



March 24, 2009

Chino Basin Watermaster
Attention: Kenneth R. Manning
Chief Executive Officer
9641 San Bernardino Road
Rancho Cucamonga, CA 91730

Subject: Analysis of Material Physical Injury from the Proposed Expansion of the Dry-Year Yield Program

Dear Mr. Manning:

The Dry-Year Yield Program (DYYP) is a groundwater storage and recovery program where supplemental water is stored in the Chino Basin during surplus years and extracted during years when the availability of supplemental water is limited. The Chino Basin DYYP was developed jointly by the Inland Empire Utilities Agency (IEUA) and the Metropolitan Water District of Southern California (MWDSC) with input from the Chino Basin Watermaster (Watermaster). The existing DYYP has a maximum storage capacity of 100,000 acre-ft with maximum puts of 25,000 acre-ft/yr and maximum takes of 33,000 acre-ft/yr. The proposed DYYP Expansion, or Expansion, evaluated herein is a 150,000 acre-ft storage program with 50,000 acre-ft/yr puts and 50,000 acre-ft/yr takes. The Expansion was developed jointly by the IEUA, the Three Valleys Municipal Water District (TVMWD), the Western Municipal Water District (WMWD), and the MWDSC.

In the latter half of 2008, an investigation was completed to evaluate the feasibility of the Expansion. This analysis was published as the *Chino Basin Dry-Year Yield Program Expansion Project Development Report* (Black & Veatch, 2008). Three expansion alternatives were developed and evaluated. Wildermuth Environmental, at the direction of the Watermaster, conducted a material physical injury analysis on these expansion alternatives. This material physical analysis is attached herein. The IEUA adopted a mitigated negative declaration for the Expansion in December 2008.

Per the Peace Agreement, material physical injury is defined as: “material injury that is attributable to Recharge, Transfer, storage and recovery, management, movement or Production of water or implementation of the Optimum Basin Management Plan including, but not limited to, degradation of water quality, liquefaction, land subsidence, increases in pump lift and adverse impacts associated with rising groundwater” (p. 8).

The criteria used to evaluate material physical injury for the Expansion include groundwater level changes, the increased potential for subsidence, losses from storage, changes in the direction and speed of known water quality anomalies, and the ability to maintain hydraulic control. These criteria were evaluated with an enhanced version of the 2007 Watermaster Model and MT3D. Based on our analysis, material physical injury—related to storage losses, groundwater level changes, and plume migration—will occur; however, this material physical injury can be mitigated. The results of the material physical injury analysis are summarized below.

DYYP Expansion Alternatives

The Baseline Alternative, which represents the DYYP as it is currently being implemented, and three DYYP Expansion Alternatives are described below. The Expansion Alternatives attempt to bookend all potential DYYP Expansion concepts.

Baseline Alternative – Expansion of the Desalters, Reoperation, and the 100,000 acre-ft DYYP. The Baseline Alternative includes the planned expansion of the desalters and reoperation—as described in *2007 CBWM Groundwater Model Documentation and Evaluation of the Peace II Project Description* (WEI, 2007)—and the existing 100,000 acre-ft DYYP. Under the existing DYYP, the MWDSC, in consultation with Watermaster and the IEUA, makes surplus water available to the basin, which is then recharged via wet water recharge and in-lieu means (the put). Previously, the MWDSC could recharge up to 25,000 acre-ft/yr in the basin. However, due to the availability of surplus water (3 out of 10 years), the put requirement was increased to 33,000 acre-ft/yr under the direction of the IEUA. When the MWDSC makes a call, appropriators that participate in the program will reduce their demands on the MWDSC's imported supplies and could make up the difference in a number of ways. For modeling purposes, this difference was assumed to be made up solely by producing more groundwater from the MWDSC's storage account (the take). For the existing 100,000 acre-ft DYYP, the puts are assumed to occur via in-lieu means. The planning period begins with a three-year take period, as it is currently underway. A ten-year cycle is then assumed to repeat itself through 2035.

Alternative 1 – 150,000 acre-ft DYYP. This alternative is identical to the existing DYYP except the puts and takes increase to 50,000 acre-ft/yr and the maximum storage in the MWDSC DYYP storage account increases to 150,000 acre-ft.

Alternative 2 – 150,000 acre-ft DYYP with 100,000 acre-ft Negative Storage. This alternative is identical to Alternative 1 except the first two cycles are modified to allow for five consecutive take years with the volume in MWDSC storage account changing from +150,000 acre-ft to -100,000 acre-ft. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to go negative for a period time and subsequently refilling it.

Alternative 3 – 150,000 acre-ft DYYP with 300,000 acre-ft Maximum Storage. This alternative is identical to Alternative 1 except the first two cycles are substantially modified to allow the MWDSC storage account to have significant quantities of water in storage and to increase the maximum volume in storage up to approximately 300,000 acre-ft. This alternative also includes small summer partial takes on the order of 6,250 acre-ft in certain years to reduce summer peaking on the Rialto Pipeline. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to hold large quantities of water throughout the anticipated term of the DYYP Expansion contract.

Groundwater Level Changes

The Baseline Alternative is Alternative 1C of the Peace II Agreement (WEI, 2008). The Parties to the Judgment and the Peace II Agreement have indicated that they are willing to accept decreased

groundwater levels and associated increases in pumping energy expenses with the expectation of financial gains and certainties made possible by implementing the Peace II project description. The Baseline Alternative includes the existing DYYP and other Peace II related features. No material physical injury will occur from implementing the Baseline Alternative.

Groundwater production is projected to be maintained with the Expansion Alternatives; although, some changes in production and replenishment plans may be required. From a production perspective, as previously noted, no material physical injury is projected to occur from the decline in groundwater levels caused by the implementing the Baseline Alternative. The same is true for each of the Expansion Alternatives with two exceptions: the proposed take by Jurupa Community Services District (JCSD)/Western Municipal water District (WMWD) was reduced and the proposed take by the City of Chino Hills was eliminated. The total reduction in the proposed take was about 8,000 acre-ft/yr. These modifications were required to maintain projected production and to avoid incurring a material physical injury. It is our professional opinion that Chino Hills could participate in the take side of the Expansion if it modified its production plans to take more water from the shallow aquifer system. The JCSD could also participate by modifying its production plans and by improving groundwater replenishment in the JCSD area. Modifying the Chino Hills and JCSD production plans was beyond the scope of this material physical injury investigation. A comprehensive review of the sustainability of groundwater production and replenishment has been incorporated into the 2010 Recharge Master Plan Update.

Groundwater level declines are, by themselves, considered material physical injury in the Peace Agreement and need to be mitigated such that they are no longer "material." The *Chino Groundwater Basin Dry-Year Yield Program Expansion Initial Study* states that "[...] the mitigation identified for storage losses is deemed adequate to offset the groundwater level declines, based on the assumption that groundwater offsets (reduced takes or increased puts) will be directed to areas actually experiencing groundwater elevation declines as a result of implementing the DYY Expansion Project." The maximum groundwater level declines projected in the material physical injury analysis are shown in Figures 12a, 12b, and 12c in the attached report.

- For Expansion Alternative 1, during the lowest storage year, groundwater levels will be lower than those of the Baseline Alternative in slightly more than half the basin. The most impacted producers include the City of Pomona, the JCSD, and the MVWD.
- For Expansion Alternative 2, during the lowest storage year, groundwater levels will be lower than those of the Baseline Alternative in most of the basin. The most impacted producers include the Cities of Chino, Ontario, Pomona, and Upland, the MVWD, and the Fontana Water Company.
- For Expansion Alternative 3, during the lowest storage year, groundwater levels will be lower than those of the Baseline Alternative in a small area of the basin within the JCSD service area. Only the JCSD will be impacted groundwater level changes under this alternative.

It should also be noted that the Expansion Alternatives produce groundwater level increases in an area located in the north-central service area of the City of Ontario and the south-central service area of the CVWD during the lowest storage period.

It is our professional opinion that the projected declines are sustainable. That said, groundwater level declines are considered a material physical injury and will need to be mitigated. The Mitigated Negative Declaration presents the following mitigation measure:

“Mitigation Measure VII-2. The stakeholders shall implement an adaptive management program in conjunction with the DYY Expansion Project. This adaptive management program shall be implemented concurrent with the DYY Expansion Project and the performance standard is to offset the actual loss of storage (measured or modeled by the Watermaster) by reduced takes or increased puts (or an alternative method deemed equivalent to reduced takes or increased puts) over each ten-year period of the DYY Expansion Project. To the extent feasible, the reduction in takes and puts, or an alternative, shall be offset in any portion of the Chino Basin that experiences a lowering of groundwater table that is attributable to the DYY Expansion Project.”

The operable language in this mitigation measure, relative to groundwater level changes, is “To the extent feasible, the reduction in takes and puts, or an alternative, shall be offset in any portion of the Chino Basin that experiences a lowering of groundwater table that is attributable to the DYY Expansion Project.” This mitigation measure assumes that Watermaster, a Chino Basin party, or another entity will be conducting monitoring, periodically reviewing monitoring data, and analyzing the basin with models to parse out the groundwater level changes of the DYY Expansion from groundwater level changes that result from other basin management activities. This is a complex analysis that would need to be done more frequently than every ten years to assure sustainable production in the JCSD service area. The mitigation is unclear, and there is speculation that it may not be mitigated at all. To ensure that these investigations will be implemented and affective, the responsible entity should be stated clearly, and the costs, attributed to identifying groundwater level changes apart from groundwater level changes that result from other basin management activities, should be budgeted. The responsible parties and the scope of the proposed mitigation measure should be included in the agreements that implement the DYY Expansion.

Changes in Subsidence Potential

WEI has been conducting subsidence investigations in Management Zone 1 (MZ1) for Watermaster since September 2000. The PA-7 piezometer is used in Watermaster’s MZ1 Long Term Management Plan as the key monitoring location for drawdown-related subsidence. This plan states that basin management activities that maintain piezometric elevations greater than 400-feet at the PA-7 piezometer (corresponding to a depth-to-water of 245 feet) will not cause inelastic subsidence. For all Expansion alternatives, the projected lowest piezometric elevations are 23 to 48 feet higher than the subsidence threshold elevation of 400 ft for the managed area of MZ1; thus, no inelastic subsidence is projected to occur in this area. No material physical injury related to subsidence is projected to result from any of the Expansion alternatives.

Storage Losses

Storage losses will occur under Expansion Alternatives 1 and 3. These losses occur due to a decline in Santa Ana River recharge that results from increased groundwater levels in the basin. Through 2035, losses total about 1,500 acre-ft for Alternative 1 and about 40,000 acre-ft for Alternative 3.

The material physical injury associated with storage losses was recognized in the Expansion Mitigated Negative Declaration. Moreover, the Mitigated Negative Declaration states that storage losses can be mitigated with either reduced takes or supplemental puts. The specific mitigation measure is provided below.

"Mitigation Measure VIII-2. The stakeholders shall implement an adaptive management program in conjunction with the DYY Expansion Project. This adaptive management program shall be implemented concurrent with the DYY Expansion Project and the performance standard is to offset the actual loss of storage (measured or modeled by the Watermaster) by reduced takes or increased puts (or an alternative method deemed equivalent to reduced takes or increased puts) over each ten-year period of the DYY Expansion Project. To the extent feasible, the reduction in takes and puts, or an alternative, shall be offset in any portion of the Chino Basin that experiences a lowering of groundwater table that is attributable to the DYY Expansion Project."

It is our opinion that this mitigation measure, if implemented, can mitigate the projected material physical injury. As with groundwater level change mitigation, it assumes that Watermaster, a Chino Basin party, or another entity will be conducting monitoring, periodically reviewing monitoring data, and analyzing the basin with models to parse out the groundwater storage losses of the DYY Expansion from storage losses that will occur as a result of other storage activities. This is a complex analysis that would need to be done more frequently than every ten years. To ensure that these investigations will be implemented and affective, the responsible entity should be stated clearly, and the costs, attributed to identifying these storage losses apart from storage losses that result from other storage activities, should be budgeted. The responsible parties and scope of the proposed mitigation measure should be included in the agreements that implement the DYY Expansion.

Change in Direction and Speed of Water Quality Anomalies – Kaiser Plume

In the Baseline Alternative, and Expansion Alternatives 1 and 3, the leading edge of the Kaiser plume was projected to travel slightly more than 4 miles in a southwesterly direction over the projection period (2007 through 2035). In Expansion Alternatives 1 and 3, the downstream half of the plume decreased in size, compared to the Baseline Alternative, suggesting that projected Expansion production at City of Ontario Well 50 drew in more of the Kaiser plume than was projected to occur under the Baseline Alternative. Furthermore, this suggests that the Expansion may contribute to water quality degradation at City of Ontario Well 50, which is adjacent to the plume. This is a potential material physical injury and may require mitigation pursuant to the Peace Agreement.

The material physical injury associated with the Kaiser Plume was specifically recognized in the Expansion Mitigated Negative Declaration. Mitigation measures VII-11 and VIII-3, which address the material physical injury associated with the Expansion and the Kaiser Plume, are provided below.

“Mitigation Measure VII-11. Hydrogeologic studies, including modeling, will be completed for each recharge site, including ASR wells, to define the recharge impacts on existing known contaminated plumes. If modeling and/or monitoring demonstrate that the rate of contaminated plume expansion or secondary effects associated with such expansion will adversely impact groundwater or water production capabilities, the recharge facility shall be moved to an alternative location where such impacts will not occur or else impacted production facilities will be replaced. In the event that proposed or existing facilities must be relocated outside of the scope of evaluation of this document, the associated environmental impacts will be evaluated in a subsequent project specific CEQA evaluation to allow a final determination on future project’s specific impacts. Such review is appropriate and consistent with utilization of a program environmental document in accordance with Sections 15162 and 15168 of the State CEQA Guidelines.”

“Mitigation Measure VIII-3. If any well intercepts the Kaiser Plume, the responsible entity will install treatment processes at the affected well(s), or implement blending, or a combination of blending and treatment, to remove the plume pollutants to a level that meets potable/drinking water quality standards. If this cannot be achieved, these well(s) will be removed from production and replaced for each agency at an alternative location outside of the influence of the Kaiser Plume.”

It is our opinion that these mitigation measures, if implemented, can mitigate the projected material physical injury. As with the previously discussed mitigation measures, these measures assume that Watermaster, a Chino Basin party, or another entity will be conducting monitoring, periodically reviewing monitoring data, and analyzing the basin with models to parse out the Kaiser plume impacts of the DYYP Expansion from Kaiser plume impacts that will occur as a result of other basin management activities. To ensure that these investigations will be implemented and affective, the responsible entity should be stated clearly, and the costs, attributed to identifying Kaiser plume impacts apart from Kaiser plume impacts that result from other basin management activities, should be budgeted. The responsible parties and scope of the proposed mitigation measures should be included in the agreements that implement the DYYP Expansion.

Hydraulic Control

Hydraulic control refers to the elimination or reduction of groundwater discharge from the Chino North Management Zone to the Santa Ana River to negligible levels. It is a requirement of the Watermaster and IEUA’s recharge permit and a condition to gaining access to the assimilative capacity afforded by the maximum benefit based TDS and nitrogen objectives. Hydraulic control was demonstrated for the Baseline Alternative without the DYYP in 2023 in *Response to Condition*

Subsequent No. 3 from the Order Confirming Motion for Approval of the Peace II Documents (WEI, 2008). Hydraulic control was assessed from detailed groundwater elevation contour maps. Groundwater elevation contours in the southern end of Layer 1 of the Chino Basin were evaluated for the Baseline Alternative (2023), Alternative 1 (2030), Alternative 2 (2035), and Alternative 3 (2025) (all years correspond to high water level periods, resulting from the put and take timing of each respective alternative). (Hydraulic control is weakest when water levels are highest in the southern portion of the basin.) Hydraulic control is maintained for all Expansion alternatives.

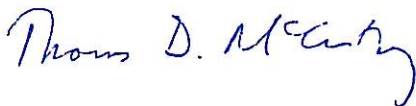
Conclusion

Based on our analysis, material physical injury—related to storage losses, groundwater level changes, and plume migration—will occur; however, this material physical injury can be mitigated if the mitigation measures, cited above, from the Mitigated Negative Declaration are substantially expanded and included in the DYYP Expansion agreements. In our professional opinion, Watermaster should condition its approval of the IEUA's application to expand the DYYP on the development of specific mitigation requirements that will be included in the final agreements that implement the DYYP Expansion.

Please call either of us if you have any questions or need further assistance.

Very truly yours,

Wildermuth Environmental, Inc.



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Associate Engineer



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Encl.



December 15, 2008

Chino Basin Watermaster
Attention: Kenneth R. Manning
Chief Executive Officer
9641 San Bernardino Road
Rancho Cucamonga, CA 91730

Subject: Analysis of Material Physical Injury from the Proposed Expansion of the Dry-Year Yield Program

Dear Mr. Manning:

The objective of this investigation is to determine if there will be a material physical injury to the Chino Basin or a Party to the Judgment from the proposed expansion of the Dry-Year Yield Program (DYYP), hereafter referred to as the DYYP Expansion or Expansion. The criteria used to evaluate material physical injury include groundwater-level changes, the increased potential for subsidence, losses from storage, changes in the direction and speed of known water quality anomalies, and the ability to maintain hydraulic control.

The DYYP is a groundwater storage and recovery program where supplemental water is stored in the Chino Basin during surplus years and extracted during years when the availability of supplemental water is limited. The Chino Basin DYYP was developed jointly by the Chino Basin Watermaster (CBWM), the Inland Empire Utilities Agency (IEUA), and the Metropolitan Water District of Southern California (MWDSC). The DYYP has a maximum storage capacity of 100,000 acre-ft with maximum puts of 25,000 acre-ft/yr and maximum takes of 33,000 acre-ft/yr. The proposed DYYP Expansion evaluated herein is a 150,000 acre-ft storage program with 50,000 acre-ft/yr puts and 50,000 acre-ft/yr takes. The Expansion was developed jointly by the CBWM, the IEUA, the Three Valleys Municipal Water District (TVMWD), the Western Municipal Water District (WMWD), and the MWDSC.

The Black and Veatch Corporation (B&V) was the lead consultant in the development of the facility and related operating plans for DYYP Expansion alternatives. Starting in February 2008, B&V developed a series of preliminary dry-year yield plans with the participating water agencies. The investigation reported herein is an assessment of material physical injury from the specific facilities and operating plans articulated by B&V. The facility and operating plans for the DYYP Expansion have been documented by B&V in Volume I of the DYYP Project Development Report.

To evaluate the criteria listed above, WEI staff utilized the 2007 Watermaster Model (Model). Figure 1 illustrates the extent of the groundwater model (model domain) and the Regional Water Quality Control Board (RWQCB) management zones. The model domain extends into the Temescal Basin as the two basins are hydraulically connected. The Model was used to evaluate a baseline alternative and three proposed Expansion alternatives.

The Baseline Alternative (Baseline) is based on the Peace II Project Description with the existing 100,000 acre-ft DYYP. Moreover, the Baseline is equivalent to Alternative 1C, which was documented in *Response to Condition Subsequent No. 3 from the Order Confirming Motion for Approval of the Peace II Documents* (WEI, 2008). The Baseline was found to cause no material physical injury. The assessment of material injury herein is based on an evaluation of the criteria listed above as well as a comparison to the Baseline Alternative.

The development of the DYYP Expansion project included a determination of how participants would increase or decrease imported water purchases at predetermined amounts to meet program put and take objectives. During put years, the participating retailers would reduce their projected pumping by an amount equal to the put, and the MWDC would supply a like amount of water to participating retailers as a direct surface water delivery. In a take year, the participating retailers would increase their pumping over their projected amount equal to the take, and the MWDC would reduce their delivery of surface water by a like amount. Table 1 lists the initial proposed takes, which were determined in a series of meetings with participating agencies. Several preliminary Model simulations were completed to determine the feasibility of these proposed takes. The conclusion of the preliminary simulations is also provided in Table 1. Due to hydraulic limitations, the proposed take for the City of Chino Hills and the WMWD could not be maintained. The City of Chino Hills proposed take was reduced from 2,000 acre-ft/yr to 0 acre-ft/yr. The WMWD proposed take was reduced from 10,000 acre-ft per year to 5,000 acre-ft/yr. These feasible takes are included in the analysis presented herein. With regard to the Chino Hills take, the take was reduced as precautionary piezometric elevations to prevent inelastic subsidence (at piezometer PA-7) could not be maintained. However, the model assumptions for City of Chino Hills were reflective of a conservative scenario relative to "deep well" pumping. In fact, the City of Chino Hills has subsequently shifted 1,448 acre-ft/yr DYY production out of the MZ-1 managed zone. Additionally, the City of Chino Hills contemplates a broader use of shallow well production than initially modeled. This will also be accomplished in conjunction with further monitoring and groundwater basin testing. It is our professional opinion that Chino Hills can participate in the take side of the Expansion Program if its pumping plans take more water from the shallow aquifer system than modeled. Optimizing the Chino Hills pumping plan is beyond the scope of this investigation. This optimization should be included in a subsequent basin-wide analysis of pumping and recharge plans performed by the appropriators and the CBWM. The WMWD take was reduced until groundwater pumping in the JCSD well field could be maintained.

Dry Year Yield Evaluation Criteria

Per the Peace Agreement, material physical injury is defined as: "material injury that is attributable to Recharge, Transfer, storage and recovery, management, movement or Production of water or implementation of the Optimum Basin Management Plan (OBMP) (WEI 1999), including, but not limited to, degradation of water quality, liquefaction, land subsidence, increases in pump lift and adverse impacts associated with rising groundwater" (p. 8).

As indicated above, each proposed Expansion alternative was evaluated with the Model to determine groundwater-level changes at selected representative locations in the basin and the basin

as a whole, the increased potential for subsidence through the lowering of piezometric levels in vicinity of the City of Chino, losses of water in storage due to operating the basin at greater storage levels, the change in direction and speed of known water quality anomalies due to the superposition of the put and take periods on otherwise expected basin operations, and the ability to maintain hydraulic control when operating the basin at greater storage levels. The planning period used in this analysis consists of the 27-year period from October 2008 through September 2035. This period corresponds to the 25-year period of the proposed Expansion agreement, which ranges from 2010 through 2035. Groundwater modeling was completed for 2006 through 2060 with the impacts reported for through 2035. The impacts of each alternative were assessed by comparing the model simulation results to the Baseline Alternative. Specifically, information was extracted from the model results to produce:

- Water budget tables to determine outflow from the Chino North Management Zone to the Prado Basin Management Zone and the Santa Ana River, new recharge from the Santa Ana River, and the change in water in storage.
- Maps showing the areal distribution of groundwater elevations and the change in groundwater elevations caused by each proposed Expansion alternative.
- Hydrographs showing projected water level time histories at selected representative wells in the Chino Basin. This includes the PA-7 piezometer located at the CBWM subsidence monitoring station in Ayala Park. The PA-7 piezometer is used to assess the potential for subsidence in the area of subsidence concern within the City of Chino.
- Maps that show plume migration tracks for the dry-year yield Baseline and Expansion over the planning period.
- Detailed groundwater level and flow system maps of the southern part of the basin to assess the state of hydraulic control.

Dry-Year Yield Program Expansion Description

Eight Chino Basin appropriators are anticipated to participate in the Expansion, including the Cities of Chino, Chino Hills, Pomona, Ontario, and Upland; the Cucamonga Valley Water District (CVWD); the Jurupa Community Services District (JCSD); and the Monte Vista Water District (MVWD). The Three Valleys Municipal Water District (TVMWD) and the Western Municipal Water District (WMWD) are also expected to participate through coordination with Chino Basin appropriators. Program participants would increase or decrease imported water purchases at a predetermined amount to meet program put and take objectives. During put years, participating retailers would reduce their projected pumping by an amount equal to the put, and MWDSC would supply a like amount of water to participating retailers as a direct surface water delivery. In take years, the participating retailers would increase their pumping over their projected amount equal to the take, and the MWDSC would reduce their delivery of surface water by a like amount; demands that would have otherwise been met by MWDSC surface water deliveries are met by groundwater extracted from the program storage account.

Tables 2 and 3 list the program participants' existing and anticipated expansion put and/or take contributions. The combined put capacity of these agencies is 50,000 acre-ft/yr. As shown in Table 2, the total committed in-lieu put capacity is approximately 42,500 acre-ft/yr. The 7,500 difference between the committed put and the modeled put is assumed to consist of either additional in-lieu

deliveries or wet water recharge. For modeling purposes, this was assumed to consist solely of additional in-lieu deliveries, which were assigned to all participants on a pro-rata basis. Approximately 17,000 acre-ft/yr of the put capacity occurs via aquifer storage and recovery (ASR) injection wells and the remaining approximately 33,000 acre-ft/yr occurs via in-lieu deliveries. The locations of the new ASR wells are shown in Figure 2. During put years, these wells operate as injection wells, and during take and hold years, they operate as extraction wells. The total in-lieu put capacity is approximately the same as the in-lieu capacity of the existing program (33,000 acre-ft/yr). The TVMWD is not a Chino Basin appropriator; therefore, its puts were assigned to the City of Pomona and the City of Upland. As shown in Table 3, the combined take capacity modeled for these agencies is 50,000 acre-ft/yr (inclusive of the existing program). The WMWD is not a Chino Basin appropriator; therefore, its takes were assigned to the JCSD.

Projected Groundwater Production for the Planning Period

The IEUA developed a preliminary groundwater pumping plan (IEUA, 2008a) for the Chino Basin during the summer of 2008. This plan, which is based on the current and future water supply plans provided by the groundwater producers for the period of 2008 through 2035, is the basis of the groundwater pumping plan used in this investigation. The producers' water supply plans include existing and new master-planned wells, planned groundwater treatment facilities, an expanded OBMP desalter program, and the assumption that CBWM will secure access to enough replenishment facilities and water to enable the producers to pump what they need. The groundwater pumping plan was vetted early through the CBWM process and was accepted by the appropriators in September 2008.

Table 4 lists projected groundwater production by party for the period of 2006/07 through 2034/35. The total production of the appropriators during the projection period averages about 180,000 acre-ft/yr and ranges from a low of about 140,000 acre-ft/yr to a high of about 210,000 acre-ft/yr. The total production for the Chino Basin during this period averages about 195,500 acre-ft/yr and ranges from a low of about 170,000 acre-ft/yr to a high of about 220,000 acre-ft/yr. Adjustments were made in some of the individual appropriator pumping plans to reduce well interference and regional drawdown in the center of the basin. The appropriators and the CBWM should conduct a basin-wide analysis of pumping and recharge plans to optimize pumping and groundwater levels. The optimization would consist of determining pumping and recharge operations that minimize drawdown using wells that pump from specific aquifers, wells in specific locations within the basin, and or constructing new wells.

Projected Groundwater Recharge and Replenishment

Replenishment water is recharged to the Chino Basin by the CBWM pursuant to the 1978 Chino Basin Judgment (Case No. RCV 51010, Chino Basin Municipal Water District vs. City of Chino et al.) and the Peace Agreement. Table 5 lists the future replenishment obligation and replenishment water estimates for the Baseline and Expansion Alternatives. The allocation of recharge to individual facilities is based on the requirement to balance recharge and discharge as described in the OBMP Peace Agreement. The CBWM purchases replenishment water when one or more parties overproduces. Typically, the CBWM purchases water from the MWDSC at a replenishment rate, which is made available to the CBWM when the MWDSC has surplus imported water. The

availability of replenishment water from the MWDSC has been substantially reduced due to environmental and judicial constraints and drought. There is no official forecast available from MWDSC to characterize the availability of replenishment water. However, MWDSC staff has presented relevant information to its member agencies, as part of an ongoing Regional Groundwater Workshop process (Brandon Goshi, August 29 and October 30 2008), showing the impacts of different water supply and demand scenarios on the availability of surplus water for groundwater replenishment and regional storage purposes. The same information was presented by MWDSC staff at the Chino Basin Watermaster Strategic Planning Meeting (Grace Chan, September 29 2008). These presentations showed that, under the Interim Remedy Order to protect Delta Smelt (U.S. District Court Judge Oliver Wanger, NRDC vs. Kempthorne 2007), surplus water may only be available in approximately three out of ten years. The primary State Water Project supply assumptions underlying this finding is documented in the 2007 State Water Project Delivery Reliability Report from the California Department of Water Resources (DWR, 2007). Although MWDSC staff also presented the impacts of potential improvements to the State Water Project supplies that may occur in the future, it has been assumed for modeling purposes that replenishment water will be available to CBWM in three of ten years and that this water will be provided to the CBWM in the quantities necessary to meet cumulative unmet replenishment obligation limited by the recharge capacity in existing recharge basins. Deliveries of this water were assumed to occur when the MWDSC is doing a put into its DYYP storage account. A 5,000 acre-ft/yr in-lieu program was also assumed to extend the recharge capacity to the amount required to satisfy replenishment obligations.

The estimated volume of new storm water recharged during the planning period is 11,646 acre-ft/yr, which is based on the actual operations of the stormwater recharge facilities in the Chino Basin. This value was used in the Peace II material physical injury analysis.

The volume of recycled water recharged during the planning period is based on IEUA recycled water plans (IEUA, 2007) and discussions with IEUA staff (IEUA, 2008b). Recycled water recharge increases from approximately 1,300 acre-ft in 2006 to 24,000 acre-ft in 2035. Table 5 shows recycled water recharge for the planning period. The availability of recycled water for recharge was based on the following assumptions:

- The IEUA will gain approval to transition from its existing 5-year volumetric average recycled water content of approximately 33% permit condition to a 10-year volumetric average recycled water content of 50% permit condition.
- Imported water will be available 3 out of 10 years for dilution.

When imported water is available, the volume used for replenishment was calculated based on the available recharge capacity and the cumulative unmet replenishment obligation. The available capacity was determined after accounting for storm water and recycled water. The volume of recycled water was determined iteratively with the estimated volume of imported water to satisfy recycled water contribution constraints. No imported water is assumed to be purchased unless there is an unmet replenishment obligation.

Alternative Descriptions

The Baseline Alternative, which represents the DYYP as it is currently being implemented, and three DYYP Expansion Alternatives are described below. The three Expansion Alternatives attempt to bookend all currently envisioned DYYP Expansion concepts.

Baseline Alternative – Expansion of the Desalters, Reoperation, and the 100,000 acre-ft DYYP. The Baseline Alternative includes the planned expansion of the desalters and reoperation—as described in *2007 CBWM Groundwater Model Documentation and Evaluation of the Peace II Project Description* (WEI, 2007a)—and the existing 100,000 acre-ft DYYP. In the existing DYYP, the MWDSC, in consultation with the CBWM and the IEUA, makes surplus water available to the basin, which is then recharged via wet water recharge and in-lieu means (the put). Previously, the MWDSC could recharge up to 25,000 acre-ft/yr in the basin. However, due to the availability of surplus water (3 out of 10 years), the put requirement was increased to 33,000 acre-ft/yr under the direction of the IEUA. When the MWDSC makes a call, appropriators that participate in the program will reduce their demands on the MWDSC's imported supplies and could make up the difference in a number of ways. For modeling purposes, this difference was assumed to be solely by producing more groundwater from Metropolitan's storage account (the take). The puts and takes are listed in Tables 2 and 3, respectively. For the existing 100,000 acre-ft DYYP, the puts are assumed to occur via in-lieu means. This is the preferred method of the appropriators, and it frees up wet water recharge capacity for future replenishment. The take commitments are contractual commitments between the appropriators listed in Table 3 and the IEUA. Figure 3a illustrates the time history of groundwater pumping and storage in the Baseline Alternative through the end of the Peace Agreement. A ten-year cycle was assumed with the first three years being put years, the next four years being hold years and the last three years being take years. The planning period starts off with a three-year take period, as it is currently underway. The ten-year cycle is assumed to repeat itself through 2035.

Alternative 1 – 150,000 acre-ft DYYP. This alternative is identical to the existing DYYP except the puts and takes increase to 50,000 acre-ft/yr and the maximum storage in the MWDSC DYYP storage account is 150,000 acre-ft. The groundwater production modifications required to accomplish the increased puts and takes are shown in Tables 2 and 3. Figure 3b illustrates the time history of groundwater pumping and storage for Alternative 1.

Alternative 2 – 150,000 acre-ft DYYP with 100,000 acre-ft Negative Storage. This alternative is identical to Alternative 1 except the first two cycles are modified to allow five consecutive take years with volume in MWDSC storage account changing from +150,000 acre-ft to -100,000 acre-ft. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to go negative for a period time and subsequently refilling it. Figure 3c illustrates the time history of groundwater pumping and storage for Alternative 2.

Alternative 3 – 150,000 acre-ft DYYP with 300,000 acre-ft Maximum Storage. This alternative is identical to Alternative 1 except the first two cycles are substantially modified to allow the MWDSC storage account to have significant quantities of water in storage and to increase the maximum volume in storage up to approximately 300,000 acre-ft. This alternative also includes small summer (or partial) takes on the order of 6,250 acre-ft in certain years to reduce summer peaking on

the Rialto Pipeline. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to hold large quantities of water throughout the anticipated term of the DYYP Expansion contract. Of particular interest are the impacts on water in storage and hydraulic control. Figure 3d illustrates the time history of groundwater pumping and storage for Alternative 3. The 6,250 acre-ft summer takes are visible apart from the large programmatic takes.

Material Physical Injury Analysis

Hydrologic Balance and Storage

The hydrologic water budgets for Chino North, Chino South, Chino East, and Prado Management Zones for the Baseline Alternative, Alternative 1, Alternative 2, and Alternative 3 are shown in Tables 6 through 9, respectively. Overall, the budgets are very similar. The greatest differences lie in how basin storage changes over time and how the basin interacts with the Santa Ana River. Water budget as used herein refers to the accounting of recharge, discharge and water in storage.

There are several recharge and discharge components listed in Tables 6 through 9. A key difference in the water budgets is the inflow from stream recharge and outflow to rising groundwater. The net difference between rising groundwater and stream recharge can be seen in the Santa Ana River discharge at Prado Dam and in basin storage.

Table 10 shows the estimated time history of Santa Ana River discharge for the Baseline and three Expansion Alternatives. Table 10 also shows the difference in surface water discharge caused by the Expansion. Figure 4a illustrates the change in Santa Ana River recharge to the Chino Basin for each alternative relative to the Baseline.

The hydrologic balance for Alternative 1 is almost identical to the baseline with subtle differences showing up in slightly increased streambed recharge in Chino South Management Zone (MZ) and the time history of storage. The hydrologic balance for Alternative 2 is shows decreased streambed recharge in Chino South MZ. This is caused by drawdown associated with negative DYYP storage program. The hydrologic balance for Alternative 3 is shows significant decreased streambed recharge in Chino South MZ. The specific amount of change for each alternative relative to the Baseline is listed below:

- For Alternative 1, the cumulative discharge for the Santa Ana River is increased by a total of about 1,500 acre-ft by 2035.
- For Alternative 2, the cumulative discharge for the Santa Ana River is reduced by a total of about 32,700 acre-ft by 2035 and is equivalent to an average decrease of about a 2 cubic feet per second (cfs) in the Santa Ana River discharge, or about one half of one percent of the total discharge in the Santa Ana River.
- For Alternative 3, the cumulative discharge for the Santa Ana River is increased by a total of about 35,900 acre-ft by 2035 and is equivalent to an average increase of about a 2 cfs in the

Santa Ana River discharge, or also about one half of one percent of the total discharge in the Santa Ana River.

Figure shows cumulative change in storage for each alternative. 4b also illustrates when water levels for each alternative are at their lowest, when the cumulative change in storage is greatest, and when there is no water in the DYYP Expansion storage account. For the planning period, this is 2030 for all alternatives with the exception of Alternative 2 and Alternative 3. Alternative 3 has water in the DYYP storage account throughout the planning period; and approximately 100,000 acre-ft in 2030. Alternative 2 is at its lowest cumulative storage in 2021.

The total storage in the Chino Basin declined similarly for each Alternative relative to the Baseline; however, the storage levels varied more abruptly due to the put and take periods. The decline in storage was at a lower rate during put periods and dropped more steeply during take periods. Figure 4b illustrates the change in storage over the planning period for each alternative. The planning period cumulative change in storage is approximately -407,000 acre-ft for the Baseline, -359,000 acre-ft for Alternative 1, -311,000 acre-ft for Alternative 2, and -359,000 acre-ft for Alternative 3. In 2030, when all storage accounts for have a zero balance except Alternative 3, the change in storage is -459,600, -462,000, -410,000, and -388,500 for Alternative 1, Alternative 2 and Alternative 3, respectively. A. When corrected for the amount of water in the DYYP storage account in 2030, Alternative 3 has a change in storage of -494,500. Note that the change in storage for the Baseline Alternative and Alternative 1 are very similar, within less than 1 percent of each other. Alternative 2 gains more water from the Santa Ana River than the other alternatives and therefore has less cumulative change in storage, approximately 11 percent less than the Baseline Alternative. Alternative 3 does not gain as much water from the Santa Ana River than the other alternatives. When correcting for DYYP water in the storage account in 2030, Alternative 3 has more cumulative change in storage, approximately 8 percent more than the Baseline Alternative.

Alternative 1 results in a negligible change in storage relative to the Baseline Alternative. Alternative 2 has the greatest difference in Santa Ana River discharge and change in storage when compared to the Baseline. During the negative storage period of Alternative 2, groundwater levels are depressed relative to the Baseline Alternative levels, and this causes greater recharge from the Santa Ana River.

Alternative 3 results in less Santa Ana River recharge compared to the Baseline Alternative because groundwater levels are higher over the planning period compared to groundwater levels in the Baseline Alternative. This has the effect of losses from storage that result from changes in River recharge that were not accounted for in the planning simulations. These losses would have to be mitigated to ensure no material physical injury.

Changes in Groundwater Levels

Figure 5 shows the locations of selected wells for which groundwater level time history were projected for the Expansion Alternatives. The hydrographs for these wells, which are included with this report as Figures 6a through 6j, show how water levels are projected to change over the planning period. The groundwater elevations in 2008 (initial condition) and 2035 were mapped for layers 1, 2, and 3 for each planning alternative. The 2008 groundwater elevations for layers 1, 2, and 3 are illustrated in Figures 7a through 7c. The initial conditions are the same for all alternatives.

Figures 8a through 8c show the Baseline Alternative at the end of the planning period (2035) for layers 1, 2, and 3.

The maximum change in groundwater levels for the Expansion Alternatives is assumed to occur when DYYP storage is exhausted near the end of the planning period (2030) or, in the case of Alternative 2, at the point where DYYP storage reaches its most negative value (2021). Figure 4b illustrates the cumulative change in storage for each alternative. The point of lowest cumulative change in storage is 2030 for the Baseline Alternative and Alternatives 1 and 3. The point of lowest cumulative storage change for Alternative 2 is 2021. The 2030 groundwater elevations for Alternative 1 layers 1, 2, and 3 are shown in Figures 9a through 9c. The 2021 groundwater elevations for Alternative 2 layers 1, 2, and 3 are shown in Figures 10a through 10c. And, the 2030 groundwater elevations for Alternative 3 layers 1, 2, and 3 are shown in Figures 11a through 11c.

Once the lowest groundwater levels were identified for each Expansion Alternative, the differences between the low groundwater levels of the Baseline Alternative and the Expansion Alternatives were calculated. Figures 12a and 12b compare the low groundwater levels for Alternatives 1 and 3 to the Baseline Alternative in 2030. Figures 12c and 12d compare the low groundwater levels for Alternative 2 to the Baseline Alternative in 2021 and 2030.

Table 10 summarizes the water level changes by alternative. The first *Baseline 2030* columns list the groundwater level changes for the Baseline Alternative from 2008 through 2030 by retail water service area. The average change is area-weighted, and the maximum and minimum changes are specific to model cells in the retail service area. The *Alternative 1 2030 + Baseline* columns list similar statistics for the difference between the Baseline Alternative and Alternative 1 in 2030. For example, the average groundwater level change in the CVWD service area for the Baseline is -37 feet, and the difference in 2030 for the average groundwater level between Alternative 1 and the Baseline is an increase of 3 feet over the retail service area. This table contains similar information for Alternatives 2 and 3.

The groundwater elevation changes are not uniform across the basin, and therefore, some retail agencies will experience greater lift and related energy expenses from the proposed Expansion. Note the following localized changes in groundwater elevations for the Baseline Alternative:

- Through fall 2030, groundwater elevations in the MVWD and City of Pomona production area are projected to change by about -15 to -20 feet in layer 1, -40 to -44 feet in layer 2, and -44 to -53 feet in layer 3.
- Through fall 2030, groundwater elevations in the MZ1 subsidence area (the production area for the Cities of Chino and Chino Hills) are projected to change by about -20 feet in layer 1, -38 feet in layer 2, and -40 feet in layer 3. The groundwater levels in layers 2 and 3 are above the subsidence threshold, and therefore, new inelastic subsidence is not expected to occur for the Baseline Alternative.
- Through fall 2030 groundwater elevations in the CVWD service area are projected to change by about -37 feet in all layers. A significant pumping depression develops at the cluster of CVWD production wells approximately 0.5 miles north of the Turner Recharge Basins. Through fall 2030,

groundwater elevations in the CVWD service area are projected to change by about -19 feet in all layers.

- Through fall 2030, groundwater elevations in the City of Ontario service area are projected to change by about -40 to -45 feet in all layers.
- Through fall 2030, groundwater elevations in the JCSD production area are projected to change by about -24 to -18 feet in all layers.
- Through fall 2030, groundwater elevations in the FWC production area are projected to change by about -26 feet in layers 1 and 2 and by about -8 feet in layer 3.

Water levels in Layer 1 for Alternatives 1 and 3 are slightly higher than the Baseline in 2030. For layers 2 and 3 water levels are still higher in Cucamonga and Fontana, but tend to be lower over the majority of the Chino Basin. Figures 12c through 12d show how each alternative varies from the baseline. Areas of concentrated put, including part of the CVWD service area, show an increase in groundwater levels, and areas where the take is concentrated, such as Pomona and MVWD, show consistent water level declines regardless of the Expansion Alternative.

The projected groundwater declines that result from the Expansion Alternatives are generally small and sustainable. That said, groundwater level declines are considered material physical injury in the Peace Agreement and will need to be mitigated. A discussion of mitigation is beyond the scope of this investigation.

Changes in Subsidence Potential

WEI has been conducting subsidence investigations in MZ1 for the CBWM since September 2000. As part of this process, WEI has reviewed recent historical subsidence across the basin using InSAR, ground level surveys, controlled pumping tests, and a rigorous review of basin hydrogeology. Figure 13 shows the location of recent subsidence in MZ1 (1996-2000) and defines the southern and central sub-areas of subsidence within MZ1. Figure 14 shows the projected the piezometric elevations at the PA-7 piezometer for all planning alternatives.

The PA-7 piezometer is used in the CBWM's MZ1 Long Term Management Plan. In this plan, basin management activities that maintain piezometric elevations greater than 400-feet at the PA-7 piezometer (corresponding to a depth to water of 245 feet) will not cause inelastic subsidence. In all cases, the projected lowest piezometric elevations are 23 to 48 feet higher than the subsidence threshold elevation of 400 ft for the managed area of MZ1; thus, no inelastic subsidence is projected to occur in this area. No material physical injury related to subsidence from any of the planning alternatives is projected to occur.

Change in Movement of Water Quality Anomalies

Previous Chino Basin water quality discussions (WEI, 2003; WEI, 2007b) have described specific water quality conditions across the entire basin and detailed existing contaminant plumes. These plumes are briefly discussed below. Following this discussion, the Expansion Alternatives' effects on said plumes are articulated.

Chino Airport. The Chino Airport is located approximately four miles east of the City of Chino and six miles south of Ontario International Airport, and occupying about 895 acres. From the early 1940s until 1948, the airport was owned by the Federal Government and used for flight training and aircraft storage. The County of San Bernardino acquired the airport in 1948 and has since operated and/or leased portions of the facility. Past and present businesses and activities at the airport since 1948 have included the modification of military aircraft; crop-dusting; aircraft-engine repair; aircraft painting, stripping, and washing; dispensing of fire-retardant chemicals to fight forest fires; and general aircraft maintenance. The use of organic solvents for various manufacturing and industrial purposes is widespread throughout the airport's history (RWQCB, 1990). From 1986 to 1988, a number of groundwater quality investigations were performed in the vicinity of Chino Airport. Analytical results from groundwater sampling revealed the presence of VOCs above MCLs in six wells down gradient of Chino Airport. The most common VOC detected above its MCL was TCE with concentrations in contaminated wells ranging from 6 to 75 µg/L. The plume is elongate in shape, up to 3,600 feet wide, and extends approximately 14,200 feet from the airport's northern boundary in a south to southwestern direction.

General Electric Flatiron Facility. The General Electric Flatiron Facility (Flatiron Facility) occupied the site at 234 East Main Street, Ontario, California from the early 1900s to 1982. Its operations primarily consisted of manufacturing clothes irons. Currently, the site is occupied by an industrial park. The RWQCB issued an investigative order to General Electric (GE) in 1987 after an inactive well in the City of Ontario was found to contain TCE and chromium above drinking water standards. Analytical results from groundwater sampling have indicated that VOCs and total dissolved chromium are the major groundwater contaminants in this plume. The most common VOC detected at levels significantly above its MCL is TCE, which reached a measured maximum concentration of 3,700 µg/L. Other VOCs—including PCE, toluene, and total xylenes, are periodically detected—but commonly below MCLs (Geomatrix Consultants, 1997). The plume is up to 3,400 feet wide and extends about 9,000 feet south-southwest (hydraulically down gradient) from the southern border of the site. From 2001 to 2006, the maximum TCE concentration in groundwater detected at an individual well within the Flatiron Facility plume was 3,200 µg/L.

