwater Use	0	0	7	112	157	236	245	245	202	77	25	0	**1,305**
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	**16**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
17	1986	335	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170	164				170		141	**1,269**
					CPG Surface Water Supply							118	115	101				**335**
					Allowable Groundwater Use	0	0	7	112	157	199	269	266	238	77	123	0	**1,448**
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	66	0	**148**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
18	1987	446	335	4	Primary Surface Water Supply (30358)	155	135	170	164					164	170	164	141	**1,264**
					CPG Surface Water Supply					51	60	169	165					**446**
					Allowable Groundwater Use	0	0	7	112	212	236	245	245	202	77	25	0	**1,360**
					Excess Groundwater Use	0	0	0	0	63	67	0	0	0	0	0	0	**130**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
19	1988	446	335	3	Primary Surface Water Supply (30358)	155	135	170	164	170				164	170	164	141	**1,433**
					CPG Surface Water Supply						112	169	165					**446**
					Allowable Groundwater Use	0	0	7	112	157	236	245	245	202	77	25	0	**1,305**
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	**16**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
20	1989	446	335	4	Primary Surface Water Supply (30358)	155	135	170	164					164	170	164	141	**1,264**
					CPG Surface Water Supply					51	60	169	165					**446**
					Allowable Groundwater Use	0	0	7	112	212	236	245	245	202	77	25	0	**1,360**
					Excess Groundwater Use	0	0	0	0	63	67	0	0	0	0	0	0	**130**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
21	1990	446	335	4	Primary Surface Water Supply (30358)	155	135	170		170				164	170	164	141	**1,269**
					CPG Surface Water Supply				44		68	169	165					**446**
					Allowable Groundwater Use	0	0	7	179	157	236	245	245	202	77	25	0	**1,373**
					Excess Groundwater Use	0	0	0	53	0	60	0	0	0	0	0	0	**112**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
22	1991	335	251	3	Primary Surface Water Supply (30358)	155	135	170	164	170				164	170	164	141	**1,433**
					CPG Surface Water Supply						84	127	124					**335**
					Allowable Groundwater Use	0	0	7	112	157	236	269	266	202	77	25	0	**1,351**
					Excess Groundwater Use	0	0	0	0	0	44	18	20	0	0	0	0	**81**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
23	1992	335	251	7	Primary Surface Water Supply (30358)	155	135	170	164								141	**765**
					CPG Surface Water Supply					28	33	89	86	76	23			**335**
					Allowable Groundwater Use	0	0	7	112	212	236	269	266	238	160	123	0	**1,624**
					Excess Groundwater Use	0	0	0	0	87	94	56	57	53	63	66	0	**476**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
24	1993	335	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170	164				170		141	**1,269**
					CPG Surface Water Supply							118	115	101				**335**
					Allowable Groundwater Use	0	0	7	112	157	199	269	266	238	77	123	0	**1,448**
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	66	0	**148**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
25	1994	335	251	3	Primary Surface Water Supply (30358)	155	135	170	164	170				164	170	164	141	**1,433**
					CPG Surface Water Supply						84	127	124					**335**
					Allowable Groundwater Use	0	0	7	112	157	236	269	266	202	77	25	0	**1,351**
					Excess Groundwater Use	0	0	0	0	0	44	18	20	0	0	0	0	**81**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
26	1995	112	0	2	Primary Surface Water Supply (30358)	155	135	170	164	170	164	170	170	164			141	**1,603**
					CPG Surface Water Supply										112			**112**
					Allowable Groundwater Use	0	0	7	112	157	199	245	240	202	135	123	0	**1,419**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	66	0	**66**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
27	1996	446	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170	164					164	141	**1,264**
					CPG Surface Water Supply							118	115	101	112			**446**
					Allowable Groundwater Use	0	0	7	112	157	199	269	266	238	135	25	0	**1,408**
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	0	0	**82**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
28	1997	446	335	4	Primary Surface Water Supply (30358)	155	135	170	164	170					170	164	141	**1,269**
					CPG Surface Water Supply						112	118	115	101				**446**
					Allowable Groundwater Use	0	0	7	112	157	236	269	266	238	77	25	0	**1,387**
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	**98**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
29	1998	0	0	0	Primary Surface Water Supply (30358)	155	135	170	164	170	164	170	170	164	170	164	141	**1,937**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	7	112	157	199	245	240	202	77	25	0	**1,263**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
30	1999	446	335	5	Primary Surface Water Supply (30358)	155	135	170	164	170	164						141	**1,099**
					CPG Surface Water Supply							118	115	101	112			**446**
					Allowable Groundwater Use	0	0	7	112	157	199	269	266	238	135	123	0	**1,506**
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	66	0	**148**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
31	2000	446	335	5	Primary Surface Water Supply (30358)	155	135	170	164	170					170		141	**1,105**
					CPG Surface Water Supply						112	118	115	101				**446**
					Allowable Groundwater Use	0	0	7	112	157	236	269	266	238	77	123	0	**1,485**
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	66	0	**164**
					Total Supply	**155**	**135**	**176**	**276**	**327**	**363**	**414**	**410**	**367**	**246**	**189**	**141**	**3,200**
1969-2000 Annual Average		**341**	**272**	**3**	**Primary Surface Water Supply (30358)**													**1,377**
					CPG Surface Water Supply													**341**
					Allowable Groundwater Use													**1,377**
					Excess Groundwater Use													**104**
					Total Supply													**3,200**

Table B5. Distribution of Supply and Demand for 3 Locations for 2017 Scenario (AF/month)

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand	2017 Monthly Demand Distribution Monthly demands do not change and is set to Year 2017 demand levels					1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	**31,595**
Supply	Hydrological Conditions for Supply Availability																	
Simulation Year	Calendar Year	CPG Total (ac-ft)	CPG Jul-Sep (ac-ft)	Term 91 Curtailment Periods, months	Monthly Supply Distribution													
0	1969	3,229	3,229	1	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530		2,469	1,884	1,507	26,506
					CPG Surface Water Supply				0	0	0	0	0	3,229	0			3,229
					Allowable Groundwater Use	0	0	7	112	157	268	477	453	285	77	25	0	1,860
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
1	1970	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	15,955
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,268	0			10,000
					Allowable Groundwater Use	0	0	7	112	157	1,172	1,399	1,374	1,220	77	25	0	5,542
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	98
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
2	1971	7,500	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	17,491
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,268	0			7,500
					Allowable Groundwater Use	0	0	7	112	157	268	1,399	1,374	1,220	77	915	0	5,527
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	994	0	1,076
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
3	1972	9,581	7,081	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	19,184
					CPG Surface Water Supply				0	0	2,500	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	112	157	1,172	480	499	285	77	25	0	2,814
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	16
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
4	1973	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	15,955
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,268	0			10,000
					Allowable Groundwater Use	0	0	7	112	157	1,172	1,399	1,374	1,220	77	25	0	5,542
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	98
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
5	1974	3,229	3,229	1	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530		2,469	1,884	1,507	26,506
					CPG Surface Water Supply				0	0	0	0	0	3,229	0			3,229
					Allowable Groundwater Use	0	0	7	112	157	268	477	453	285	77	25	0	1,860
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
6	1975	7,500	7,500	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469	1,884	1,507	19,375
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,268	0			7,500
					Allowable Groundwater Use	0	0	7	112	157	268	1,399	1,374	1,220	77	25	0	4,638
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	0	0	82
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
7	1976	9,581	7,081	5	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367					3,229		1,884	1,507	13,718
					CPG Surface Water Supply				0	831	985	3,597	3,484	0	683			9,581
					Allowable Groundwater Use	0	0	7	112	1,536	1,763	480	499	285	1,209	25	0	5,916
					Excess Groundwater Use	0	0	0	0	787	940	0	0	0	653	0	0	2,380
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
8	1977	7,500	5,625	7	Primary Surface Water Supply (30358)	1,536	1,395	1,800								1,884	1,507	8,122
					CPG Surface Water Supply				381	497	589	1,988	1,936	1,701	408			7,500
					Allowable Groundwater Use	0	0	7	1,242	1,536	1,763	1,796	1,773	1,585	1,209	25	0	10,936
					Excess Groundwater Use	0	0	0	855	1,122	1,337	293	274	229	928	0	0	5,038
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
9	1978	7,081	7,081	2	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420			3,229	2,469	1,884	1,507	22,604
					CPG Surface Water Supply				0	0	0	3,597	3,484	0	0			7,081
					Allowable Groundwater Use	0	0	7	112	157	268	480	499	285	77	25	0	1,910
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
10	1979	9,581	7,081	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	19,184
					CPG Surface Water Supply			-	0	0	2,500	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	112	157	1,172	480	499	285	77	25	0	2,814
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	16
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
11	1980	7,500	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	17,491
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,268	0			7,500
					Allowable Groundwater Use	0	0	7	112	157	268	1,399	1,374	1,220	77	915	0	5,527
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	994	0	1,076
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
12	1981	9,581	7,081	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	19,184
					CPG Surface Water Supply				0	0	2,500	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	112	157	1,172	480	499	285	77	25	0	2,814
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	16
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
13	1982	0	0	0	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229	2,469	1,884	1,507	29,735
					CPG Surface Water Supply				0	0	0	0	0	0	0			0
					Allowable Groundwater Use	0	0	7	112	157	268	477	453	285	77	25	0	1,860
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
14	1983	0	0	0	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229	2,469	1,884	1,507	29,735
					CPG Surface Water Supply				0	0	0	0	0	0	0			0
					Allowable Groundwater Use	0	0	7	112	157	268	477	453	285	77	25	0	1,860
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
15	1984	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	15,955
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,268	0			10,000
					Allowable Groundwater Use	0	0	7	112	157	1,172	1,399	1,374	1,220	77	25	0	5,542
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	98
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
16	1985	9,581	7,081	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	19,184
					CPG Surface Water Supply				0	0	2,500	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	112	157	1,172	480	499	285	77	25	0	2,814
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	16
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
17	1986	7,500	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	17,491
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,268	0			7,500
					Allowable Groundwater Use	0	0	7	112	157	268	1,399	1,374	1,220	77	915	0	5,527
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	994	0	1,076
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
18	1987	9,581	7,081	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367					3,229	2,469	1,884	1,507	16,186
					CPG Surface Water Supply				0	1,144	1,356	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	112	1,536	1,761	480	499	285	77	25	0	4,782
					Excess Groundwater Use	0	0	0	0	475	571	0	0	0	0	0	0	1,046
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
19	1988	9,581	7,081	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	19,184
					CPG Surface Water Supply				0	0	2,500	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	112	157	1,172	480	499	285	77	25	0	2,814
					Excess Groundwater Use	0	0	0	0	0	16	0	0	0	0	0	0	16
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
20	1989	9,581	7,081	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367					3,229	2,469	1,884	1,507	16,186
					CPG Surface Water Supply				0	1,144	1,356	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	112	1,536	1,761	480	499	285	77	25	0	4,782
					Excess Groundwater Use	0	0	0	0	475	571	0	0	0	0	0	0	1,046
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
21	1990	9,581	7,081	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800		2,998				3,229	2,469	1,884	1,507	16,817
					CPG Surface Water Supply				983	0	1,517	3,597	3,484	0	0			9,581
					Allowable Groundwater Use	0	0	7	1,242	157	1,698	480	499	285	77	25	0	4,470
					Excess Groundwater Use	0	0	0	253	0	473	0	0	0	0	0	0	727
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
22	1991	7,500	5,625	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	19,184
					CPG Surface Water Supply				0	0	1,875	2,850	2,775	0	0			7,500
					Allowable Groundwater Use	0	0	7	112	157	1,558	1,209	1,189	285	77	25	0	4,618
					Excess Groundwater Use	0	0	0	0	0	256	18	20	0	0	0	0	293
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
23	1992	7,500	5,625	7	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367								1,507	8,605
					CPG Surface Water Supply				0	623	739	1,988	1,936	1,701	513			7,500
					Allowable Groundwater Use	0	0	7	112	1,536	1,763	1,796	1,773	1,585	1,209	915	0	10,695
					Excess Groundwater Use	0	0	0	0	995	1,186	293	274	229	824	994	0	4,796
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
24	1993	7,500	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420				2,469		1,507	17,491
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,268	0			7,500
					Allowable Groundwater Use	0	0	7	112	157	268	1,399	1,374	1,220	77	915	0	5,527
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	994	0	1,076
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
25	1994	7,500	5,625	3	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998				3,229	2,469	1,884	1,507	19,184
					CPG Surface Water Supply				0	0	1,875	2,850	2,775	0	0			7,500
					Allowable Groundwater Use	0	0	7	112	157	1,558	1,209	1,189	285	77	25	0	4,618
					Excess Groundwater Use	0	0	0	0	0	256	18	20	0	0	0	0	293
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
26	1995	2,365	0	2	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229			1,507	25,382
					CPG Surface Water Supply				0	0	0	0	0	0	2,365			2,365
					Allowable Groundwater Use	0	0	7	112	157	268	477	453	285	181	915	0	2,854
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	994	0	994
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
27	1996	9,865	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420					1,884	1,507	16,907
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,268	2,365			9,865
					Allowable Groundwater Use	0	0	7	112	157	268	1,399	1,374	1,220	181	25	0	4,742
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	0	0	82
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
28	1997	10,000	7,500	4	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469	1,884	1,507	15,955
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,268	0			10,000
					Allowable Groundwater Use	0	0	7	112	157	1,172	1,399	1,374	1,220	77	25	0	5,542
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	0	0	98
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
29	1998	0	0	0	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420	3,600	3,530	3,229	2,469	1,884	1,507	29,735
					CPG Surface Water Supply				0	0	0	0	0	0	0			0
					Allowable Groundwater Use	0	0	7	112	157	268	477	453	285	77	25	0	1,860
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
30	1999	9,865	7,500	5	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998	3,420						1,507	15,023
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,268	2,365			9,865
					Allowable Groundwater Use	0	0	7	112	157	268	1,399	1,374	1,220	181	915	0	5,631
					Excess Groundwater Use	0	0	0	0	0	0	27	28	27	0	994	0	1,076
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
31	2000	10,000	7,500	5	Primary Surface Water Supply (30358)	1,536	1,395	1,800	2,367	2,998					2,469		1,507	14,071
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,268	0			10,000
					Allowable Groundwater Use	0	0	7	112	157	1,172	1,399	1,374	1,220	77	915	0	6,432
					Excess Groundwater Use	0	0	0	0	0	16	27	28	27	0	994	0	1,092
					Total Supply	1,536	1,395	1,807	2,479	3,155	3,688	4,077	3,983	3,514	2,545	1,909	1,507	31,595
1969-2000 Annual Average		**7,480**	**5,930**	**3**	**Primary Surface Water Supply (30358)**													**18,853**
					CPG Surface Water Supply													**7,480**
					Allowable Groundwater Use													**4,521**
					Excess Groundwater Use													**741**
					Total Supply													**31,595**

Table B6. Total Surface Water Availability for 2040 Scenario (AF/month)

Supply

		Hydrological Conditions for Supply Availability				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Simulation Year	Calendar Year	CPG Total (ac-ft)	CPG Jul-Sep (ac-ft)	Term 91 Curtailment Periods, months	Monthly Supply Distribution													
0	1969	10,000	7,500	1	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571		3,150	2,403	1,919	**33,987**
					CPG Surface Water Supply									4,181				**4,181**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**4,660**	**4,571**	**4,181**	**3,150**	**2,403**	**1,919**	**38,168**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*289*	*378*	*608*	*1,799*	*2,386*	*3,030*	*20,101*
1	1970	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply						2,500	2,651	2,581	2,267				**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**2,651**	**2,581**	**2,267**	**3,150**	**2,403**	**1,919**	**30,328**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*-*	*2,297*	*2,367*	*2,522*	*1,799*	*2,386*	*3,030*	*25,651*