General Electric Test Cell Facility. The GE Engine Maintenance Center Test Cell Facility (Test Cell Facility) is located at 1923 East Avon, Ontario, California. The primary operations at the Test Cell Facility include the testing and maintenance of aircraft engines. A soil and groundwater investigation, followed by a subsequent quarterly groundwater monitoring program, began in 1991 (Dames & Moore, 1996). The results of these investigations showed that VOCs exist in the soil and groundwater beneath the Test Cell Facility and that the released VOCs have migrated offsite. Analytical results from subsequent investigations indicated that the most common and abundant VOC detected in groundwater beneath the Test Cell Facility was TCE. The historical maximum TCE concentration measured at an onsite monitoring well (directly beneath the Test Cell Facility) was 1,240 µg/L. The historical maximum TCE concentration measured at an offsite monitoring well (down gradient) was 190 µg/L (BDM International, 1997). Other VOCs that have been detected include PCE; cis-1,2-DCE; 1,2-dichloropropane; 1,1-DCE; 1,1-DCA; benzene; toluene; xylenes; and others. The plume is elongate in shape, up to 2,400 feet wide, and extends approximately 10,300 feet from the Test Cell Facility in a southwesterly direction. From 2001 to 2006, the maximum TCE and PCE concentrations in groundwater detected at an individual well within the Test Cell Facility plume were 900 µg/L and 17 µg/L, respectively.

Kaiser Steel Fontana Steel Site. Between 1943 and 1983, the Kaiser Steel Corporation (Kaiser) operated an integrated steel manufacturing facility in Fontana. During the first 30 years of the facility's operation (1945-1974), a portion of Kaiser's brine wastewater was discharged to surface impoundments and allowed to percolate into the soil. In the early 1970s, the surface impoundments were lined to eliminate percolation to groundwater (Mark J. Wildermuth, 1991). In July 1983, Kaiser initiated a groundwater investigation that revealed the presence of a plume of degraded groundwater under the facility. In August 1987, the RWQCB issued CAO Number 87-121, which required additional groundwater investigations and remediation activities. The results of these investigations showed that the major constituents of release to groundwater were inorganic dissolved solids and low molecular weight organic compounds. The wells sampled during the groundwater investigations had TDS concentrations ranging from 500 to 1,200 mg/L and TOC concentrations ranging from 1 to 70 mg/L. As of November 1991, the plume had migrated almost entirely off the Kaiser site. Based on a limited number of wells, including City of Ontario Well No. 30, the plume is up to 3,400 feet wide and extends about 17,500 feet from northeast to southwest.

Milliken Landfill. The Milliken Sanitary Landfill (MSL) is a Class III Municipal Solid Waste Management Unit, located near the intersections of Milliken Avenue and Mission Boulevard in the City of Ontario. This facility is owned by the County of San Bernardino and managed by the County's Waste System Division. The facility was opened in 1958 and continues to accept waste within an approximate 140-acre portion of the 196-acre permitted area (GeoLogic Associates, 1998). Groundwater monitoring at the MSL began in 1987 with five monitoring wells as part of a Solid Waste Assessment Test investigation (IT, 1989). The results of this investigation indicated that the MSL had released organic and inorganic compounds to the underlying groundwater. Due to the presence of such compounds, the MSL conducted an Evaluation Monitoring Program (EMP) investigation. Following the completion of the EMP, a total of 29 monitoring wells were drilled to evaluate the nature and extent of the groundwater impacts identified in the vicinity of the MSL (GeoLogic Associates, 1998). Analytical results from groundwater sampling have indicated that VOCs are the major constituents of release. The most common VOCs detected are TCE, PCE, and dichlorodifluoromethane. Other VOCs detected above their MCLs include vinyl chloride; benzene; 1,1-dichloroethane; and 1,2-dichloropropane. The historical maximum total VOC concentration detected at an individual monitoring well is 159.6 µg/L (GeoLogic Associates, 1998). The plume is up to 1,800 feet wide and extends about 2,100 feet south of the MSL's southern border. From 2001 to 2006, the maximum TCE and PCE concentrations detected at an individual well within the MSL plume were 96 µg/L and 44 µg/L, respectively.

Ontario International Airport. A VOC plume, primarily containing TCE, exists south of the Ontario Airport. This plume extends approximately from State Route 60 on the north and Haven Avenue on the east to Cloverdale Road on the south and South Grove Avenue on the west. In July 2005, Draft CAOs were issued by the RWQCB. These CAOs were presented to the companies they named in August 2005. From 2001 to 2006, the maximum TCE concentration detected at an individual well within this plume was 38 µg/L. The plume is up to 17,700 feet wide and 20,450 feet long.

Pomona Area Plume. This is an undocumented VOC plume in the Pomona area. This plume extends approximately from Holt Boulevard on the north and East End Avenue on the east to

Philadelphia Street on the south and Towne Avenue on the west. From 2000 to 2008, the maximum TCE concentration within this plume was 46 µg/L. The plume is up to 5,000 feet wide and 7,900 feet long.

Figure 15 illustrates the locations of groundwater contaminant plumes in Chino Basin at the beginning of the planning period and their estimated locations at the end of the planning period for the Baseline and DYYP Alternatives. The migration of the plumes through the planning period is very similar for each Alternative.

The current locations of the plumes were mapped from recent data. These locations were assumed to be the initial plume locations at the start of the planning period. Initial concentrations were prepared as input files for MT3D (Zheng and Wang, 1999). MT3D is a 3-dimensional solute transport model code for simulation of advection, dispersion, and chemical reactions of dissolved constituents in groundwater systems. This code, in conjunction with the Model, was used to simulate the movement of the plumes.

With the exception of the Kaiser plume, the plume locations are virtually identical for all the Alternatives, indicating that the change in direction and speed of movement of these plumes caused by the DYYP Expansion is not significant will not contribute to material physical injury. The modeling results suggest that there may be material physical injury from the Expansion alternatives for some wells owned by the City of Ontario.

The simulation results for the Baseline and Expansion Alternatives are discussed below for each contaminant plume:

- Chino Airport – At the beginning of the planning period, the Chino Airport plume underlies and extends southwest of the Chino Airport. In the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 1.25 miles in the southeasterly direction. The migration of the plume in both alternatives is nearly identical. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient and local Chino Creek Well Field groundwater pumping. At the end of the planning period, the plume location is south and east of Pine and Euclid Avenues, underlying the northern reaches of the Prado Flood Control Basin. The County of San Bernardino is under a Cleanup and Abatement order to remediate this plume.
- General Electric Flatiron Facility – At the beginning of the planning period, the GE Flatiron plume extends south of Mission Boulevard along Euclid Avenue. In the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 0.4 miles in the easterly direction and 0.6 miles in the southerly direction. There is a negligible difference between the Baseline and Expansion Alternatives plume locations in 2035. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient, local groundwater pumping, and recharge at the Ely Basins. The recharge at Ely Basins deflects the plume to the northwest. GE is under a Cleanup and Abatement order to remediate this plume. It is unlikely that the plume will be allowed to migrate as shown herein.
- General Electric Test Cell Facility – At the beginning of the planning period, the GE Test Cell plume is located south of Ontario Airport, extending southwest of Mission Boulevard to Grove Avenue. In

the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 0.7 miles in the southeasterly direction around the Ely Basins. There is a negligible difference between the Baseline and Expansion Alternatives plume locations in 2035. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient, local groundwater pumping, and recharge at the Ely Basins. At the end of the planning period, the leading edge of the plume directly underlies State Highway 60 just east of Grove Avenue. GE is under a Cleanup and Abatement order to remediate this plume.

- Kaiser Steel Fontana Steel Site – The location of the Kaiser plume, as shown in Figure 15, was estimated using past modeling studies (through the mid-1980s) and updated through 2008. Kaiser stopped monitoring in the early 1990s. Thus, the projection described herein is approximate. At the beginning of the planning period, the elongated Kaiser plume extends in a southwesterly direction from the former Kaiser Steel site to Mission Boulevard. With the Baseline Alternative, the leading edge of the plume traveled approximately 4.2 miles in the southwesterly direction. With the Expansion Alternatives, the leading edge of the plume traveled approximately 4.2 miles, 3.9 miles, and 4.5 miles in the southwesterly direction for Alternative 1, Alternative 2, and Alternative 3, respectively. City of Ontario Well 50 will be impacted by the Baseline Alternative and each of the Expansion Alternatives. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient and groundwater pumping at wells owned by the City of Ontario, JCSD, and the Chino Desalter Authority. At the end of the planning period, for both the Baseline and Alternatives, the plume is aligned along the west side of Interstate 15 between South Archibald Avenue and South Milliken Avenue, north and south of Highway 60.
- Milliken Landfill – At the beginning of the planning period, the Milliken Landfill plume extends southwest from the landfill site, just north of Mission Boulevard. In the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 1.3 miles in the southerly direction. There is a negligible difference between the Baseline and Alternative plume locations in 2035. The primary factors affecting plume migration in the simulation are the regional hydraulic gradient and local groundwater pumping. At the end of the planning period, for the Baseline and Expansion Alternatives, the plume is located just southeast of the intersection of East Chino Avenue and Haven Avenue.
- Ontario International Airport – At the beginning of the planning period, the plume underlies a broad area south of Riverside Drive, north of Kimball Avenue, west of Grove Avenue, and east of Archibald Avenue. In the Baseline, the leading edge of the plume did not travel south of its initial (current) position. There is a negligible difference between the Baseline and Expansion Alternative plume locations in 2035. The primary factors affecting plume migration in the simulation are the regional hydraulic gradient and local groundwater pumping, specifically pumping at the Chino-1 Desalter Well Field—the plume is consumed in part by production at the Chino-1 Desalter well field and does not migrate past this well field.
- Pomona Area Plume – At the beginning of the planning period, the plume underlies an area south of Holt Boulevard and north of Philadelphia Street. For the Baseline and all Alternatives, the plume moves approximately 0.5 miles south. There is a negligible difference between the Baseline and the Alternative plume locations in 2035. The primary factors affecting plume migration in the simulation are the regional hydraulic gradient and local groundwater pumping, specifically City of Pomona pumping.

Hydraulic Control

Hydraulic control refers to the elimination or reduction of groundwater discharge from the Chino North MZ to the Santa Ana River to negligible levels. It is a requirement of CBWM and the IEUA's recycled water recharge permit and a condition to gaining access to the assimilative capacity for TDS and nitrogen afforded by the maximum benefit based TDS and nitrogen objectives. Hydraulic control was assessed herein from detailed groundwater elevation contour maps. Hydraulic control was demonstrated for the Baseline Alternative without the DYYP in 2023 in *Response to Condition Subsequent No. 3 from the Order Confirming Motion for Approval of the Peace II Documents* (WEI, 2008). Therefore, the Baseline Alternative (herein with DYYP) was evaluated for hydraulic control in 2023 to determine if it is consistent with the Peace II modeling work.

Hydraulic control is weakest when water levels are highest in the southern portion of the basin. Differences in Santa Ana River recharge are driven by the elevation of groundwater in the southern portion of the basin: lower recharge indicates a period of high groundwater levels, and conversely, greater recharge indicates a period of lower groundwater levels. Figure 4a shows projected Santa Ana River recharge for Alternatives 1, 2, and 3.

Figures 16a through 16d show the groundwater elevation contours for the southern end of the Chino Basin for Layer 1 for the Baseline (2023), Alternative 1 (2030), Alternative 2 (2035), and Alternative 3 (2025), respectively. These maps also show the direction of groundwater flow in the form of unit vectors. These vectors are plotted for every fourth model cell. All planning alternatives result in complete hydraulic control: there are no indications that groundwater from the Chino North Management Zone will discharge to the Santa Ana River.

Conclusions

The objective of this investigation is to determine if the proposed DYYP Expansion will result in material physical injury to the Chino Basin or a party to the Judgment. The criteria used to evaluate material physical injury include groundwater level changes, the increased potential for subsidence, losses due to increased storage, changes in direction and speed of known water quality anomalies, and the ability to maintain hydraulic control. These criteria were evaluated with an enhanced version of the 2007 Watermaster Model and MT3D. Based on our analysis, material physical injury related to storage losses, groundwater level changes, and plume migration will occur; however, this material physical injury can be mitigated.

Storage Losses

Losses from storage will occur as a result of increasing the storage in the basin for Alternative 3. The loss of water in storage is projected to range from about 40,000 acre-ft. This loss in storage water can be mitigated with either reduced takes or by supplemental puts to replace water lost from storage. At present, further discussion of the mitigation is beyond the scope of this investigation.

Groundwater Levels

The Baseline Alternative is essentially Alternative 1C of the Peace II Agreement. The Parties to the Judgment and the Peace II agreement have indicated that they are willing to accept an increase in energy expenses with the expectation of other financial gains and certainties made possible by implementing the Peace II project description, which includes the existing DYYP and other Peace II related agreements. Therefore, no material physical injury is projected to occur from the decline in groundwater levels caused by implementing the Baseline Alternative.

Groundwater production is projected to be maintained with the Baseline and Alternatives; although, some changes in production and replenishment plans may be required. From a production perspective, no material physical injury is projected to occur from the decline in groundwater levels caused by the implementing the Baseline Alternative. The same is true for each of the Expansion Alternatives. Recall that the plan for puts and takes that was analyzed herein reduced the anticipated take for the JCSD/WMWD component and eliminated the take for Chino Hills. These modifications were required to maintain projected pumping and not incur a material physical injury. It is our professional opinion that Chino Hills could participate in the take side of the Expansion Program if it modified its pumping plans to take more water from the shallow aquifer system. Optimizing the Chino Hills pumping plan is beyond the scope of this investigation. This optimization should be included in a subsequent basin-wide analysis of pumping and recharge plans performed by the appropriators and the Watermaster. This subsequent investigation may also indicate that the JCSD/WMWD take could be increased.

The projected groundwater declines in parts of the basin from the Expansion Alternatives are generally small and sustainable. That said, groundwater level declines are by themselves considered material physical injury in the Peace Agreement and need to be mitigated such that they are no longer "material." A discussion of the mitigation is beyond the scope of this investigation.

Change in Direction and Speed of Water Quality Anomalies – Kaiser Plume

In the Baseline Alternative, Alternative 1, and Alternative 3 the leading edge of the Kaiser plume traveled slightly more than 4 miles in a southwesterly direction. In Alternative 1 and Alternative 3, the bottom half of the plume decreased in size, compared to the Baseline Alternative, suggesting that the projected Expansion pumping at City of Ontario well drew in more of the Kaiser plume than was projected to occur in the Baseline Alternative. This suggests that the Expansion may contribute to water quality degradation at the City of Ontario well adjacent to the plume. This is a potential material physical injury that will require mitigation pursuant to the Peace Agreement. A discussion of the mitigation is beyond the scope of this investigation.

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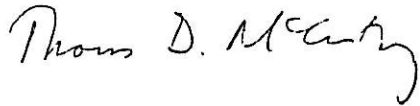
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Please call either of us if you have any questions or need further assistance.

Wildermuth Environmental, Inc.



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Encl.

**Table 1
Proposed Pumping Adjustments for Takes**

Agency	Existing Program Takes (1) (acre-ft/yr)	Proposed Expansion Program Takes (2) (acre-ft/yr)	Proposed Total Takes (1) + (2) = (3) (acre-ft/yr)	Feasible Expansion Program Takes (4) (acre-ft/yr)	Feasible Total Takes (1) + (4) = (5) (acre-ft/yr)
City of Chino	1,159	2,000	3,159	2,000	3,159
City of Chino Hills	1,448	2,000	3,448	0	1,448
City of Ontario	8,076	0	8,076	0	8,076
City of Pomona	2,000	2,000	4,000	2,000	4,000
City of Upland	3,001	1,000	4,001	1,000	4,001
Cucamonga Valley Water District	11,353	0	11,353	0	11,353
Fontana Water Company	0	0	0	0	0
Jurupa Community Services District ¹	2,000	2,000	4,000	2,000	4,000
Monte Vista Water District	3,963	5,000	8,963	5,000	8,963
Three Valleys MWD	0	0	0	0	0
Western Municipal Water District ¹	0	10,000	10,000	5,000	5,000
Total	33,000	24,000	57,000	17,000	50,000

1. Western Municipal Water District take performed by Jurupa Community Services District. The feasible take from the Jurupa Community Services District well field is a total of 9,000 acre-ft.

Table 2
Pumping Adjustments for Puts

Agency	Existing Program		Expanded Program		Total Program		
	4 Years (acre-ft/yr)	Converted to 3 Years (acre-ft/yr)	Expansion puts (acre-ft/yr)	Additional Puts ¹ (acre-ft/yr)	Total Puts (acre-ft/yr)	Total ASR puts (acre-ft/yr)	Total In-Lieu Puts (acre-ft/yr)
City of Chino	2,519	3,359	1,000	111	1,111	3,710	809
City of Chino Hills	1,319	1,758	0	0	0	1,823	0
City of Ontario	7,601	10,135	3,000	333	3,333	0	13,615
City of Pomona ²	7,004	9,339	1,000	111	1,111	0	10,717
City of Upland ^{2,3}	1,283	1,711	1,000	111	1,111	0	2,711
Cucamonga Valley Water District	2,260	3,014	5,000	556	5,556	7,000	1,307
Fontana Water Company	0	0	0	0	0	0	0
Jurupa Community Services District	0	0	0	0	0	0	0
Monte Vista Water District	3,013	4,017	4,000	444	4,444	4,000	4,310
Three Valleys MWD ²	0	0	0	0	0	0	0
Sub Totals	25,000	33,333	15,000	1,667	16,667	16,533	33,467
Total						50,000	

1. Additional puts required to meet 50,000 would be recharged wet water or additional in-lieu. For modeling purposes, this additional put was assumed to be in-lieu and distributed to participating agencies on a pro-rata basis.

2. For modeling purposes, Three Valleys MWD "puts" were distributed to the Cities of Pomona and Upland.

3. When Upland pumping was too low to offset with in-lieu, additional in-lieu was distributed to other agencies on a pro-rata basis.

**Table 3
Pumping Adjustments for Takes**

Agency	Existing DYY Program Takes (acre-ft/yr)	Expanded Program Takes	
		Expansion Takes (acre-ft/yr)	Total Takes (acre-ft/yr)
City of Chino	1,159	2,000	3,159
City of Chino Hills	1,448	0	1,448
City of Ontario	8,076	0	8,076
City of Pomona	2,000	2,000	4,000
City of Upland	3,001	1,000	4,001
Cucamonga Valley Water District	11,353	0	11,353
Fontana Water Company	0	0	0
Jurupa Community Services District ¹	2,000	2,000	9,000
Monte Vista Water District	3,963	5,000	8,963
Three Valleys MWD	0	0	0
Western Municipal Water District ¹	0	5,000	0
Total	33,000	17,000	50,000

1. Western Municipal Water District take performed by Jurupa Community Services District. JCSD's take is 4,000 acre-ft/yr and Western's take is 5,000 acre-ft/yr.

2. Take adjustments were made without optimization of pumping plans. It is possible that Chino Hills and WMWD could participate at higher takes with modifications to pumping plans (wells used and or aquifers pumped from).

Table 4
Groundwater Pumping Projection for the Chino Basin - DYY Expansion Program
(acre-ft/yr)

Producer	Pumping Projection ¹					
	2009/10 (acre-ft/yr)	2014/15 (acre-ft/yr)	2019/20 (acre-ft/yr)	2024/25 (acre-ft/yr)	2029/30 (acre-ft/yr)	2034/35 (acre-ft/yr)
Overlying Agricultural Pool	<u>21,482</u>	<u>13,251</u>	<u>5,010</u>	<u>5,010</u>	<u>5,010</u>	<u>5,010</u>
Overlying Non-Agricultural Pool						
San Bernardino Cty (Chino Airport)	0	0	0	0	0	0
Ameron Inc	0	0	0	0	0	0
California Steel Industries Inc	1,284	1,284	1,284	1,284	1,284	1,284
Swan Lake Mobile Home Park	0	0	0	0	0	0
Vulcan Materials Company	5	5	5	5	5	5
Space Center Mira Loma Inc.	0	0	0	0	0	0
Angelica Textile Service	29	29	29	29	29	29
Sunkist Growers Inc	147	147	147	147	147	147
Praxair Inc	0	0	0	0	0	0
General Electric Company	451	451	451	451	451	451
California Speedway	621	621	621	621	621	621
Reliant Energy Etiwanda	705	705	705	705	705	705
Subtotal Overlying Non-Agricultural Pool Production	<u>3,247</u>	<u>3,247</u>	<u>3,247</u>	<u>3,247</u>	<u>3,247</u>	<u>3,247</u>
Appropriative Pool						
Arrowhead Mountain Spring Water Company	263	318	335	308	308	308
Chino Desalter Authority	26,356	39,400	39,400	39,400	39,400	39,400
City of Chino	9,971	10,844	11,811	12,777	12,963	12,963
City of Chino Hills ²	4,823	4,823	4,823	4,823	4,823	4,823
City of Norco	0	0	0	0	0	0
City of Ontario	28,796	27,211	32,360	37,508	42,658	42,658
City of Pomona	13,000	13,000	13,000	13,000	13,000	13,000
City of Upland	1,284	2,140	2,140	2,140	2,140	2,140
Cucamonga Valley Water District	16,598	21,229	26,729	32,229	37,729	37,729
Fontana Union Water Company	0	0	0	0	0	0
Fontana Water Company	13,500	10,000	11,000	11,500	12,000	12,500
Jurupa Community Services District ²	20,087	18,123	21,616	21,419	21,419	21,419
Inland Empire Utilities Agency	0	0	0	0	0	0
Marygold Mutual Water Company	0	0	0	0	0	0
Metropolitan Water District of Southern California	0	0	0	0	0	0
Monte Vista Irrigation Company	0	0	0	0	0	0
Monte Vista Water District	16,000	17,000	18,500	20,000	21,500	21,500
Mutual Water Company of Glen Avon Heights	0	0	0	0	0	0
Niagara	657	795	838	770	770	770
San Antonio Water Company	894	1,149	1,282	1,244	1,244	1,244
San Bernardino County (Olympic Facility)	13	16	17	15	15	15
Santa Ana River Water Company	263	318	335	308	308	308
Golden State Water Company	329	397	419	385	385	385
West End Consolidated Water Company	0	0	0	0	0	0
West Valley Water District	0	0	0	0	0	0
Subtotal Appropriators	<u>152,837</u>	<u>166,763</u>	<u>184,800</u>	<u>197,827</u>	<u>210,663</u>	<u>211,163</u>
Total Production	<u>177,567</u>	<u>183,255</u>	<u>192,855</u>	<u>206,078</u>	<u>218,914</u>	<u>219,414</u>

1. All production data from IEUA (2008) unless otherwise noted.
2. Black and Veatch, 2008

Table 5
Supplemental Water Deliveries
(acre-ft)

Year	Recycled Water Recharge Used to Reduce Replenishment ¹	Overproduction and Replenishment				
		Net Replenishment Obligation	In-Lieu Deliveries	MWDSC Replenishment Supply	Total Wet Water Recharge	Cumulative Unmet Replenishment Obligation
2006	1,303	-29,339	0	24,759	24,759	-29,339
2007	6,000	-18,977	0	0	0	-73,076
2008	8,000	-17,889	0	0	0	-90,964
2009	8,786	-3,564	0	0	0	-94,528
2010	9,571	-1,261	0	0	0	-95,789
2011	10,357	964	0	0	0	-94,825
2012	11,143	-4,545	0	0	0	-99,371
2013	11,929	-3,148	0	0	0	-102,519
2014	13,500	22,061	0	0	0	-80,457
2015	13,500	27,885	0	0	0	-52,572
2016	13,500	26,332	0	0	0	-26,240
2017	15,000	23,290	5,000	21,809	26,809	-2,950
2018	15,000	22,047	0	0	0	-7,712
2019	15,000	21,038	0	0	0	13,326
2020	15,000	20,151	0	0	0	33,478
2021	15,000	20,478	0	0	0	53,956
2022	15,000	20,843	0	0	0	74,799
2023	16,000	20,469	0	0	0	95,268
2024	16,000	21,296	5,000	82,670	87,670	116,563
2025	22,000	16,195	5,000	76,670	81,670	45,088
2026	22,000	16,886	5,000	20,063	25,063	-19,696
2027	24,000	15,361	5,000	15,361	20,361	-29,398
2028	24,000	15,757	0	0	0	-34,002
2029	24,000	16,184	0	0	0	-17,818
2030	24,000	28,668	0	0	0	10,850
2031	24,000	29,159	0	0	0	40,009
2032	24,000	29,601	0	0	0	69,610
2033	24,000	29,982	0	0	0	99,592
2034	24,000	30,339	5,000	74,670	79,670	129,931
2035	24,000	31,200	5,000	74,670	79,670	81,460
Total	489,589	427,462	35,000	390,672	425,672	na
Average	16,320	14,249	1,167	13,022	14,189	-2,911
Max	24,000	31,200	5,000	82,670	87,670	129,931
Min	1,303	-29,339	0	0	0	-102,519

1. The Replenishment obligation has been reduced do to recycled water recharge.

Table 6
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Baseline Alternative
 (acre-ft)

Year	Inflows						Outflows						Inflow- Outflow
	Boundary Inflow	Temescal to PBMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PBMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow	
					Storm	Imported and Recycled Water Replenishment							
2006	32,703	6,084	86,301	26,237	11,646	28,110	189,081	153,537	1,883	14,788	15,622	185,830	3,251
2007	32,703	6,262	82,093	29,478	11,646	6,011	168,194	168,334	1,837	14,447	13,981	198,599	-30,406
2008	32,703	5,992	83,012	31,393	11,646	8,014	172,760	205,094	1,792	14,268	13,295	234,450	-61,690
2009	32,703	5,619	83,671	33,084	11,646	8,798	175,521	208,107	1,767	14,063	12,640	237,577	-62,056
2010	32,703	5,212	82,149	34,653	11,646	9,585	175,948	212,373	1,753	13,853	12,049	240,027	-64,078
2011	32,703	4,807	81,849	35,936	11,646	10,372	177,313	146,784	1,740	13,658	11,550	173,732	3,581
2012	32,703	4,409	79,176	36,981	11,646	11,159	176,074	147,431	1,730	13,483	11,125	173,768	2,306
2013	32,703	4,044	78,266	38,119	11,646	11,945	176,723	148,076	1,716	13,275	10,645	173,713	3,011
2014	32,703	3,710	77,834	39,137	11,646	13,519	178,549	182,079	1,704	13,111	10,269	207,163	28,614
2015	32,703	3,401	77,243	40,228	11,646	13,519	178,760	182,645	1,694	12,980	9,943	207,261	-28,501
2016	32,703	3,113	76,195	41,228	11,646	14,169	179,053	181,675	1,685	12,874	9,695	205,929	-26,876
2017	32,703	2,848	75,760	41,881	11,646	43,255	208,093	176,174	1,677	12,795	9,513	200,159	7,933
2018	32,703	2,604	74,231	42,448	11,646	15,021	178,653	213,258	1,671	12,729	9,363	237,022	-58,369
2019	32,703	2,380	73,530	43,158	11,646	15,021	178,439	212,503	1,666	12,658	9,196	236,022	-57,584
2020	32,703	2,176	71,573	43,982	11,646	15,021	177,101	211,747	1,665	12,587	9,021	235,020	-57,919
2021	32,703	1,993	71,111	44,634	11,646	15,021	177,101	146,037	1,671	12,536	8,898	169,143	7,964
2022	32,703	1,828	70,147	44,953	11,646	15,021	176,298	146,563	1,686	12,513	8,850	169,612	6,686
2023	32,703	1,686	68,771	45,106	11,646	16,023	175,935	147,089	1,712	12,497	8,824	170,121	5,813
2024	32,703	1,564	67,886	45,423	11,646	16,023	175,245	176,014	1,750	12,469	8,761	198,994	-23,749
2025	32,703	1,459	66,933	45,838	11,646	98,727	257,306	176,538	1,794	12,423	8,661	199,417	57,890
2026	32,703	1,369	66,057	46,066	11,646	98,727	256,568	176,761	1,835	12,370	8,576	199,542	57,027
2027	32,703	1,287	65,443	46,095	11,646	98,727	255,901	176,761	1,877	12,328	8,517	199,484	56,417
2028	32,703	1,212	64,549	46,199	11,646	24,034	180,342	214,599	1,925	12,295	8,466	237,285	-56,943
2029	32,703	1,146	64,037	46,612	11,646	24,034	180,177	214,003	1,971	12,243	8,362	236,579	-56,403
2030	32,703	1,086	63,214	47,213	11,646	24,034	179,895	215,769	2,015	12,176	8,227	238,187	-58,292
2031	32,703	1,031	62,919	47,624	11,646	24,034	179,957	149,939	2,058	12,124	8,128	172,249	7,708
2032	32,703	981	62,540	47,702	11,646	24,034	179,606	149,939	2,103	12,109	8,114	172,265	7,341
2033	32,703	937	62,017	47,596	11,646	24,034	178,932	149,939	2,146	12,105	8,117	172,307	6,625
2034	32,703	896	61,798	47,606	11,646	24,034	178,683	178,051	2,188	12,087	8,096	200,422	-21,739
2035	32,703	859	61,535	47,854	11,646	98,727	253,325	178,552	2,226	12,043	8,012	200,833	52,492
Total	981,081	81,993	2,161,841	1,254,485	349,388	846,753	5,675,540	5,347,372	54,936	385,888	294,518	6,082,714	-407,174
Average	32,703	2,733	72,061	41,816	11,646	28,225	189,185	176,246	1,831	12,863	9,817	202,757	-13,572
Maximum	32,703	6,262	86,301	47,854	11,646	98,727	257,306	215,769	2,226	14,788	15,622	240,027	57,890
Minimum	32,703	859	61,535	26,237	11,646	6,011	168,194	146,037	1,665	12,043	8,012	169,143	-64,078



Table 7
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Alternative 1 - 150,000 acre-ft DYYP
 (acre-ft)

Year	Inflows							Outflows						Inflow- Outflow
	Boundary Inflow	Temescal to PBMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PBMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow		
					Storm	Imported and Recycled Water Replenishment								
2006	32,703	6,084	86,301	26,232	11,646	26,110	189,076	153,518	1,883	14,788	15,622	185,811	3,264	
2007	32,703	6,262	82,093	29,463	11,646	6,011	168,178	168,315	1,837	14,445	13,976	198,573	-30,395	
2008	32,703	5,992	83,012	31,380	11,646	8,014	172,748	205,551	1,792	14,255	13,251	234,849	-62,101	
2009	32,703	5,620	83,671	33,085	11,646	8,798	175,522	209,563	1,767	14,034	12,538	237,901	-62,376	
2010	32,703	5,212	82,149	34,678	11,646	9,585	175,973	212,828	1,752	13,812	11,921	240,313	-64,340	
2011	32,703	4,808	81,849	35,947	11,646	10,372	177,325	130,084	1,739	13,620	11,443	156,886	20,438	
2012	32,703	4,409	79,176	36,954	11,646	11,159	176,047	130,731	1,730	13,461	11,072	156,995	19,052	
2013	32,703	4,044	78,266	37,989	11,646	11,945	176,593	131,377	1,716	13,270	10,644	157,007	19,586	
2014	32,703	3,709	77,834	38,861	11,646	13,519	178,271	182,059	1,705	13,118	10,301	207,182	-28,911	
2015	32,703	3,400	77,243	39,798	11,646	13,519	178,308	182,626	1,694	12,998	10,012	207,329	-29,022	
2016	32,703	3,112	76,195	40,644	11,646	14,169	178,469	181,870	1,685	12,904	9,792	206,251	-27,762	
2017	32,703	2,846	75,760	41,196	11,646	43,255	207,406	176,154	1,678	12,833	9,634	200,299	7,107	
2018	32,703	2,603	74,231	41,855	11,646	15,021	178,059	229,739	1,672	12,764	9,468	253,643	-75,584	
2019	32,703	2,381	73,530	43,008	11,646	15,021	178,290	228,962	1,666	12,668	9,208	252,525	-74,235	
2020	32,703	2,178	71,573	44,336	11,646	15,021	177,779	228,226	1,665	12,565	8,940	251,396	-73,939	
2021	32,703	1,994	71,111	45,304	11,646	15,021	177,457	229,336	1,670	12,493	8,775	252,274	-75,505	
2022	32,703	1,829	70,147	45,994	11,646	15,021	176,940	129,861	1,685	12,467	8,736	152,749	24,191	
2023	32,703	1,687	68,771	45,549	11,646	16,023	176,378	130,387	1,711	12,459	8,739	153,296	23,082	
2024	32,703	1,564	67,886	45,615	11,646	16,023	175,437	175,992	1,749	12,445	8,711	198,897	-23,460	
2025	32,703	1,459	66,933	45,737	11,646	98,727	257,205	176,516	1,794	12,417	8,654	199,381	57,824	
2026	32,703	1,368	66,057	45,759	11,646	98,727	256,261	176,739	1,835	12,378	8,597	199,549	56,712	
2027	32,703	1,286	65,443	45,604	11,646	98,727	255,410	176,739	1,878	12,351	8,572	199,540	55,870	
2028	32,703	1,212	64,549	45,731	11,646	24,034	179,875	231,078	1,925	12,318	8,515	253,836	-73,961	
2029	32,703	1,146	64,037	46,545	11,646	24,034	180,111	231,078	1,971	12,246	8,351	253,646	-73,535	
2030	32,703	1,086	63,214	47,664	11,646	24,034	180,347	233,042	2,014	12,149	8,145	255,350	-75,003	
2031	32,703	1,032	62,919	48,390	11,646	24,034	180,724	133,626	2,056	12,075	8,013	155,770	24,954	
2032	32,703	982	62,540	48,457	11,646	24,034	180,362	133,626	2,101	12,053	8,002	155,782	24,580	
2033	32,703	937	62,017	48,160	11,646	24,034	179,496	133,626	2,145	12,058	8,031	155,860	23,637	
2034	32,703	896	61,799	47,895	11,646	24,034	178,972	178,707	2,187	12,057	8,041	200,993	-22,021	
2035	32,703	859	61,535	47,718	11,646	98,727	253,189	179,207	2,226	12,042	8,017	201,492	51,697	
Total	981,081	81,994	2,161,842	1,255,150	349,388	846,753	5,676,208	5,301,182	54,928	385,543	293,721	6,035,375	-359,167	
Average	32,703	2,733	72,061	41,838	11,646	28,225	189,207	176,706	1,831	12,851	9,791	201,179	-11,972	
Maximum	32,703	6,262	86,301	48,457	11,646	98,727	257,205	233,042	2,226	14,788	15,622	255,350	57,824	
Minimum	32,703	859	61,535	26,232	11,646	6,011	168,178	129,336	1,565	12,042	8,002	152,274	-75,584	

Table 7 ALT1_Budget.xls



Table 8
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Alternative 2 - 150,000 acre-ft DYYP with 100,000 acre-ft Negative Storage
 (acre-ft)

Year	Inflows						Outflows						Inflow- Outflow
	Boundary Inflow	Temescal to PBMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PBMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow	
					Storm	Imported and Recycled Water Replenishment							
2006	32,703	6,084	86,301	26,232	11,646	26,110	189,076	153,518	1,883	14,788	15,622	185,811	3,264
2007	32,703	6,262	82,093	29,463	11,646	6,011	168,178	168,315	1,837	14,445	13,976	198,573	-30,395
2008	32,703	5,992	83,012	31,380	11,646	8,014	172,748	205,551	1,792	14,255	13,251	234,849	-62,101
2009	32,703	5,620	83,671	33,085	11,646	8,798	175,522	209,563	1,767	14,034	12,538	237,901	-62,378
2010	32,703	5,212	82,149	34,678	11,646	9,585	175,973	212,828	1,752	13,812	11,921	240,313	-64,340
2011	32,703	4,808	81,849	35,947	11,646	10,372	177,325	130,084	1,739	13,620	11,443	156,886	20,438
2012	32,703	4,409	79,176	36,954	11,646	11,159	176,047	130,731	1,730	13,461	11,072	156,995	19,052
2013	32,703	4,044	78,266	37,989	11,646	11,945	176,593	131,377	1,716	13,270	10,644	157,007	19,586
2014	32,703	3,709	77,834	39,164	11,646	13,519	178,574	231,440	1,704	13,099	10,234	256,478	-77,904
2015	32,703	3,402	77,243	40,993	11,646	13,519	179,505	232,007	1,693	12,922	9,756	256,378	-76,873
2016	32,703	3,116	76,195	42,861	11,646	14,169	180,691	231,251	1,684	12,754	9,334	255,023	-74,333
2017	32,703	2,852	75,760	44,440	11,646	43,255	210,656	230,495	1,676	12,605	8,999	253,774	-43,118
2018	32,703	2,610	74,231	45,801	11,646	15,021	182,012	229,739	1,669	12,474	8,724	252,606	-70,594
2019	32,703	2,387	73,530	46,727	11,646	15,021	182,015	174,644	1,663	12,376	8,538	197,222	-15,207
2020	32,703	2,181	71,573	47,039	11,646	15,021	180,163	173,890	1,662	12,328	8,460	196,340	-16,177
2021	32,703	1,994	71,111	47,146	11,646	15,021	179,621	157,985	1,668	12,311	8,429	180,392	-772
2022	32,703	1,829	70,147	47,256	11,646	15,021	178,602	129,861	1,683	12,303	8,414	152,262	26,340
2023	32,703	1,686	68,771	47,267	11,646	16,023	178,095	130,387	1,709	12,302	8,416	152,813	25,282
2024	32,703	1,563	67,886	47,281	11,646	16,023	177,101	147,343	1,747	12,301	8,413	169,805	7,296
2025	32,703	1,458	66,933	47,261	11,646	16,023	176,516	176,739	1,792	12,290	8,391	198,988	59,740
2026	32,703	1,367	66,057	47,115	11,646	16,023	175,727	176,739	1,834	12,265	8,363	199,201	58,415
2027	32,703	1,285	65,443	46,879	11,646	16,023	175,684	176,739	1,876	12,244	8,346	199,205	57,478
2028	32,703	1,144	64,549	46,648	11,646	16,023	175,684	176,739	1,924	12,237	8,349	199,248	-18,459
2029	32,703	1,084	64,037	46,780	11,646	16,023	180,790	176,739	1,971	12,209	8,298	253,556	-73,212
2030	32,703	1,030	63,214	47,365	11,646	16,023	180,343	176,739	2,015	12,156	8,179	201,056	-21,010
2031	32,703	980	62,919	47,555	11,646	16,023	180,046	176,739	2,059	12,119	8,126	184,580	-4,693
2032	32,703	935	62,540	47,637	11,646	16,023	179,887	162,276	2,104	12,101	8,106	184,587	-5,048
2033	32,703	895	62,017	47,619	11,646	16,023	178,954	133,626	2,147	12,091	8,095	155,959	22,995
2034	32,703	858	61,799	47,511	11,646	16,023	178,587	150,056	2,189	12,086	8,097	172,428	6,159
2035	32,703	858	61,535	47,226	11,646	16,023	178,587	150,557	2,228	12,084	8,107	172,976	79,720
Total	981,081	82,001	2,161,842	1,281,302	349,388	846,753	5,702,367	5,286,318	54,914	383,341	288,640	6,013,213	-310,846
Average	32,703	2,733	72,061	42,710	11,646	28,225	190,079	176,211	1,830	12,778	9,621	200,440	-10,362
Maximum	32,703	6,262	86,301	47,637	11,646	98,727	258,728	232,007	2,228	14,788	15,622	256,478	79,720
Minimum	32,703	858	61,535	26,232	11,646	6,011	168,178	129,861	1,662	12,084	8,095	152,262	-77,904

Table 9
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Alternative 3 - 150,000 acre-ft DYYP with 300,000 acre-ft Maximum Storage
 (acre-ft)

Year	Inflows							Outflows					Inflow- Outflow
	Boundary Inflow	Temescal to PEIMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PEIMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow	
					Storm	Imported and Recycled Water Replenishment							
2006	32,703	6,084	86,301	26,232	11,646	26,110	189,076	153,518	1,883	14,788	15,622	185,811	3,264
2007	32,703	6,262	82,093	29,463	11,646	6,011	168,178	168,315	1,837	14,445	13,976	198,573	-30,395
2008	32,703	5,991	83,012	31,352	11,646	8,014	172,719	205,073	1,792	14,265	13,285	234,414	-61,695
2009	32,703	5,619	83,671	33,015	11,646	8,798	175,452	209,084	1,767	14,059	12,625	237,534	-62,083
2010	32,703	5,212	82,149	34,563	11,646	9,585	175,858	212,349	1,753	13,848	12,040	239,980	-64,132
2011	32,703	4,807	81,849	35,855	11,646	10,372	177,232	130,084	1,740	13,655	11,548	157,027	20,205
2012	32,703	4,409	79,176	36,894	11,646	11,159	175,986	130,731	1,730	13,484	11,138	157,084	18,903
2013	32,703	4,044	78,266	37,951	11,646	11,945	176,556	131,377	1,716	13,284	10,681	157,059	19,497
2014	32,703	3,709	77,834	38,816	11,646	13,519	178,227	182,059	1,705	13,129	10,333	157,225	-28,999
2015	32,703	3,400	77,243	39,743	11,646	13,519	178,253	182,626	1,694	13,009	10,040	207,369	-29,116
2016	32,703	3,111	76,195	40,583	11,646	14,169	178,408	181,870	1,685	12,916	9,819	206,290	-27,882
2017	32,703	2,846	75,760	41,160	11,646	43,255	207,370	182,146	1,678	12,843	9,655	206,322	1,048
2018	32,703	2,603	74,231	41,615	11,646	15,021	177,819	186,349	1,672	12,787	9,533	210,340	-32,521
2019	32,703	2,380	73,530	42,040	11,646	15,021	177,320	185,592	1,667	12,738	9,421	209,418	-32,098
2020	32,703	2,174	71,573	42,436	11,646	15,021	175,554	178,845	1,667	12,699	9,329	202,539	-26,985
2021	32,703	1,989	71,111	42,718	11,646	15,021	175,189	129,336	1,673	12,680	9,284	152,972	22,216
2022	32,703	1,826	70,147	42,844	11,646	15,021	174,187	129,861	1,688	12,674	9,286	153,513	20,674
2023	32,703	1,685	68,771	42,851	11,646	16,023	173,678	130,387	1,715	12,674	9,298	154,074	19,604
2024	32,703	1,562	67,866	43,024	11,646	16,023	172,845	181,983	1,753	12,657	9,255	205,649	-32,804
2025	32,703	1,459	66,933	43,347	11,646	16,023	172,845	181,983	1,753	12,657	9,255	205,649	-32,804
2026	32,703	1,369	66,057	43,544	11,646	98,727	254,815	182,507	1,798	12,617	9,154	206,076	48,739
2027	32,703	1,287	65,443	43,604	11,646	98,727	254,046	182,731	1,839	12,566	9,063	206,129	47,282
2028	32,703	1,213	64,549	43,912	11,646	98,727	253,411	182,730	1,882	12,523	8,994	206,129	47,282
2029	32,703	1,148	64,037	44,852	11,646	24,034	178,056	231,078	1,929	12,475	8,894	254,376	-76,320
2030	32,703	1,088	63,214	46,057	11,646	24,034	178,419	231,078	1,973	12,391	8,675	254,117	-75,698
2031	32,703	1,033	62,919	46,874	11,646	24,034	178,741	233,042	2,016	12,286	8,430	255,774	-77,033
2032	32,703	983	62,540	47,087	11,646	24,034	179,209	133,626	2,058	12,207	8,270	156,161	23,048
2033	32,703	938	62,017	47,159	11,646	24,034	178,993	167,230	2,103	12,172	8,230	189,705	-10,742
2034	32,703	898	61,799	47,316	11,646	24,034	178,497	167,230	2,146	12,142	8,189	189,707	-11,210
2035	32,703	860	61,535	47,403	11,646	24,034	178,395	178,707	2,187	12,106	8,129	201,129	-22,733
Total	981,081	81,988	2,161,842	1,224,309	349,388	846,753	5,645,361	5,260,751	54,970	388,190	300,265	6,004,176	-358,815
Average	32,703	2,733	72,061	40,810	11,646	28,225	188,179	175,358	1,832	12,940	10,009	200,139	-11,960
Maximum	32,703	6,262	86,301	47,403	11,646	98,727	254,815	233,042	2,226	14,788	15,622	255,774	51,304
Minimum	32,703	860	61,535	26,232	11,646	6,011	168,178	129,336	1,667	12,070	8,067	152,972	-77,033