2	1971	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply							2,651	2,581	2,267				**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**2,651**	**2,581**	**2,267**	**3,150**	**-**	**1,919**	**29,853**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*2,297*	*2,367*	*2,522*	*1,799*	*4,789*	*3,030*	*28,416*
3	1972	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply						2,500	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**34,510**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*23,759*
4	1973	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply						2,500	2,651	2,581	2,267				**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**2,651**	**2,581**	**2,267**	**3,150**	**2,403**	**1,919**	**30,328**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*2,297*	*2,367*	*2,522*	*1,799*	*2,386*	*3,030*	*27,940*
5	1974	10,000	7,500	1	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571		3,150	2,403	1,919	**33,987**
					CPG Surface Water Supply									4,181				**4,181**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**4,660**	**4,571**	**4,181**	**3,150**	**2,403**	**1,919**	**38,168**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*289*	*378*	*608*	*1,799*	*2,386*	*3,030*	*20,101*
6	1975	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150	2,403	1,919	**24,756**
					CPG Surface Water Supply							2,651	2,581	2,267				**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**2,651**	**2,581**	**2,267**	**3,150**	**2,403**	**1,919**	**32,256**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*2,297*	*2,367*	*2,522*	*1,799*	*2,386*	*3,030*	*26,013*
7	1976	10,000	7,500	5	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013					4,181		2,403	1,919	**17,539**
					CPG Surface Water Supply					831	986	3,800	3,700		684			**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**831**	**986**	**3,800**	**3,700**	**4,181**	**684**	**2,403**	**1,919**	**27,539**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*4,118*	*3,804*	*1,149*	*1,249*	*608*	*4,265*	*2,386*	*3,030*	*30,729*
8	1977	7,500	5,625	7	Primary Surface Water Supply (30358)	1,952	1,773	2,297								2,403	1,919	**10,345**
					CPG Surface Water Supply				381	496	589	1,989	1,936	1,700	409			**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**381**	**496**	**589**	**1,989**	**1,936**	**1,700**	**409**	**2,403**	**1,919**	**17,845**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*4,408*	*4,452*	*4,200*	*2,960*	*3,013*	*3,089*	*4,540*	*2,386*	*3,030*	*40,424*
9	1978	10,000	7,500	2	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428			4,181	3,150	2,403	1,919	**28,937**
					CPG Surface Water Supply							3,800	3,700					**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**36,437**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*21,832*
10	1979	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply						2,500	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**34,510**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*23,759*
11	1980	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply							2,651	2,581	2,267				**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**2,651**	**2,581**	**2,267**	**3,150**	**-**	**1,919**	**29,853**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*2,297*	*2,367*	*2,522*	*1,799*	*4,789*	*3,030*	*28,416*
12	1981	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply						2,500	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**34,510**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*23,759*
13	1982	10,000	7,500	0	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181	3,150	2,403	1,919	**38,168**
					CPG Surface Water Supply													-
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**4,660**	**4,571**	**4,181**	**3,150**	**2,403**	**1,919**	**38,168**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*289*	*378*	*608*	*1,799*	*2,386*	*3,030*	*20,101*
14	1983	10,000	7,500	0	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181	3,150	2,403	1,919	**38,168**
					CPG Surface Water Supply													-
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**4,660**	**4,571**	**4,181**	**3,150**	**2,403**	**1,919**	**38,168**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*289*	*378*	*608*	*1,799*	*2,386*	*3,030*	*20,101*
15	1984	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply						2,500	2,651	2,581	2,267				**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**2,651**	**2,581**	**2,267**	**3,150**	**2,403**	**1,919**	**30,328**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*2,297*	*2,367*	*2,522*	*1,799*	*2,386*	*3,030*	*27,940*
16	1985	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply						2,500	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**34,510**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*23,759*
17	1986	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply							2,651	2,581	2,267				**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**2,651**	**2,581**	**2,267**	**3,150**	**-**	**1,919**	**29,853**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*2,297*	*2,367*	*2,522*	*1,799*	*4,789*	*3,030*	*28,416*
18	1987	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013					4,181	3,150	2,403	1,919	**20,689**
					CPG Surface Water Supply					1,143	1,357	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**1,143**	**1,357**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**30,689**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*3,805*	*3,433*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*27,579*
19	1988	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply						2,500	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**34,510**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*23,759*
20	1989	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013					4,181	3,150	2,403	1,919	**20,689**
					CPG Surface Water Supply					1,143	1,357	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**1,143**	**1,357**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**30,689**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*3,805*	*3,433*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*27,579*
21	1990	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297		3,820				4,181	3,150	2,403	1,919	**21,496**
					CPG Surface Water Supply				982		1,518	3,800	3,700					**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**982**	**3,820**	**1,518**	**3,800**	**3,700**	**4,181**	**3,150**	**2,403**	**1,919**	**31,496**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*3,807*	*1,129*	*3,271*	*1,149*	*1,249*	*608*	*1,799*	*2,386*	*3,030*	*26,773*
22	1991	7,500	5,625	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply						1,875	2,850	2,775					**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**1,875**	**2,850**	**2,775**	**4,181**	**3,150**	**2,403**	**1,919**	**32,010**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,914*	*2,099*	*2,174*	*608*	*1,799*	*2,386*	*3,030*	*26,259*
23	1992	7,500	5,625	7	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013								1,919	**10,955**
					CPG Surface Water Supply					623	739	1,989	1,936	1,700	513			**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**623**	**739**	**1,989**	**1,936**	**1,700**	**513**	**-**	**1,919**	**18,455**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*4,326*	*4,050*	*2,960*	*3,013*	*3,089*	*4,436*	*4,789*	*3,030*	*39,813*
24	1993	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply							2,651	2,581	2,267				**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**2,651**	**2,581**	**2,267**	**3,150**	**-**	**1,919**	**29,853**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*2,297*	*2,367*	*2,522*	*1,799*	*4,789*	*3,030*	*28,416*
25	1994	7,500	5,625	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply						1,875	2,850	2,775					**7,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**1,875**	**2,850**	**2,775**	**4,181**	**3,150**	**2,403**	**1,919**	**32,010**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,914*	*2,099*	*2,174*	*608*	*1,799*	*2,386*	*3,030*	*26,259*
26	1995	10,000	7,500	2	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181			1,919	**32,615**
					CPG Surface Water Supply										2,500			**2,500**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**4,660**	**4,571**	**4,181**	**2,500**	**-**	**1,919**	**35,115**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*289*	*378*	*608*	*2,449*	*4,789*	*3,030*	*23,154*
27	1996	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428					2,403	1,919	**21,606**
					CPG Surface Water Supply							2,651	2,581	2,267	2,500			**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**2,651**	**2,581**	**2,267**	**2,500**	**2,403**	**1,919**	**31,606**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*2,297*	*2,367*	*2,522*	*2,449*	*2,386*	*3,030*	*26,663*
28	1997	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply						2,500	2,651	2,581	2,267				**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**2,651**	**2,581**	**2,267**	**3,150**	**2,403**	**1,919**	**30,328**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*2,297*	*2,367*	*2,522*	*1,799*	*2,386*	*3,030*	*27,940*