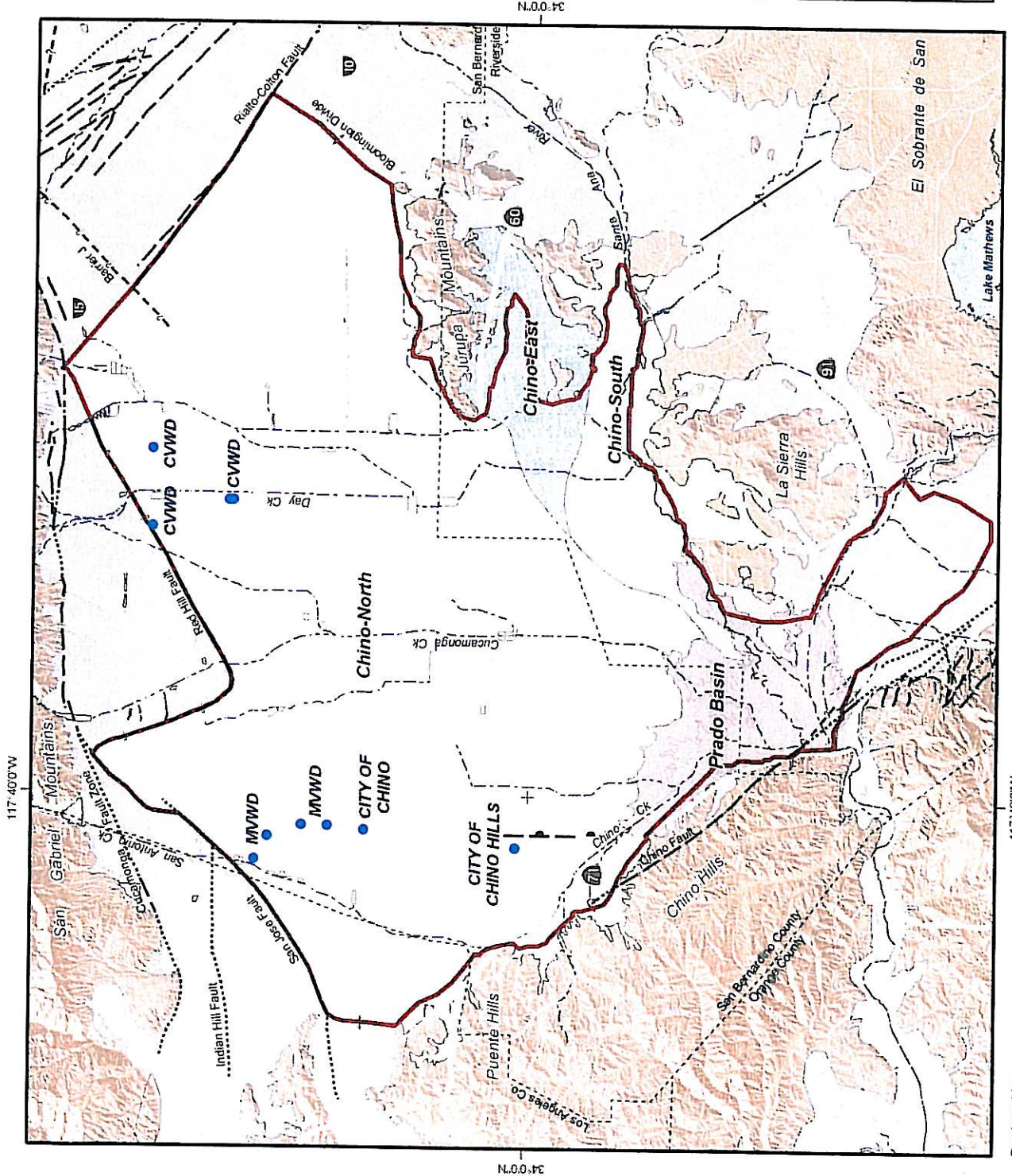
Table 9 ALT3_Budget.xls



Table 10
Comparison of Projected Annual Discharge at Prado Dam Through 2035
 (acre-ft)

Year	Santa Ana River Discharge at Prado ¹				Difference		
	Baseline	Alternative 1	Alternative 2	Alternative 3	Baseline - Alternative 1	Baseline - Alternative 2	Baseline - Alternative 3
2006	237,156	237,161	237,161	237,161	-5	-5	-5
2007	237,412	237,422	237,422	237,422	-10	-10	-10
2008	241,895	241,862	241,862	241,925	32	32	-30
2009	245,326	245,222	245,222	245,379	104	104	-53
2010	248,942	248,789	248,789	249,023	153	153	-82
2011	251,523	251,405	251,405	251,603	118	118	-79
2012	257,244	257,219	257,219	257,345	25	25	-101
2013	261,405	261,533	261,533	261,608	-129	-129	-203
2014	265,787	266,096	265,726	266,172	-309	61	-385
2015	268,603	269,124	267,673	269,207	-521	931	-603
2016	274,677	275,358	272,683	275,446	-681	1,995	-769
2017	279,619	280,426	276,546	280,483	-807	3,073	-864
2018	284,680	285,378	280,688	285,683	-698	3,992	-1,003
2019	287,948	288,110	283,721	289,291	-162	4,227	-1,343
2020	294,358	293,923	290,741	296,212	435	3,617	-1,854
2021	299,361	298,567	296,380	301,662	794	2,982	-2,301
2022	304,771	304,016	302,032	307,316	756	2,740	-2,545
2023	308,629	308,100	306,060	311,358	529	2,569	-2,729
2024	315,766	315,524	313,561	318,659	242	2,205	-2,893
2025	320,363	320,456	318,669	323,347	-94	1,694	-2,984
2026	320,049	320,377	318,787	323,058	-328	1,262	-3,010
2027	318,168	318,712	317,212	321,135	-545	956	-2,967
2028	319,807	320,323	319,240	322,522	-517	567	-2,715
2029	319,290	319,346	319,057	321,362	-56	233	-2,072
2030	318,554	318,020	318,353	319,913	534	201	-1,359
2031	316,249	315,367	316,315	317,141	881	-66	-892
2032	317,951	317,084	318,009	318,683	867	-57	-732
2033	318,060	317,410	318,015	318,570	650	45	-510
2034	318,029	317,686	318,125	318,352	343	-96	-323
2035	315,903	316,044	316,625	316,410	-141	-723	-507
Total	8,192,956	8,191,479	8,160,246	8,228,863	1,477	32,711	-35,907
Average	292,606	292,553	291,437	293,888	53	1,168	-1,282
Max	320,363	320,456	319,240	323,347	881	4,227	-30
Min	241,895	241,862	241,862	241,925	-807	-723	-3,010

1. Expected value discharge.



Main Features

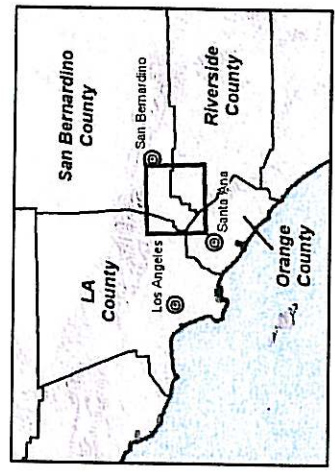
- New Aquifer Storage and Recovery Well
- MODFLOW Groundwater Flow Model Boundary

Geology

- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
 - - - Location Uncertain
 - Location Approximate
 - Location Approximate
 - Location Concealed
 - Location of Groundwater Barrier

Other Features

- Groundwater Divides
- Flood Control/Conservation Basins
- Streams, Rivers, and Channels



Location Map of New Aquifer Storage and Recovery Wells

Figure 2

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Author: MJC
 Date: 20081024
 File: Figure_2.mxd

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Inland Empire
 WATER AGENCY

VALLEYS
 WATER DISTRICT

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

0 2 4 Miles
 0 2 4 6 KM

34°0'0"N
 117°40'0"W

Figure 3a
Baseline Alternative, Pumping and Storage Over Time

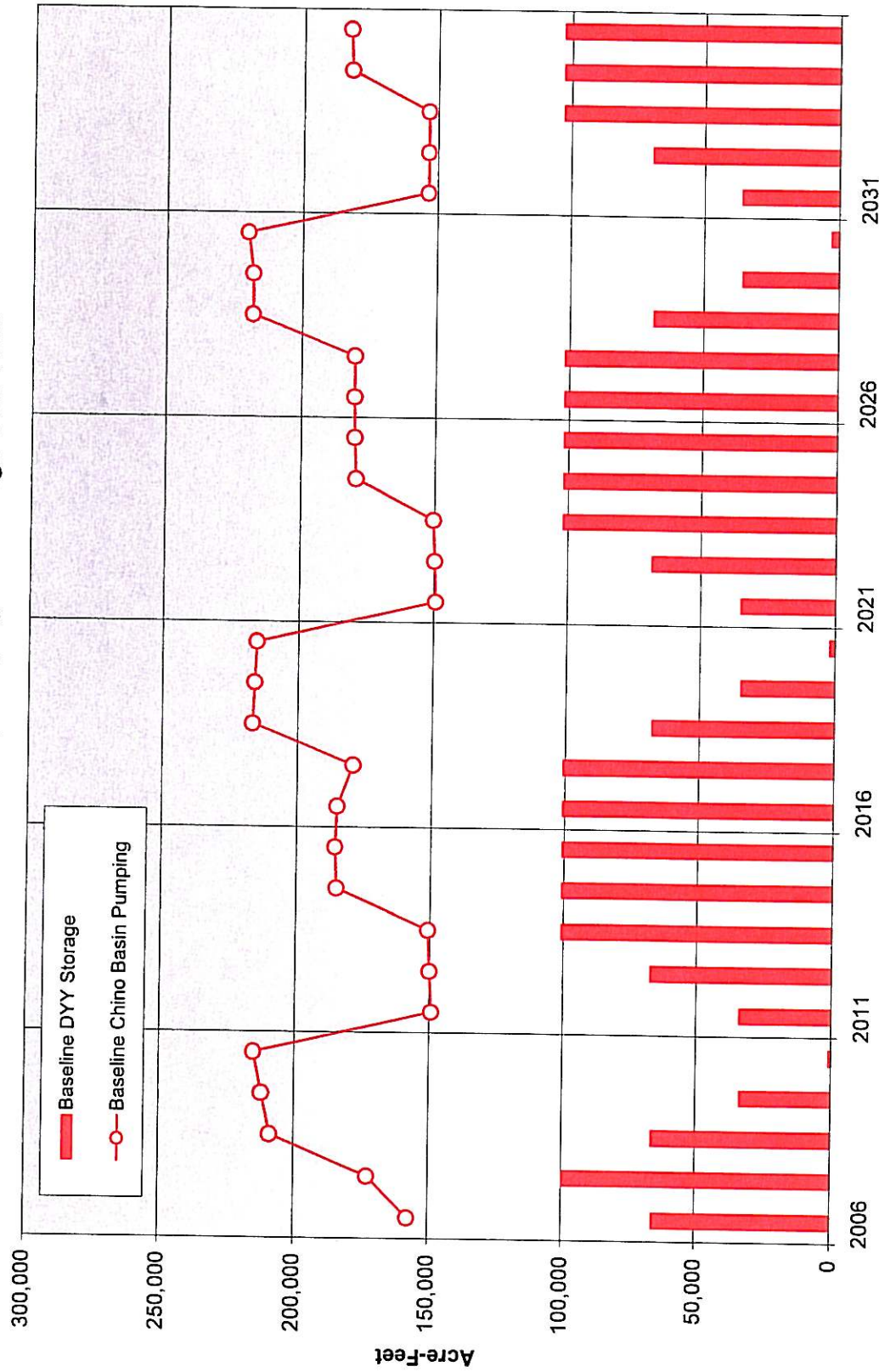


Figure 3a to 3d.xls

Figure 3b
Alternative 1 - 10 Typical Operation, Pumping and Storage Over Time

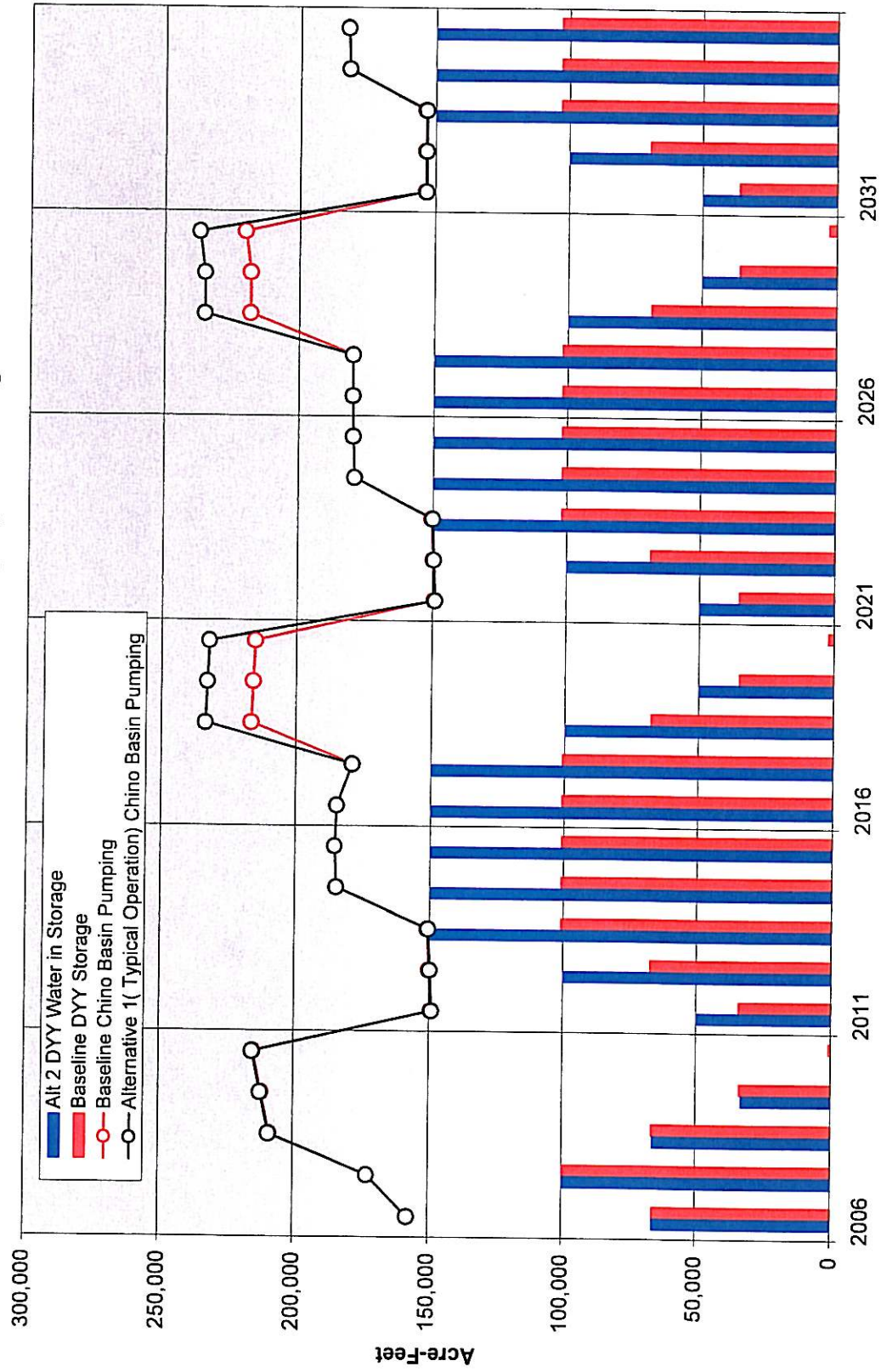


Figure 3a to 3d.xls

Figure 3c
Alternative 2 - Negative Storage, Pumping and Storage Over Time

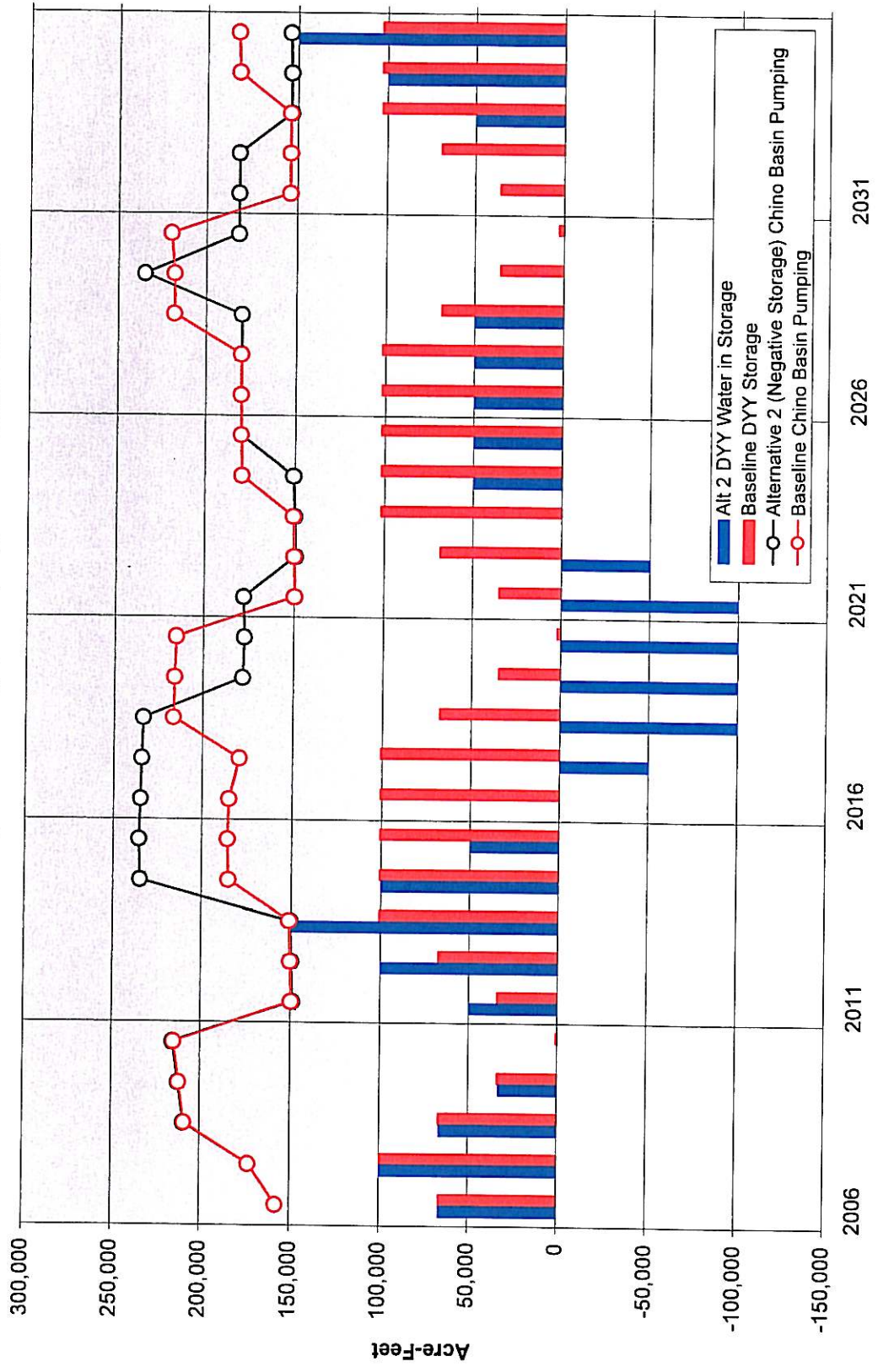


Figure 3a to 3d.xls



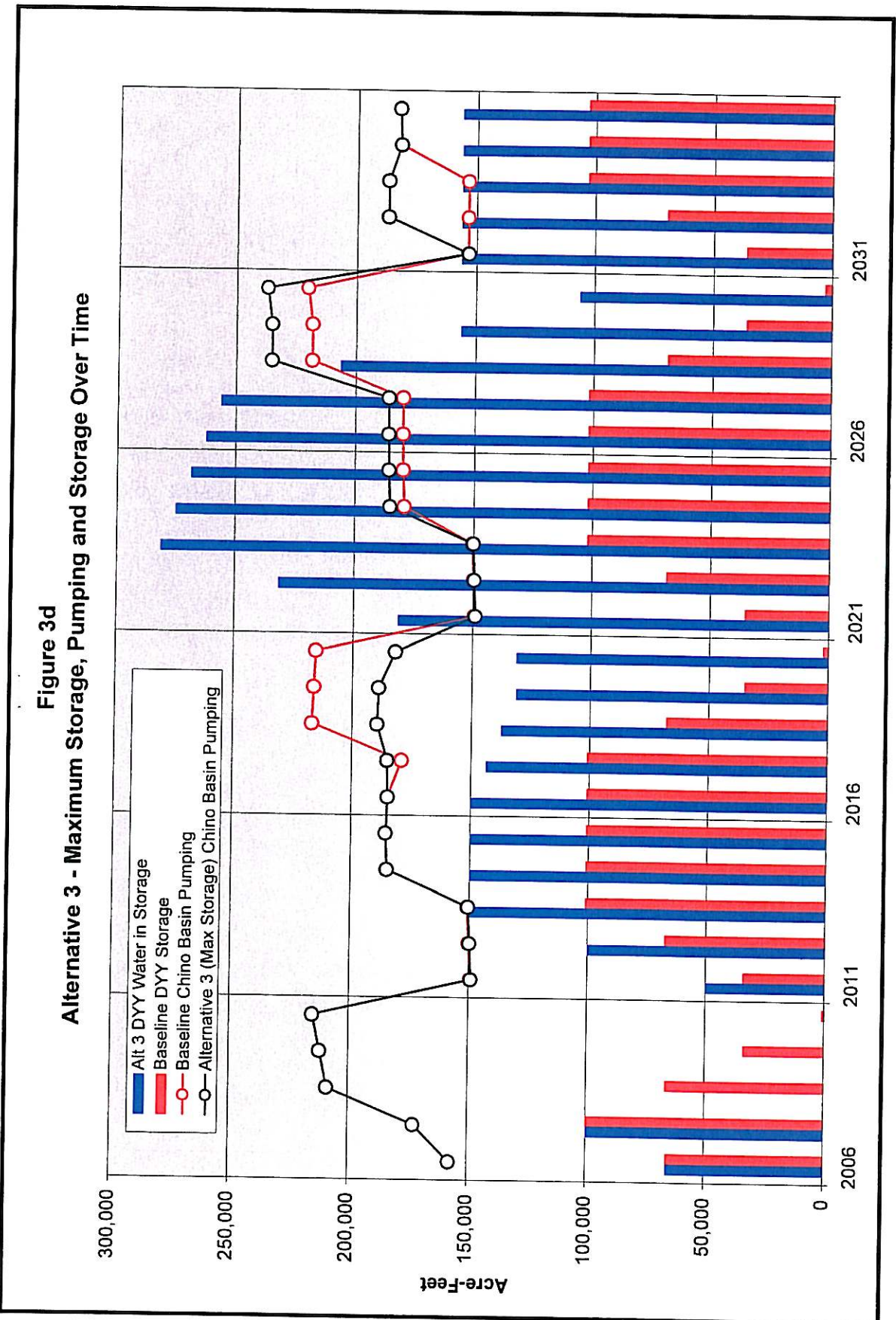


Figure 3a to 3d.xls

Figure 4a
Comparison of Projected Annual Time Histories of Santa Ana River Recharge the
the Chino Basin for the Dry-Year Yield Expansion Program Alternatives Relative to
the Baseline Alternative

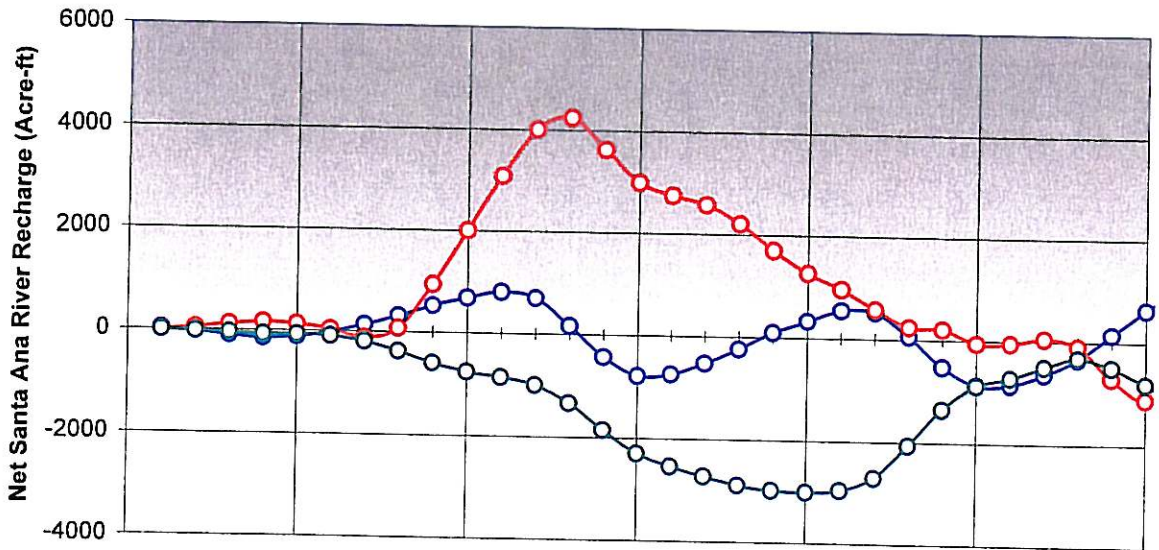
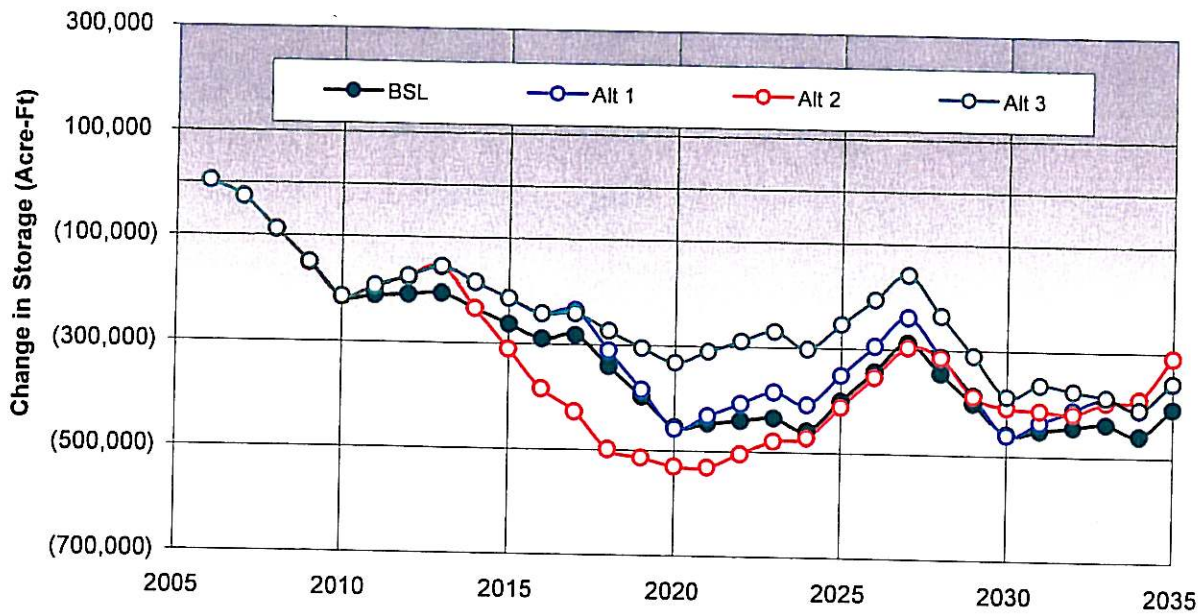
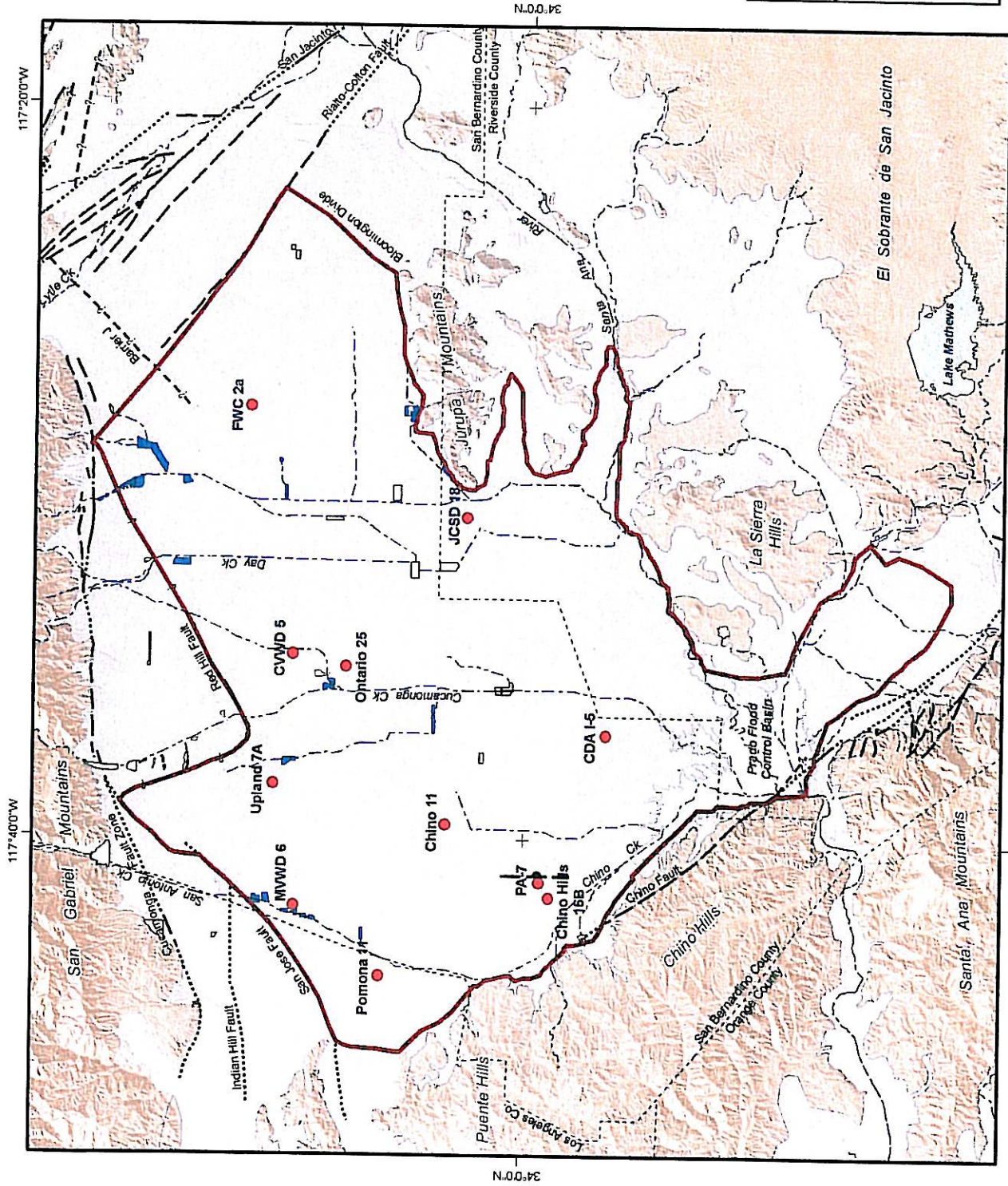


Figure 4b
Cumulative Change in Chino Basin Groundwater Storage For Each Alternative





Hydrograph Well

MODFLOW Groundwater Flow Model Boundary

Geology

Water-Bearing Sediments

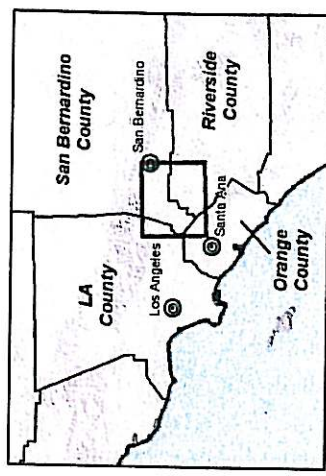
- Quaternary Alluvium
- Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- Location Approximate
- Location Concealed
- Location Uncertain
- Approximate Location of Groundwater Barrier

Other Features

- Groundwater Divides
- Flood Control/Conservation Basins
- Streams, Rivers, and Channels



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Author: MJC
 Date: 2008/02/4
 File: Figure_5.mxd

Scale: 0 1 2 3 4 Miles / 0 2 4 6 KM

Logos: VALLEYS WATER PARTNERSHIP, Inland Empire WATER PARTNERSHIP, BLACK & VEATCH

Chino Basin Dry-Year Yield Program Expansion Impact Analysis

Planning Alternative Hydrograph Well Location Map

Figure 5

Figure 6a
 Simulated Groundwater Water Levels in Well 7A, City of Upland

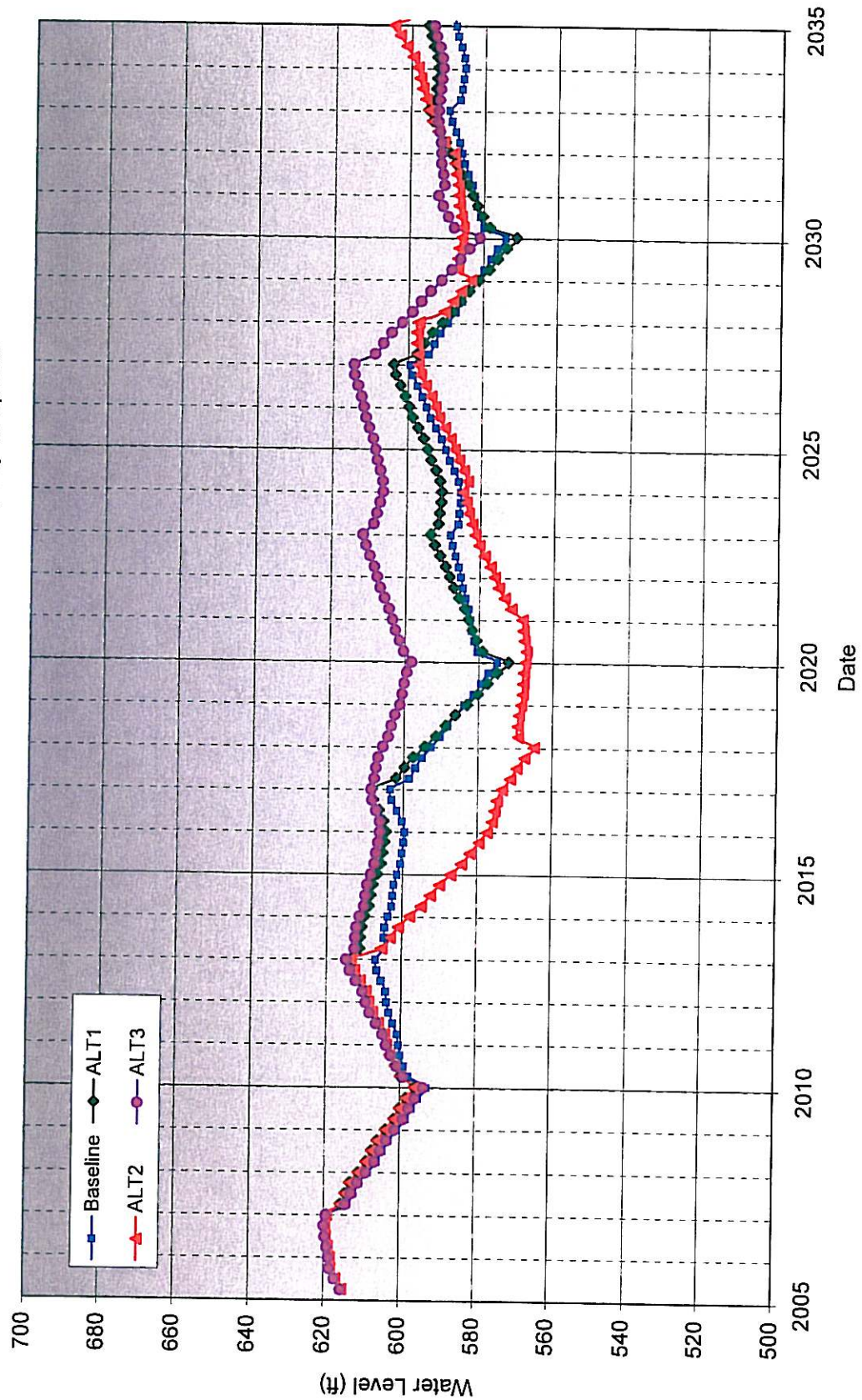


Figure 6 and Figure 14.xls

Figure 6b
 Simulated Groundwater Water Levels in Well 11, City of Chino

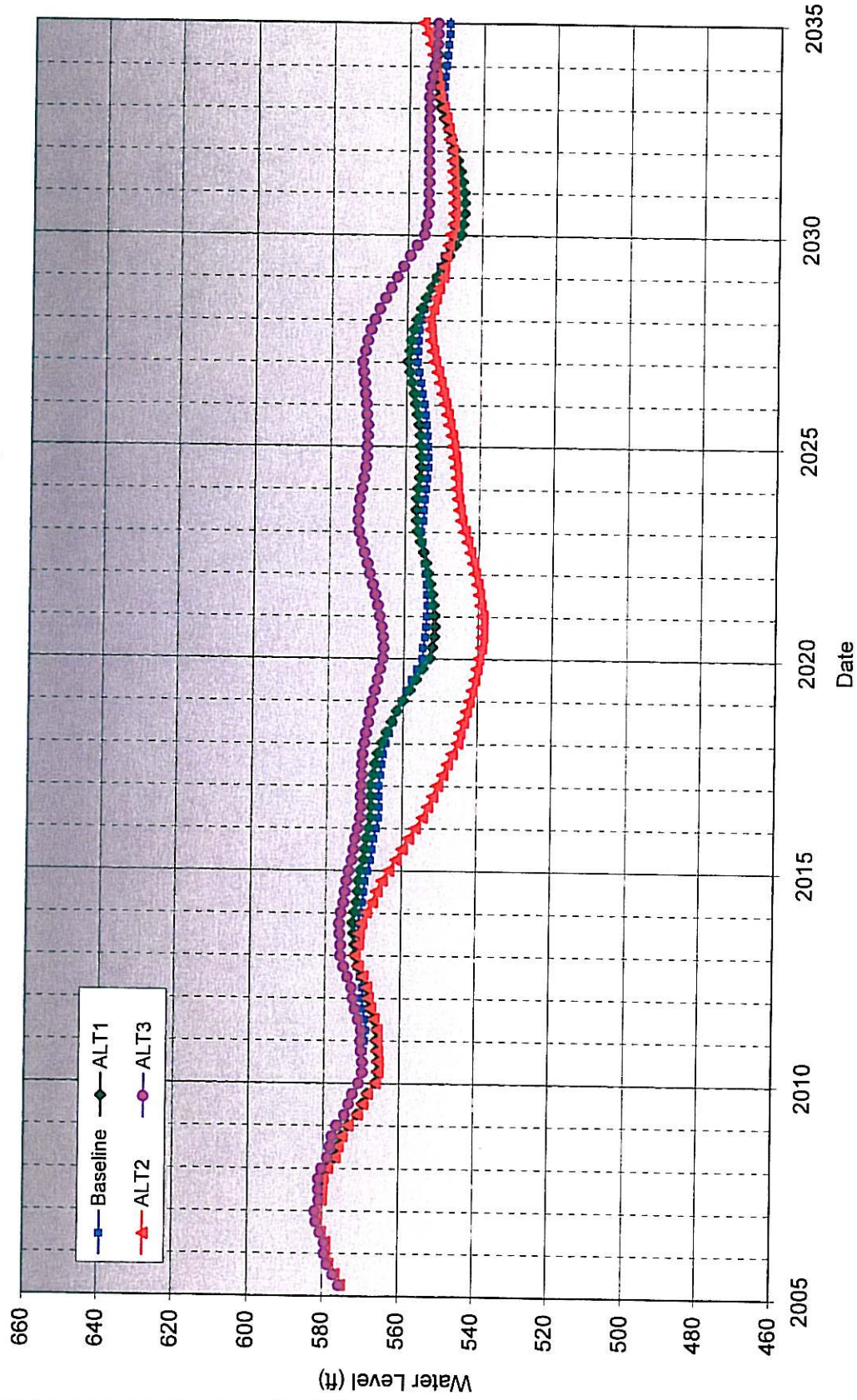


Figure 6 and Figure 14.xls

Figure 6c
 Simulated Groundwater Water Levels in Well18, Jurupa Community Services District

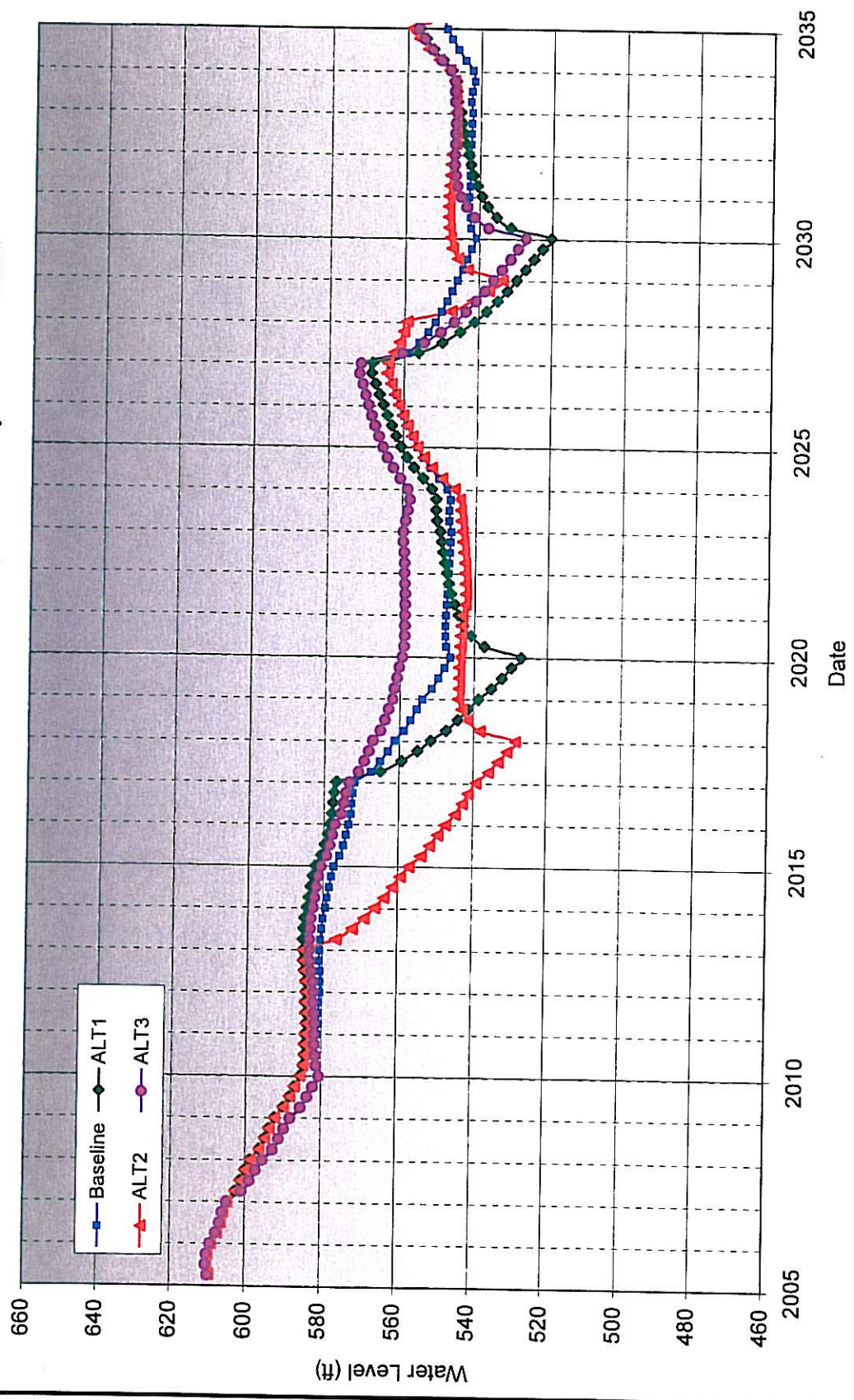


Figure 6 and Figure 14.xls

Figure 6d
 Simulated Groundwater Water Levels in Well P-11, City of Pomona

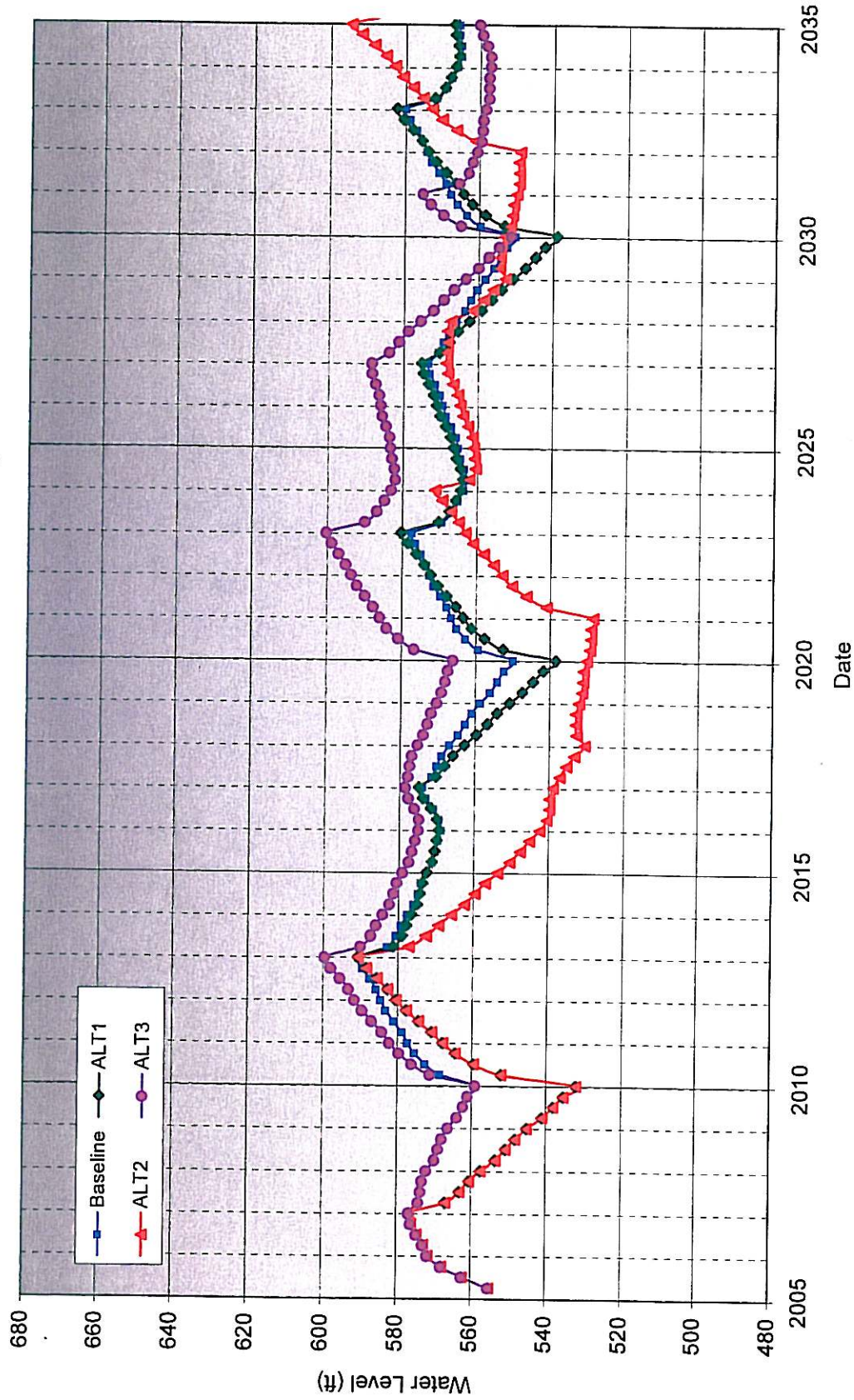


Figure 6 and Figure 14.xls

Figure 6e
Simulated Groundwater Water Levels in Well 6, Monte Vista Water District