29	1998	10,000	7,500	0	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181	3,150	2,403	1,919	**38,168**
					CPG Surface Water Supply													-
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**4,660**	**4,571**	**4,181**	**3,150**	**2,403**	**1,919**	**38,168**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*289*	*378*	*608*	*1,799*	*2,386*	*3,030*	*20,101*
30	1999	10,000	7,500	5	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428						1,919	**19,203**
					CPG Surface Water Supply							2,651	2,581	2,267	2,500			**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**4,428**	**2,651**	**2,581**	**2,267**	**2,500**	**-**	**1,919**	**29,203**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*362*	*2,297*	*2,367*	*2,522*	*2,449*	*4,789*	*3,030*	*29,066*
31	2000	10,000	7,500	5	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150		1,919	**17,925**
					CPG Surface Water Supply						2,500	2,651	2,581	2,267				**10,000**
					Total Surface Water Supply	**1,952**	**1,773**	**2,297**	**3,013**	**3,820**	**2,500**	**2,651**	**2,581**	**2,267**	**3,150**	**-**	**1,919**	**27,925**
					Unused RWTF Capacity	*2,997*	*2,697*	*2,652*	*1,776*	*1,129*	*2,289*	*2,297*	*2,367*	*2,522*	*1,799*	*4,789*	*3,030*	*30,343*
1969-2000 Annual Average		**9,688**	**7,266**	**3**	**Primary Surface Water Supply (30358)**													**24,110**
					CPG Surface Water Supply													**7,683**
					Total Surface Water Supply													**31,793**
					Unused RWTF Capacity													***26,404***

Table B7. Distribution of Supply and Demand for City of Woodland for 2040 Scenario (AF/month)

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand	2040 Monthly Demand Distribution Monthly demands do not change and is set to Year 2040 demand levels					949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092	1,643	1,201	1,007	**19,450**
Supply	Hydrological Conditions for Supply Availability																	
Simulation Year	Calendar Year	CPG Total (ac-ft)	CPG Jul-Sep (ac-ft)	Term 91 Curtailment Periods, months	Monthly Supply Distribution													
0	1969	2,092	2,092	1	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411		1,643	1,201	1,007	**17,358**
					CPG Surface Water Supply									2,092				**2,092**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
1	1970	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895					1,643	1,201	1,007	**10,108**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	750	723	627	0	0	0	**2,803**
					Excess Groundwater Use	0	0	0	0	0	227	256	233	186	0	0	0	**902**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
2	1971	4,228	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338				1,643		1,007	**11,245**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	750	723	627	0	360	0	**2,462**
					Excess Groundwater Use	0	0	0	0	0	0	256	233	186	0	841	0	**1,516**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
3	1972	5,637	4,228	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895				2,092	1,643	1,201	1,007	**12,200**
					CPG Surface Water Supply						1,409	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	359	326	0	0	0	0	**1,386**
					Excess Groundwater Use	0	0	0	0	0	227	0	0	0	0	0	0	**227**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,111**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,223**
4	1973	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895					1,643	1,201	1,007	**10,108**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	750	723	627	0	0	0	**2,803**
					Excess Groundwater Use	0	0	0	0	0	227	256	233	186	0	0	0	**902**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
5	1974	2,092	2,092	1	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411		1,643	1,201	1,007	**17,358**
					CPG Surface Water Supply									2,092				**2,092**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
6	1975	4,228	4,228	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338				1,643	1,201	1,007	**12,446**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	750	723	627	0	0	0	**2,101**
					Excess Groundwater Use	0	0	0	0	0	0	256	233	186	0	0	0	**675**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
7	1976	5,637	4,228	5	Primary Surface Water Supply (30358)	949	898	1,156	1,359					2,092		1,201	1,007	**8,662**
					CPG Surface Water Supply					468	556	2,142	2,086		385			**5,637**
					Allowable Groundwater Use	0	0	0	0	568	701	359	326	0	493	0	0	**2,447**
					Excess Groundwater Use	0	0	0	0	858	1,081	0	0	0	765	0	0	**2,704**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
8	1977	4,228	3,171	7	Primary Surface Water Supply (30358)	949	898	1,156								1,201	1,007	**5,211**
					CPG Surface Water Supply				215	280	332	1,121	1,091	958	230			**4,228**
					Allowable Groundwater Use	0	0	0	408	568	701	750	723	627	493	0	0	**4,272**
					Excess Groundwater Use	0	0	0	737	1,047	1,305	630	597	506	920	0	0	**5,739**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
9	1978	4,228	4,228	2	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338			2,092	1,643	1,201	1,007	**14,538**
					CPG Surface Water Supply							2,142	2,086					**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	359	326	0	0	0	0	**685**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
10	1979	5,637	4,228	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895				2,092	1,643	1,201	1,007	**12,200**
					CPG Surface Water Supply						1,409	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	359	326	0	0	0	0	**1,386**
					Excess Groundwater Use	0	0	0	0	0	227	0	0	0	0	0	0	**227**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
11	1980	4,228	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338				1,643		1,007	**11,245**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	750	723	627	0	360	0	**2,462**
					Excess Groundwater Use	0	0	0	0	0	0	256	233	186	0	841	0	**1,516**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
12	1981	5,637	4,228	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895				2,092	1,643	1,201	1,007	**12,200**
					CPG Surface Water Supply						1,409	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	359	326	0	0	0	0	**1,386**
					Excess Groundwater Use	0	0	0	0	0	227	0	0	0	0	0	0	**227**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
13	1982	0	0	0	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092	1,643	1,201	1,007	**19,450**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
14	1983	0	0	0	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092	1,643	1,201	1,007	**19,450**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
15	1984	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895					1,643	1,201	1,007	**10,108**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	750	723	627	0	0	0	**2,803**
					Excess Groundwater Use	0	0	0	0	0	227	256	233	186	0	0	0	**902**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
16	1985	5,637	4,228	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895				2,092	1,643	1,201	1,007	**12,200**
					CPG Surface Water Supply						1,409	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	359	326	0	0	0	0	**1,386**
					Excess Groundwater Use	0	0	0	0	0	227	0	0	0	0	0	0	**227**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
17	1986	4,228	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338				1,643		1,007	**11,245**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	750	723	627	0	360	0	**2,462**
					Excess Groundwater Use	0	0	0	0	0	0	256	233	186	0	841	0	**1,516**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
18	1987	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359					2,092	1,643	1,201	1,007	**10,305**
					CPG Surface Water Supply					645	765	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	0	568	701	359	326	0	0	0	0	**1,954**
					Excess Groundwater Use	0	0	0	0	682	872	0	0	0	0	0	0	**1,554**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
19	1988	5,637	4,228	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895				2,092	1,643	1,201	1,007	**12,200**
					CPG Surface Water Supply						1,409	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	359	326	0	0	0	0	**1,386**
					Excess Groundwater Use	0	0	0	0	0	227	0	0	0	0	0	0	**227**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
20	1989	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359					2,092	1,643	1,201	1,007	**10,305**
					CPG Surface Water Supply					645	765	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	0	568	701	359	326	0	0	0	0	**1,954**
					Excess Groundwater Use	0	0	0	0	682	872	0	0	0	0	0	0	**1,554**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
21	1990	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156		1,895				2,092	1,643	1,201	1,007	**10,841**
					CPG Surface Water Supply				553		856	2,142	2,086					**5,637**
					Allowable Groundwater Use	0	0	0	408	0	701	359	326	0	0	0	0	**1,794**
					Excess Groundwater Use	0	0	0	398	0	781	0	0	0	0	0	0	**1,179**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
22	1991	4,228	3,171	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895				2,092	1,643	1,201	1,007	**12,200**
					CPG Surface Water Supply						1,057	1,607	1,564					**4,228**
					Allowable Groundwater Use	0	0	0	0	0	701	750	723	0	0	0	0	**2,175**
					Excess Groundwater Use	0	0	0	0	0	580	144	124	0	0	0	0	**847**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