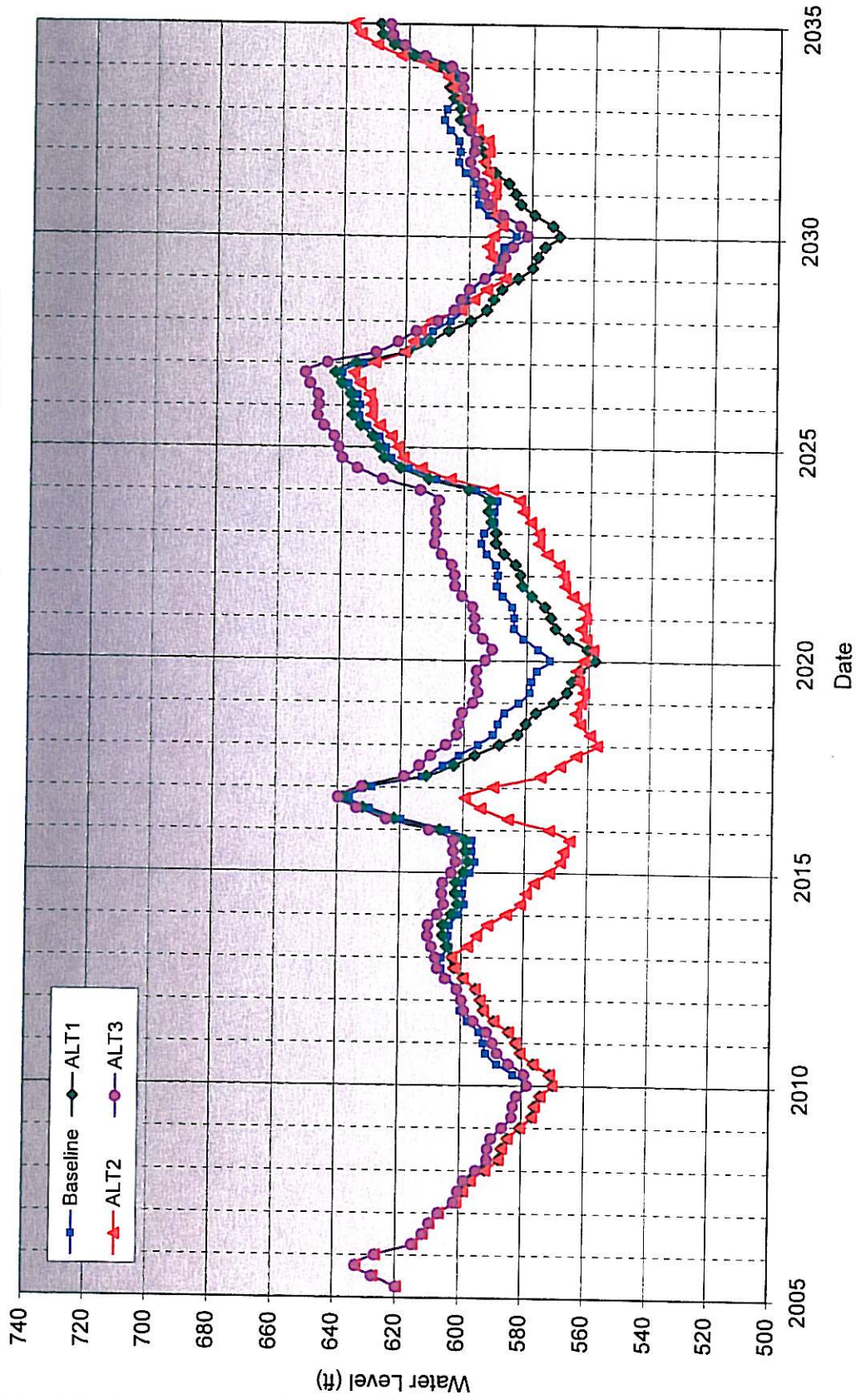


Figure 6 and Figure 14.xls

Figure 6f
 Simulated Groundwater Water Levels in Well 25, City of Ontario

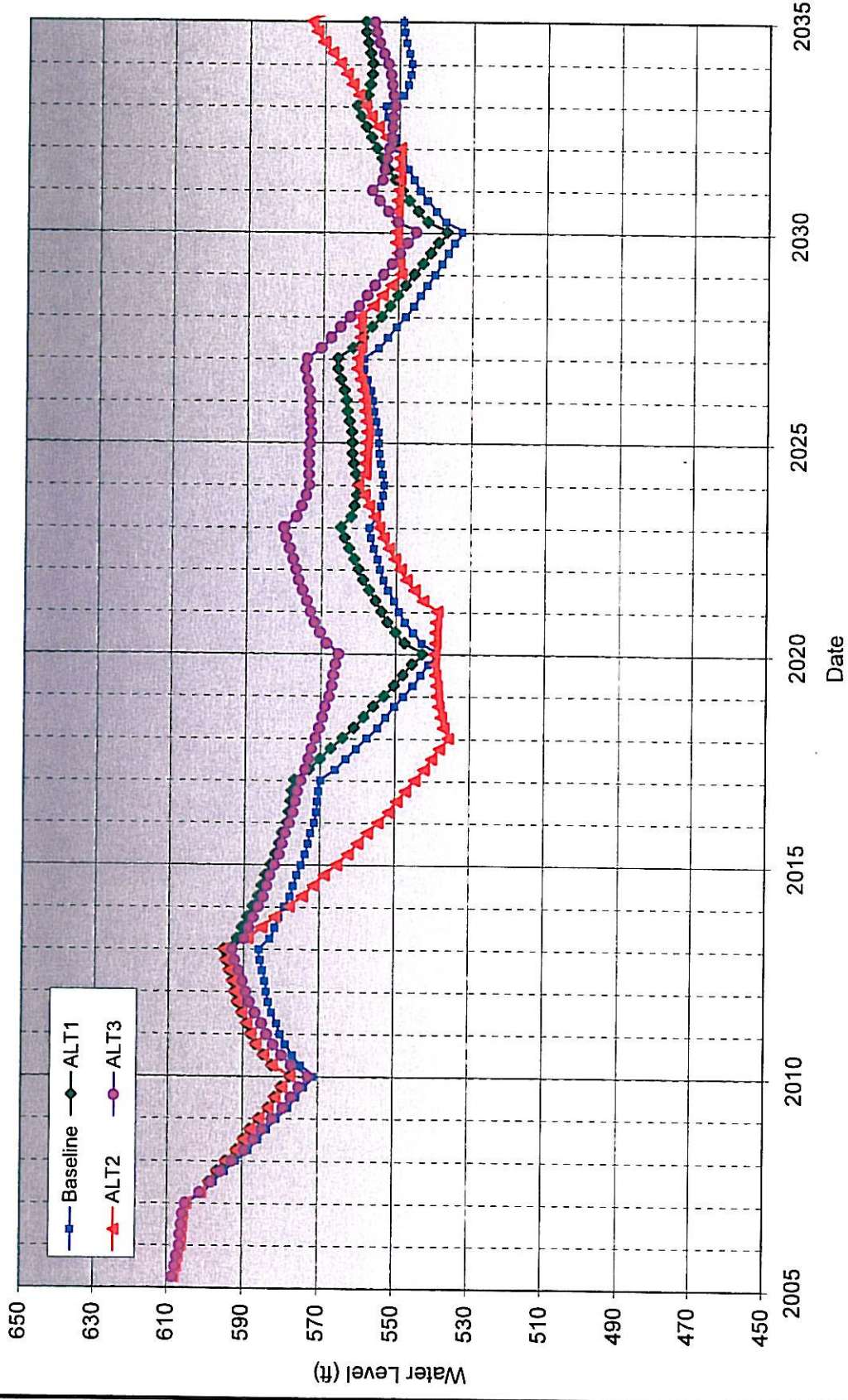


Figure 6 and Figure 14.xls

Figure 6g
 Simulated Groundwater Water Levels in Well CB-5, Cucamonga Valley Water District

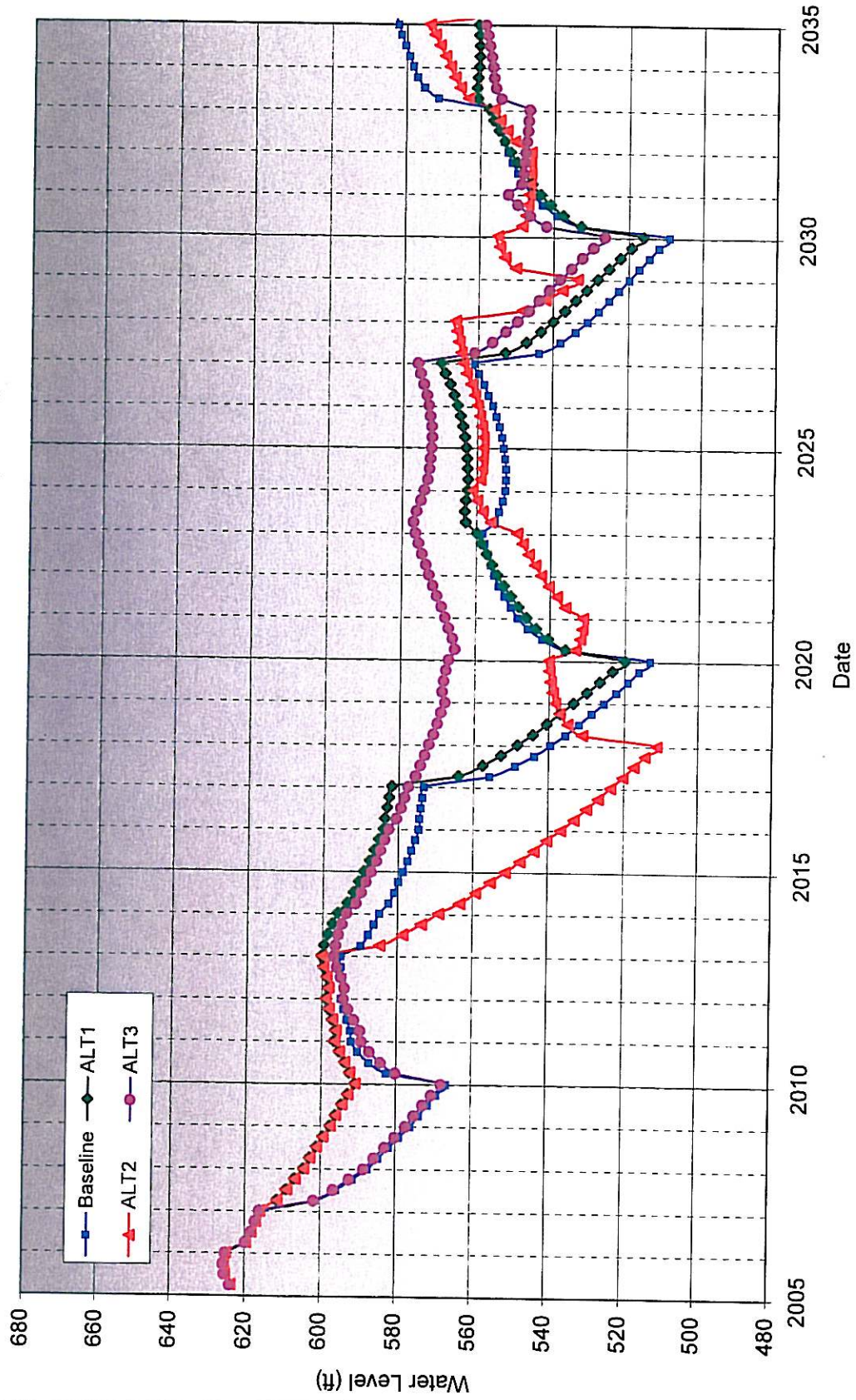


Figure 6 and Figure 14.xls

Figure 6h
 Simulated Groundwater Water Levels in Well 1, Chino Desalter Authority

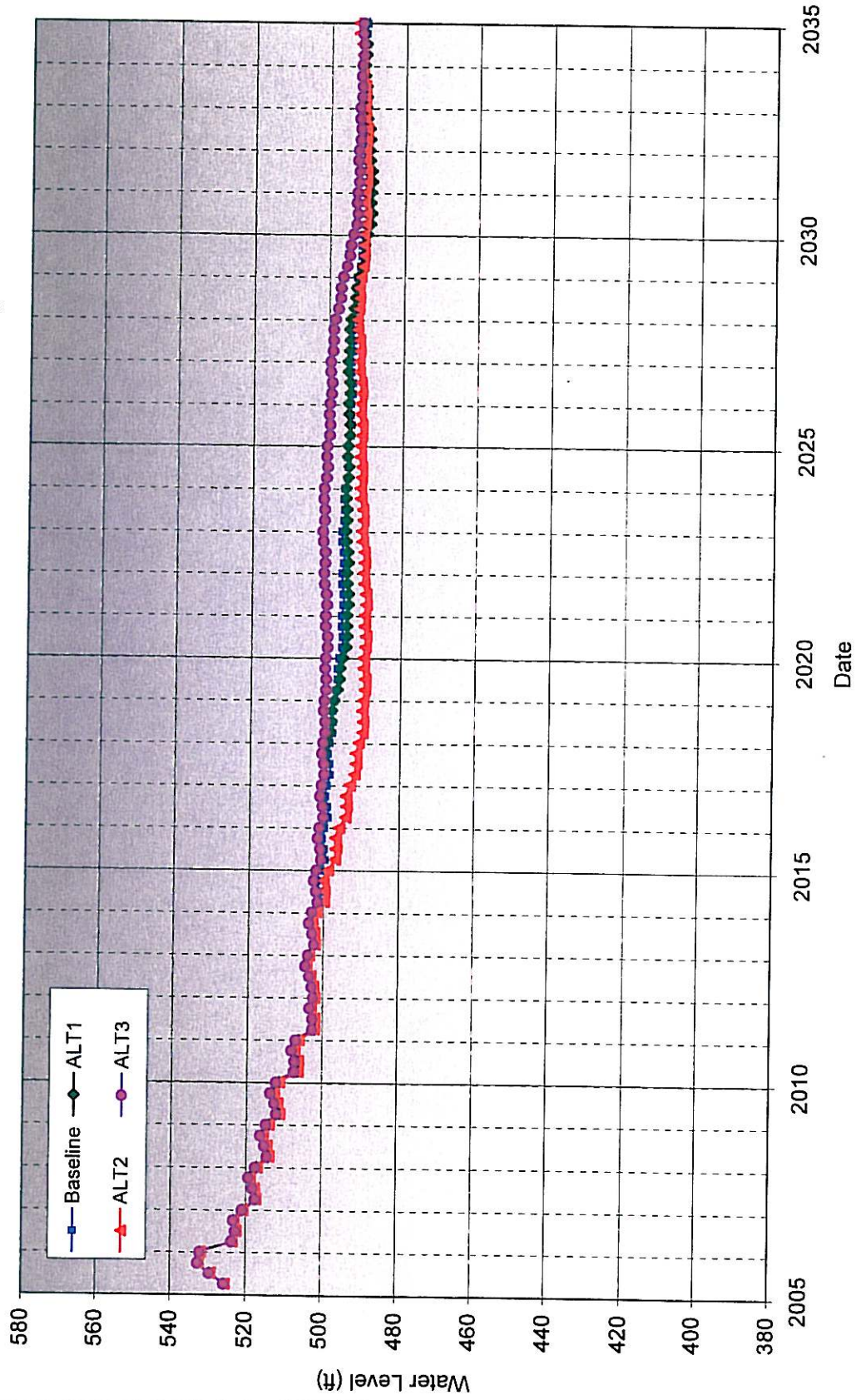


Figure 6 and Figure 14.xls

Figure 6i
 Simulated Groundwater Water Levels in Well 15B, City Of Chino Hills

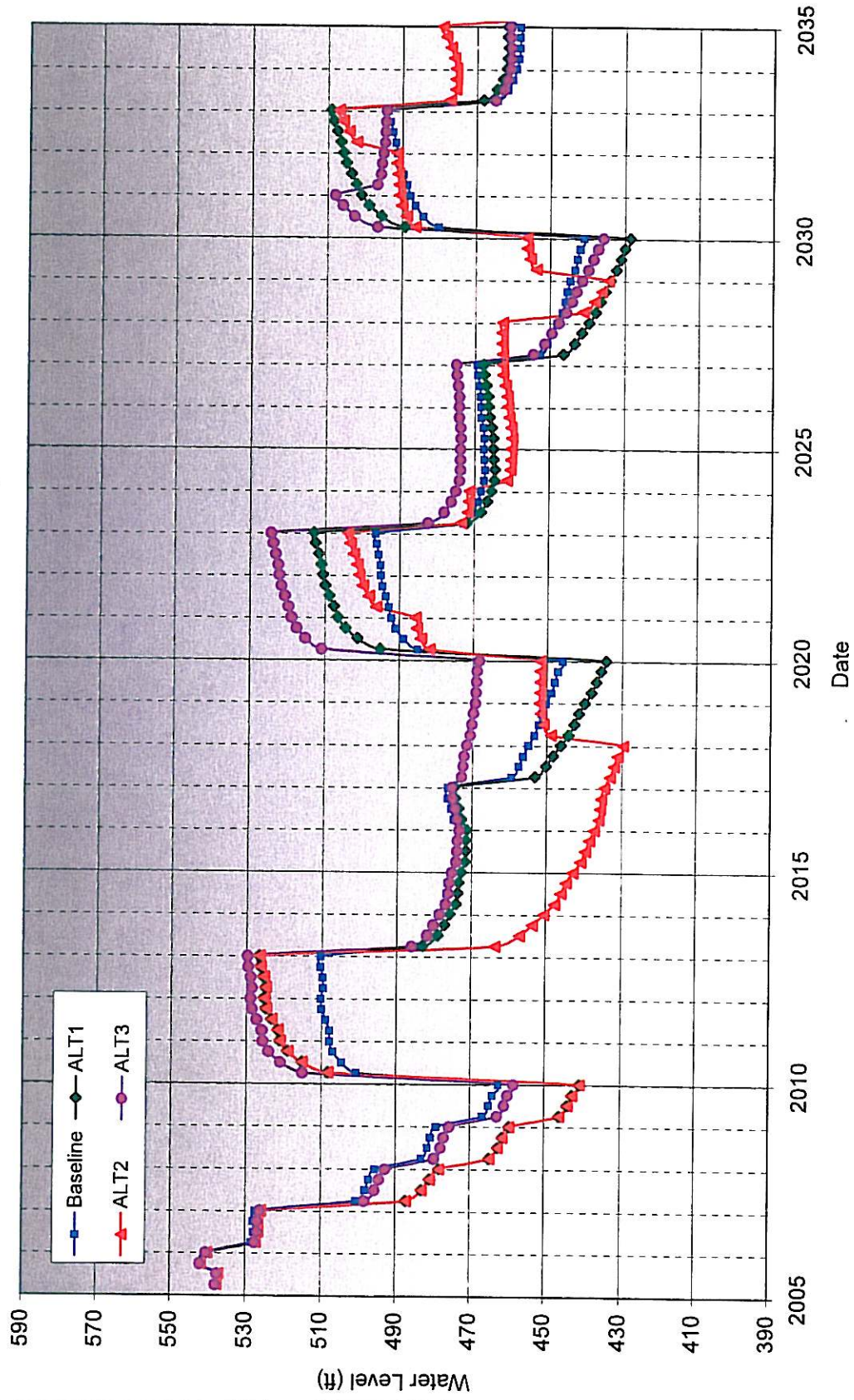


Figure 6 and Figure 14.xls

Figure 6j
 Simulated Groundwater Water Levels in Well F2A, Fontana Water Company

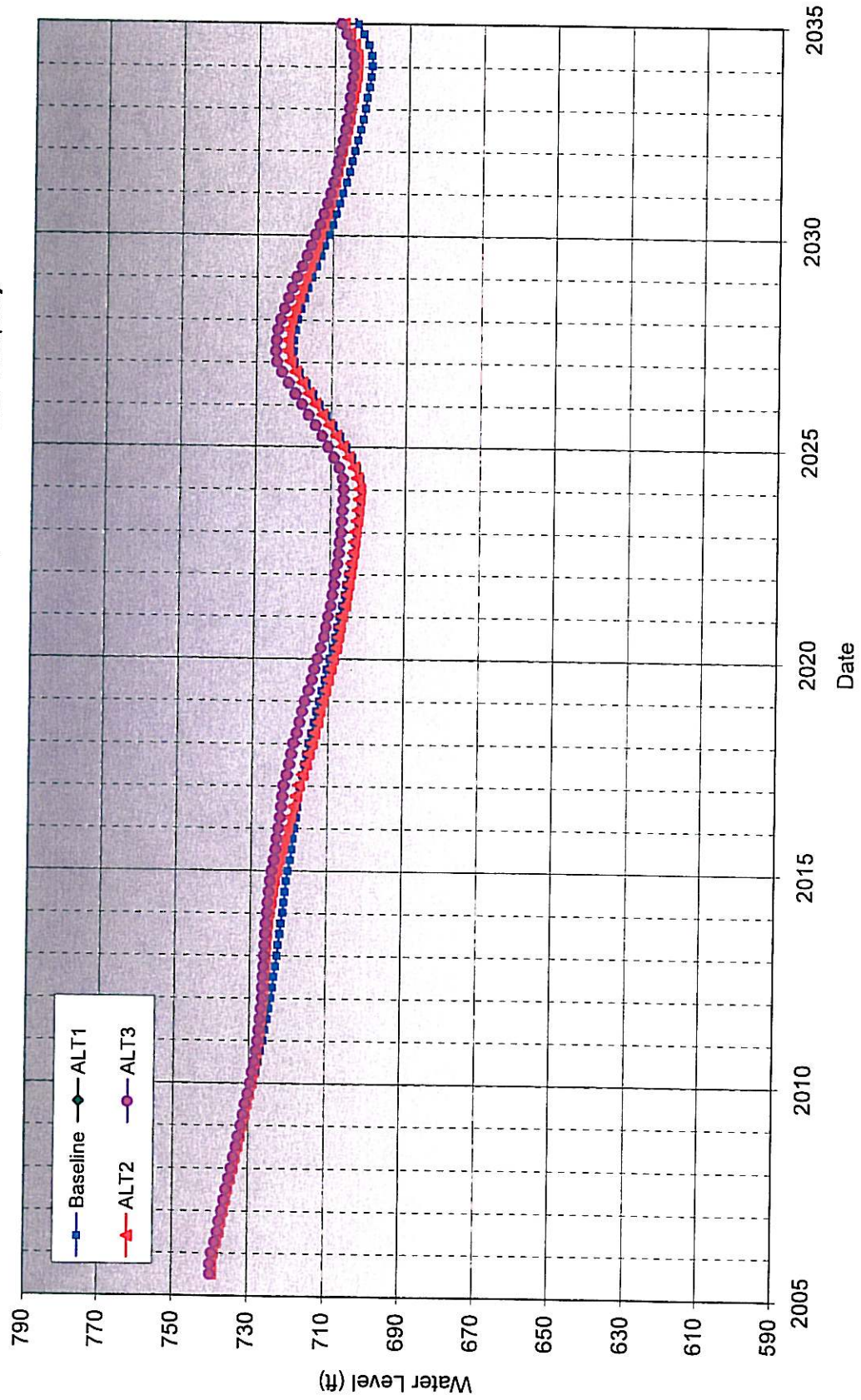
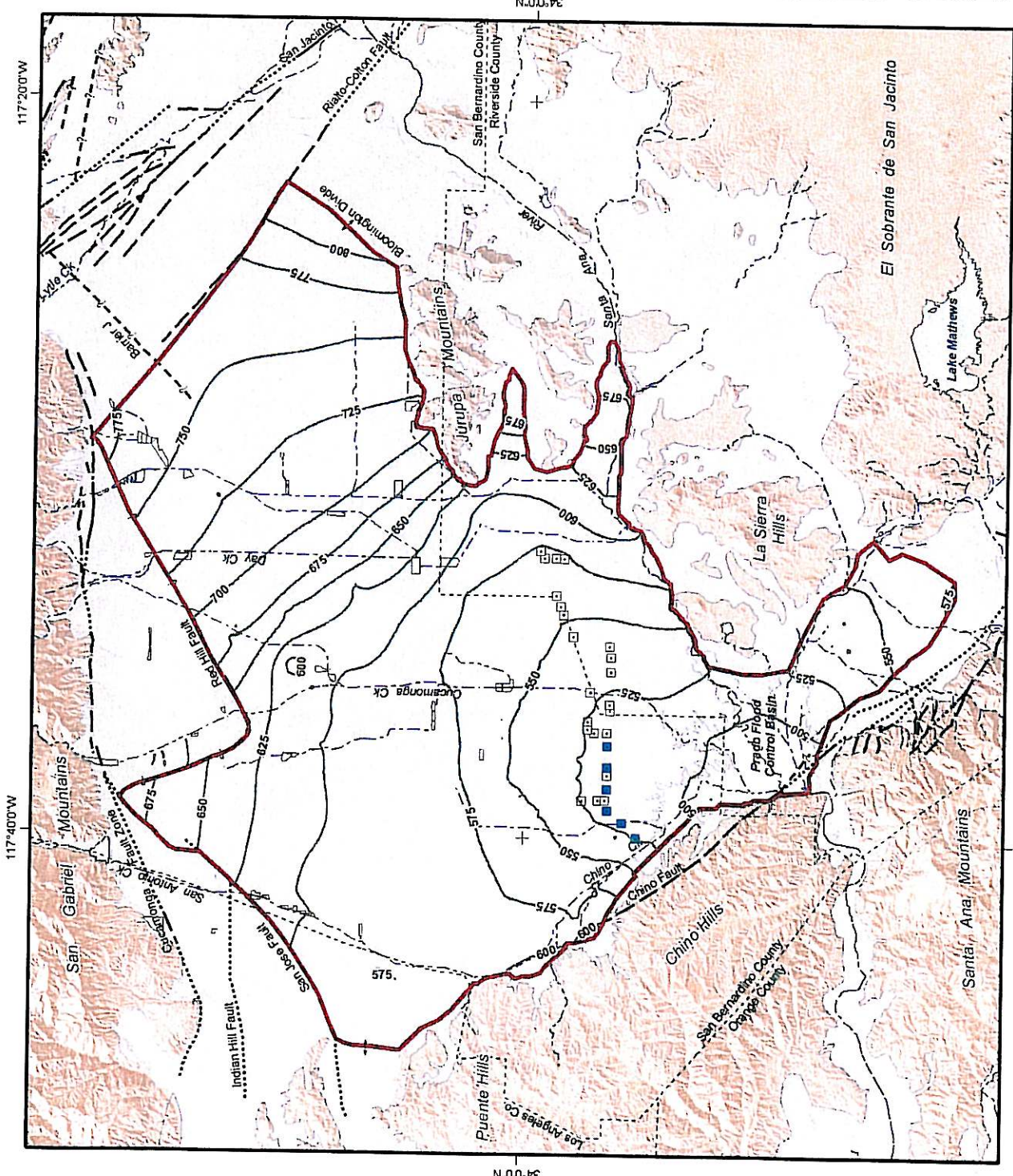


Figure 6 and Figure 14.xls



Groundwater Elevation Contours
(feet above mean sea-level)

- Existing Chino Desalter Well
- Proposed Chino Desalter Well

MODFLOW Groundwater
Flow Model Boundary

Geology

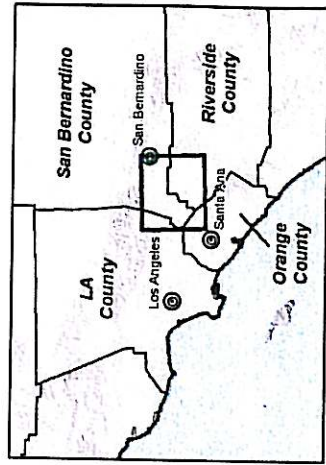
- Water-Bearing Sediments
- Quaternary Alluvium
- Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- Location Approximate
- Location Uncertain
- Location Concealed

Other Features

- Groundwater Divides
- Flood Control/Conservation Basins
- Streams, Rivers, and Channels



**Assumed Groundwater Elevations
for Layer 1
Start of the Baseline Period in 2008**

Figure 7a

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 File: Figure_7a.mxd

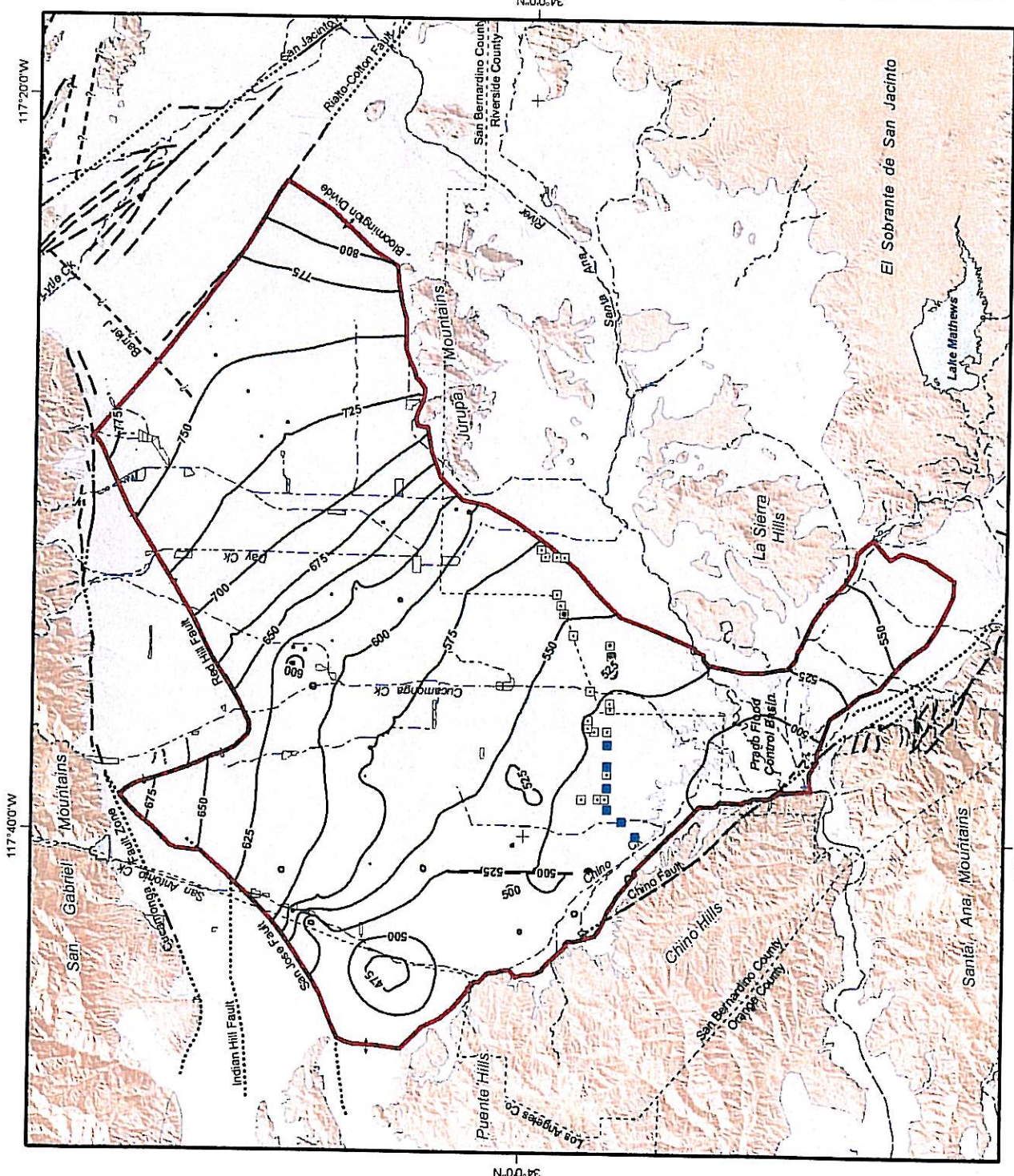
0 1 2 3 4 Miles
 0 2 4 6 KM

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 AUTHORITY

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 SERVICES

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

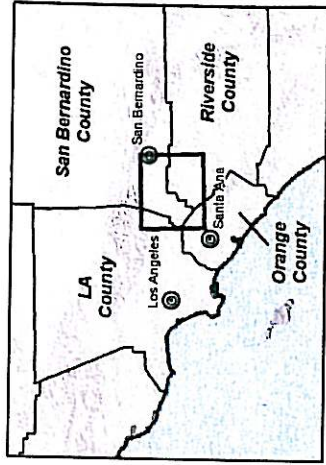


- Groundwater Elevation Contours
(feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Assumed Groundwater Elevations for Layer 2
Start of the Baseline Period in 2008

Figure 7b

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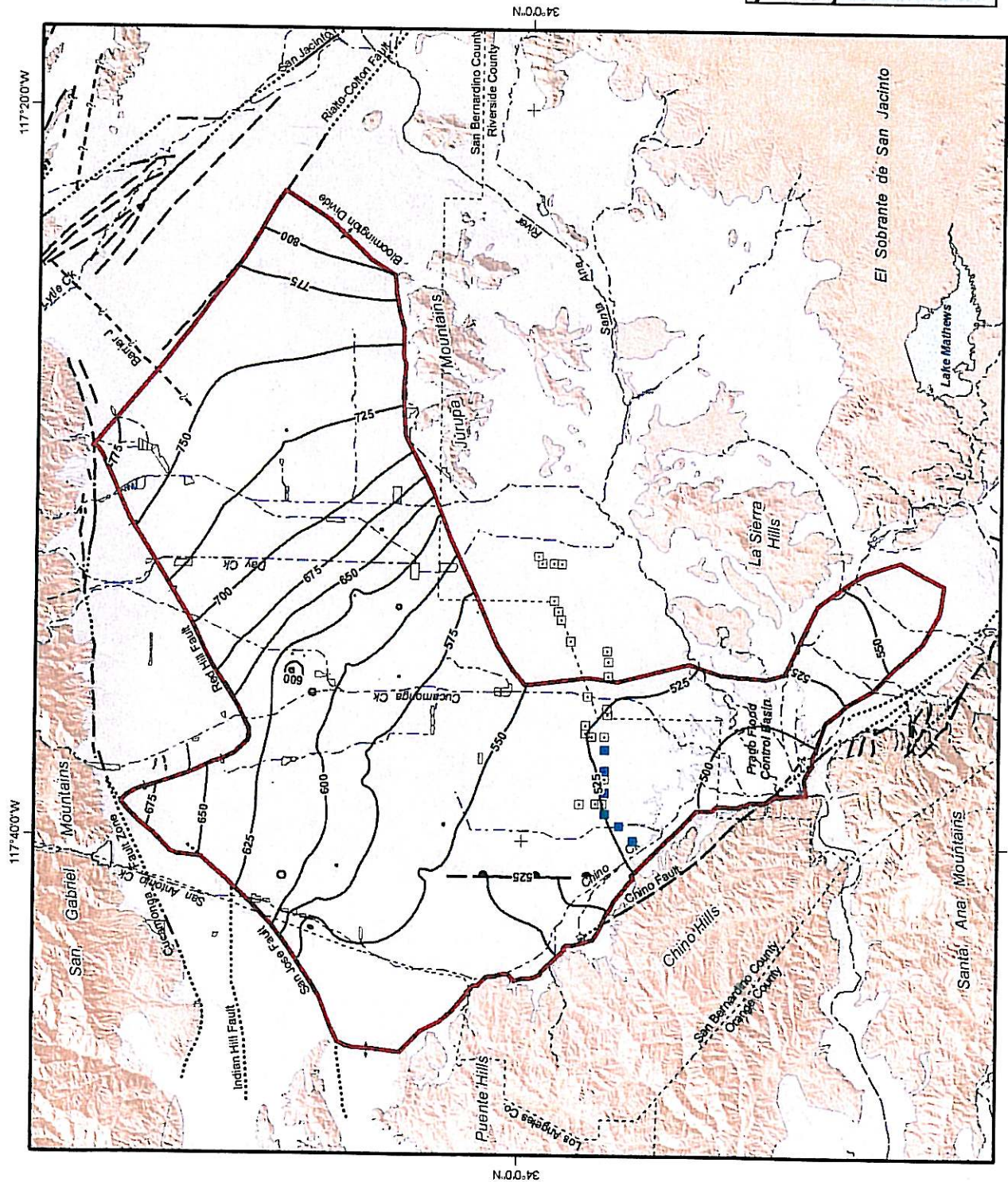
0 1 2 3 4 Miles
 0 2 4 6 KM

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VALLEYS
 WATER AGENCY

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

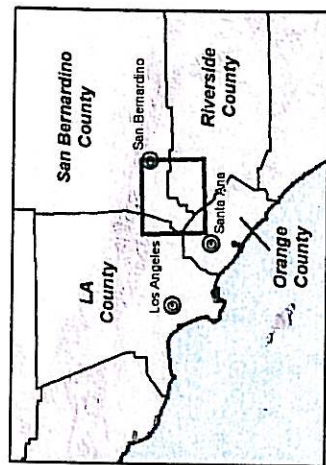


- Groundwater Elevation Contours
(feet above mean sea-level)
- Existing Chino Desaliner Well
- Proposed Chino Desaliner Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Assumed Groundwater Elevations for Layer 3 Start of the Baseline Period in 2008

Figure 7c

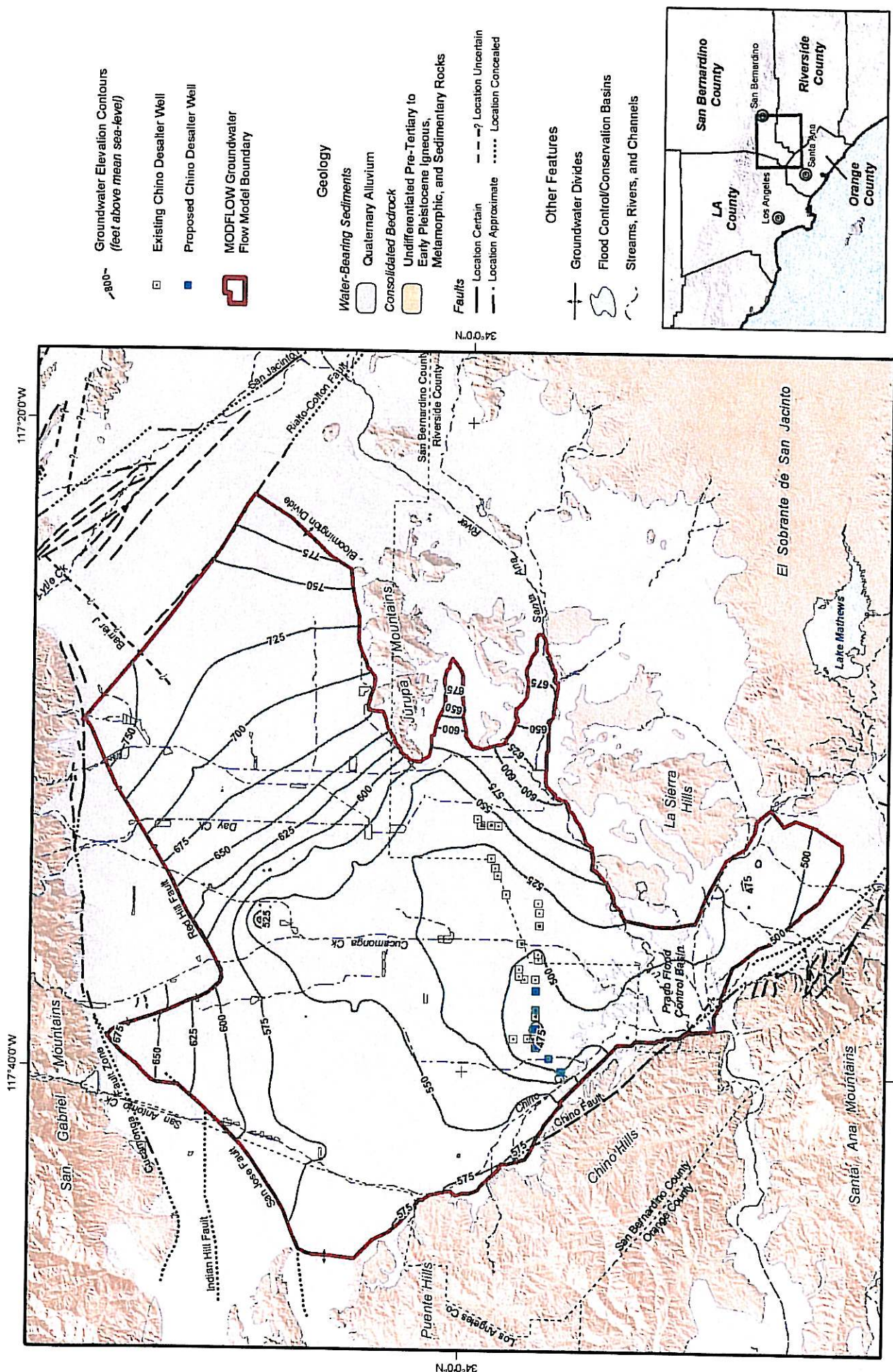
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Author: MJC
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 File: Figure_7c.mxd

Scale: 0 1 2 3 4 Miles / 0 2 4 6 KM

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CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION IMPACT ANALYSIS



Projected Groundwater Elevations for Layer 1
Baseline Alternative in 2035

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 File: Figure_8a.mxd

0 1 2 3 4 Miles
 0 2 4 6 KM

117°40'0"W 117°20'0"W

34°0'0"N 34°0'0"N

San Bernardino County
 Riverside County
 Orange County
 LA County

San Bernardino
 Los Angeles
 Santa Ana

San Jacinto Mountains
 Puente Hills
 Chino Hills
 La Sierra Hills
 San Jacinto Mountains
 El Sobrante de San Jacinto
 Santa Ana Mountains

Indian Hill Fault
 San Jose Fault
 San Antonio Fault
 Rio-Cajon Fault
 Bloomington Divide
 Day Ck
 Cucamonga Ck
 Chino Fault
 Pigeon Flood Control Basin
 Lake Mathews

Groundwater Elevation Contours (feet above mean sea-level)
 Existing Chino Desalter Well
 Proposed Chino Desalter Well
 MODFLOW Groundwater Flow Model Boundary

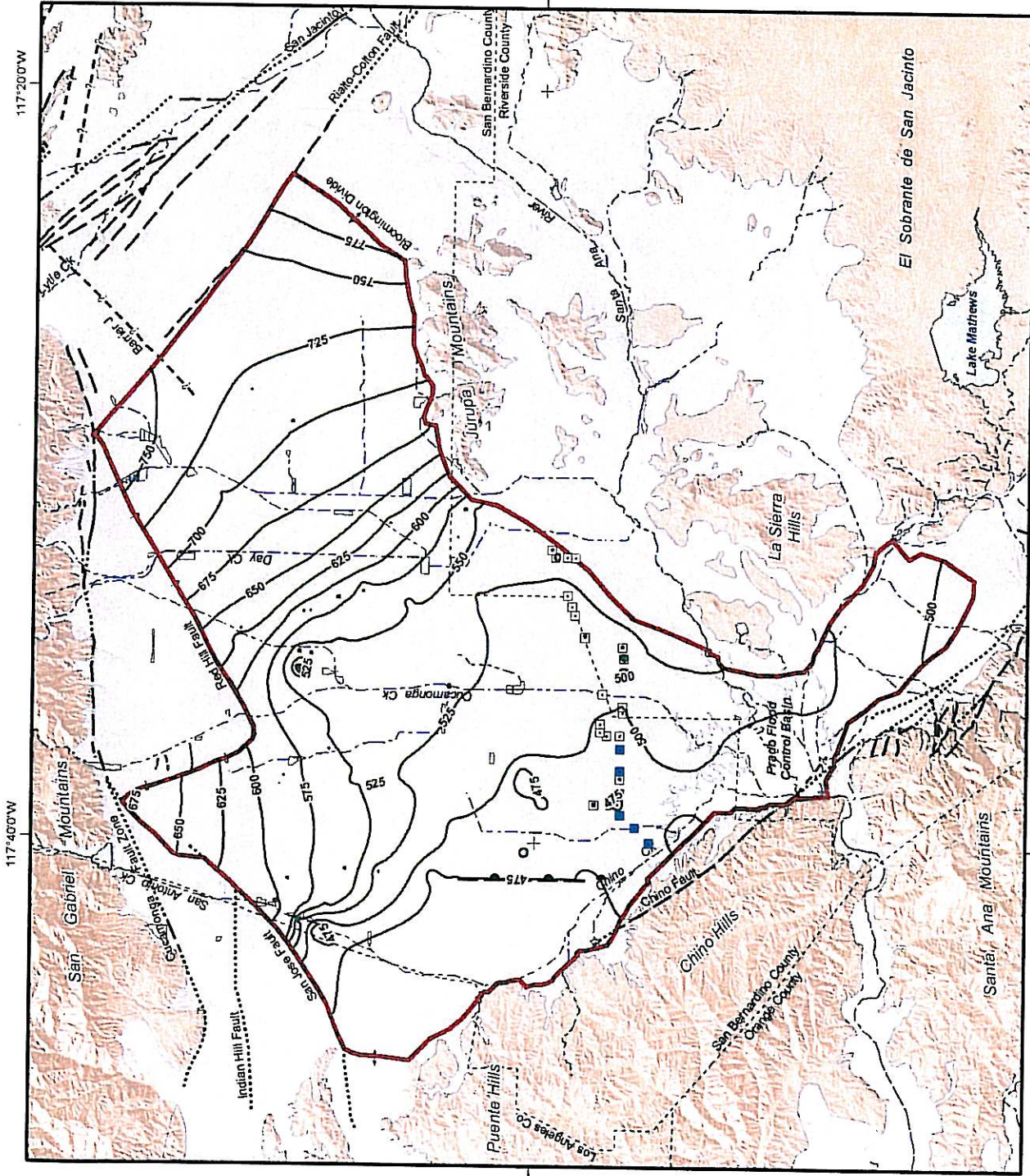
Geology
 Water-Bearing Sediments
 Quaternary Alluvium
 Consolidated Bedrock
 Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults
 Location Certain
 Location Approximate
 Location Uncertain
 Location Concealed

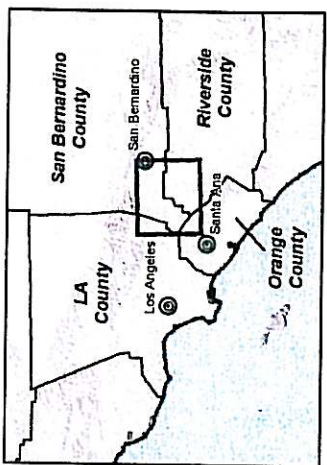
Other Features
 Groundwater Divides
 Flood Control/Conservation Basins
 Streams, Rivers, and Channels

Figure 8a

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis



- Groundwater Elevation Contours
(feet above mean sea-level)
 - Existing Chino Desaliner Well
 - Proposed Chino Desaliner Well
 - MODFLOW Groundwater
Flow Model Boundary
- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to
Early Pleistocene Igneous,
Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
 - Location Uncertain
 - Location Approximate
 - Approximate Location
of Groundwater Barrier
 - Location Concealed
- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



**Projected Groundwater Elevations
for Layer 2
Baseline Alternative in 2035**

Figure 8b

117°20'0"W

117°40'0"W

34°0'0"N

34°0'0"N

117°20'0"W

117°40'0"W



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Chino Basin Dry-Year Yield Program Expansion
Impact Analysis

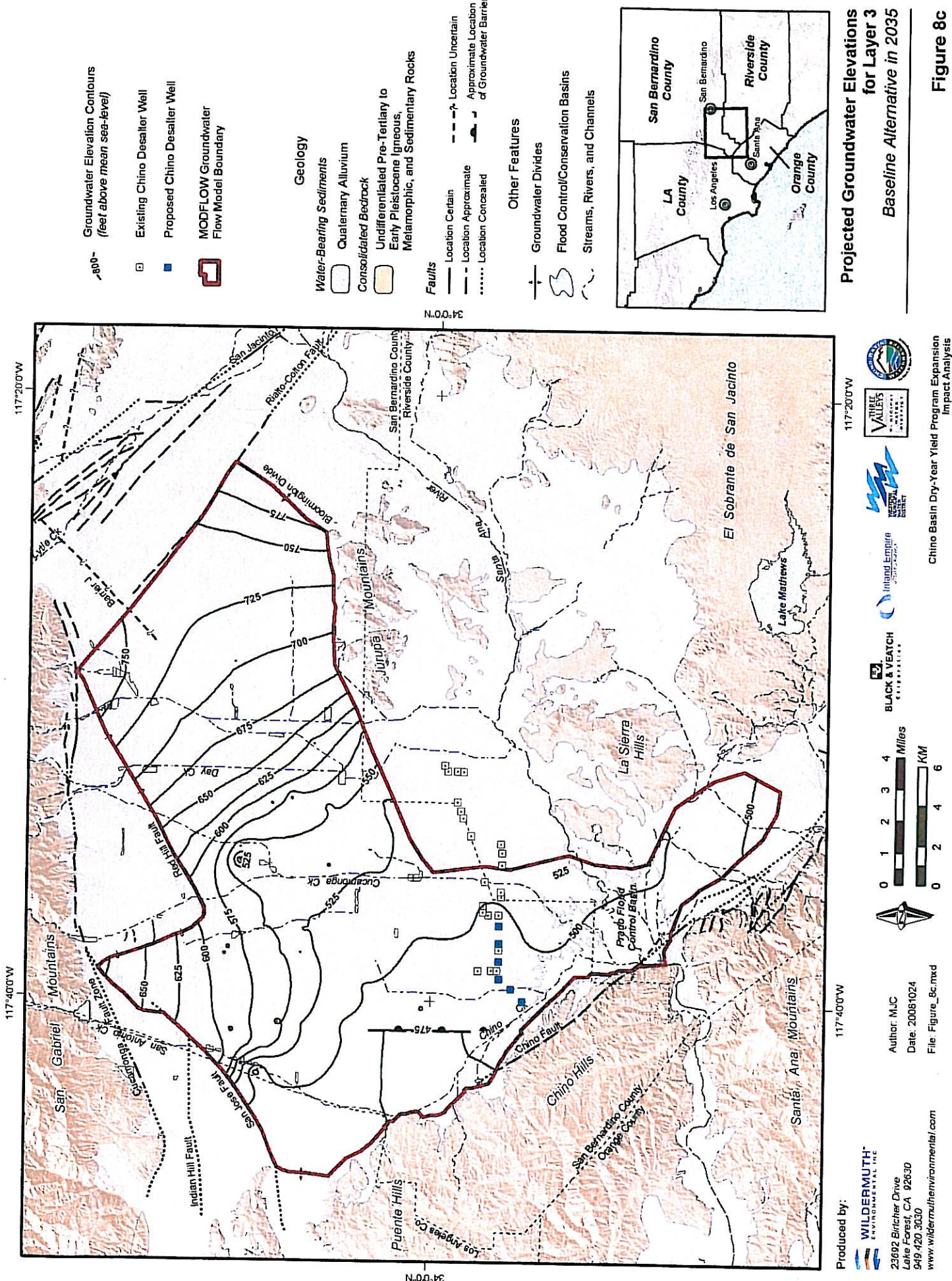
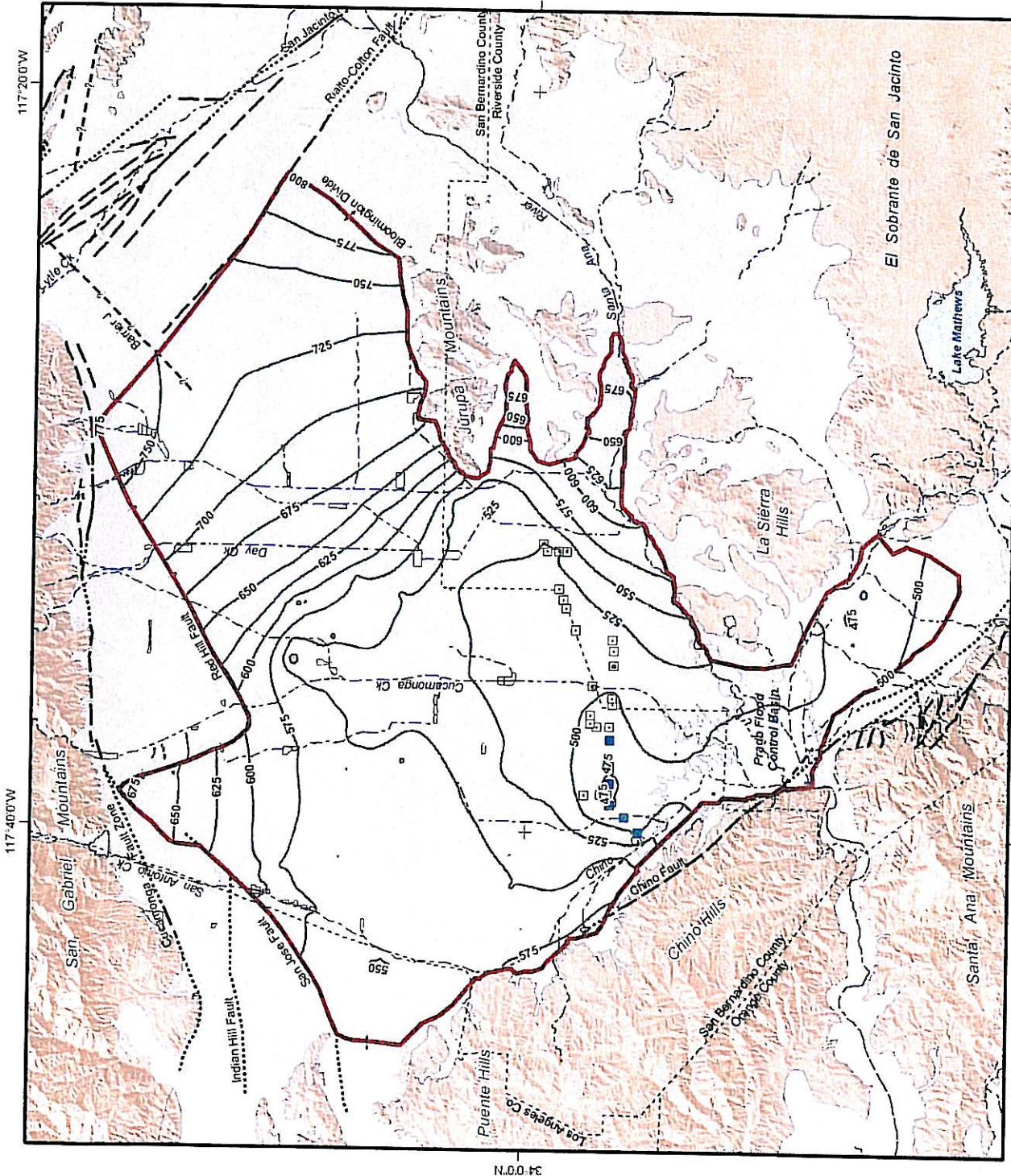


Figure 8c



Groundwater Elevation Contours
(feet above mean sea-level)

- Existing Chino Desalter Well
- Proposed Chino Desalter Well

MODFLOW Groundwater
Flow Model Boundary

Geology

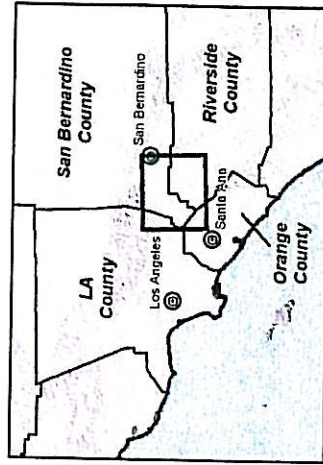
- Water-Bearing Sediments
- Quaternary Alluvium
- Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- - - Location Uncertain
- · · · · Location Approximate
- · · · · Location Concealed

Other Features

- Groundwater Divides
- Flood Control/Conservation Basins
- Streams, Rivers, and Channels



**Projected Groundwater Elevations
for Layer 1
Alternative 1 in 2030**

Figure 9a

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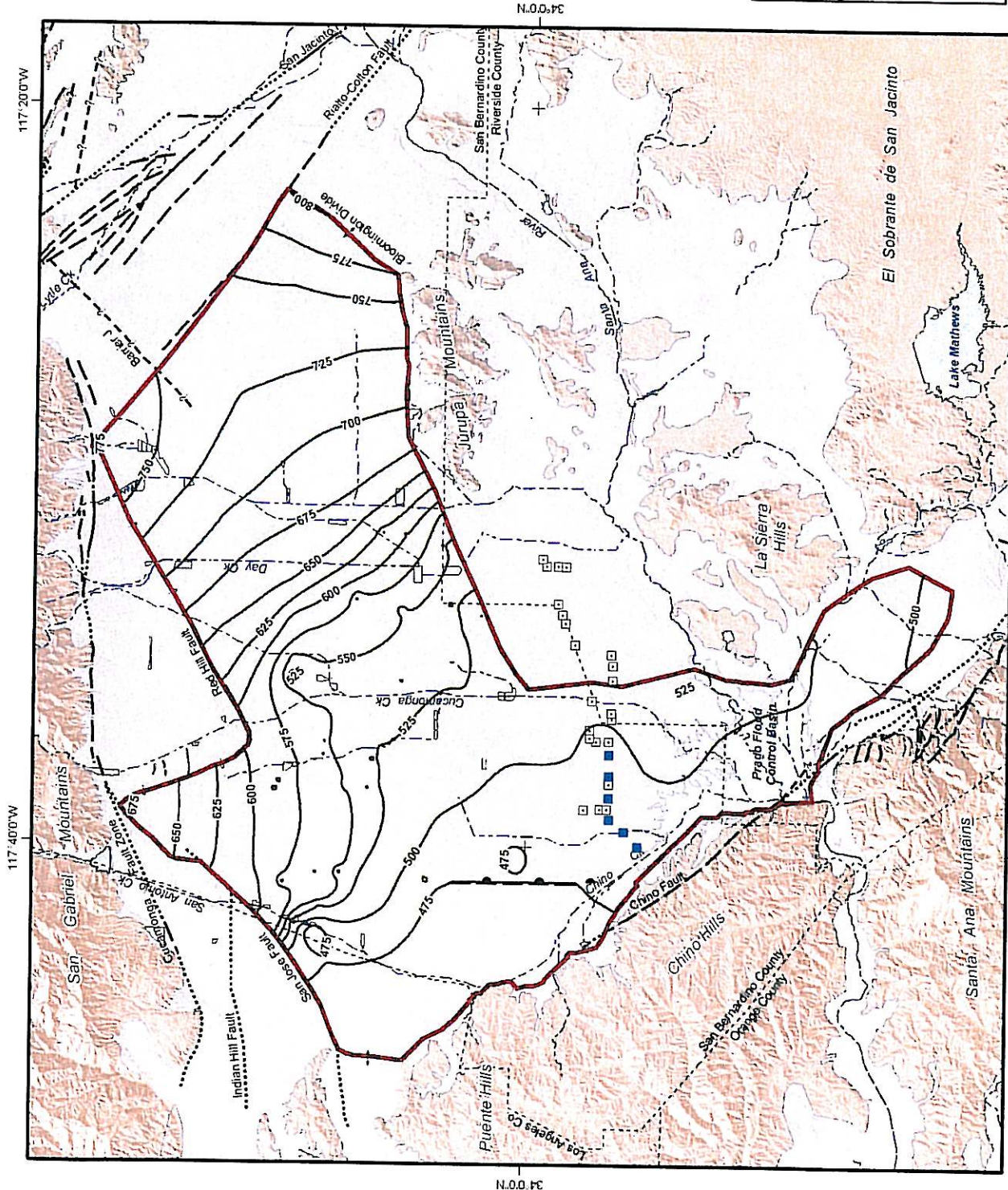
Author: MJC
 Date: 20081024
 File: Figure_9a.mxd

117°40'0"W 117°20'0"W

0 1 2 3 4 Miles
 0 2 4 6 KM

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Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

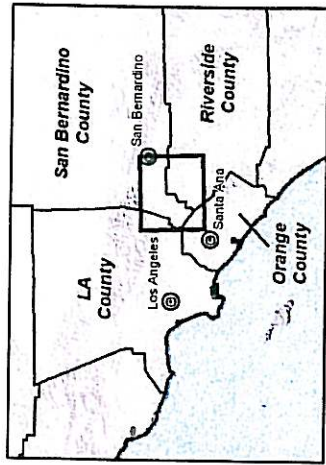


- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 3 Alternative 1 in 2030

Figure 9c

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 File: Figure_9c.mxd

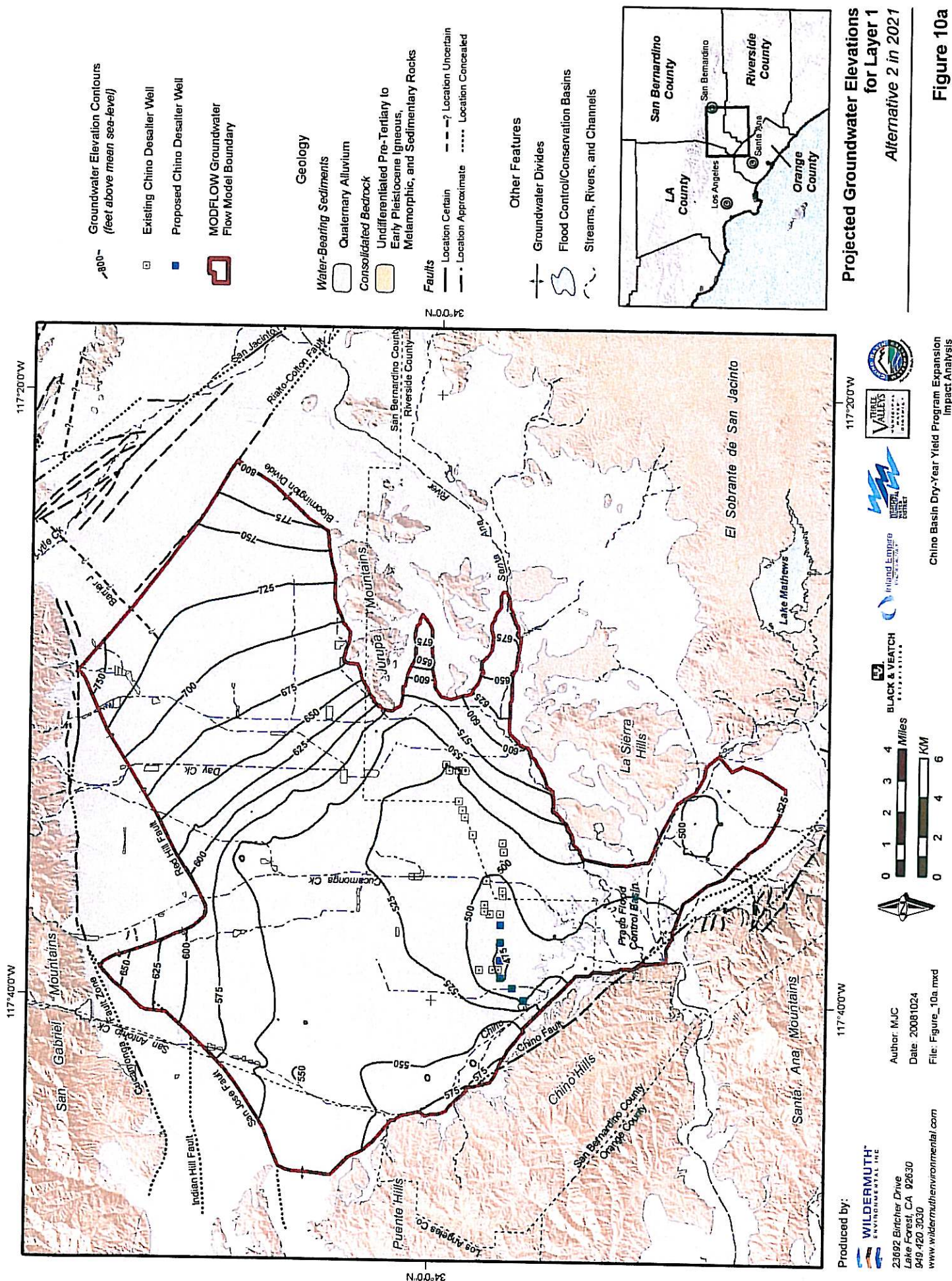
Scale: 0 1 2 3 4 Miles / 0 2 4 6 KM

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Chino Basin Dry-Year Yield Program Expansion Impact Analysis

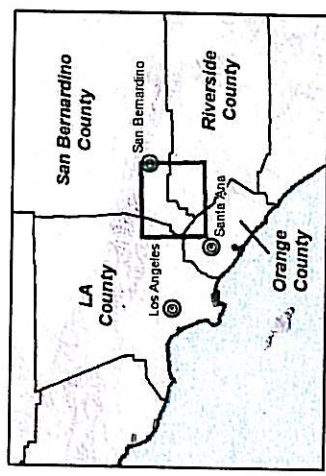


- Groundwater Elevation Contours
(feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Uncertain
 - Location Concealed

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 1
Alternative 2 in 2021

Figure 10a

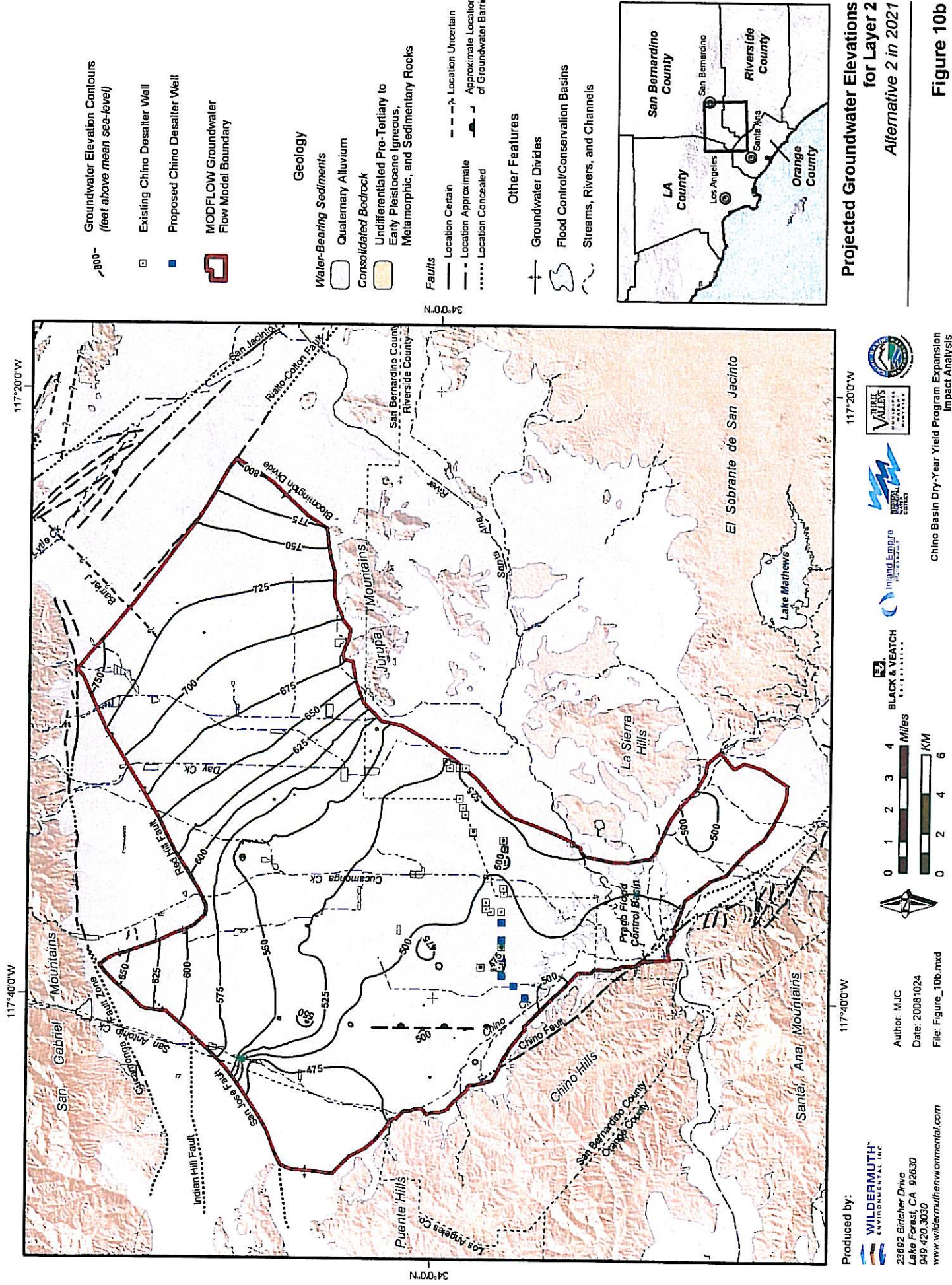
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 Date: 20081024
 File: Figure_10a.mxd

0 1 2 3 4 Miles
 0 2 4 6 KM

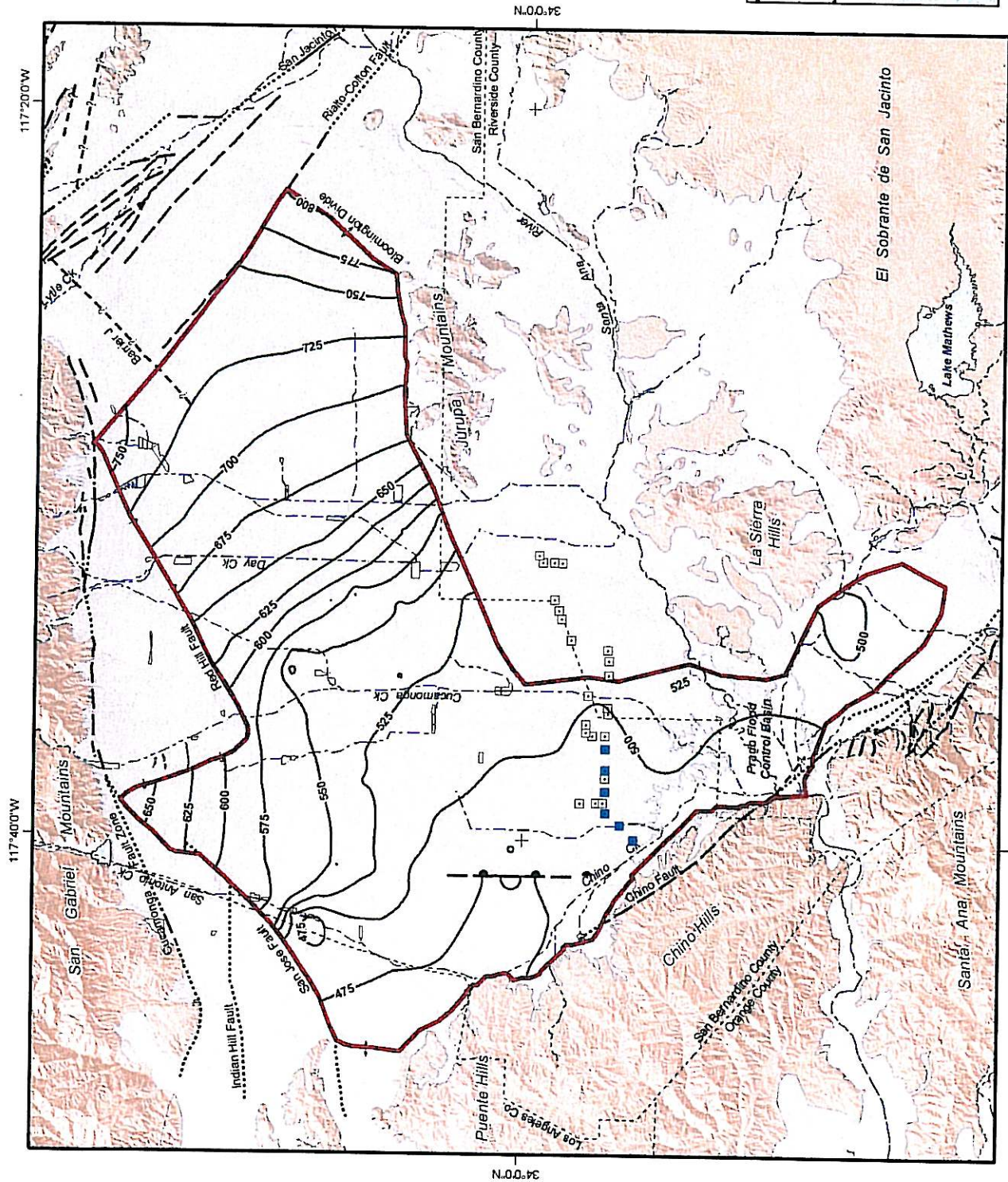
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Chino Basin Dry-Year Yield Program Expansion Impact Analysis



Projected Groundwater Elevations for Layer 2 Alternative 2 in 2021

Figure 10b

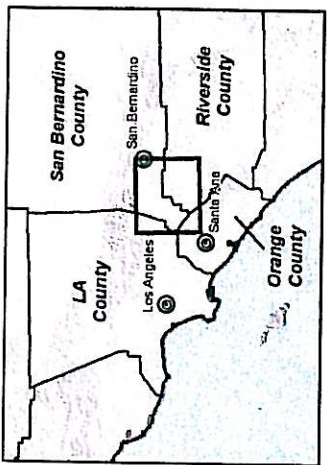


- Groundwater Elevation Contours
(feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater
Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to
Early Pleistocene Igneous,
Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location
of Groundwater Barrier

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



**Projected Groundwater Elevations
for Layer 3
Alternative 2 in 2035**

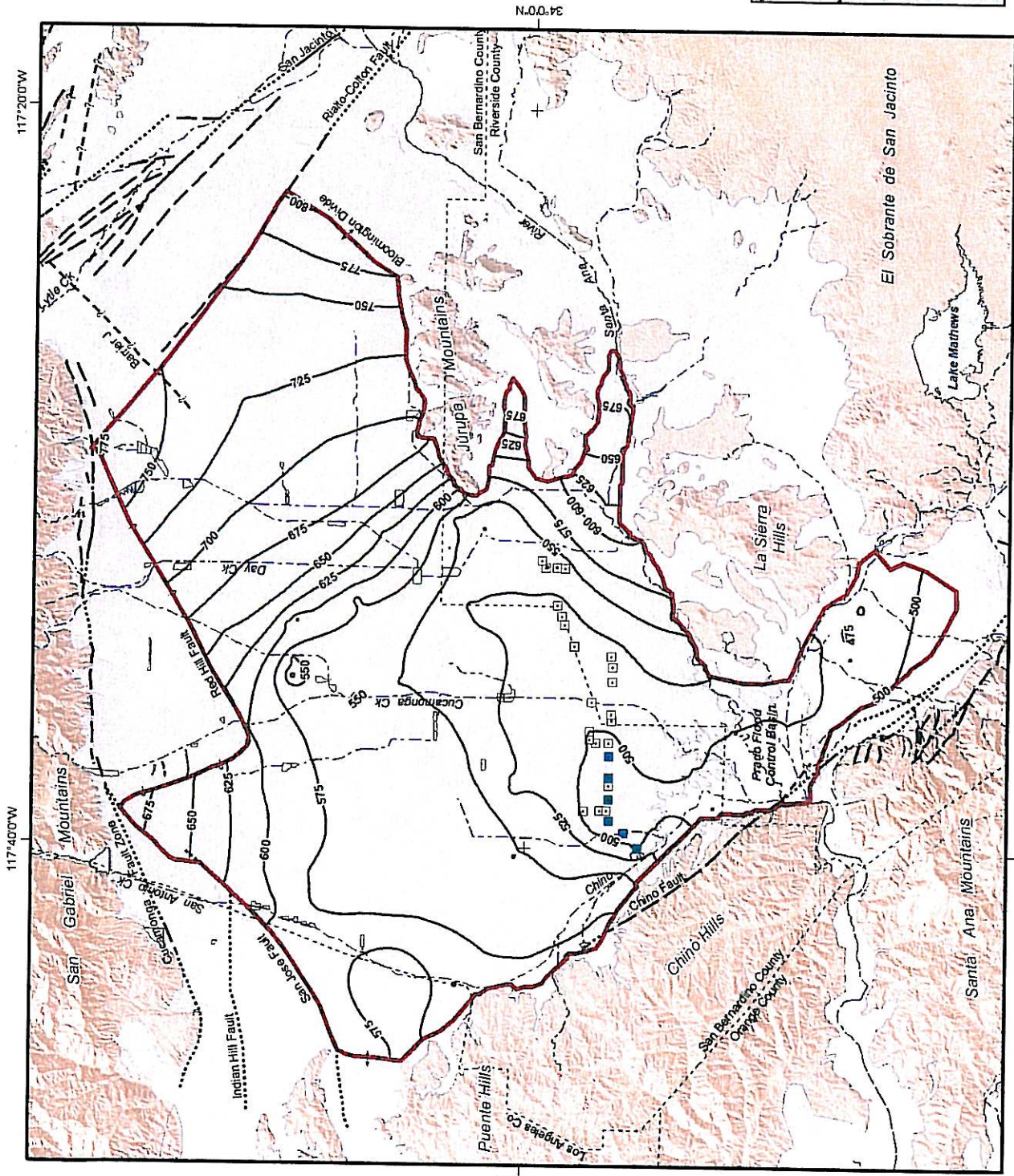
Figure 10c

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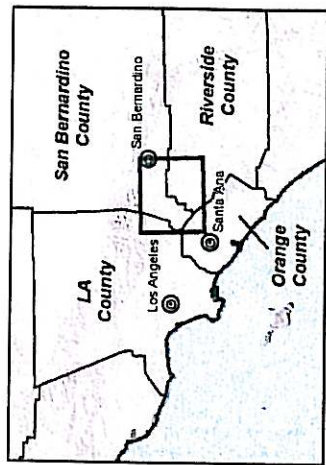
Author: MJC
 Date: 2008/10/24
 File: Figure_10c.mxd

0 1 2 3 4 Miles
 0 2 4 6 KM

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis



- 800' Groundwater Elevation Contours (feet above mean sea-level)
 - Existing Chino Desalter Well
 - Proposed Chino Desalter Well
 - MODFLOW Groundwater Flow Model Boundary
- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
 - Location Approximate
 - Location Uncertain
 - Location Concealed
- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 1 in Alternative 3 in 2030

Figure 11a

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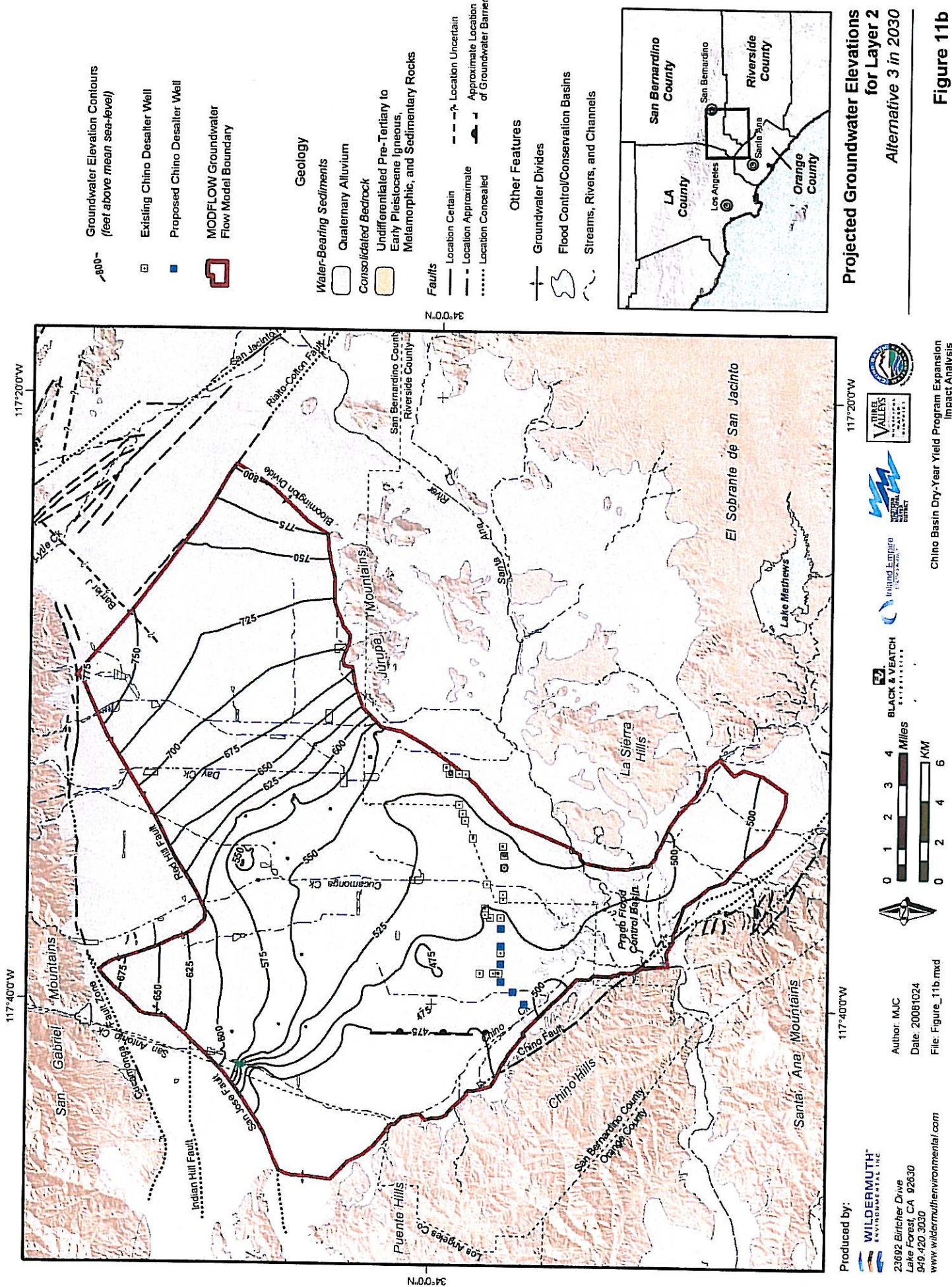
Author: MJC
 Date: 2008/10/24
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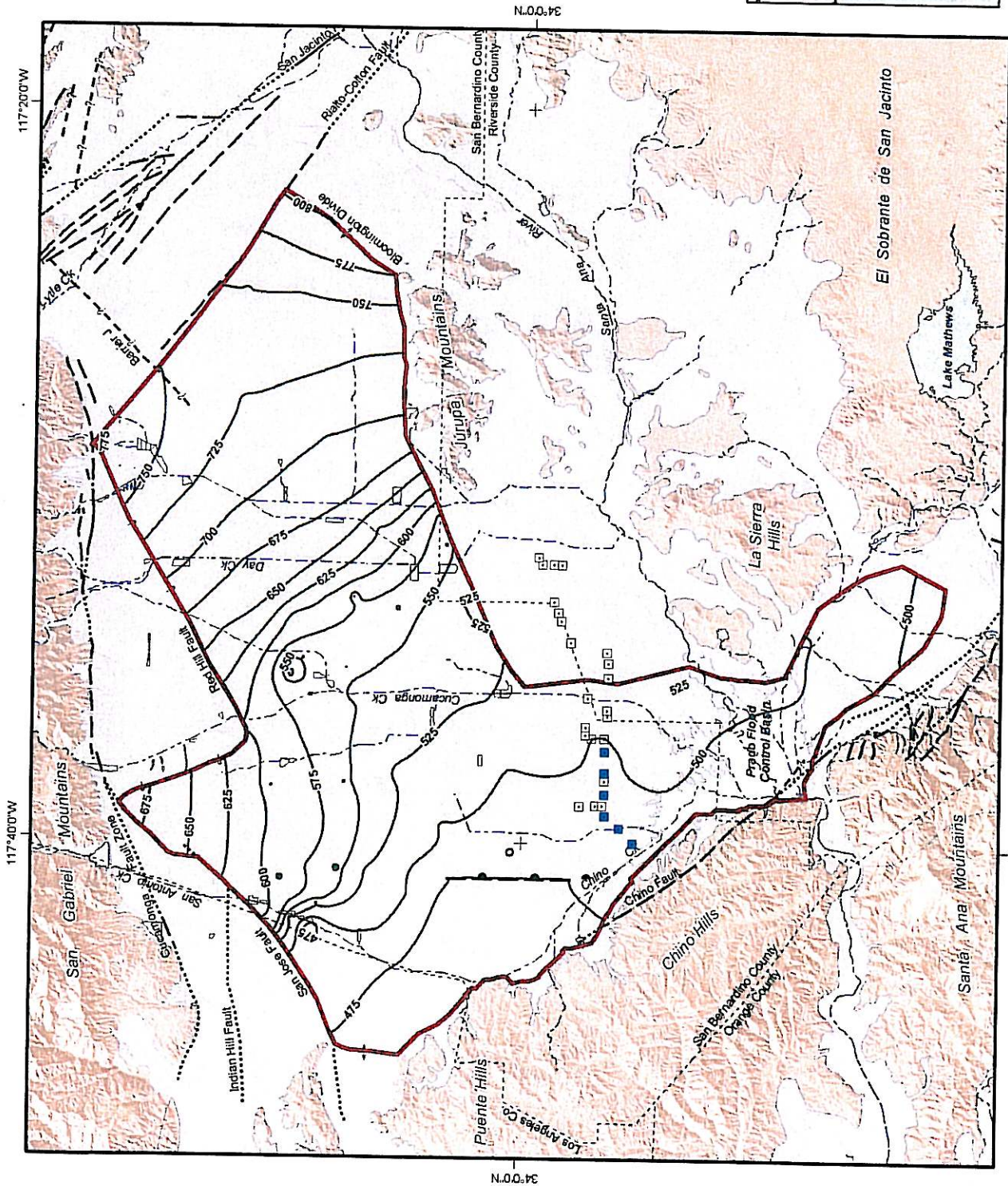
0 1 2 3 4 Miles
 0 2 4 6 KM

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CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION IMPACT ANALYSIS





800--
Groundwater Elevation Contours
(feet above mean sea-level)

□ Existing Chino Desalter Well
□ Proposed Chino Desalter Well

MODFLOW Groundwater
Flow Model Boundary

Geology

Water-Bearing Sediments
Quaternary Alluvium
Consolidated Bedrock

Undifferentiated Pre-Tertiary to
Early Pleistocene Igneous,
Metamorphic, and Sedimentary Rocks

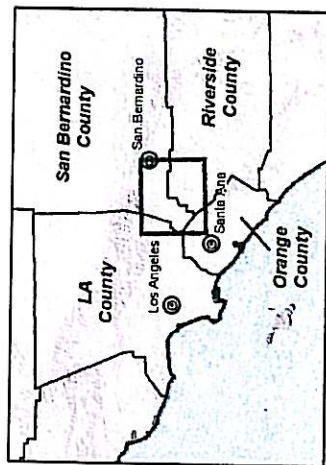
Faults

Location Certain
Location Approximate
Location Concealed

Location Uncertain
Approximate Location
of Groundwater Barrier

Other Features

Groundwater Divides
Flood Control/Conservation Basins
Streams, Rivers, and Channels



**Projected Groundwater Elevations
for Layer 3
Alternative 3 in 2030**

Figure 11c

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Date: 20081024
File: Figure_11c.mxd

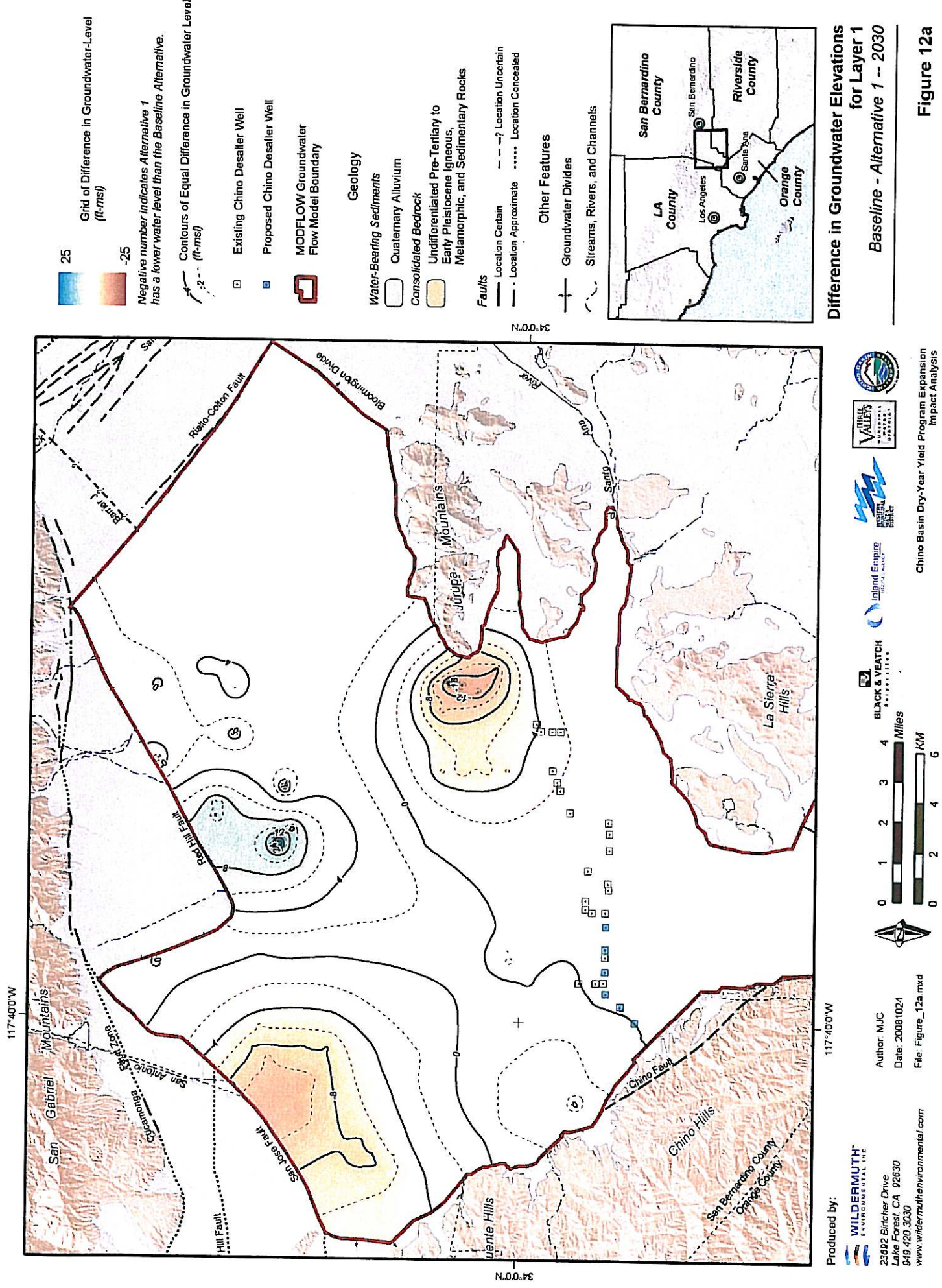
0 1 2 3 4 Miles
0 2 4 6 KM

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WATER AGENCY

VALLEYS
WATER AGENCY

CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION
IMPACT ANALYSIS



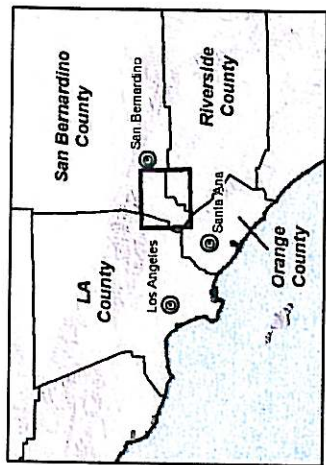
25
Grid of Difference in Groundwater-Level (ft-msf)
-25
Negative number indicates Alternative 1 has a lower water level than the Baseline Alternative.