23	1992	4,228	3,171	7	Primary Surface Water Supply (30358)	949	898	1,156	1,359								1,007	**5,369**
					CPG Surface Water Supply					351	417	1,121	1,091	958	289			**4,228**
					Allowable Groundwater Use	0	0	0	0	568	701	750	723	627	493	360	0	**4,224**
					Excess Groundwater Use	0	0	0	0	975	1,220	630	597	506	861	841	0	**5,629**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
24	1993	4,228	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338				1,643		1,007	**11,245**
					CPG Surface Water Supply							1,495	1,455	1,278				**4,228**
					Allowable Groundwater Use	0	0	0	0	0	0	750	723	627	0	360	0	**2,462**
					Excess Groundwater Use	0	0	0	0	0	0	256	233	186	0	841	0	**1,516**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
25	1994	4,228	3,171	3	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895				2,092	1,643	1,201	1,007	**12,200**
					CPG Surface Water Supply						1,057	1,607	1,564					**4,228**
					Allowable Groundwater Use	0	0	0	0	0	701	750	723	0	0	0	0	**2,175**
					Excess Groundwater Use	0	0	0	0	0	580	144	124	0	0	0	0	**847**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
26	1995	1,409	0	2	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092			1,007	**16,606**
					CPG Surface Water Supply										1,409			**1,409**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	234	360	0	**594**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	841	0	**841**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
27	1996	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338					1,201	1,007	**10,803**
					CPG Surface Water Supply							1,495	1,455	1,278	1,409			**5,637**
					Allowable Groundwater Use	0	0	0	0	0	0	750	723	627	234	0	0	**2,335**
					Excess Groundwater Use	0	0	0	0	0	0	256	233	186	0	0	0	**675**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
28	1997	5,637	4,228	4	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895					1,643	1,201	1,007	**10,108**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	750	723	627	0	0	0	**2,803**
					Excess Groundwater Use	0	0	0	0	0	227	256	233	186	0	0	0	**902**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
29	1998	0	0	0	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338	2,501	2,411	2,092	1,643	1,201	1,007	**19,450**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
30	1999	5,637	4,228	5	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895	2,338						1,007	**9,602**
					CPG Surface Water Supply							1,495	1,455	1,278	1,409			**5,637**
					Allowable Groundwater Use	0	0	0	0	0	0	750	723	627	234	360	0	**2,695**
					Excess Groundwater Use	0	0	0	0	0	0	256	233	186	0	841	0	**1,516**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
31	2000	5,637	4,228	5	Primary Surface Water Supply (30358)	949	898	1,156	1,359	1,895					1,643		1,007	**8,907**
					CPG Surface Water Supply						1,409	1,495	1,455	1,278				**5,637**
					Allowable Groundwater Use	0	0	0	0	0	701	750	723	627	0	360	0	**3,163**
					Excess Groundwater Use	0	0	0	0	0	227	256	233	186	0	841	0	**1,743**
					Total Supply	**949**	**898**	**1,156**	**1,359**	**1,895**	**2,338**	**2,501**	**2,411**	**2,092**	**1,643**	**1,201**	**1,007**	**19,450**
1969-2000 Annual Average		**4,314**	**3,434**	**3**	**Primary Surface Water Supply (30358)**													**12,108**
					CPG Surface Water Supply													**4,314**
					Allowable Groundwater Use													**1,892**
					Excess Groundwater Use													**1,135**
					Total Supply													**19,450**

Table B8. Distribution of Supply and Demand for City of Davis for 2040 Scenario (AF/month)

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand	2040 Monthly Demand Distribution Monthly demands do not change and is set to Year 2040 demand levels					809	706	920	1,441	1,705	1,896	2,162	2,138	1,914	1,286	988	736	**16,700**
Supply		Hydrological Conditions for Supply Availability																
Simulation Year	Calendar Year	CPG Total (ac-ft)	CPG Jul-Sep (ac-ft)	Term 91 Curtailment Periods, months	**Monthly Supply Distribution**													
0	1969	1,876	1,876	1	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876	1,938	1,938		1,286	988	736	**14,343**
					CPG Surface Water Supply									1,876				**1,876**
					Allowable Groundwater Use	0	0	0	0	0	20	223	199	38	0	0	0	**481**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
1	1970	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705					1,286	988	736	**8,590**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	1,123	1,127	1,026	0	0	0	**4,193**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
2	1971	2,938	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876				1,286		736	**9,478**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	20	1,123	1,127	1,026	0	642	0	**3,938**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	346	0	**346**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
3	1972	3,917	2,938	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705				1,876	1,286	988	736	**10,466**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	673	689	38	0	0	0	**2,317**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
4	1973	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705					1,286	988	736	**8,590**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	1,123	1,127	1,026	0	0	0	**4,193**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
5	1974	1,876	1,876	1	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876	1,938	1,938		1,286	988	736	**14,343**
					CPG Surface Water Supply									1,876				**1,876**
					Allowable Groundwater Use	0	0	0	0	0	20	223	199	38	0	0	0	**481**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
6	1975	2,938	2,938	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876				1,286	988	736	**10,466**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	20	1,123	1,127	1,026	0	0	0	**3,296**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
7	1976	3,917	2,938	5	Primary Surface Water Supply (30358)	809	706	920	1,441					1,876		988	736	**7,475**
					CPG Surface Water Supply					325	386	1,489	1,449		268			**3,917**
					Allowable Groundwater Use	0	0	0	0	1,108	1,233	673	689	38	836	0	0	**4,577**
					Excess Groundwater Use	0	0	0	0	271	278	0	0	0	182	0	0	**731**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
8	1977	2,938	2,203	7	Primary Surface Water Supply (30358)	809	706	920								988	736	**4,158**
					CPG Surface Water Supply				149	194	231	779	758	666	160			**2,938**
					Allowable Groundwater Use	0	0	0	936	1,108	1,233	1,383	1,380	1,244	836	0	0	**8,120**
					Excess Groundwater Use	0	0	0	355	402	433	0	0	4	290	0	0	**1,484**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
9	1978	2,938	2,938	2	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876			1,876	1,286	988	736	**12,342**
					CPG Surface Water Supply							1,489	1,449					**2,938**
					Allowable Groundwater Use	0	0	0	0	0	20	673	689	38	0	0	0	**1,420**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
10	1979	3,917	2,938	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705				1,876	1,286	988	736	**10,466**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	673	689	38	0	0	0	**2,317**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
11	1980	2,938	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876				1,286		736	**9,478**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	20	1,123	1,127	1,026	0	642	0	**3,938**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	346	0	**346**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
12	1981	3,917	2,938	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705				1,876	1,286	988	736	**10,466**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	673	689	38	0	0	0	**2,317**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
13	1982	0	0	0	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876	1,938	1,938	1,876	1,286	988	736	**16,219**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	20	223	199	38	0	0	0	**481**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
14	1983	0	0	0	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876	1,938	1,938	1,876	1,286	988	736	**16,219**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	20	223	199	38	0	0	0	**481**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
15	1984	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705					1,286	988	736	**8,590**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	1,123	1,127	1,026	0	0	0	**4,193**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
16	1985	3,917	2,938	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705				1,876	1,286	988	736	**10,466**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	673	689	38	0	0	0	**2,317**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
17	1986	2,938	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876				1,286		736	**9,478**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	20	1,123	1,127	1,026	0	642	0	**3,938**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	346	0	**346**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
18	1987	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441					1,876	1,286	988	736	**8,761**
					CPG Surface Water Supply					448	531	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	1,108	1,233	673	689	38	0	0	0	**3,741**
					Excess Groundwater Use	0	0	0	0	149	132	0	0	0	0	0	0	**281**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