Contours of Equal Difference in Groundwater Level (ft-msf)
Existing Chino Desalter Well
Proposed Chino Desalter Well
MODFLOW Groundwater Flow Model Boundary

Geology
Water-Bearing Sediments
Quaternary Alluvium
Consolidated Bedrock
Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults
Location Certain
Location Approximate
Location Uncertain
Location Concealed

Other Features
Groundwater Divides
Streams, Rivers, and Channels



Difference in Groundwater Elevations for Layer 1 - Baseline - Alternative 1 -- 2030

Figure 12a

117°40'0"W

34°0'0"N

34°0'0"N

117°40'0"W

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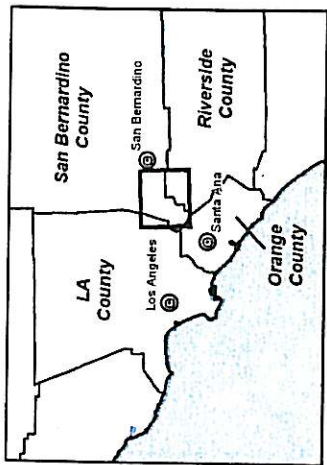
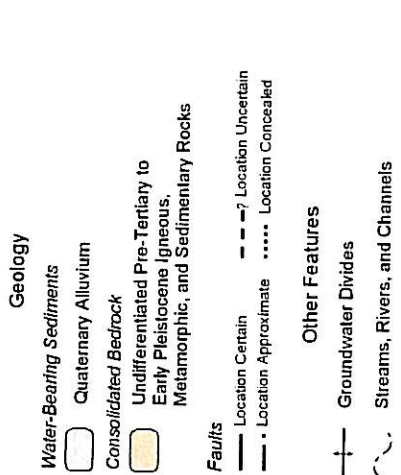
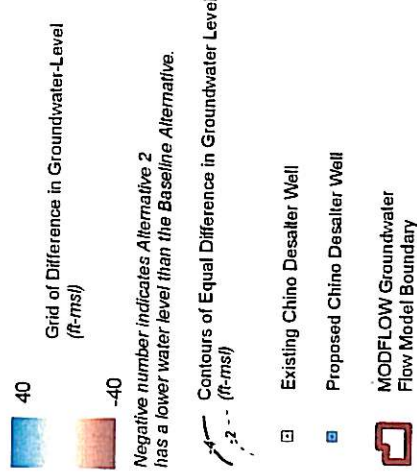
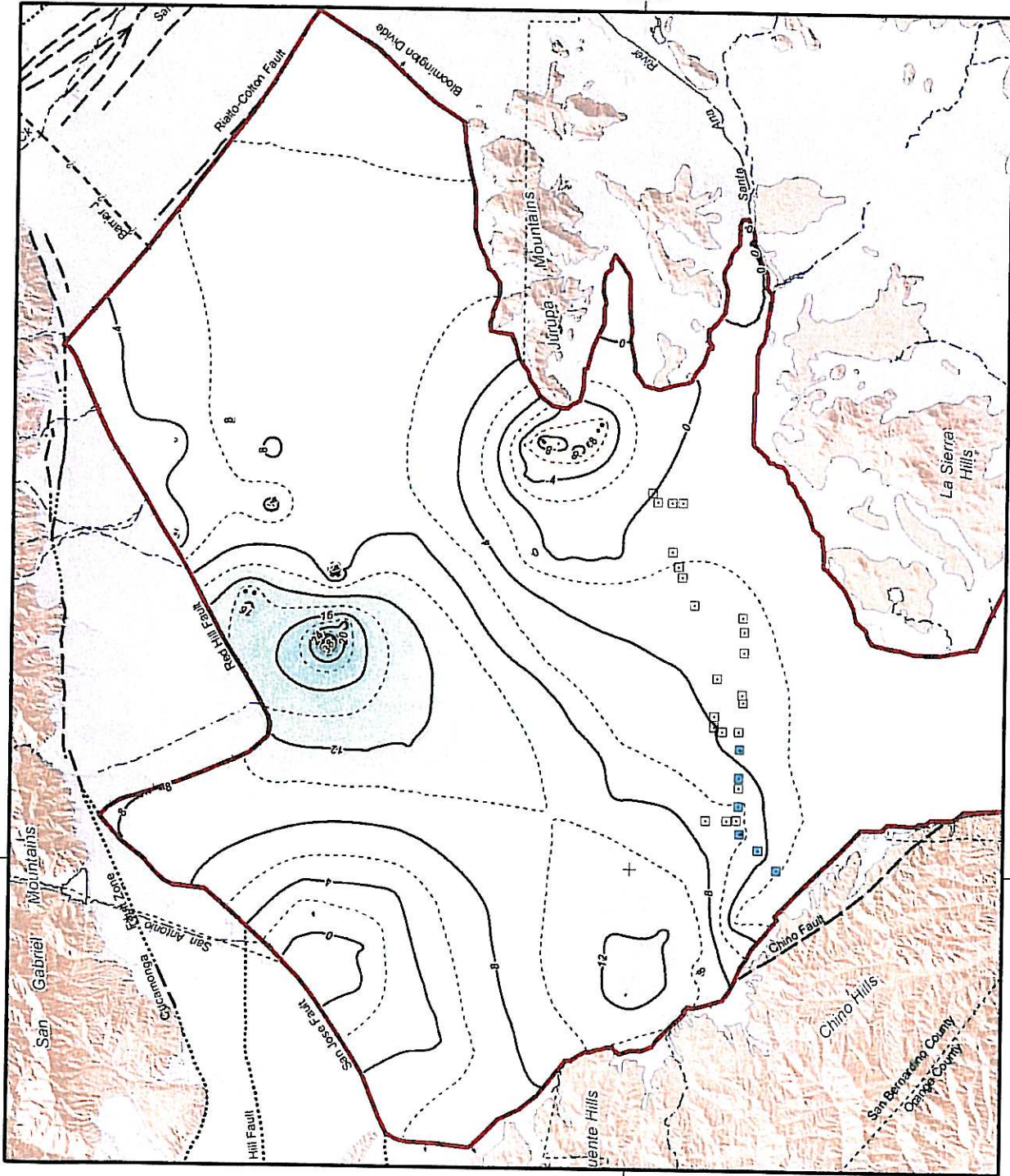
Author: MJC
Date: 20081024
File: Figure_12a.mxd



0 1 2 3 4 Miles
0 2 4 6 KM



Chino Basin Dry-Year Yield Program Expansion Impact Analysis



Difference in Groundwater Elevations for Layer 1
Baseline - Alternative 3 -- 2030

Figure 12b

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Author: MJC
 Date: 20081024
 File: Figure_12b.mxd

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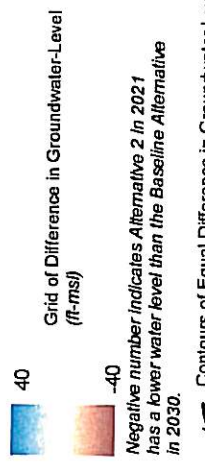
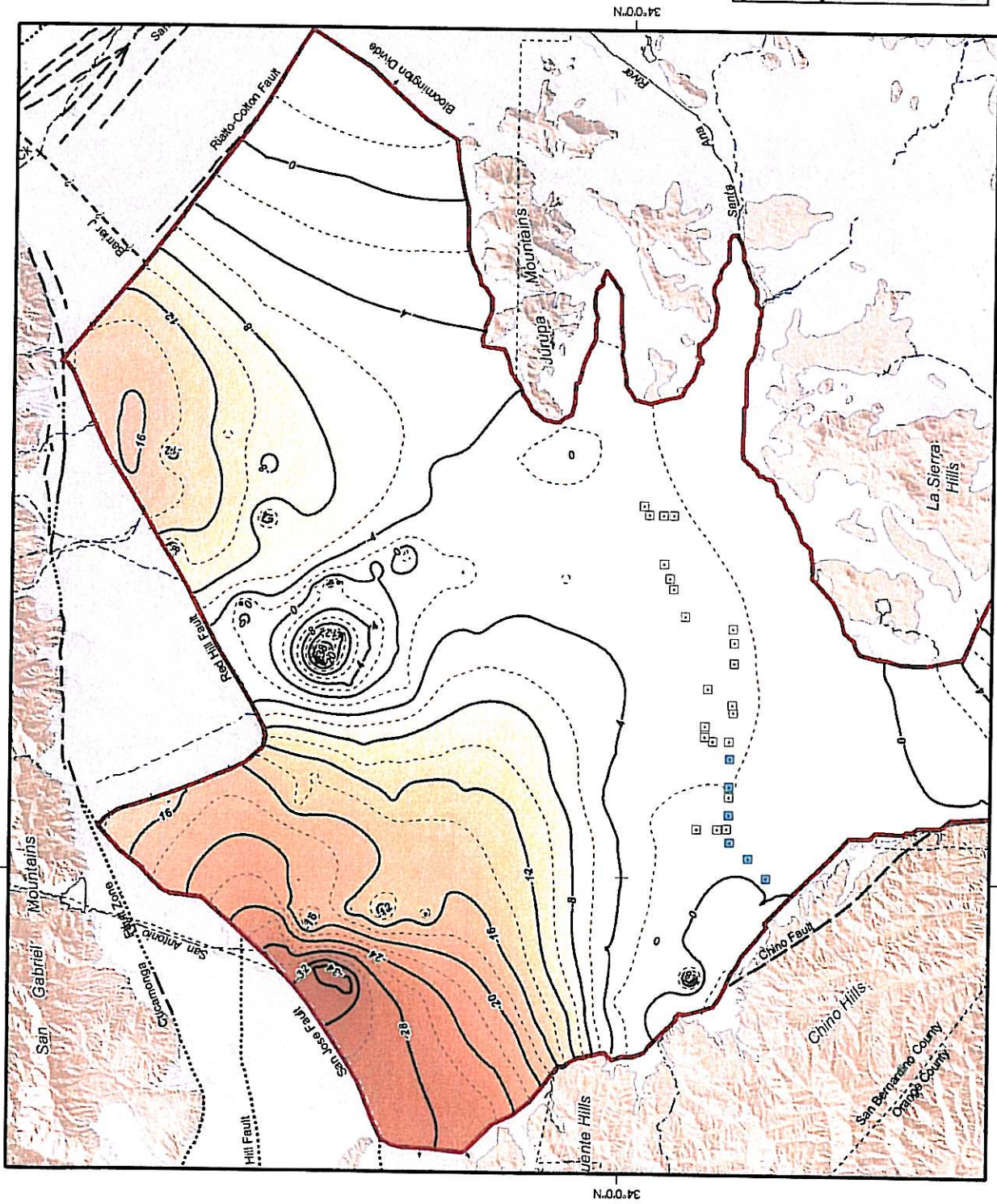
inland Empire
 WATER AGENCY

VALLEYS
 WATER DISTRICT

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

0 1 2 3 4 Miles
 0 2 4 6 KM

117° 40' 0" W
 34° 0' 0" N



- Contours of Equal Difference in Groundwater Level (ft-ms)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

Geology

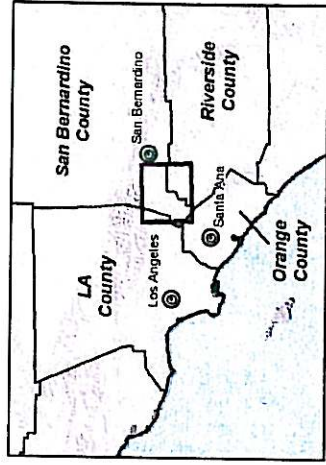
- Water-Bearing Sediments
- Quaternary Alluvium
- Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- Location Approximate
- Location Uncertain
- Location Concealed

Other Features

- Groundwater Divides
- Streams, Rivers, and Channels



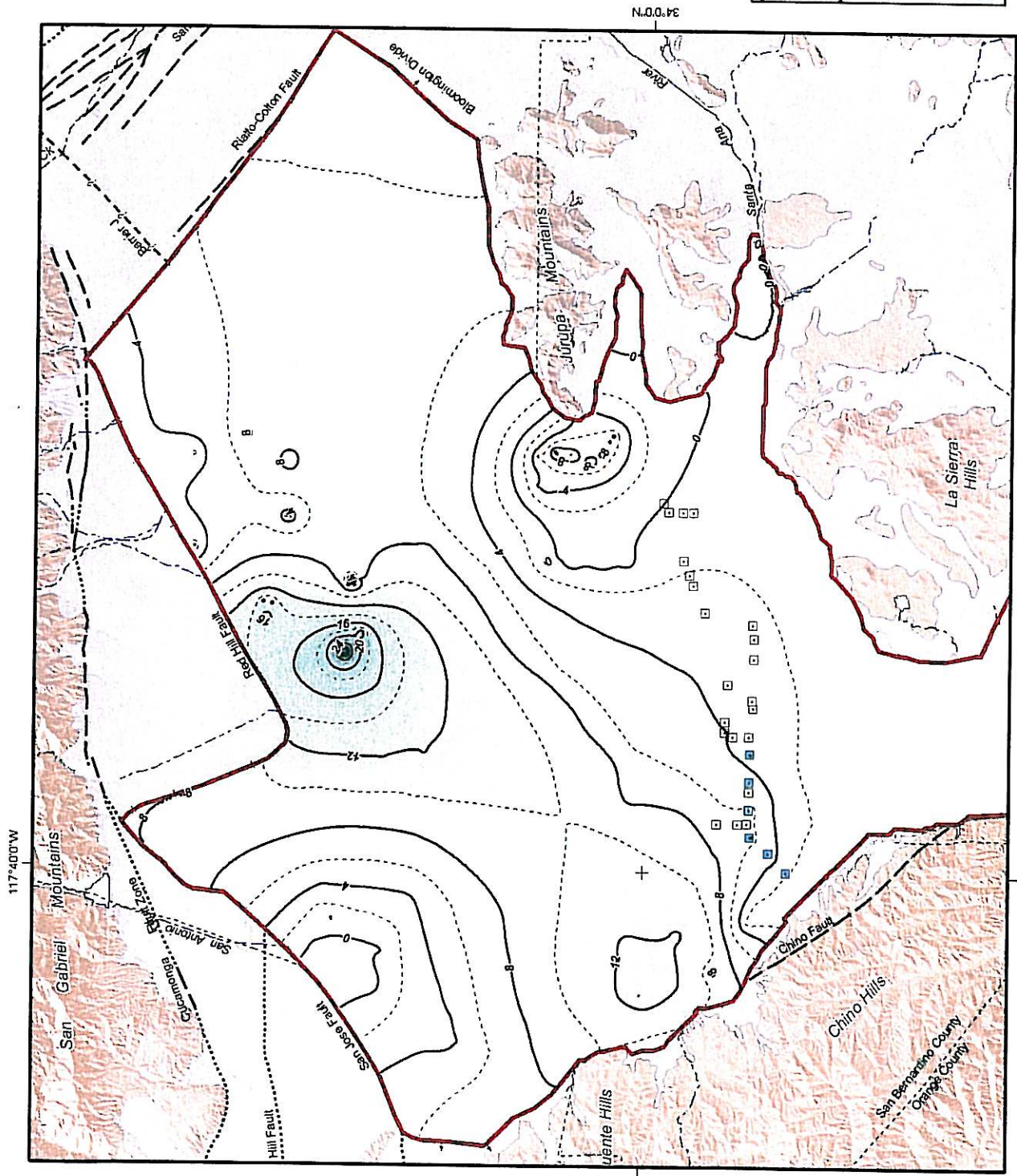
Difference in Groundwater Elevations for Layer 1
Baseline 2030 - Alternative 2 2021

Figure 12c

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 Date: 2008/10/24
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Chino Basin Dry-Year Yield Program Expansion Impact Analysis



25
Grid of Difference in Groundwater-Level (ft-msl)
-25
Negative number indicates Alternative 3 has a lower water level than the Baseline Alternative.

Contours of Equal Difference in Groundwater Level (ft-msl)

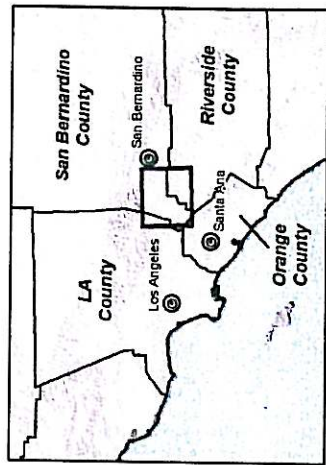
Existing Chino Desalter Well
Proposed Chino Desalter Well
MODFLOW Groundwater Flow Model Boundary

Geology

Water-Bearing Sediments
Quaternary Alluvium
Consolidated Bedrock
Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

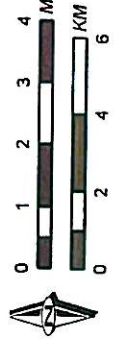
Faults
Location Certain
Location Approximate
Location Uncertain
Location Concealed

Other Features
Groundwater Divides
Streams, Rivers, and Channels



Difference in Groundwater Elevations for Layer 1
Baseline - Alternative 2 -- 2030

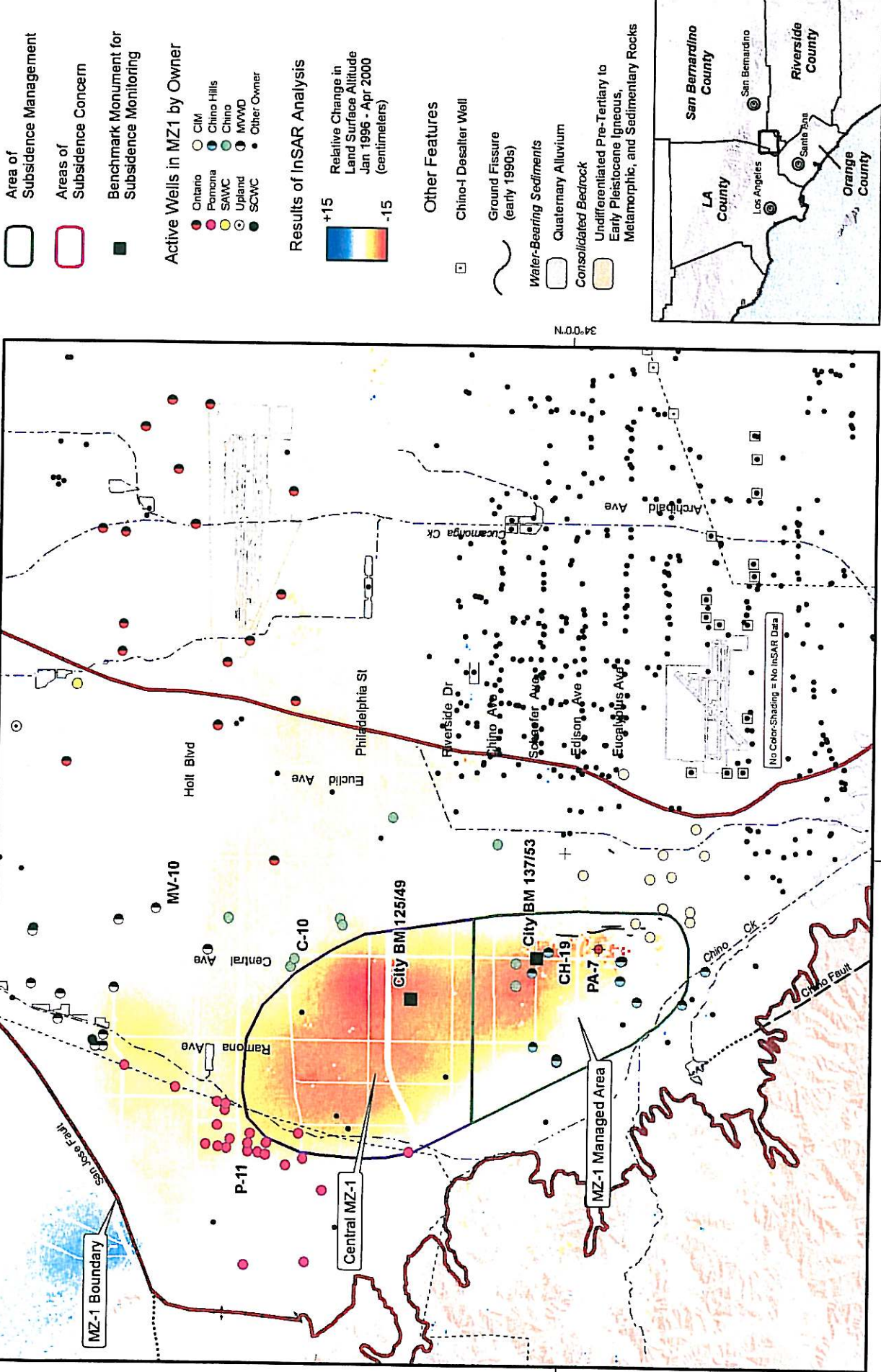
Figure 12d



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Chino Basin Dry-Year Yield Program Expansion Impact Analysis



- Area of Subsidence Management
- Areas of Subsidence Concern
- Benchmark Monument for Subsidence Monitoring

Active Wells in MZ1 by Owner

- Ontario
- Pomona
- SAWC
- Upland
- SCWC
- CIM
- Chino Hills
- Chino
- MVWD
- Other Owner

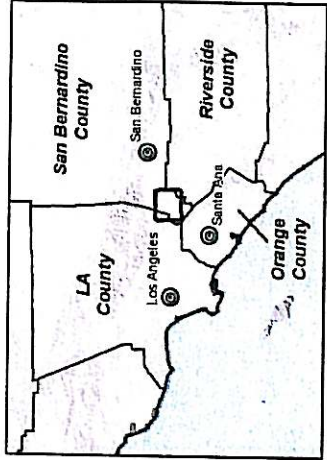
Results of InSAR Analysis



Relative Change in Land Surface Altitude
Jan 1996 - Apr 2000
(centimeters)

Other Features

- Chino-1 Desalter Well
- Ground Fissure (early 1990s)
- Water-Bearing Sediments
- Quaternary Alluvium Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks



Subsidence Area in MZ1

Figure 13



Chino Basin Dry-Year Yield Program Expansion Impact Analysis

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No Color-Shading = No InSAR Data

Figure 14
 Simulated Groundwater Water Levels in Well PA-7 for Each Alternative

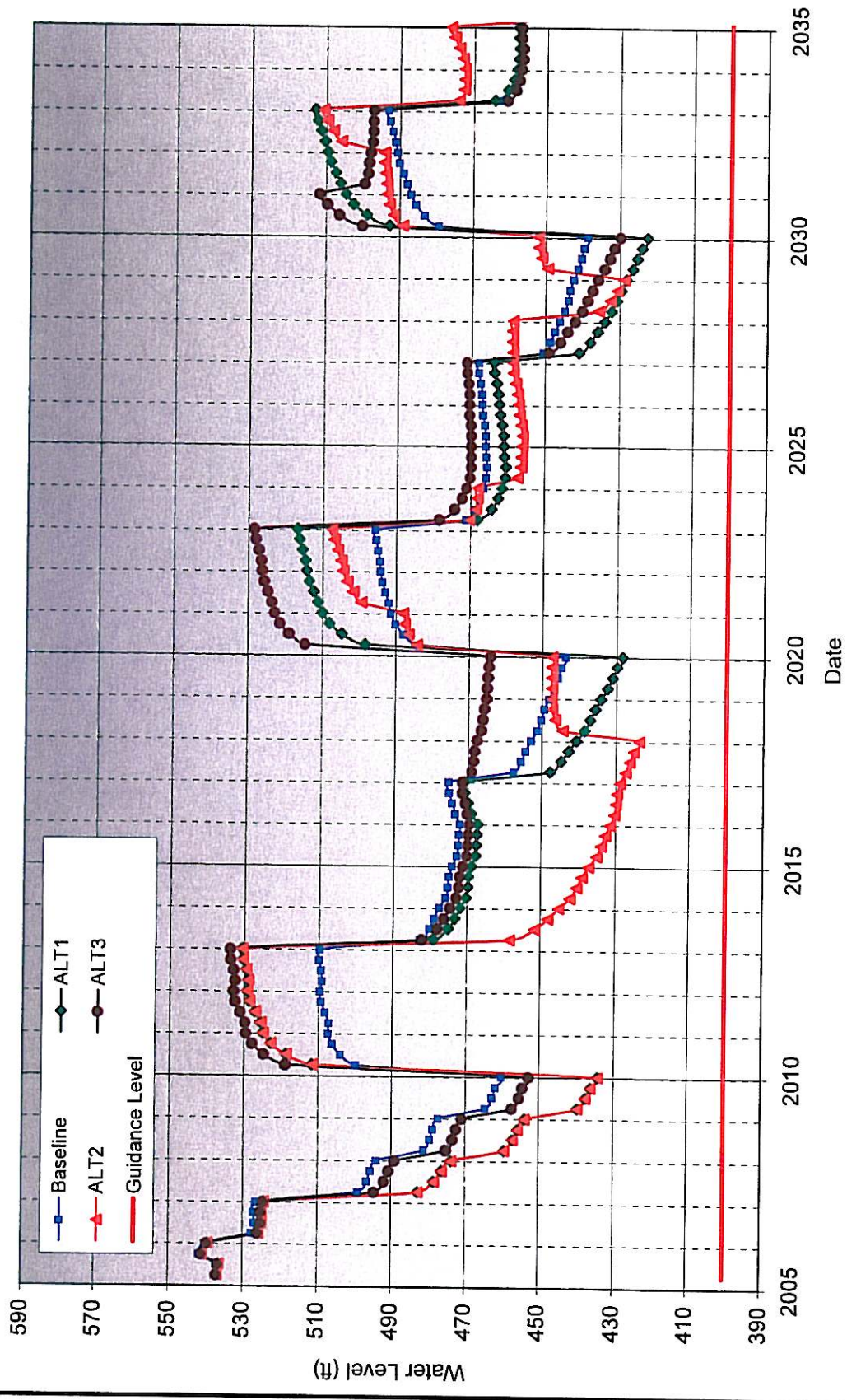


Figure 6 and Figure 14.xls

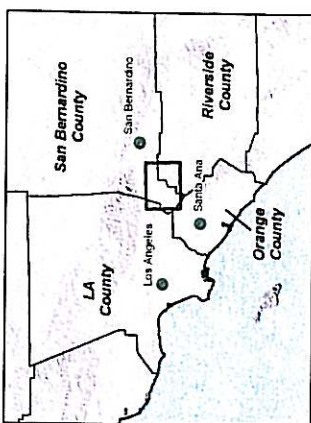
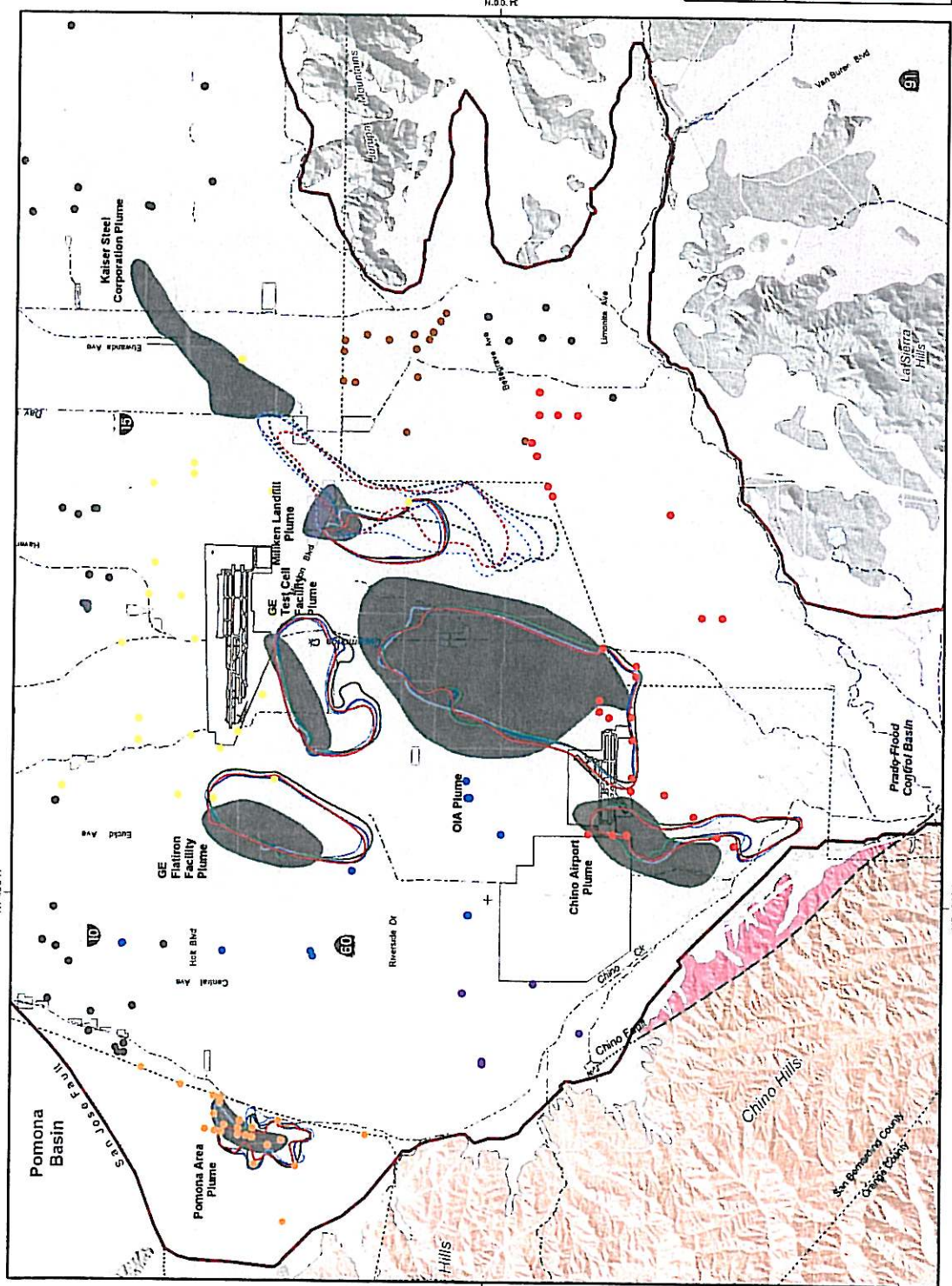


Location of Groundwater Contaminant Plumes (2006)

- Water Quality Anomaly
- Baseline Alternative Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly¹
- Alternative 1 Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly²
- Alternative 2 Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly³
- Alternative 3 Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly¹

For clarity, the Kaiser Plume is designated with a dashed outline

- Appropriator Wells
- Jirajpa Community Services District
- City of Pomona
- City of Ontario
- City of Chino Hills
- City of Chino
- Chino Desalter Authority
- Other Appropriators
- Other Features
- MODFLOW Groundwater Flow Model Boundary
- Chino Basin Hydrologic Boundary
- Flood Control and Conservation Basins



Estimated Location of Water Quality Anomalies in 2006 and their Projected Locations in 2035

Figure 15

117-400W

117-400W

N.A.S.F.

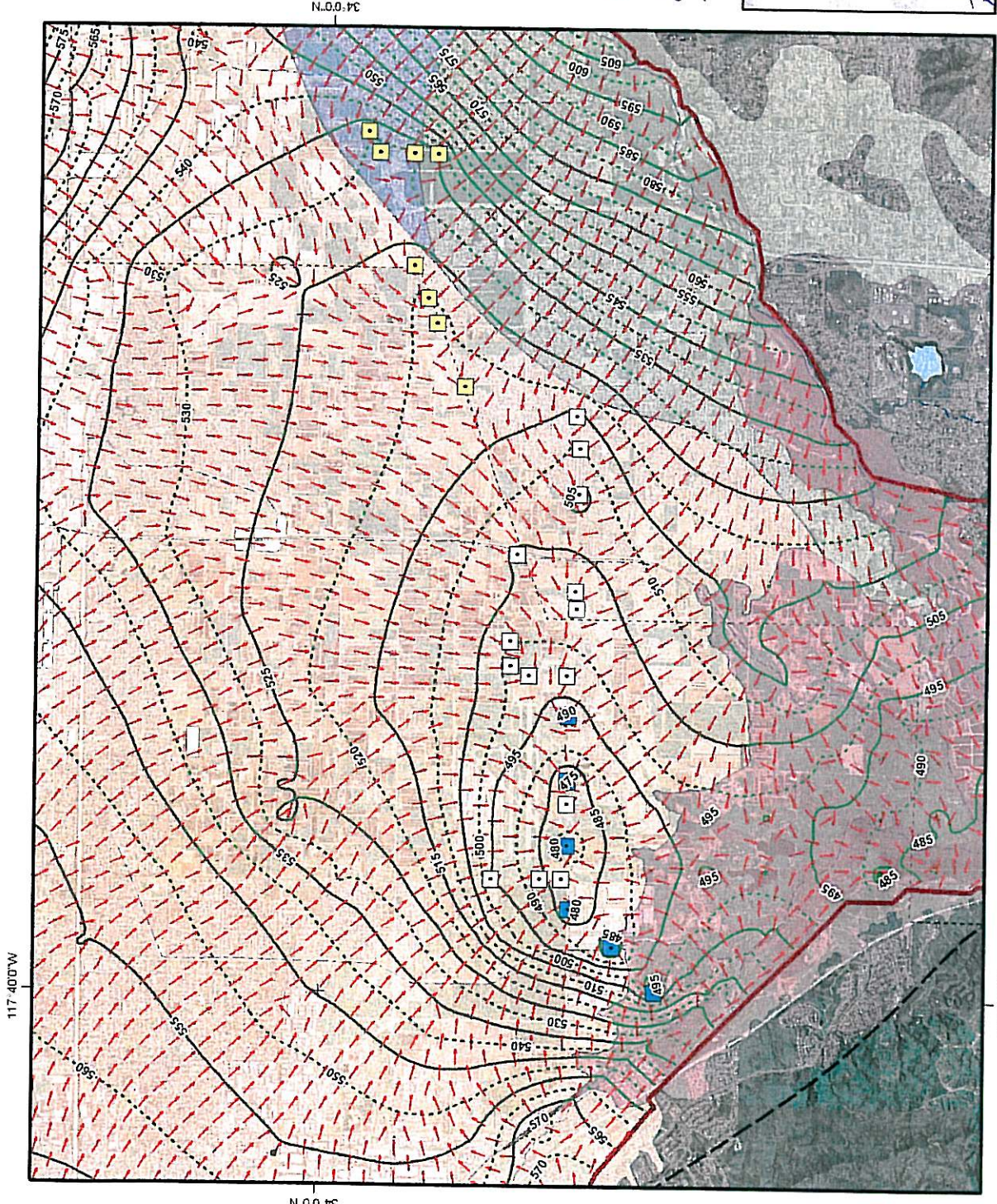
117-400W



Author: MLC
Date: 2008/2/11
File: Figure_15

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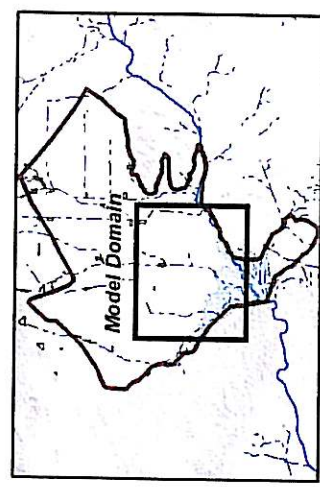
Chino Basin Dry-Year Yield Program Extension Impact Analysis



- 800- Groundwater Elevation Contours (feet above mean sea-level)
- 775- Existing Chino 1 Desalter Well
- Existing Chino 2 Desalter Well
- Proposed Chino Creek Well
- Groundwater Flow Direction

Other Features

- Groundwater Management Zone
 - Chino-East
 - Chino-South
 - Chino-North
 - Prado Basin
- MODFLOW Groundwater Flow Model Boundary
- Flood Control and Conservation Basins
- Streams, Rivers, and Flood Control Channels



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Date: 20081024
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THREE VALLEYS
WATER AGENCY

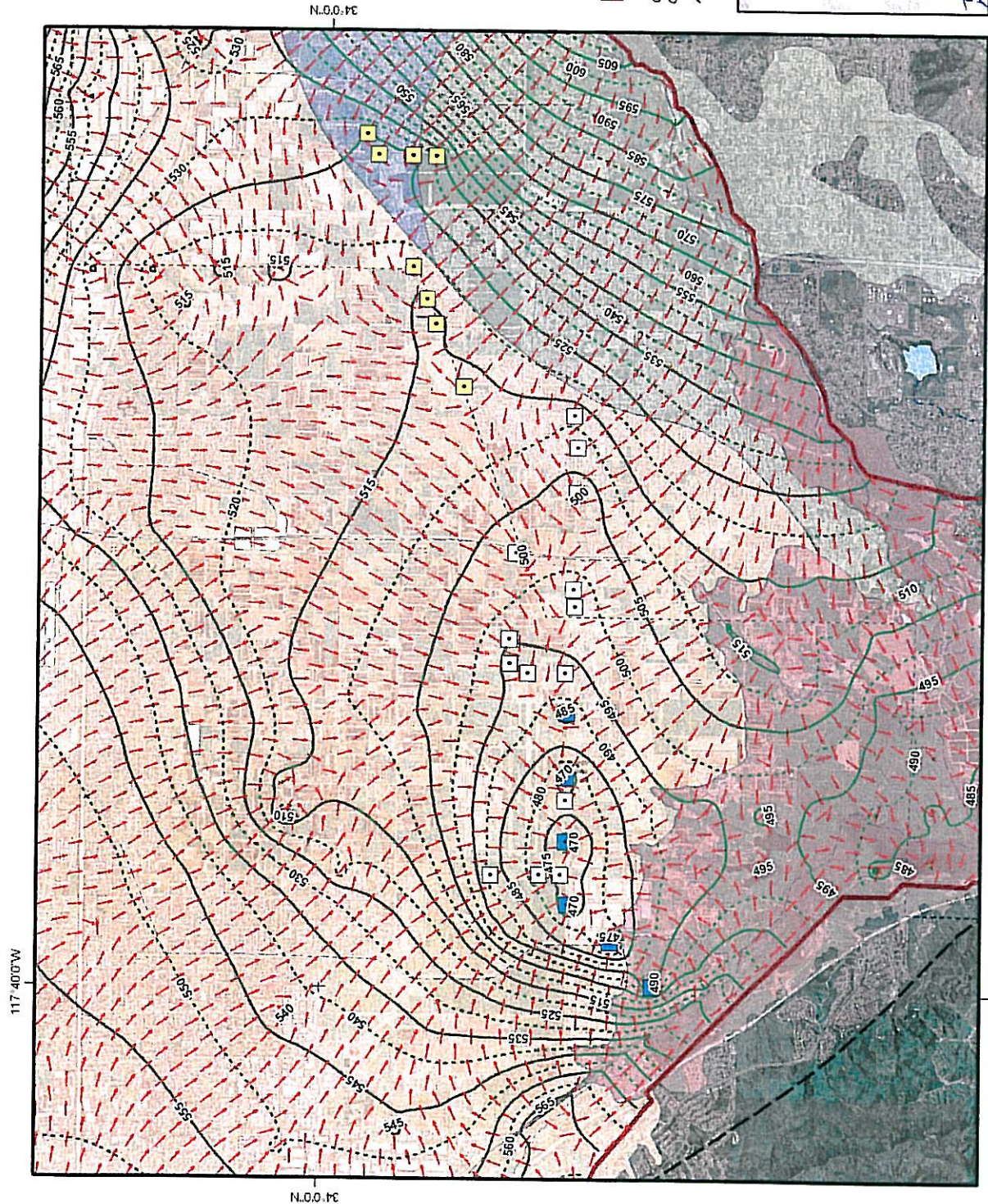
INLAND EMPIRE
WATER DISTRICT

Chino Basin Dry-Year Yield Program Expansion
Impact Analysis

0 1 2 Miles
0 1 2 3 KM

Groundwater Elevation Contours and Flow Direction in the Vicinity of the Desalters
Baseline Alternative in Layer 1 -- 2023

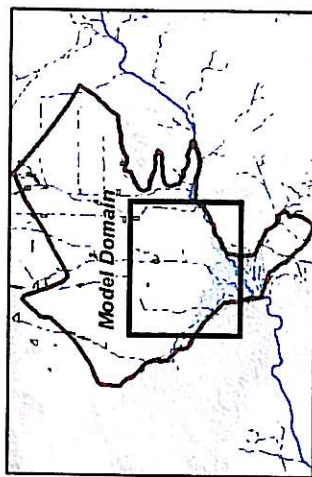
Figure 16a



- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino 1 Desalter Well
- Existing Chino 2 Desalter Well
- Proposed Chino Creek Well
- Groundwater Flow Direction

Other Features

- Groundwater Management Zone
 - Chino-East
 - Chino-South
 - Chino-North
 - Prado Basin
- MODFLOW Groundwater Flow Model Boundary
- Flood Control and Conservation Basins
- Streams, Rivers, and Flood Control Channels



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THREE VALLEYS
 WATER AGENCY

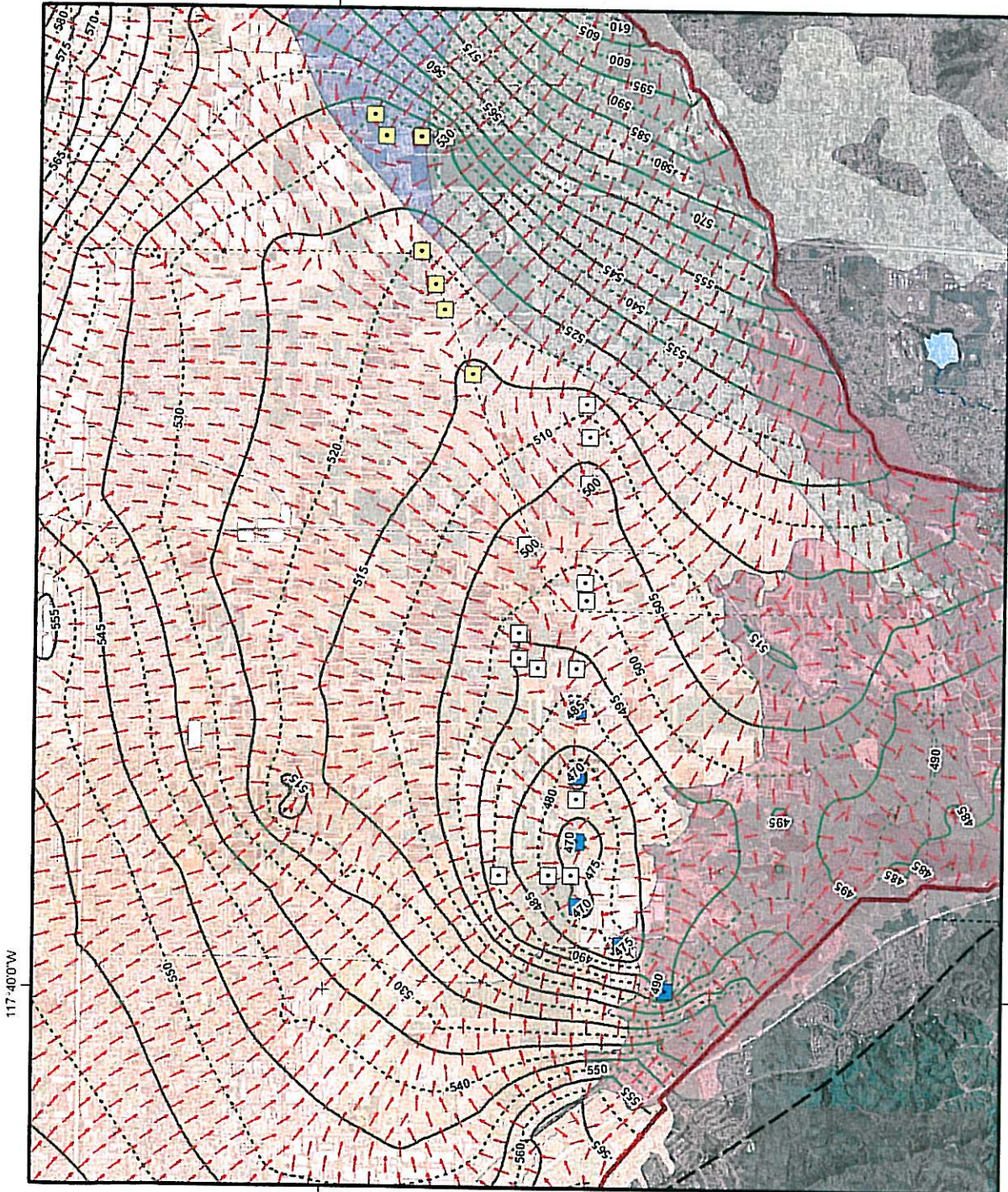
Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

Scale: 0 to 2 Miles / 0 to 3 KM

North Arrow

Groundwater Elevation Contours and Flow Direction in the Vicinity of the Desalters
 Alternative 1 in Layer 1 -- 2030

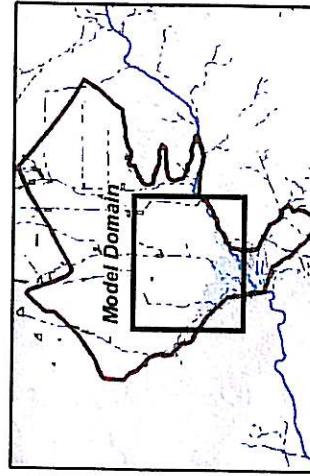
Figure 16b



- 800 ~ Groundwater Elevation Contours (feet above mean sea-level)
- 775 ~
- Existing Chino 1 Desalter Well
- Existing Chino 2 Desalter Well
- Proposed Chino Creek Well
- Groundwater Flow Direction

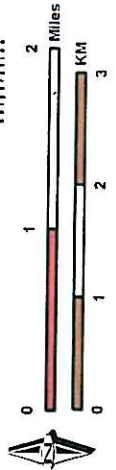
Other Features

- Groundwater Management Zone
 - Chino-East
 - Chino-South
 - Chino-North
 - Prado Basin
- MODFLOW Groundwater Flow Model Boundary
- Flood Control and Conservation Basins
- Streams, Rivers, and Flood Control Channels



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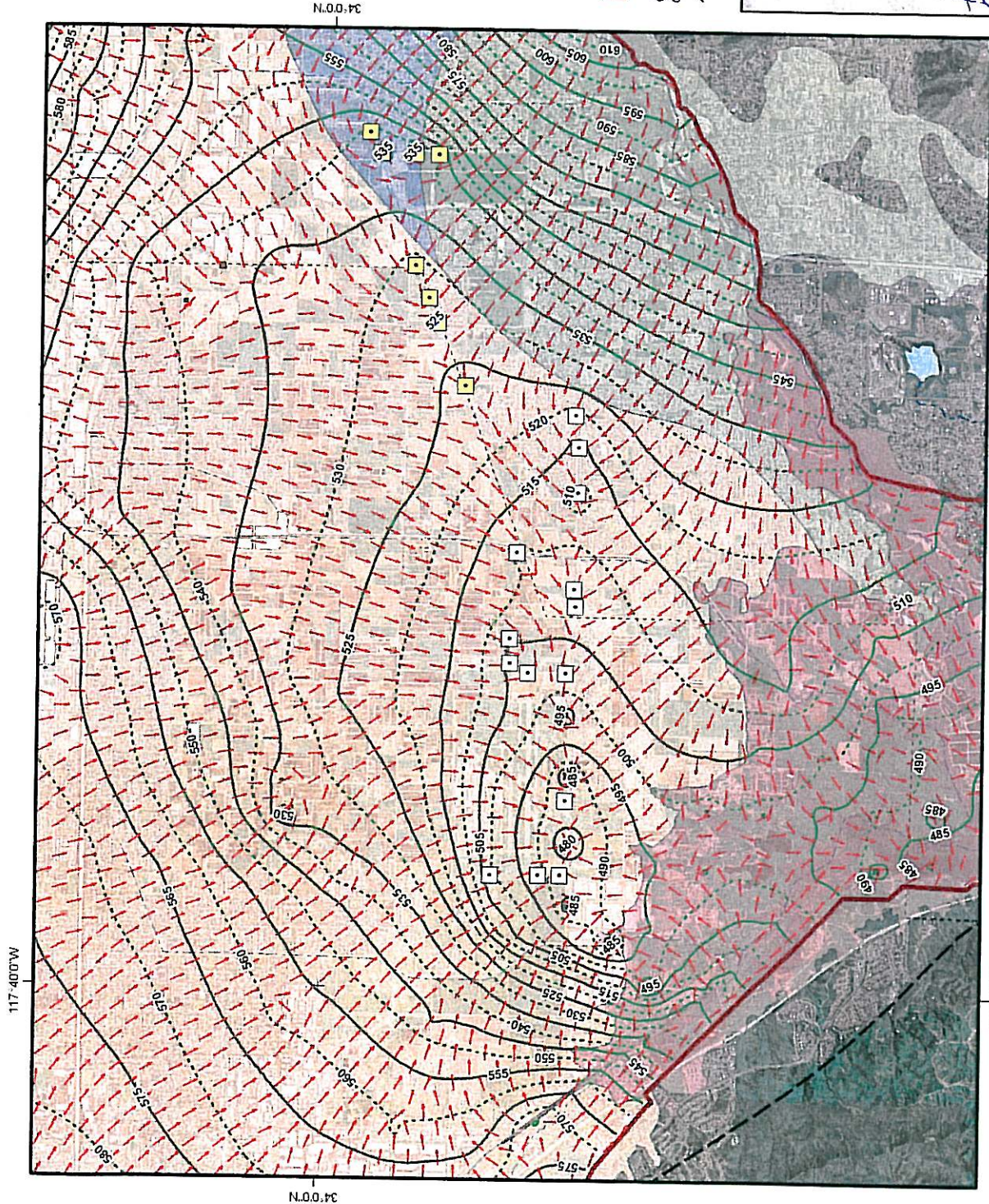
Author: MJC
 Date: 20081024
 File: Figure_16c.mxd



Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

Groundwater Elevation Contours and Flow Direction in the Vicinity of the Desalters
 Alternative 2 in Layer 1 -- 2035

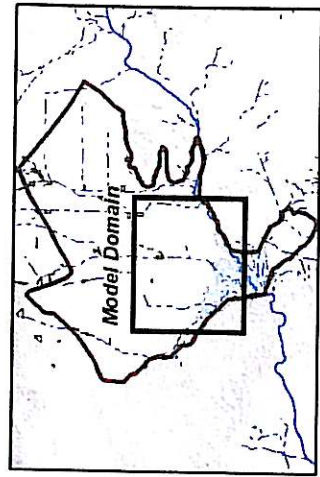
Figure 16c



- Groundwater Elevation Contours
(feet above mean sea-level)
- Existing Chino 1 Desalter Well
- Existing Chino 2 Desalter Well
- Proposed Chino Creek Well
- Groundwater Flow Direction

Other Features

- Groundwater Management Zone
 - Chino-East
 - Chino-South
 - Chino-North
 - Prado Basin
- MODFLOW Groundwater Flow Model Boundary
- Flood Control and Conservation Basins
- Streams, Rivers, and Flood Control Channels



Groundwater Elevation Contours and Flow Direction in the Vicinity of the Desalters
 Alternative 3 in Layer 1 -- 2025

Figure 16d

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CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION
 IMPACT ANALYSIS

VALLEYS WATER AGENCY

WATER DISTRICT

Imperial Empire

0 1 2 Miles
 0 1 2 3 KM

N



CHINO BASIN WATERMASTER

III. REPORTS / UPDATES

E. INLAND EMPIRE UTILITIES AGENCY

5. Quarterly Water Conservation Programs
6. Monthly Water Conservation Programs
7. Imported Water Deliveries/DYY Report
8. Recycled Water Newsletter
9. State and Federal Legislative Reports
10. Community Outreach/Public Relations Repo



CHINO BASIN WATERMASTER

ADVISORY COMMITTEE

May 28, 2009

AGENDA

INTERAGENCY WATER MANAGERS' REPORT

Chino Basin Watermaster

9641 San Bernardino Road

Rancho Cucamonga, CA 91730

Discussion Items:

- MWD Water Supply Allocation Update (oral)
- IEUA's Drought Plan Update (oral)
- Recycled Water Status Report (oral)
- Peace II CEQA Update (oral)

Written Items:

- Quarterly Water Conservation Programs
- Monthly Water Conservation Programs
- Imported Water Deliveries/DYY Performance Report
- Recycled Water Newsletter
- State and Federal Legislative Reports
- Community Outreach/Public Relations Report

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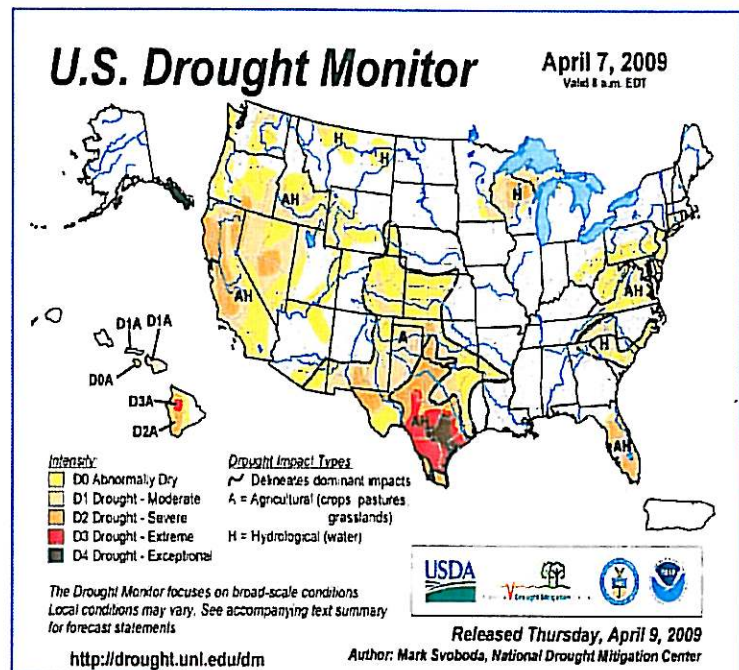
PLANNING & WATER RESOURCES UPDATE
3RD QUARTER ACTIVITIES
APRIL 2009

Planning and Water Resources Activities

HIGHLIGHTS

Water Supply Conditions

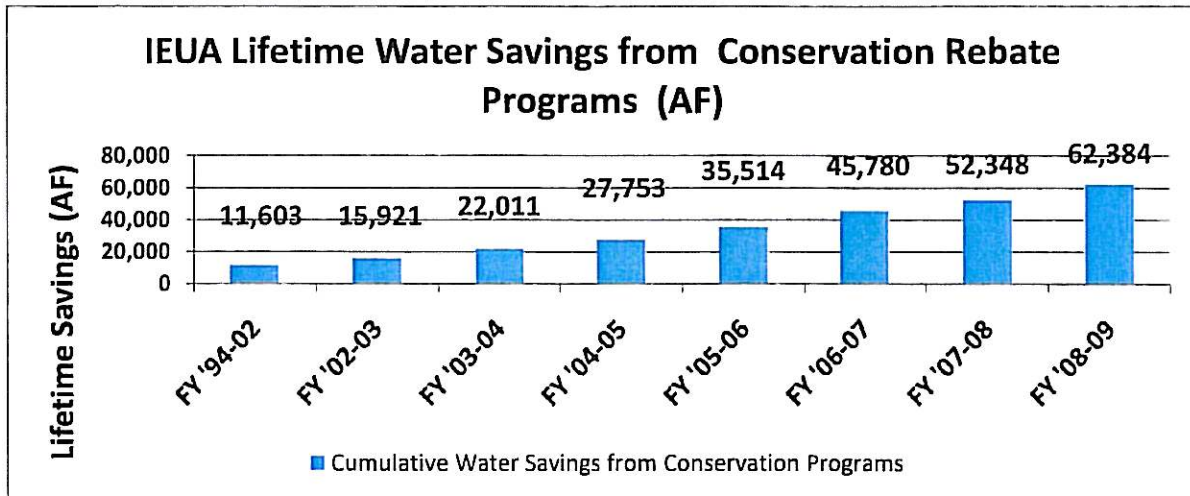
- On April 14th, MWD imposed a mandatory Level 2 Shortage (10% reduction of imported water) through its Water Supply Allocation Plan (WSAP). The WSAP will limit supplies to member agencies and impose penalty rates for any water use above the target levels. Funds collected by MWD through penalty rates would help finance conservation programs.
- On April 14th, MWD also adopted a 19.7% rate increase. The increase reflects MWD's loss of State Water Project (SWP) supplies and increased costs of alternative water supplies.
- On April 14th, DWR increased SWP Table A allocations from 20% to 30%. Final allocations will be announced in May.



Regional Drought Response

- On April 15th, IEUA's Board of Directors adopted an IEUA Drought Plan allocating the 10% mandatory reduction in MWD imported water deliveries. In preparation of the IEUA Drought Plan, IEUA in cooperation with its member agencies held over 55 meetings, workshops and presentations over the last 18 months.
- IEUA has also been working in partnership with the retail agencies to increase local supplies through implementation of the 3-year Recycled Water Business Plan (21,455 acre-feet connected as of March); through increasing production by the Chino Desalters (26,800 acre-feet in FY 2007/08); and through aggressive implementation of conservation rebate programs. IEUA was awarded \$1 million from DWR's Urban Drought Assistance Grant program to provide additional incentives for recycled water connections.

- **Chino Desalter**
 This fiscal year, the two desalters have produced 20,006.2 AF of water (of which 11,041.7 AF was delivered to IEUA retail agencies). The current production capacity is 24,600 AFY, and it will be expanded to approximately 40,000 AFY by 2010. The development of a Phase III Chino Desalter expansion plan and application to MWD for Local Resources Program funding is under discussion. MWD is currently funding \$4.5 million of the Phase 2 improvements.
- **DYY Expansion Program**
 The CEQA work for the proposed program was completed and adopted by the IEUA Board on December 17, 2008. After MWD approved the completion of the CEQA work, IEUA was fully reimbursed for the \$1.5 million feasibility study done to evaluate the possible expansion of the existing DYY Program. An implementation agreement must be negotiated with MWD by September 2009 for the Chino Desalter Authority to continue to receive \$4.5 million annual Local Resource Program rebate (25 years or \$112.5 million). To ensure this agreement is completed in time, three workgroups were formed to finalize the deal points for the expansion of the DYY Program: 1) Program Funding; 2) Chino Basin Groundwater Storage Rules; and 3) Program Operating and Pricing. As part of the DYY Expansion program, a Groundwater Storage Application was submitted to the Chino Basin Watermaster in March, 2009.
- **MWD Conservation Grant Program (ECP/ICP)**
 IEUA submitted three grant proposals on behalf of member agencies on March 16, 2009. IEUA submitted one for a residential water budget program; IEUA and Chino Basin Water Conservation District submitted one in partnership on a residential landscape audit program; and Monte Vista Water District prepared a proposal for the City of Montclair Redevelopment Agency Landscape Retrofit Pilot Project.
- **MWD Model Conservation Ordinance Requirement**
 On January 13, 2009, Metropolitan's Board authorized ordinance implementation criteria as a prerequisite to participation in three extraordinary conservation programs: Phase II Public Sector Program, Turf Removal Pilot Program, MWD Enhanced Conservation Grant Program. IEUA member agencies submitted documents for full or interim compliance with the requirement over the last quarter. All agencies continue to take steps in updating or revising existing ordinances for compliance with the requirement.
- **MWD Annual Programs Review/Advisory Committee (PAC)**
 MWD held a focus group meeting on Wednesday, March 25, 2009 to obtain consensus on program refinements and major incentive reductions that would directly impact the 2009-2010 conservation budget. There were approximately 13 member agencies in attendance and the following recommendations were developed, with apprehension: the implementation of two reservation systems in the CII Save-A-Buck and the residential So Cal WaterSmart Programs, in addition to many incentive reductions and elimination of several devices.
- **Water Savings due to Rebates and Incentives**
 As illustrated in the IEUA Lifetime Savings graph, the expected cumulative water savings over the lifetime of water conservation devices that have been applied in the service area has increased to 62,384 acre feet.



OTHER RELATED NEWS

▪ California's Imported Water Deliveries Limited by Drought and Delta Restrictions

- On February 27, Governor Schwarzenegger declared a drought state of emergency, directing state agencies to provide assistance to local communities and asking urban water users to reduce their water use by 20%.
- Spring storms in mid-February and March failed to lift California out of a third consecutive year of drought. In fact, 2007-2009 is expected to rank in the top 10 driest 3-year periods in the last century. MWD reported that, since 2006, it has drawn down water reserves that are set aside for dry cycles and emergencies by more than half, making it important to very carefully manage remaining supplies.
- A series of regulatory agency restrictions on Bay-Delta water exports are further limiting water deliveries to farms and urban areas. A federal court ruling to protect Delta smelt has reduced SWP pumping capacity by about 30%. A forthcoming Biological Opinion from the National Marine Fisheries Service to protect salmon and steelhead trout may further reduce pumping capability from the Delta.
- Total precipitation and snowpack remain at below normal levels for the year. As of April 1, 2009, statewide hydrologic conditions were as follows: precipitation, 80% of average; snowpack water content, 81% of normal; runoff, 55 percent of average; and reservoir storage, 80 percent of average. Lake Oroville, a principal water storage reservoir, remains 34% below normal levels.
- In the summer of 2008, DWR proposed to establish a Drought Water Bank to facilitate water transfers. On January 13, 2009, DWR released a request to agencies who may be interested in selling water to submit their proposals.
- On January 29, 2009, the Delta Vision Committee issued a final report with the primary goal of managing the Delta over the long term to restore and maintain identified functions and values that are determined to be important to the environmental quality of the Delta and the economic and social well being of the people of the state.
- The Public Review Draft of California's Water Plan Update 2009 is now available online for review and comment. Workshops will be held over the spring. Comments are due by June 5, 2009.
- DWR is currently evaluating the environmental impacts of the Bay Delta Conservation Plan (BDCP). The BDCP's purpose is to provide for the conservation of at-risk species in the Delta

and improve its reliability as the hub of the state's water supply system. An EIR/EIS for BDCP is being prepared. The draft EIR/EIS is expected to be ready for public review and comment by late 2009/early 2010.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA ACTIVITIES

▪ MWD Water Deliveries

For the first three months of calendar year 2009, IEUA has purchased 2,085.1 AF (3%) of its Tier 1 limit of 59,752 AF. For fiscal year 2008/09 IEUA has purchased 34,464.2 AF of imported water (see attached graphs).

▪ DYY Implementation

To date, through the DYY twelve month period (May 2008 – April 2009) IEUA DYY-participating retail agencies are on track to meet their DYY performance targets. IEUA DYY participants have pumped 28,538.4 AF (92% of IEUA's obligation of 31,000 AF) from the MWD groundwater storage account. MWD imported water deliveries have been reduced by 26,104.4 AF (84% of IEUA's obligation of 31,000 AF).

▪ MWD Integrated Water Resources Plan (IRP)

The IRP technical workgroups continue to meet on a monthly basis to review and edit issue papers, as well as continue modeling efforts. MWD anticipates issue papers for each of the six technical workgroups (groundwater, recycled water, conservation, stormwater/urban runoff, graywater and seawater desalination) to be complete by the end of fiscal year 2008/09. The final IRP is expected to be adopted by MWD's Board of Directors by the end of calendar year 2009.

STATE ACTIVITIES

▪ Budget Crisis Stalls Infrastructure Projects

A December 18, 2009 letter from the State Department of Finance says all disbursements from the state's Pooled Money Investment Account (AB55 loans) are being frozen to preserve cash needed for day-to-day operation of state government. The freeze will continue until the budget crisis is resolved. In addition, the State Water Resources Control Board issued a notice saying invoices for all projects funded by Proposition 13, 40, 50, and 84 are being put on hold pending further notice. No new grant agreements will be signed until action is taken on the budget.

▪ AB 1420 Compliance

IEUA staff has been working with DWR and member agencies to develop fair and consistent guidelines for compliance with AB 1420 now and in the future. IEUA staff is currently working with member agencies to develop a Regional BMP Compliance Plan with the anticipated completion of the plan by July 2009.

▪ California Urban Water Conservation Council "BMP" Revisions

The Council is continuing to work on several approaches for calculating gallons per capita day and anticipates having several recommendations for members at the June Plenary Meeting. Over the last quarter, IEUA staff worked with Steering Committee Members to develop a united message to the Department of Water Resources on AB 1420 compliance and inclusion of the revised BMPs into law.

▪ **20x2020 Water Conservation Initiatives**

IEUA staff has been actively participating in local technical workgroups that are developing legislative language and creating methodology framework for calculating gallons per capita day (GPCD). The intent of the workgroups is to support flexible language and framework that could be incorporated into one of three competing water conservation “spot” bills.

▪ **State Water Resources Control Board (SWRCB) Draft Water Recycling Policy/Proposed Statewide General Permit**

The Statewide Water Recycling Policy was adopted by the SWRCB on February 3, 2009. The SWRCB is now developing a statewide General Permit for Landscape Irrigation Uses of Recycled Water. A draft General Permit and draft Initial Study/Mitigated Negative Declaration were posted for public comment on 3/29/09 and the period for submitting written public comments closed on 4/27/09. The SWRCB is expected to announce the hearing date shortly. The California Water Code requires the adoption of a general permit by July 31, 2009.

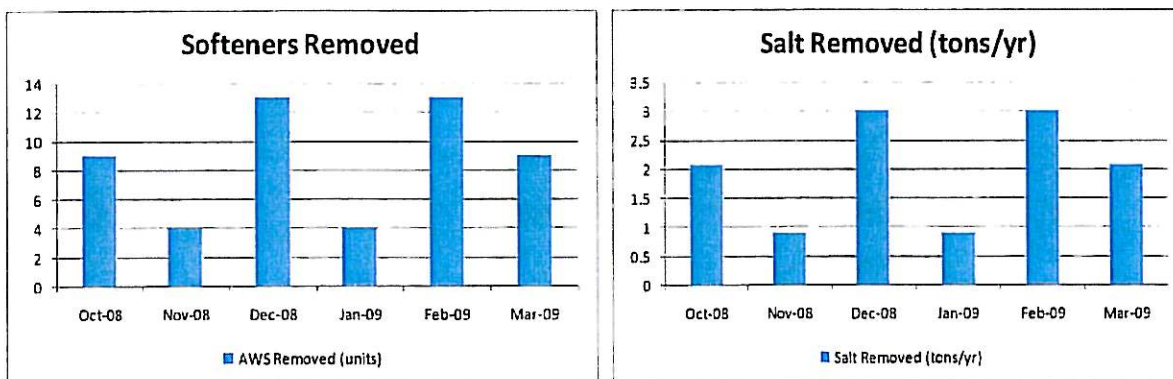
▪ **Climate Change/AB 32 Implementation**

In December, the California Air Resources Board (CARB) approved a strategic plan for the implementation of AB 32, the California Climate Change Act of 2006. It specifies the actions needed to reduce the state’s GHG emissions by 169 million metric tons over the next twelve years – a 30% reduction. The plan recommends the creation of a cap and trade program for 85% of the state’s GHG emissions and calls for raising, from 20% to 30%, the amount of renewable energy that must be included in each utility’s generation portfolio. CARB staff is currently developing the elements of the cap and trade program, including what industry sectors will be regulated. IEUA is participating in the California Wastewater Climate Change Group (CWCCG), a coalition of forty agencies that represents the wastewater industry. CWCCG met with CARB staff on March 18 to discuss concerns with being regulated under a declining cap program. CARB held a workshop on 4/10/09 to address biomass issues in a cap and trade program.

REGIONAL PLANNING ACTIVITIES

▪ **Pilot Automatic Water Softener Removal Rebate Program Update**

The Water Softener Rebate Program, which was launched by IEUA’s Pretreatment Program in mid-September, has removed 52 automatic water softeners (AWS) and 12 tons of salt (per year). IEUA received 111 inquires about the program in response to television, radio, and newspaper advertising. In January, water bill inserts were started.



▪ **Building Activity Report & Growth Forecast**

As expected, the downturn in the state's economy has had a significant impact on building activity within IEUA's service area. For fiscal year 2008/09, IEUA used a conservative estimate of 3,350 EDUs in the budget. Through February, building activity is only at 890 EDU's, generating just over \$4 million for the Regional Capital Fund. IEUA retail agency FY 2008/09's Ten-Year Growth Forecasts show just over 60,000 EDUs being added to the system. For the next 3-4 years the forecasts trend around 3,000 to 4,000 EDU's. The latter years of the Ten-Year Growth Forecast shows trends closer to what was seen in the early 2000's.

▪ **Chino Basin Groundwater Recharge Master Plan Update**

The Chino Basin Watermaster (Watermaster) is required, pursuant to the Peace II Agreement and the December 21, 2007 Court Order approving the Peace II Agreement, to prepare an update of the Chino Basin Groundwater Recharge Master Plan by July 2010. The Plan will address the challenges attributable to projected changes in project demands, Basin Re-operation, declines in Safe Yield, and opportunities for new sources of recharge including improvements to existing facilities and development and/or enhancement of supplemental recharge (including recycled water, storm water, new wells and low impact development strategies). During the month of March, the first of a series of workshops was held at the offices of the Watermaster. During the next 16 months (March 2009 – June 2010), a total of eleven workshops are scheduled. These workshops are intended to serve as a forum for the Watermaster to present and facilitate public discussion of Groundwater Recharge Master Plan Technical Memorandums, as they become available. The final version of each Technical Memorandum will be incorporated into the appropriate section of the Groundwater Recharge Master Plan.

▪ **One Water One Watershed (OWOW) IRWMP Planning Process**

The final OWOW Plan was completed in January 2009 and unveiled at a conference. SAWPA plans to call for projects in spring, 2009, which should also correspond with the release of the DWR IRWMP grant guidelines. IEUA was leading the "Climate Change" pillar.

▪ **Regulatory Compliance Developments**

- IEUA obtained the final regulatory permits necessary to allow bidding and construction of the 1,630 Northeast recycled water pipeline and turnout facilities to deliver recycled water into the San Sevaine and Victoria recharge basins. A separate permit was obtained to construct monitoring wells and lysimeters at the recharge basins. Documentation was provided to the Flood Control District showing that regulatory approvals have been obtained from the US Army Corps of Engineers, US Fish & Wildlife Service, California Department of Fish and Game, and California Regional Water Quality Control Board-Santa Ana Region. In response, the Flood Control District issued a Permit to Construct and Operate the recycled water facilities at those basins. IEUA is now working on obtaining similar authorization to improve the berm and control structures at San Sevaine Basin No. 5 and to obtain a long-term permit for ongoing O&M activities at all the recharge basins.
- IEUA submitted CEQA documentation to the State Board environmental review staff for the RP-1 Dewatering Facility Expansion project and received comments back in March 2009. The State Board CEQA staff agreed with IEUA's determination that a Categorical Exemption was the appropriate CEQA document and requested minor additional information. The Dewatering Facility Expansion is a \$26 million project for which IEUA has applied for economic stimulus funding through the US EPA/State Water Resources Control Board.

▪ **Planning Model Updates**

The Modeling Team performed several model runs on wastewater routing alternatives and presented recommendations to staff on the future use of the Montclair Diversion and Whispering Lakes Pump Station. In January, the Optimization Model received an Engineering Research Achievement Award from the California Water Environment Association.

WATER CONSERVATION ACTIVITIES

▪ **Evolving Water Conservation Legislation**

IEUA is working directly with stakeholders and the legislature on shaping the framework for proposed water conservation bills. There are currently three water conservation bills pending which lay out different approaches to achieve a 20% reduction in urban per capita water use in California by 2020 (consistent with the Governor's call for 20% by 2020). All three bills being extensively revised, but as currently drafted, they do the following:

- **AB 49 (Feuer/Huffman)** would require DWR to establish the methodology for retail agencies to achieve the 20% reduction;
- **SB 261 (Dutton/Ducheny/Hollingsworth)** currently targets residential sector reduction, and features a regional coordination to achieve the 20% reduction;
- **SB 460 (Wolk)** requires local agencies, both urban and agricultural, to develop a long term plan for achieving 20% reduction by 2020.

▪ **Inland Empire Landscape Alliance**

The Inland Empire Landscape Alliance Advisory Board endorsed the Technical Committee's completed regional model "Chino Basin Water Efficient Landscape Ordinance" on February 12, 2009. Once the ordinance was endorsed, the Technical Committee began work on developing support materials, which is expected to continue through July. Monthly educational workshops for landscape professionals and residents were held in conjunction with the Landscape Alliance by Greenlee Nursery, and two well attended Water Site Awareness Tours of Best Management Practices for planning commissioners and senior staff were held in Rancho Cucamonga and Chino.

▪ **Phase III Landscape Audit Program**

CBWCD has completed 134 landscape audits with a potential savings of 706 acre feet per year since the program began in January 2009. There are currently 9 sites scheduled to be audited and 8 sites pending to be scheduled. Presently there are 200 Release Forms waiting to be returned and processed. CBWCD has been hosting several MWD California Friendly Landscape Training Class series over the last quarter for residential and professional customers.

▪ **Garden In Every School**

Garden designs and irrigation plans for the schools participating in the 2008/09 Garden in Every School program have been completed. Sites have been cleared and the irrigation systems will be installed by the school maintenance districts and parent volunteers this spring.

▪ **Ontario Cares Program**

To date, eight California-Friendly site conversions have been completed, with twelve sites in some stage of conversion. IEUA executed an MOU agreement with the City of Ontario in January 2009 to provide up front funding for faster completion of the site conversions. In addition, IEUA also

executed a contract with Dudek and Associates to complete a California-Friendly bidding template. Program is on schedule for completion in July 2009.

▪ **Water Wise Residential Landscape Program**

109 conversions have been completed, with the cumulative area of landscape retrofitted since program inception being 136,873 sq. ft. This represents an annual water savings of 19 AFY. The program has been put on hold as of December 31 and is awaiting the initiation of the new MWD Turf Buy Back Program this spring. Approximately 30 applications are still in the process of being converted and should be completed by June 30th.

▪ **Residential Rebate Program**

The Residential Rebate Program began in FY 02/03. On July 1, 2008, the program was transitioned to an MWD region-wide vendor, SoCal WaterSmart. The following is a list of residential rebate activity for FY 08/09 thru March 2009:

<i>Device Name</i>	<i># of Rebates Issued</i>	<i>Cumulative Total # Installed Since FY 02/03</i>
Ultra Low-Flush and High Efficiency Toilets	1,587	13,656
High-Efficiency Clothes Washers	778	10,420
Weather-Based Irrigation Controllers	9	398
Rotating Nozzles for Pop-Up Spray Heads	21	2,457 (nozzles)
Synthetic Turf Retrofit	90	71,054 sf
Water-Wise Residential Landscape Retrofit Program	89	136,873 sf

▪ **CII Save-A-Buck**

For fiscal year 08/09, to date there have been 1,185 devices rebated. From program inception (FY 00/01) to date, a total of 7,840 devices have been rebated, representing a lifetime savings of almost 20,246 AF.

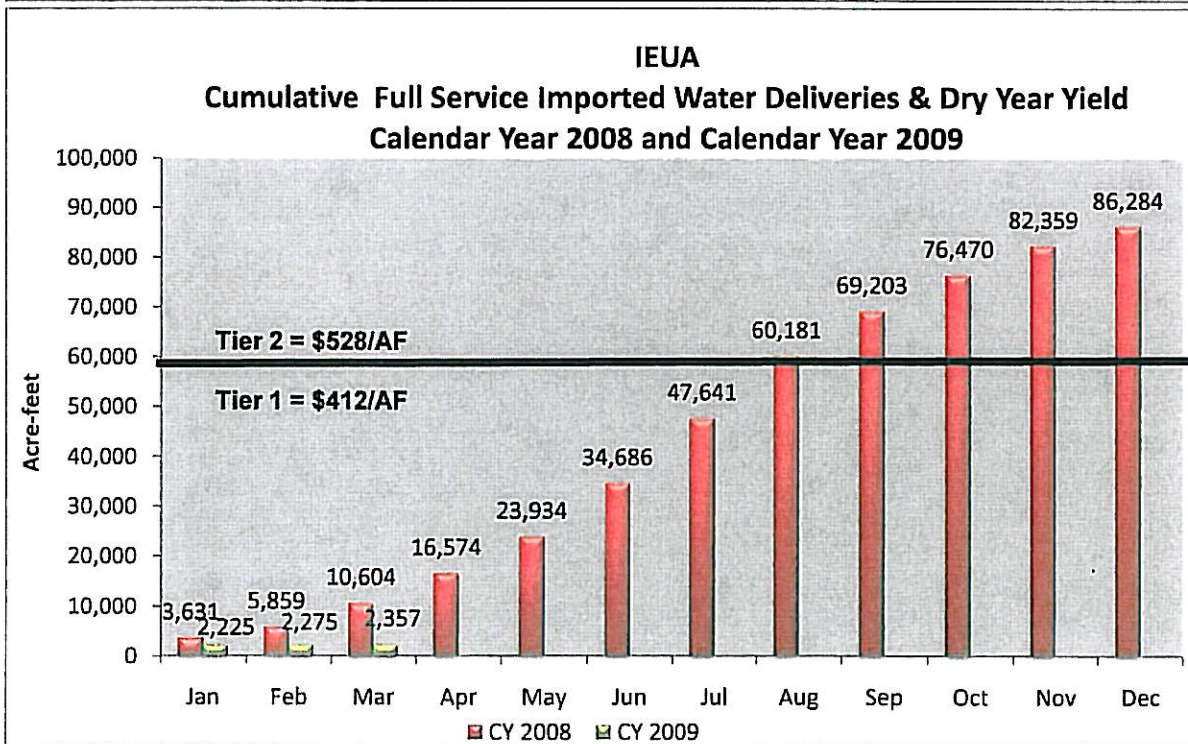
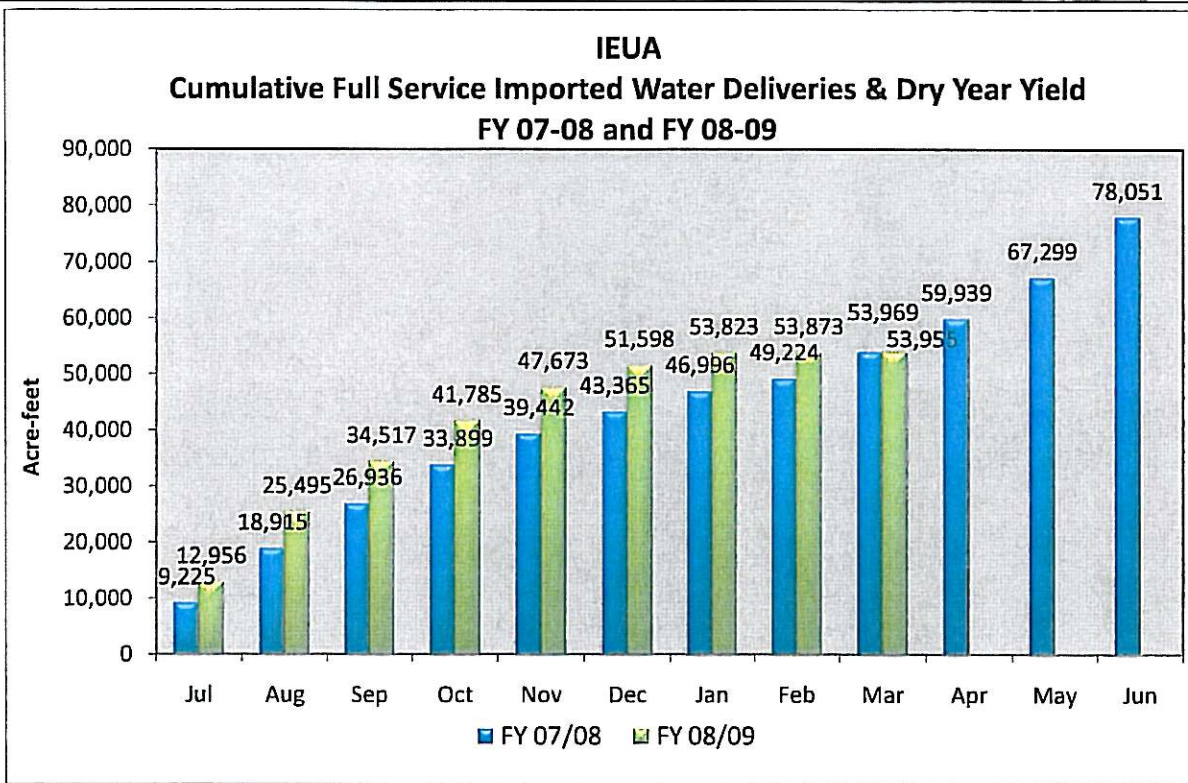
▪ **Multi-Family Direct Installation Program**

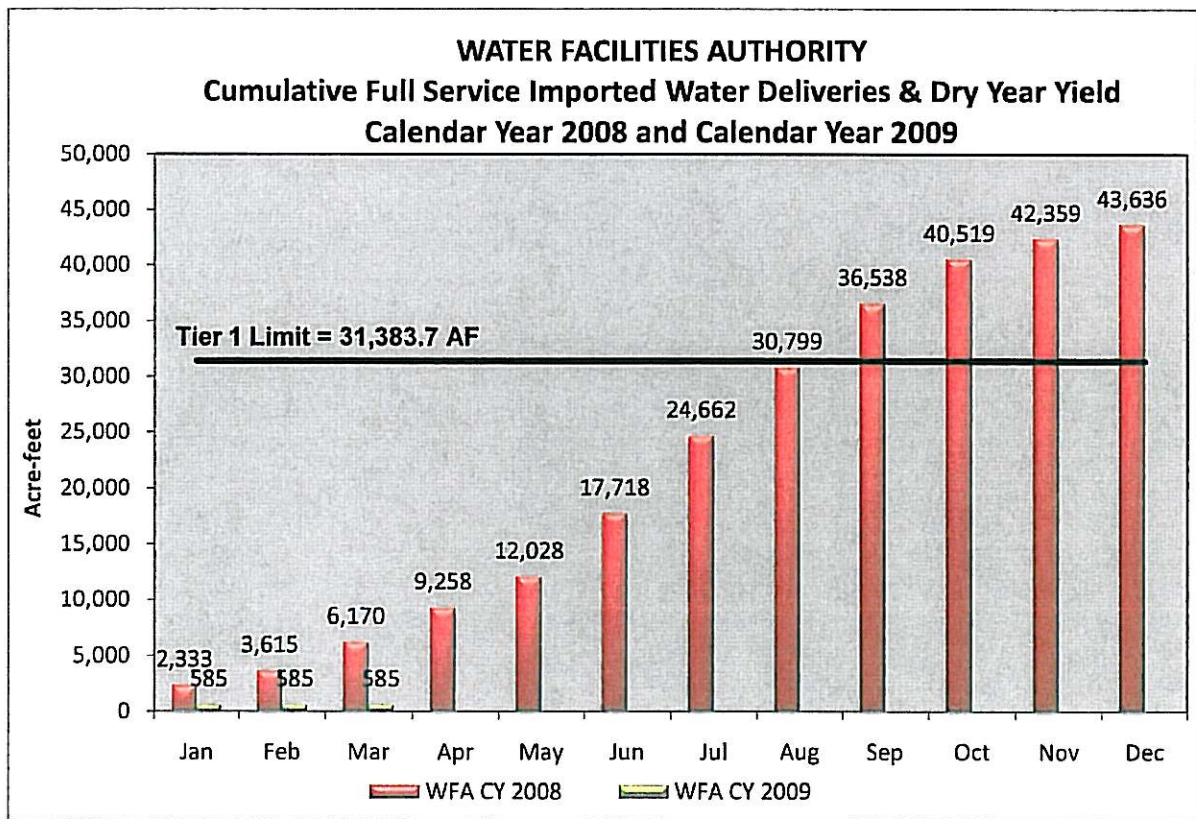
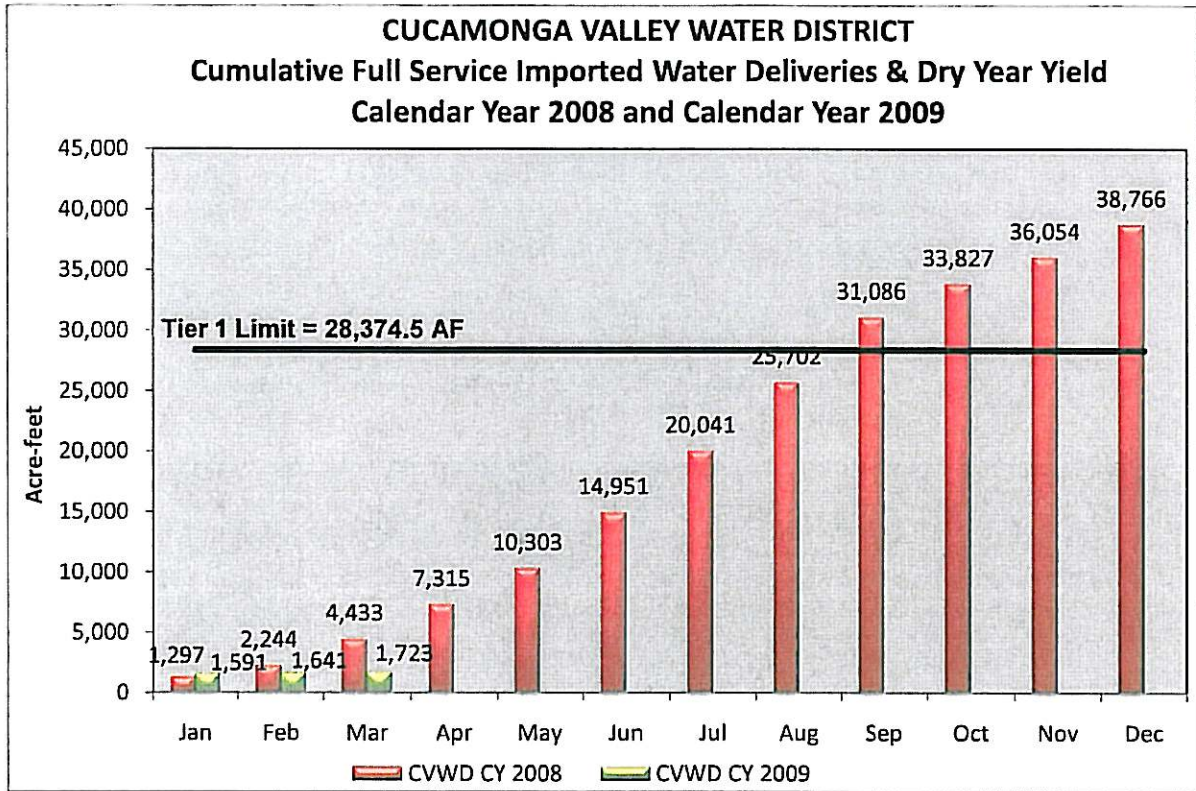
The Multi-Family Direct Installation Program began in October 2006 through a funding partnership with DWR, MWD and IEUA. To date, 16,027 toilet retrofits have been completed. The program was place on hold in January 2009 due to the State budget crisis and suspension of bond funding. The program is anticipated to resume activities by the end of the year.