19	1988	3,917	2,938	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705				1,876	1,286	988	736	**10,466**
					CPG Surface Water Supply						979	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	673	689	38	0	0	0	**2,317**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
20	1989	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441					1,876	1,286	988	736	**8,761**
					CPG Surface Water Supply					448	531	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	0	1,108	1,233	673	689	38	0	0	0	**3,741**
					Excess Groundwater Use	0	0	0	0	149	132	0	0	0	0	0	0	**281**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
21	1990	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920		1,705				1,876	1,286	988	736	**9,025**
					CPG Surface Water Supply				385		595	1,489	1,449					**3,917**
					Allowable Groundwater Use	0	0	0	936	0	1,233	673	689	38	0	0	0	**3,569**
					Excess Groundwater Use	0	0	0	120	0	69	0	0	0	0	0	0	**189**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
22	1991	2,938	2,203	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705				1,876	1,286	988	736	**10,466**
					CPG Surface Water Supply						734	1,116	1,087					**2,938**
					Allowable Groundwater Use	0	0	0	0	0	1,162	1,046	1,051	38	0	0	0	**3,296**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
23	1992	2,938	2,203	7	Primary Surface Water Supply (30358)	809	706	920	1,441								736	**4,611**
					CPG Surface Water Supply					244	290	779	758	666	201			**2,938**
					Allowable Groundwater Use	0	0	0	0	1,108	1,233	1,383	1,380	1,244	836	642	0	**7,825**
					Excess Groundwater Use	0	0	0	0	353	374	0	0	4	249	346	0	**1,326**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
24	1993	2,938	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876				1,286		736	**9,478**
					CPG Surface Water Supply							1,039	1,011	888				**2,938**
					Allowable Groundwater Use	0	0	0	0	0	20	1,123	1,127	1,026	0	642	0	**3,938**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	346	0	**346**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
25	1994	2,938	2,203	3	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705				1,876	1,286	988	736	**10,466**
					CPG Surface Water Supply						734	1,116	1,087					**2,938**
					Allowable Groundwater Use	0	0	0	0	0	1,162	1,046	1,051	38	0	0	0	**3,296**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
26	1995	979	0	2	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876	1,938	1,938	1,876			736	**13,945**
					CPG Surface Water Supply										979			**979**
					Allowable Groundwater Use	0	0	0	0	0	20	223	199	38	307	642	0	**1,430**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	346	0	**346**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
27	1996	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876					988	736	**9,180**
					CPG Surface Water Supply							1,039	1,011	888	979			**3,917**
					Allowable Groundwater Use	0	0	0	0	0	20	1,123	1,127	1,026	307	0	0	**3,603**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
28	1997	3,917	2,938	4	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705					1,286	988	736	**8,590**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	1,123	1,127	1,026	0	0	0	**4,193**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
29	1998	0	0	0	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876	1,938	1,938	1,876	1,286	988	736	**16,219**
					CPG Surface Water Supply													**0**
					Allowable Groundwater Use	0	0	0	0	0	20	223	199	38	0	0	0	**481**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
30	1999	3,917	2,938	5	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705	1,876						736	**8,192**
					CPG Surface Water Supply							1,039	1,011	888	979			**3,917**
					Allowable Groundwater Use	0	0	0	0	0	20	1,123	1,127	1,026	307	642	0	**4,245**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	346	0	**346**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
31	2000	3,917	2,938	5	Primary Surface Water Supply (30358)	809	706	920	1,441	1,705					1,286		736	**7,602**
					CPG Surface Water Supply						979	1,039	1,011	888				**3,917**
					Allowable Groundwater Use	0	0	0	0	0	917	1,123	1,127	1,026	0	642	0	**4,835**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	346	0	**346**
					Total Supply	**809**	**706**	**920**	**1,441**	**1,705**	**1,896**	**2,162**	**2,138**	**1,914**	**1,286**	**988**	**736**	**16,700**
1969-2000 Annual Average		**3,024**	**2,412**	**3**	**Primary Surface Water Supply (30358)**													**10,231**
					CPG Surface Water Supply													**3,024**
					Allowable Groundwater Use													**3,235**
					Excess Groundwater Use													**210**
					Total Supply													**16,700**

Table B9. Distribution of Supply and Demand for UC Davis for 2040 Scenario (AF/month)

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand	2040 Monthly Demand Distribution Monthly demands do not change and is set to Year 2040 demand levels					194	170	221	346	410	456	520	514	460	309	238	177	4,015
Supply		Hydrological Conditions for Supply Availability																
Simulation Year	Calendar Year	CPG Total (ac-ft)	CPG Jul-Sep (ac-ft)	Term 91 Curtailment Periods, months	Monthly Supply Distribution													
0	1969	214	214	1	Primary Surface Water Supply (30358)	194	170	221	214	221	214	221	221		221	214	177	2,285
					CPG Surface Water Supply				0	0	0	0	0	214	0			214
					Allowable Groundwater Use	0	0	1	133	189	242	299	293	247	89	24	0	1,516
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
1	1970	446	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221					221	214	177	1,630
					CPG Surface Water Supply						112	118	115	101				446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	299	89	24	0	1,702
					Excess Groundwater Use	0	0	0	0	0	48	64	65	60	0	0	0	236
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
2	1971	335	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221	214				221		177	1,630
					CPG Surface Water Supply							118	115	101				335
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	299	89	154	0	1,779
					Excess Groundwater Use	0	0	0	0	0	0	64	65	60	0	83	0	271
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
3	1972	446	335	3	Primary Surface Water Supply (30358)	194	170	221	214	221				214	221	214	177	1,844
					CPG Surface Water Supply						112	169	165					446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	247	89	24	0	1,650
					Excess Groundwater Use	0	0	0	0	0	48	12	15	0	0	0	0	75
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
4	1973	446	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221					221	214	177	1,630
					CPG Surface Water Supply						112	118	115	101				446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	299	89	24	0	1,702
					Excess Groundwater Use	0	0	0	0	0	48	64	65	60	0	0	0	236
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
5	1974	214	214	1	Primary Surface Water Supply (30358)	194	170	221	214	221	214	221	221		221	214	177	2,285
					CPG Surface Water Supply									214				214
					Allowable Groundwater Use	0	0	1	133	189	242	299	293	247	89	24	0	1,516
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
6	1975	335	335	3	Primary Surface Water Supply (30358)	194	170	221	214	221	214				221	214	177	1,844
					CPG Surface Water Supply							118	115	101				335
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	299	89	24	0	1,648
					Excess Groundwater Use	0	0	0	0	0	0	64	65	60	0	0	0	188
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
7	1976	446	335	5	Primary Surface Water Supply (30358)	194	170	221	214					214		214	177	1,402
					CPG Surface Water Supply					37	44	169	165		30			446
					Allowable Groundwater Use	0	0	1	133	266	296	338	334	247	201	24	0	1,839
					Excess Groundwater Use	0	0	0	0	106	116	12	15	0	78	0	0	327
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
8	1977	335	251	7	Primary Surface Water Supply (30358)	194	170	221								214	177	975
					CPG Surface Water Supply				17	22	26	89	86	76	18			335
					Allowable Groundwater Use	0	0	1	225	266	296	338	334	299	201	24	0	1,984
					Excess Groundwater Use	0	0	0	104	121	133	93	94	85	90	0	0	721
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
9	1978	335	335	2	Primary Surface Water Supply (30358)	194	170	221	214	221	214			214	221	214	177	2,058
					CPG Surface Water Supply							169	165					335
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	247	89	24	0	1,596
					Excess Groundwater Use	0	0	0	0	0	0	12	15	0	0	0	0	27
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
10	1979	446	335	3	Primary Surface Water Supply (30358)	194	170	221	214	221				214	221	214	177	1,844
					CPG Surface Water Supply						112	169	165					446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	247	89	24	0	1,650
					Excess Groundwater Use	0	0	0	0	0	48	12	15	0	0	0	0	75
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
11	1980	335	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221	214				221		177	1,630
					CPG Surface Water Supply							118	115	101				335
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	299	89	154	0	1,779
					Excess Groundwater Use	0	0	0	0	0	0	64	65	60	0	83	0	271
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
12	1981	446	335	3	Primary Surface Water Supply (30358)	194	170	221	214	221				214	221	214	177	1,844
					CPG Surface Water Supply						112	169	165					446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	247	89	24	0	1,650
					Excess Groundwater Use	0	0	0	0	0	48	12	15	0	0	0	0	75
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
13	1982	0	0	0	Primary Surface Water Supply (30358)	194	170	221	214	221	214	221	221	214	221	214	177	2,499
					CPG Surface Water Supply													0
					Allowable Groundwater Use	0	0	1	133	189	242	299	293	247	89	24	0	1,516
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
14	1983	0	0	0	Primary Surface Water Supply (30358)	194	170	221	214	221	214	221	221	214	221	214	177	2,499
					CPG Surface Water Supply													0
					Allowable Groundwater Use	0	0	1	133	189	242	299	293	247	89	24	0	1,516
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
15	1984	446	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221					221	214	177	1,630
					CPG Surface Water Supply						112	118	115	101				446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	299	89	24	0	1,702
					Excess Groundwater Use	0	0	0	0	0	48	64	65	60	0	0	0	236
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
16	1985	446	335	3	Primary Surface Water Supply (30358)	194	170	221	214	221				214	221	214	177	1,844
					CPG Surface Water Supply						112	169	165					446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	247	89	24	0	1,650
					Excess Groundwater Use	0	0	0	0	0	48	12	15	0	0	0	0	75
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
17	1986	335	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221	214				221		177	1,630
					CPG Surface Water Supply							118	115	101				335
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	299	89	154	0	1,779
					Excess Groundwater Use	0	0	0	0	0	0	64	65	60	0	83	0	271
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
18	1987	446	335	4	Primary Surface Water Supply (30358)	194	170	221	214					214	221	214	177	1,623
					CPG Surface Water Supply					51	61	169	165					446
					Allowable Groundwater Use	0	0	1	133	266	296	338	334	247	89	24	0	1,727
					Excess Groundwater Use	0	0	0	0	92	99	12	15	0	0	0	0	219
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
19	1988	446	335	3	Primary Surface Water Supply (30358)	194	170	221	214	221				214	221	214	177	1,844
					CPG Surface Water Supply						112	169	165					446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	247	89	24	0	1,650
					Excess Groundwater Use	0	0	0	0	0	48	12	15	0	0	0	0	75
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
20	1989	446	335	4	Primary Surface Water Supply (30358)	194	170	221	214					214	221	214	177	1,623
					CPG Surface Water Supply					51	61	169	165					446
					Allowable Groundwater Use	0	0	1	133	266	296	338	334	247	89	24	0	1,727
					Excess Groundwater Use	0	0	0	0	92	99	12	15	0	0	0	0	219
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
21	1990	446	335	4	Primary Surface Water Supply (30358)	194	170	221		221				214	221	214	177	1,630
					CPG Surface Water Supply				44		68	169	165					446
					Allowable Groundwater Use	0	0	1	225	189	296	338	334	247	89	24	0	1,742
					Excess Groundwater Use	0	0	0	77	0	92	12	15	0	0	0	0	197
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
22	1991	335	251	3	Primary Surface Water Supply (30358)	194	170	221	214	221				214	221	214	177	1,844
					CPG Surface Water Supply						84	127	124					335
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	247	89	24	0	1,650
					Excess Groundwater Use	0	0	0	0	0	76	55	56	0	0	0	0	187
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
23	1992	335	251	7	Primary Surface Water Supply (30358)	194	170	221	214								177	975
					CPG Surface Water Supply					28	33	89	86	76	23			335
					Allowable Groundwater Use	0	0	1	133	266	296	338	334	299	201	154	0	2,022
					Excess Groundwater Use	0	0	0	0	116	127	93	94	85	85	83	0	683
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
24	1993	335	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221	214				221		177	1,630
					CPG Surface Water Supply							118	115	101				335
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	299	89	154	0	1,779
					Excess Groundwater Use	0	0	0	0	0	0	64	65	60	0	83	0	271
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
25	1994	335	251	3	Primary Surface Water Supply (30358)	194	170	221	214	221				214	221	214	177	1,844
					CPG Surface Water Supply						84	127	124					335
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	247	89	24	0	1,650
					Excess Groundwater Use	0	0	0	0	0	76	55	56	0	0	0	0	187
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
26	1995	112	0	2	Primary Surface Water Supply (30358)	194	170	221	214	221	214	221	221	214			177	2,065
					CPG Surface Water Supply										112			112
					Allowable Groundwater Use	0	0	1	133	189	242	299	293	247	198	154	0	1,756
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	83	0	83
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
27	1996	446	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221	214					214	177	1,623
					CPG Surface Water Supply							118	115	101	112			446
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	299	198	24	0	1,757
					Excess Groundwater Use	0	0	0	0	0	0	64	65	60	0	0	0	188
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
28	1997	446	335	4	Primary Surface Water Supply (30358)	194	170	221	214	221					221	214	177	1,630
					CPG Surface Water Supply						112	118	115	101				446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	299	89	24	0	1,702
					Excess Groundwater Use	0	0	0	0	0	48	64	65	60	0	0	0	236
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
29	1998	0	0	0	Primary Surface Water Supply (30358)	194	170	221	214	221	214	221	221	214	221	214	177	2,499
					CPG Surface Water Supply													0
					Allowable Groundwater Use	0	0	1	133	189	242	299	293	247	89	24	0	1,516
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	0
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
30	1999	446	335	5	Primary Surface Water Supply (30358)	194	170	221	214	221	214						177	1,410
					CPG Surface Water Supply							118	115	101	112			446
					Allowable Groundwater Use	0	0	1	133	189	242	338	334	299	198	154	0	1,888
					Excess Groundwater Use	0	0	0	0	0	0	64	65	60	0	83	0	271
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
31	2000	446	335	5	Primary Surface Water Supply (30358)	194	170	221	214	221					221		177	1,417
					CPG Surface Water Supply						112	118	115	101				446
					Allowable Groundwater Use	0	0	1	133	189	296	338	334	299	89	154	0	1,833
					Excess Groundwater Use	0	0	0	0	0	48	64	65	60	0	83	0	320
					Total Supply	194	170	221	346	410	456	520	514	460	309	238	177	4,015
1969-2000 Annual Average		344	275	3	**Primary Surface Water Supply (30358)**													1,771
					CPG Surface Water Supply													344
					Allowable Groundwater Use													1,705
					Excess Groundwater Use													195
					Total Supply													4,015

Table B10. Distribution of Supply and Demand for 3 Locations for 2040 Scenario (AF/month)

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total, AFY
Demand	2040 Monthly Demand Distribution Monthly demands do not change and is set to Year 2040 demand levels					1,952	1,773	2,298	3,146	4,009	4,690	5,183	5,063	4,466	3,238	2,427	1,919	**40,165**
Supply		**Hydrological Conditions for Supply Availability**																
Simulation Year	**Calendar Year**	**CPG Total (ac-ft)**	**CPG Jul-Sep (ac-ft)**	**Term 91 Curtailment Periods, months**	**Monthly Supply Distribution**													
0	1969	4,181	4,181	1	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571		3,150	2,403	1,919	**33,987**
					CPG Surface Water Supply				0	0	0	0	0	4,181	0			**4,181**
					Allowable Groundwater Use	0	0	1	133	189	263	522	493	285	89	24	0	**1,997**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
1	1970	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,267	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	2,211	2,184	1,952	89	24	0	**8,698**
					Excess Groundwater Use	0	0	0	0	0	275	320	298	246	0	0	0	**1,139**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
2	1971	7,500	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,267	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	263	2,211	2,184	1,952	89	1,157	0	**8,179**
					Excess Groundwater Use	0	0	0	0	0	0	320	298	246	0	1,270	0	**2,133**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
3	1972	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply				0	0	2,500	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	1,370	1,349	285	89	24	0	**5,353**
					Excess Groundwater Use	0	0	0	0	0	275	12	15	0	0	0	0	**303**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
4	1973	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,267	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	2,211	2,184	1,952	89	24	0	**8,698**
					Excess Groundwater Use	0	0	0	0	0	275	320	298	246	0	0	0	**1,139**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
5	1974	4,181	4,181	1	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571		3,150	2,403	1,919	**33,987**
					CPG Surface Water Supply				0	0	0	0	0	4,181	0			**4,181**
					Allowable Groundwater Use	0	0	1	133	189	263	522	493	285	89	24	0	**1,997**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
6	1975	7,500	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150	2,403	1,919	**24,756**
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,267	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	263	2,211	2,184	1,952	89	24	0	**7,046**
					Excess Groundwater Use	0	0	0	0	0	0	320	298	246	0	0	0	**863**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
7	1976	10,000	7,500	5	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013					4,181		2,403	1,919	**17,539**
					CPG Surface Water Supply				0	831	986	3,800	3,700	0	684			**10,000**
					Allowable Groundwater Use	0	0	1	133	1,943	2,230	1,370	1,349	285	1,530	24	0	**8,863**
					Excess Groundwater Use	0	0	0	0	1,236	1,474	12	15	0	1,025	0	0	**3,762**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
8	1977	7,500	5,625	7	Primary Surface Water Supply (30358)	1,952	1,773	2,297								2,403	1,919	**10,345**
					CPG Surface Water Supply				381	496	589	1,989	1,936	1,700	409			**7,500**
					Allowable Groundwater Use	0	0	1	1,569	1,943	2,230	2,471	2,437	2,171	1,530	24	0	**14,376**
					Excess Groundwater Use	0	0	0	1,196	1,570	1,871	723	690	595	1,300	0	0	**7,944**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
9	1978	7,500	7,500	2	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428			4,181	3,150	2,403	1,919	**28,937**
					CPG Surface Water Supply				0	0	0	3,800	3,700	0	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	263	1,370	1,349	285	89	24	0	**3,701**
					Excess Groundwater Use	0	0	0	0	0	0	12	15	0	0	0	0	**27**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
10	1979	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply			-	0	0	2,500	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	1,370	1,349	285	89	24	0	**5,353**
					Excess Groundwater Use	0	0	0	0	0	275	12	15	0	0	0	0	**303**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
11	1980	7,500	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,267	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	263	2,211	2,184	1,952	89	1,157	0	**8,179**
					Excess Groundwater Use	0	0	0	0	0	0	320	298	246	0	1,270	0	**2,133**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
12	1981	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply				0	0	2,500	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	1,370	1,349	285	89	24	0	**5,353**
					Excess Groundwater Use	0	0	0	0	0	275	12	15	0	0	0	0	**303**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
13	1982	0	0	0	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181	3,150	2,403	1,919	**38,168**
					CPG Surface Water Supply				0	0	0	0	0	0	0			**0**
					Allowable Groundwater Use	0	0	1	133	189	263	522	493	285	89	24	0	**1,997**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
14	1983	0	0	0	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181	3,150	2,403	1,919	**38,168**
					CPG Surface Water Supply				0	0	0	0	0	0	0			**0**
					Allowable Groundwater Use	0	0	1	133	189	263	522	493	285	89	24	0	**1,997**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
15	1984	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,267	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	2,211	2,184	1,952	89	24	0	**8,698**
					Excess Groundwater Use	0	0	0	0	0	275	320	298	246	0	0	0	**1,139**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
16	1985	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply				0	0	2,500	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	1,370	1,349	285	89	24	0	**5,353**
					Excess Groundwater Use	0	0	0	0	0	275	12	15	0	0	0	0	**303**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
17	1986	7,500	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,267	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	263	2,211	2,184	1,952	89	1,157	0	**8,179**
					Excess Groundwater Use	0	0	0	0	0	0	320	298	246	0	1,270	0	**2,133**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
18	1987	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013					4,181	3,150	2,403	1,919	**20,689**
					CPG Surface Water Supply				0	1,143	1,357	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	1,943	2,230	1,370	1,349	285	89	24	0	**7,422**
					Excess Groundwater Use	0	0	0	0	923	1,103	12	15	0	0	0	0	**2,054**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
19	1988	10,000	7,500	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply				0	0	2,500	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	1,370	1,349	285	89	24	0	**5,353**
					Excess Groundwater Use	0	0	0	0	0	275	12	15	0	0	0	0	**303**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
20	1989	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013					4,181	3,150	2,403	1,919	**20,689**
					CPG Surface Water Supply				0	1,143	1,357	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	1,943	2,230	1,370	1,349	285	89	24	0	**7,422**
					Excess Groundwater Use	0	0	0	0	923	1,103	12	15	0	0	0	0	**2,054**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
21	1990	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297		3,820				4,181	3,150	2,403	1,919	**21,496**
					CPG Surface Water Supply				982	0	1,518	3,800	3,700	0	0			**10,000**
					Allowable Groundwater Use	0	0	1	1,569	189	2,230	1,370	1,349	285	89	24	0	**7,105**
					Excess Groundwater Use	0	0	0	595	0	942	12	15	0	0	0	0	**1,564**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
22	1991	7,500	5,625	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply				0	0	1,875	2,850	2,775	0	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	2,160	2,134	2,108	285	89	24	0	**7,121**
					Excess Groundwater Use	0	0	0	0	0	656	199	180	0	0	0	0	**1,034**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
23	1992	7,500	5,625	7	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013								1,919	**10,955**
					CPG Surface Water Supply				0	623	739	1,989	1,936	1,700	513			**7,500**
					Allowable Groundwater Use	0	0	1	133	1,943	2,230	2,471	2,437	2,171	1,530	1,157	0	**14,072**
					Excess Groundwater Use	0	0	0	0	1,443	1,721	723	690	595	1,196	1,270	0	**7,638**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
24	1993	7,500	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428				3,150		1,919	**22,353**
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,267	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	263	2,211	2,184	1,952	89	1,157	0	**8,179**
					Excess Groundwater Use	0	0	0	0	0	0	320	298	246	0	1,270	0	**2,133**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
25	1994	7,500	5,625	3	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820				4,181	3,150	2,403	1,919	**24,510**
					CPG Surface Water Supply				0	0	1,875	2,850	2,775	0	0			**7,500**
					Allowable Groundwater Use	0	0	1	133	189	2,160	2,134	2,108	285	89	24	0	**7,121**
					Excess Groundwater Use	0	0	0	0	0	656	199	180	0	0	0	0	**1,034**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
26	1995	2,500	0	2	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181			1,919	**32,615**
					CPG Surface Water Supply				0	0	0	0	0	0	2,500			**2,500**
					Allowable Groundwater Use	0	0	1	133	189	263	522	493	285	738	1,157	0	**3,780**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	1,270	0	**1,270**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
27	1996	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428					2,403	1,919	**21,606**
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,267	2,500			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	263	2,211	2,184	1,952	738	24	0	**7,696**
					Excess Groundwater Use	0	0	0	0	0	0	320	298	246	0	0	0	**863**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
28	1997	10,000	7,500	4	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150	2,403	1,919	**20,328**
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,267	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	2,211	2,184	1,952	89	24	0	**8,698**
					Excess Groundwater Use	0	0	0	0	0	275	320	298	246	0	0	0	**1,139**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
29	1998	0	0	0	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428	4,660	4,571	4,181	3,150	2,403	1,919	**38,168**
					CPG Surface Water Supply				0	0	0	0	0	0	0			**0**
					Allowable Groundwater Use	0	0	1	133	189	263	522	493	285	89	24	0	**1,997**
					Excess Groundwater Use	0	0	0	0	0	0	0	0	0	0	0	0	**0**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
30	1999	10,000	7,500	5	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820	4,428						1,919	**19,203**
					CPG Surface Water Supply				0	0	0	2,651	2,581	2,267	2,500			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	263	2,211	2,184	1,952	738	1,157	0	**8,829**
					Excess Groundwater Use	0	0	0	0	0	0	320	298	246	0	1,270	0	**2,133**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
31	2000	10,000	7,500	5	Primary Surface Water Supply (30358)	1,952	1,773	2,297	3,013	3,820					3,150		1,919	**17,925**
					CPG Surface Water Supply				0	0	2,500	2,651	2,581	2,267	0			**10,000**
					Allowable Groundwater Use	0	0	1	133	189	1,915	2,211	2,184	1,952	89	1,157	0	**9,831**
					Excess Groundwater Use	0	0	0	0	0	275	320	298	246	0	1,270	0	**2,409**
					Total Supply	**1,952**	**1,773**	**2,298**	**3,146**	**4,009**	**4,690**	**5,183**	**5,063**	**4,466**	**3,238**	**2,427**	**1,919**	**40,165**
1969-2000 Annual Average		**7,683**	**6,121**	**3**	**Primary Surface Water Supply (30358)**													**24,110**
					CPG Surface Water Supply													**7,683**
					Allowable Groundwater Use													**6,833**
					Excess Groundwater Use													**1,539**
					Total Supply													**40,165**