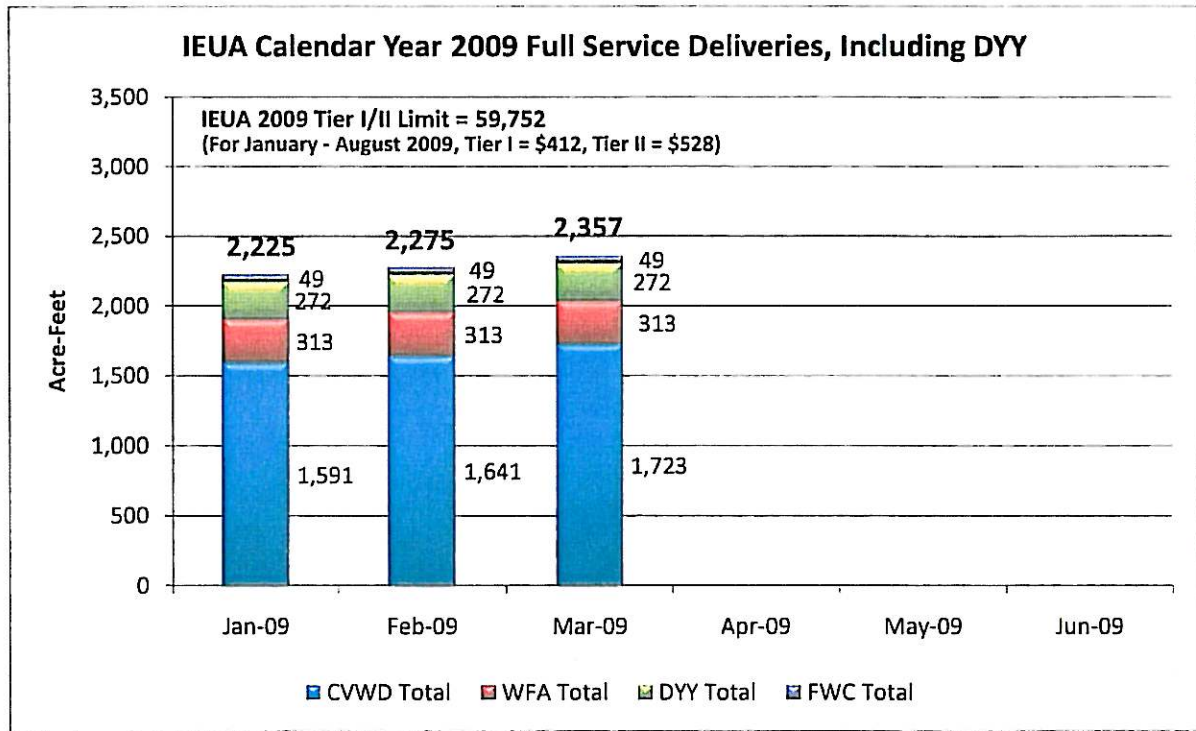
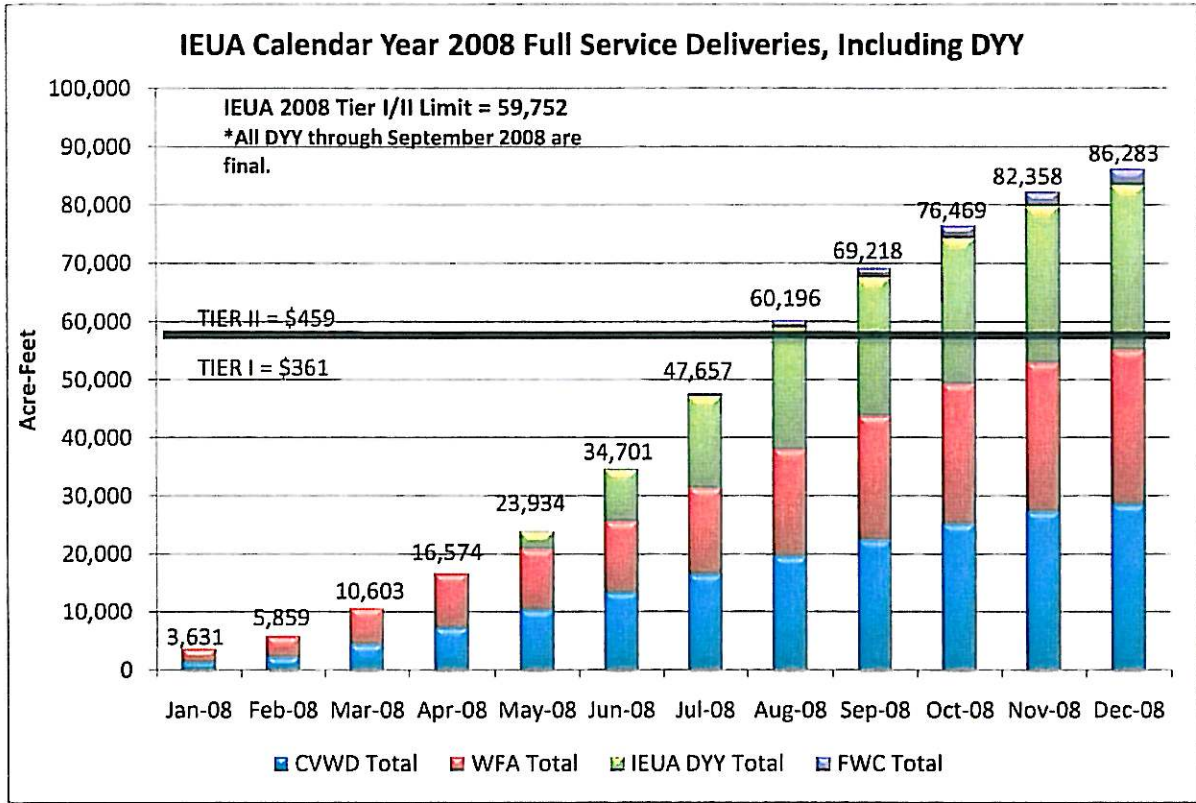
▪ **National Theatre For Children**

To date, there were 27 schools scheduled that received 54 performances over the fall and early spring time period. There are 16 remaining schools scheduled to receive 35 performances through the end of the fiscal year. Participating schools are located in service areas of the Cities of Chino Hills, Ontario, and Upland, Cucamonga Valley Water District, Fontana Water Company, and Monte Vista Water District.

ATTACHMENT: IMPORTED WATER DELIVERIES







2008 Imported Water Sales	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Water Facilities Authority													
Direct Deliveries	2,333	1,282	2,555	3,088	1,332	1,682	2,730	3,450	2,913	2,836	1,444	1,060	26,705
Dry Year Yield					1,438	4,008	4,214	2,686	2,827	1,145	395	218	16,931
Sub-Total/	2,333	1,282	2,555	3,088	2,770	5,690	6,944	6,136	5,740	3,964	1,839	1,278	43,636
Cucamonga Valley Water District													
Direct Deliveries	1,297	947	2,189	2,883	2,988	3,046	3,074	3,129	2,857	2,741	2,182	1,213	28,546
Dry Year Yield					1,603	2,016	2,532	2,527	0	44	1,499	1,131	11,352
Sub-Total/	1,297	947	2,189	2,883	4,591	5,062	5,606	5,656	2,857	2,785	3,681	2,344	39,898
Fontana Water Company													
Direct Deliveries	0	0	0	0	0	15	406	747	426	501	369	303	2,767
Sub-Total/	0	0	0	0	0	15	406	747	426	501	369	303	2,767
Inland Empire Utilities Agency													
Direct Deliveries	3,631	2,229	4,744	5,971	4,320	4,743	6,210	7,326	6,196	6,078	3,995	2,576	58,018
Dry Year Yield	0	0	0	0	3,041	6,024	6,746	5,213	2,827	1,172	1,894	1,349	28,266
TOTAL	3,631	2,229	4,744	5,971	7,360	10,767	12,956	12,539	9,023	7,250	5,889	3,925	86,284

2009 Imported Water Sales	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Water Facilities Authority													
Direct Deliveries	312	0	0										312
Dry Year Yield	272	0	0										272
<i>Sub-Total</i>	584	0	0	0	0	0	0	0	0	0	0	0	584
Cucomonga Valley Water District													
Direct Deliveries	1,591	50	82										1,723
Dry Year Yield	0	0	0										0
<i>Sub-Total</i>	1,591	50	82	0	0	0	0	0	0	0	0	0	1,723
Fontana Water Company													
Direct Deliveries	49	0	0										49
<i>Sub-Total</i>	49	0	0	0	0	0	0	0	0	0	0	0	49
Inland Empire Utilities Agency													
Direct Deliveries	1,952	50	82										2,084
Dry Year Yield	272	0	0										272
TOTAL	2,224	50	82	0	0	0	0	0	0	0	0	0	2,356

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Water Resources and Conservation Programs

Monthly Report

APRIL 2009 (REPORTING MARCH 2009 DATA)

Highlights

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Links

Department of Water Resources.....
<http://www.water.ca.gov/>

Metropolitan Water District
<http://mwdh2o.com/>

Water conservation ...
<http://www.bewaterwise.com>

IEUA.....
<http://www.ieua.org>

California Water Supply News



California remains in a third consecutive year of drought despite spring storms. The Department of Water Resources (DWR) increased the 2009 State Water Project allocation from 20% (in March) to 30% (in April). The final allocation will be set in May and, if it remains at 30%, it will match the lowest in State Water Project history.

DWR reported that 20 agencies in California have implemented some form of mandatory water conservation measures and that voluntary measures have been adopted by 59 agencies.

On April 15, Interior Secretary Ken Salazar announced that the Obama administration has earmarked \$260 million for California water projects and drought assistance through the American Recovery and Reinvestment Act of 2009.

The Public Review Draft of DWR's California's Water Plan Update 2009 is now available online for review and comment (www.waterplan.water.ca.gov). Public comment workshops will be held over the spring. Comments are due by June 5, 2009.

DWR is preparing an environmental document (EIR/EIS) for the Bay Delta Conservation Plan (BDCP). The draft document is expected to be ready for public review and comment by late 2009/early 2010. The purpose of the BDCP is to conserve at-risk species in the Delta and improve its reliability as the hub of the state's water supply system.

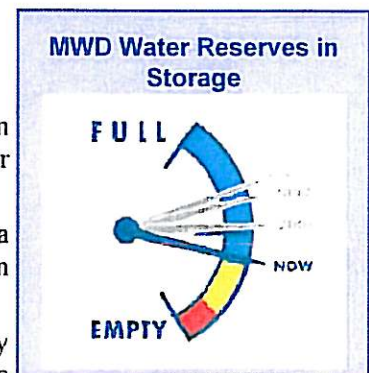
MWD and IEUA Drought Actions

On April 14th, MWD approved a drought allocation plan with a 10% mandatory reduction in imported water deliveries to its member agencies.

On April 15th, IEUA's Board of Directors adopted a Drought Plan, allocating the 10% mandatory reduction in MWD imported water deliveries.

The cost of purchasing imported water from MWD by IEUA and its retail agencies is expected to increase significantly during the next few years. On April 14th, MWD approved an imported water rate increase of 19.7% effective September 1, 2009.

IEUA is proactively working with retail agencies to develop a Best Management Practices (BMP) compliance plan for meeting AB1420 requirements. IEUA currently meets the compliance requirements for wholesale agencies.



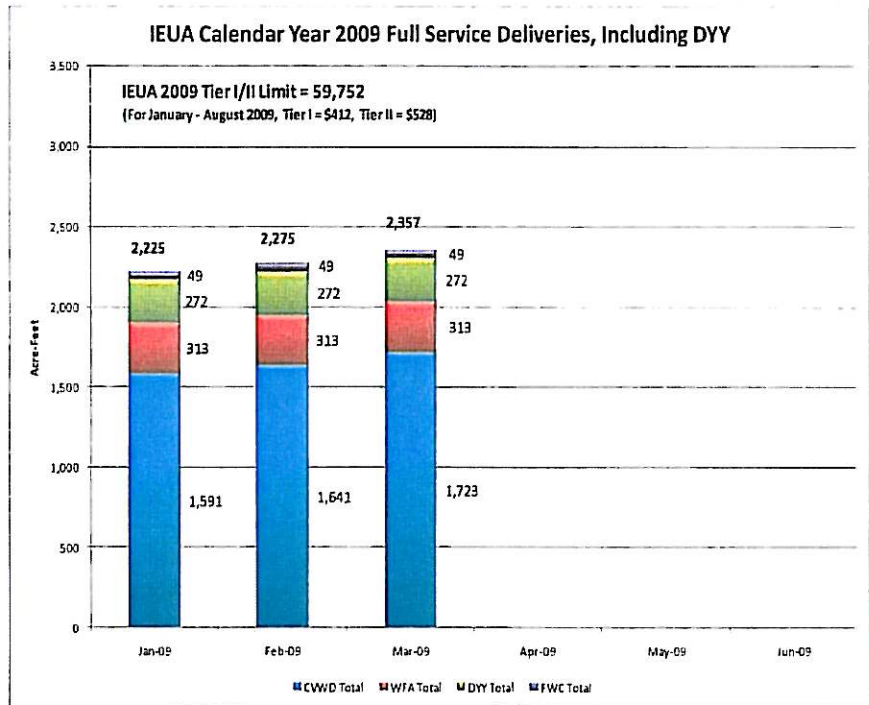
IEUA Water Supply Programs

Imported Water Deliveries

For the month of March, IEUA purchased 82.1 acre feet (AF) of Tier I water, increasing the cumulative total for the calendar year to 2,085.1 AF (see graph below).

Dry Year Yield (DYY) Program

IEUA retail agencies are on track to meet their DYY Program obligations for the year ending in April 2009. DYY participants have certified they have pumped 28,538.4 AF (92% of IEUA's obligation of 31,000 AF) from the groundwater storage account. MWD imported water deliveries have been reduced by 26,104.4 AF (84% of IEUA's obligation of 31,000 AF). The March MWD invoice to IEUA contained 3,185.1 AF in DYY certifications.



DYY Program Expansion

Three workgroups were formed to develop deal points for the expansion of the DYY Program: (1) Program Funding; (2) Chino Basin Groundwater Storage Rules; and (3) Program Operating and Pricing. DYY participants have until September 2009 to negotiate a final agreement with MWD for the expansion of the program. As part of the DYY Expansion program, a Groundwater Storage Application was submitted to the Chino Basin Watermaster in March, 2009.

Recycled Water Program

IEUA is implementing a 3-Year Business Plan that will increase recycled water connected capacity to 50,000 AFY by 2010. As of March, there was 21,455 AFY of connected capacity, with another 7,145 AFY expected over the next 6 months.



Conservation Programs

MWD Conservation Ordinance Requirement

MWD staff provided approvals for the cities of Chino Hills, Upland, Ontario, Monte Vista Water District, Fontana Water Company, and San Antonio Water Company, finding that their existing ordinances meet MWD's requirements. The City of Chino and Cucamonga Valley Water District received an acceptance of their Written Pledge letters, with ordinances to be in place by June 30th.



All IEUA member agencies are eligible for funds from the Public Sector Program, MWD Enhanced Conservation Grant Program, and MWD's Pilot Turf Replacement Program when it becomes available.

MWD Annual Programs Review and Advisory Committee (PAC)

MWD held a focus group meeting on Wednesday, March 25, 2009 to obtain consensus on program refinements and reductions to cope with the \$10 million reduction in MWD's budget for major conservation incentive programs. There were approximately 13 member agencies in attendance. It was determined that reservation systems will be implemented in both the CII Save-A-Buck Program and the residential So Cal WaterSmart Program, although member agencies expressed concern about inadequate time for notice and transition. In addition, recommendations were made for specific incentive reductions and elimination of several devices.



Inland Empire Landscape Alliance

The Inland Empire Landscape Alliance technical committee has begun work to develop support tools for the implementation of the regional model landscape ordinance. The next Advisory Board meeting will be held on May 14th at 3:00 p.m. in IEUA's Board Room.

Conservation Legislation

IEUA is working directly with stakeholders and the legislature on shaping the framework for proposed water conservation bills. There are currently three water conservation bills pending which lay out different approaches to achieve a 20% reduction in urban per capita water use in California by 2020 (consistent with the Governor's call for 20% by 2020). All three bills being extensively revised, but as currently drafted, they do the following:

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Water Wise Residential Landscape Program

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Garden in Every School®

Irrigation systems are being installed at the schools participating in the 2008/2009 Garden in Every School program, and planting days will begin in March. Four applications were received for the 2009/2010 Garden in Every School program. Schools will be selected and grants for the 2009/10 program will be awarded by the end of April.



MWD Integrated Resources Plan (IRP) Technical Workgroups

IRP technical workgroups held conference calls in April to review and edit draft issue papers for inclusion in the 2009 IRP. The Conservation Workgroup wrapped up their work and finalized their draft paper for submission to the oversight committee at the end of April for review. The final IRP should be completed by September 2009 with adoption of the plan by the MWD Board in November 2009.



Landscape Evaluation and Audit Program

In Phase III, the Chino Basin Water Conservation District has completed 134 landscape audits with a potential savings of 706 AFY. This is in addition to 1,200 AFY in Phase II. There are currently 9 sites scheduled to be audited, 8 sites awaiting scheduling, and 200 release forms waiting to be returned and processed. The MWD California Friendly Landscape Training Classes (residential series) were held in March with great attendance and much success.



Major Conservation Rebate Programs



MWD SoCal WaterSmart & Save-A-Buck Programs

Table I summarizes the rebates provided through March 2009 for the Save-A-Buck Program (CII and Multi-family Residential) and the SoCal WaterSmart Program. Overall, 51,059 devices/rebates were issued under these programs since their inception, for a total annual water savings of 3,416 acre-feet per year.

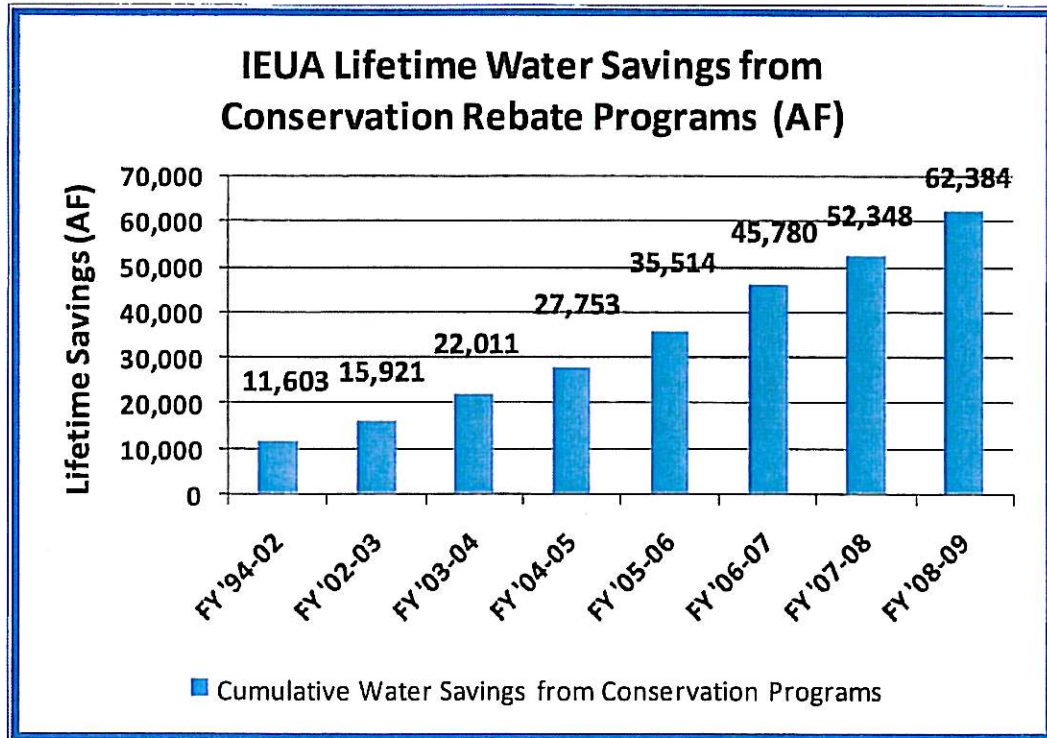


MWD Public Agency Sector Program

Total MWD funding received by public agencies within the IEUA service area has been \$2,612,227 (Table II below). Overall, 906 devices have been funded, representing an annual water savings of 575 acre-feet per year, or a savings of 5,702 acre feet over the lifetime of the devices. No activity has occurred since October 2008 because funding was put on hold until the new MWD conservation ordinance requirement could be adopted and implemented.

Cumulative Water Savings

The cumulative expected lifetime water savings from the water conservation devices that have been installed in the service area through rebates currently totals 62,384 acre feet. The Lifetime Water Savings graph illustrates the growth trend in water savings due to rebate and retrofit programs. It does not include the savings from public educational and outreach programs, which are difficult to quantify. Additional details on rebates and retrofits are provided in Tables I and II.



MWD Public/Private and Public Agency Rebate Programs

TABLE I—MWD Public/Private Sector Rebate Programs

Device Name	Current Fiscal Year through March '09		Since Program Inception	
	# Devices Installed	Equivalent Annual Water Savings (AF)	Cumulative # Devices Installed	Equivalent Annual Savings (AF)
Commercial, Industrial, Institutional Program				
High-Efficiency Clothes Washers	9	0.8	466	39.4
Multi-Family High-Efficiency Clothes Washers	7	0.6	8	0.7
Cooling Tower Conductivity & pH Controllers	2	1.3	26	16.7
Ultra-Low-Flush Toilets	0	0	1,894	657.2
ULFT Flushometers	0	0	4	0.3
High-Efficiency Toilets	791	34	3,212	136.5
Zero Water Urinals	133	16	1,159	142.0
High-Efficiency Urinals	0	0	8	0.5
Weather-Based Irrigation Controllers	2	1.3	11	7.2
Rotating Nozzles for Pop-Up Spray Heads	86	0.3	183	15.5
Synthetic Turf for CII (rebates)	0	0	5	4.7
High-Efficiency Nozzles for Large Rotary	120	21.6	120	21.6
Dry Vacuum Pumps	0	0	0	0
Steam Sterilizer Retrofits	0	0	0	0
Pre-Rinse Spray Head (PRSI)	31	7.9	33	8.4
Water Broom	4	0.6	700	107.4
X-Ray Recirculation Units	0	0	11	35.2
Subtotal	1185	84.3	7840	1193.3
Multi-Family Direct-Install Program				
Ultra Low-Flush Toilets	0	0	14,283	495.6
High-Efficiency Toilets	1682	71.5	1744	74.1
Subtotal	1682	71.5	16,027	569.7
Residential Program				
Ultra Low-Flush and High Efficiency Toilets	1587	55.1	13,656	473.9
High-Efficiency Clothes Washers	778	65.8	10,420	881.5
Weather-Based Irrigation Controllers	9	5.9	398	258.7
Rotating Nozzles for Pop-Up Spray Heads	21	0.1	2,457	9.8
Synthetic Turf Retrofit (rebates)	90	0.01	152	9.9
Water-Wise Residential Landscape Retrofit Program (rebates)	89	0.01	109	19.2
Subtotal	2574	126.8	27,192	1653.0
TOTALS	5441	282.7	51059	3416.0

TABLE II--MWD Public Agency Sector Rebate Program (February 2008 - Present)

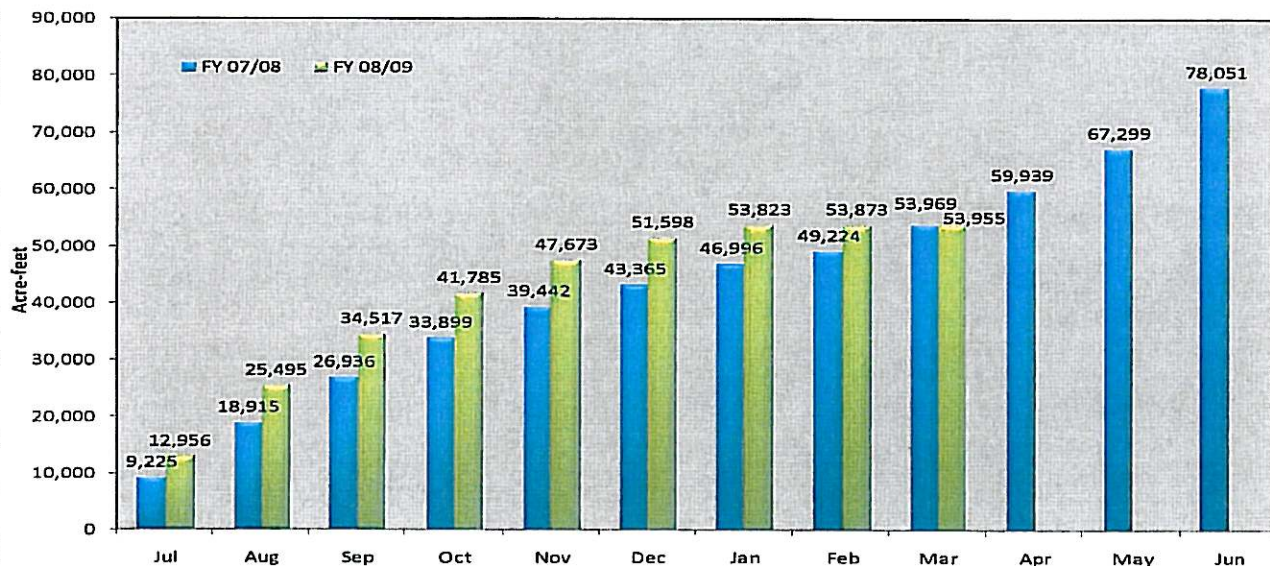
Customer	Device Quantity	Award	Annual Water Savings (AFY)	Lifetime Water Savings (AF)
City of Ontario	72	\$445,540.02	95.8	956.9
Chino Valley Unified School District (Cities of Chino, Chino Hills, Ontario)	277	\$361,575.50	123.5	1200
Cucamonga School District	10	\$10,547.13	7.7	76.5
Central School District	32	\$31,619.94	11.9	119.3
Elizavets School District	39	\$125,206.58	32.2	321.8
Chaffey Joint Union School District (City of Ontario, CVWD, MWD)	86	\$222,832.50	45.5	454.3
Monte Vista Water District	6	\$2,356.46	0.4	8.3
Alta Loma School District	22	\$36,538.62	16.7	166.7
City of Fontana	9	\$94,087.50	18.8	188.2
Upland Unified School District (Cities of Chino, Chino Hills, Ontario)	51	\$64,497.74	23.5	234.6
City of Chino Hills	302	\$597,425.00	195.5	1994.9
TOTALS	906	\$2,612,227	575.4	5,702

Calendar of Upcoming Events and Meetings

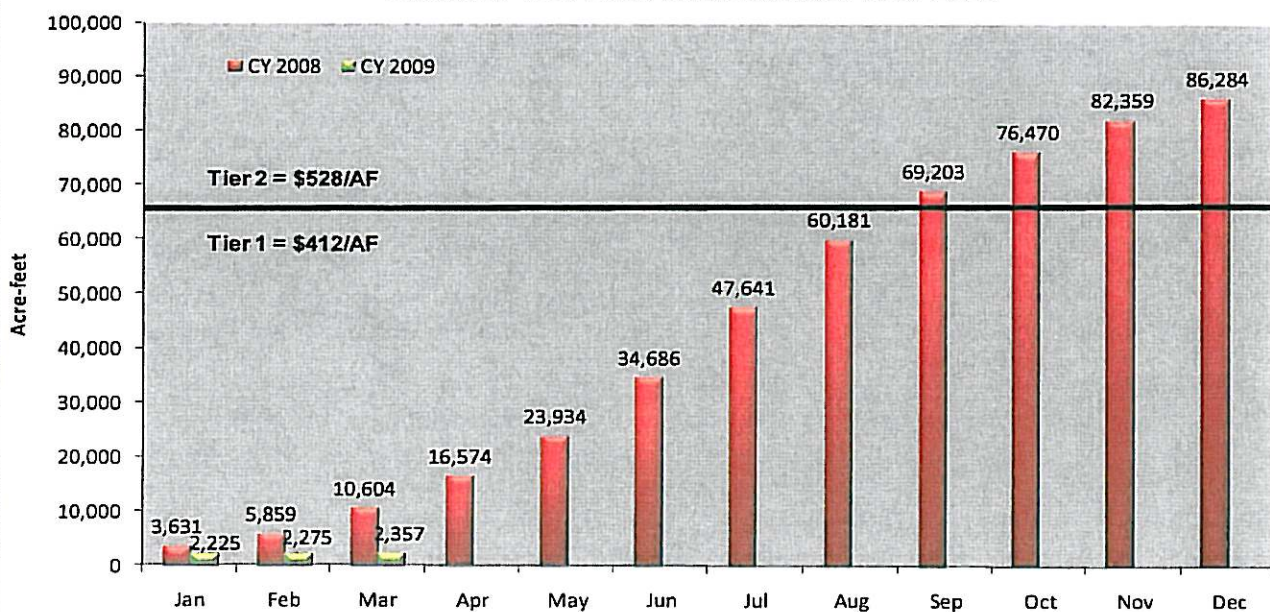
May 1.2.3 2009	Inland Green Expo. Ontario Convention Center (Fri 1-7. Sat 10-7. Sun 10-5)
May 2. 2009	SB Co. Regional Parks' Kickin' it Old School Kickball Tournament (Prado Park. 7:30 am - 5:30 pm)
May 6. 2009	IEUA Board Meeting (IEUA Board Room)
May 6. 2009	MWD PAC Meeting (9:00 am – 2:00 pm, location TBD)
May 7. 2009	Spring Green Fair (MWD, 9:30 am - 3:00pm)
May 8. 2009	Inland Empire Regional Composting Facility Dedication (IERCF. 10:00 am)
May 9. 2009	Cucamonga Valley Water District's Water Awareness Day (11:00 am to 2:00 pm)
May 15 – 17. 2009	MWD's Solar Cup, Skinner Lake
May 16. 2009	Greenlee Nursery Landscape Workshop "Remove your Lawn". IEUA Event Center (10:00 am to 11:00 am)
May 14, 2009	Landscape Alliance Board Meeting (3:00 pm – 4:00 pm. Board Room)
May 20, 2009	IEUA Board Meeting (IEUA Board Room)
May 21. 2009	Landscape Alliance Technical Sub-Committee Meeting (1:00 pm – 3:30 pm. Anza)
May 21. 2009	MWD Monthly WUE Meeting (MWD-LA. 9:30 am – 2:30 pm)
May 28. 2009	Education Coordinator's Meeting @ MWD. 9:00 am
June 3. 2009	MWD PAC Meeting (9:00 am – 2:00 pm. location TBD)
June 3. 2009	IEUA Board Meeting (IEUA Board Room)
June 17. 2009	IEUA Board Meeting (IEUA Board Room)
June 18, 2009	MWD Monthly WUE Meeting (MWD-LA. 9:30 am – 2:30 pm)
June 20. 2009	Greenlee Nursery Landscape Workshop "Remove your Lawn" IEUA. Event Center (10:00 am to 11:00 am)
July 1. 2009	MWD PAC Meeting (9:00 am – 2:00 pm. location TBD)
July 1. 2009	IEUA Board Meeting (IEUA Board Room)
July 15. 2009	IEUA Board Meeting (IEUA Board Room)
July 16. 2009	MWD Monthly WUE Meeting (MWD-LA. 9:30 am – 2:30 pm)
July 23. 2009	Landscape Alliance Technical Sub-Committee Meeting (1:00 pm – 3:30 pm. Anza)
August 5, 2009	MWD PAC Meeting (9:00 am – 2:00 pm. location TBD)
August 5. 2009	IEUA Board Meeting (IEUA Board Room)
August 13. 2009	Landscape Alliance Board Meeting (3:00 pm – 4:00 pm. Board Room)
August 19. 2009	IEUA Board Meeting (IEUA Board Room)
August 20. 2009	BIA/San Bernardino County Water Conference. Ontario Convention Center (Time TBD)
August 20. 2009	MWD Monthly WUE Meeting (MWD-LA. 9:30 am – 2:30 pm)
September 24. 2009	Landscape Alliance Technical Sub-Committee Meeting (1:00 pm – 3:30 pm. Anza)
November 12. 2009	Landscape Alliance Board Meeting (3:00 pm – 4:00 pm. Board Room)

Imported Water Deliveries

IEUA
Cumulative Full Service Imported Water Deliveries & Dry Year Yield
FY 07-08 and FY 08-09

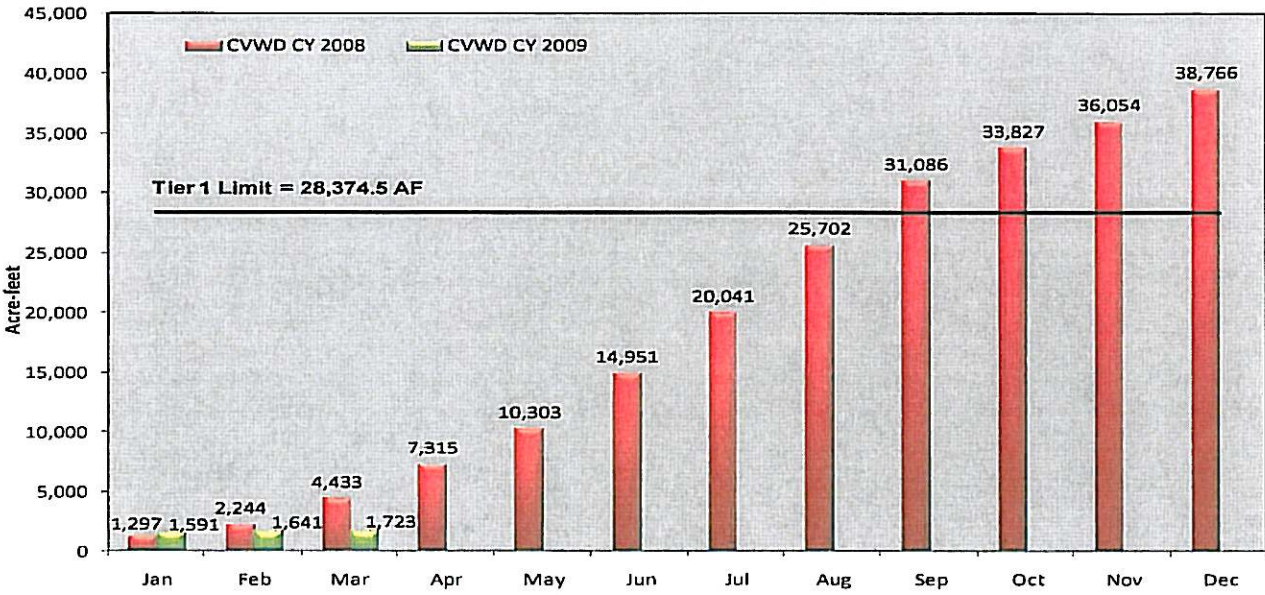


IEUA
Cumulative Full Service Imported Water Deliveries & Dry Year Yield
Calendar Year 2008 and Calendar Year 2009

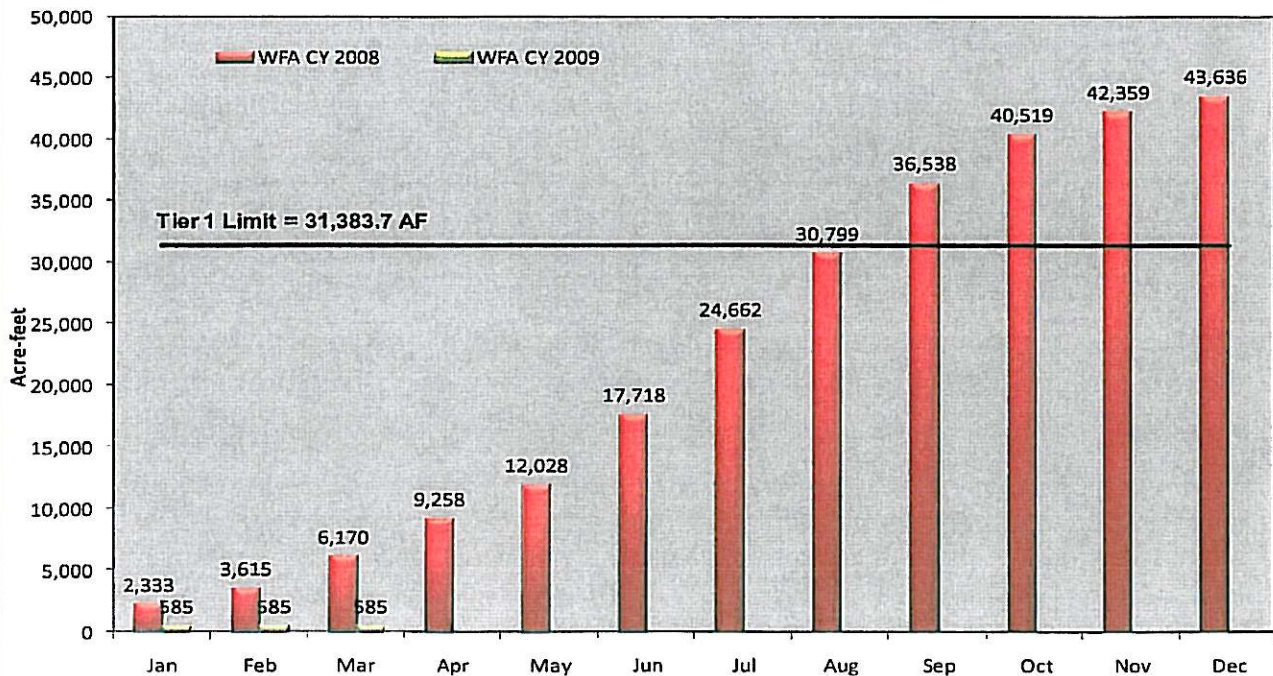


Imported Water Deliveries (Continued)

CUCAMONGA VALLEY WATER DISTRICT
Cumulative Full Service Imported Water Deliveries & Dry Year Yield
Calendar Year 2008 and Calendar Year 2009



WATER FACILITIES AUTHORITY
Cumulative Full Service Imported Water Deliveries & Dry Year Yield
Calendar Year 2008 and Calendar Year 2009



Imported Water Deliveries (Continued)

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Dry Year Yield					1,438	4,008	4,214	2,686	2,827	1,145	395	218	16,931
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Direct Deliveries	0	0	0	0	0	15	406	747	426	501	369	303	2,767
Sub-Total	0	0	0	0	0	15	406	747	426	501	369	303	2,767
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Direct Deliveries	3,631	2,229	4,744	5,971	4,320	4,743	6,210	7,326	6,196	6,078	3,995	2,576	58,018
Dry Year Yield	0	0	0	0	3,041	6,024	6,746	5,213	2,827	1,189	1,894	1,349	28,283
TOTAL	3,631	2,229	4,744	5,971	7,360	10,767	12,956	12,539	9,023	7,267	5,889	3,925	86,301
2009 Imported Water Sales	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Water Facilities Authority													
Direct Deliveries	312	0	0	0	0	0	0	0	0	0	0	0	312
Dry Year Yield	272	0	0	0	0	0	0	0	0	0	0	0	272
Sub-Total	584	0	0	0	0	0	0	0	0	0	0	0	584
Cucamonga Valley Water District													
Direct Deliveries	1,591	50	82	0	0	0	0	0	0	0	0	0	1,723
Dry Year Yield	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	1,591	50	82	0	0	0	0	0	0	0	0	0	1,723
Fontana Water Company													
Direct Deliveries	49	0	0	0	0	0	0	0	0	0	0	0	49
Sub-Total	49	0	0	0	0	0	0	0	0	0	0	0	49
Inland Empire Utilities Agency													
Direct Deliveries	1,952	50	82	0	0	0	0	0	0	0	0	0	2,084
Dry Year Yield	272	0	0	0	0	0	0	0	0	0	0	0	272
TOTAL	2,224	50	82	0	0	0	0	0	0	0	0	0	2,356



MAY 2009

RECYCLED WATER PROGRAM NEWSLETTER

Highlights:

- 135 AFY New Recycled Water Customers Connected.....Page 2
- Funding Development/Stimulus Funding.....Page 3
- Construction of New Recycled Water Facilities.....Page 5

AGENCY UPDATES

MEMBER AGENCY'S UPDATES: Ontario-Montclair School District

We have recent connections of Recycled Water in the Ontario-Montclair School District such as Corona, Del Norte, Vina Danks, and Vineyard schools that have been completed and are fully operational on the city's recycled water system. Construction at Buena Vista, Kingsley, Monte Vista, and Vernon is 95% complete and Elderberry and Lehigh are in planning stages for implementation in 2009. The balance of planned schools, Arroyo, El Camino, Mariposa, and Wiltsey, will be completed as part of the Inland Empire Utilities Agency's next phase of Recycled Water expansion projects planned for implementation in 2010.



UPCOMING EVENTS

- Red Team Meeting (IEUA and Member Agency Implementation).....4:15 PM May 7th, 2009 at CVWD
- Recycled Water Site Supervisor Training8:00am-12:00pm, June 11th, 2009 at IEUA
- Recycled Water Site Supervisor Training8:00am-12:00pm, September 10th, 2009 at IEUA

Recycled Water Customers and Usage Data:

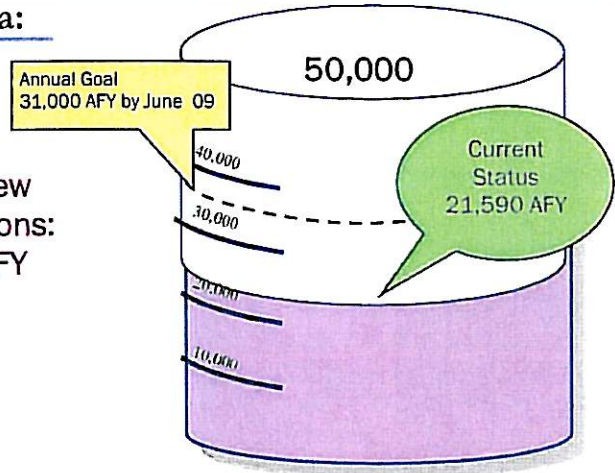
Recent Connections:

- College Park Community (Chino, 30AFY)
- Viramontes Express (Chino, 65 AFY)
- 4th St & Archibald (CVWD, 1AFY)
- Grove Memorial Park (Ontario, 10AFY)
- Roshan LLC (Ontario, 2AFY)
- Vineyard Plaza (Ontario, 1AFY)
- CCC-N (Ontario, 11AFY)
- City of Chino Hills (2 connections, 10AFY)
- Los Serranos Ranch Community Assc (5AFY)

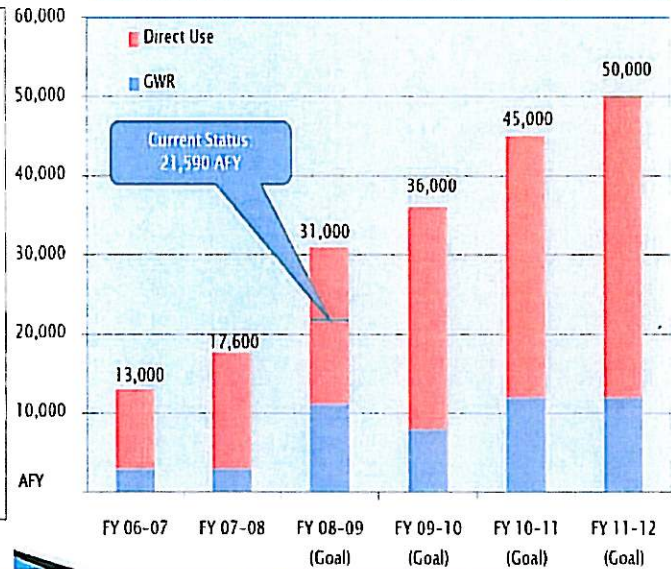
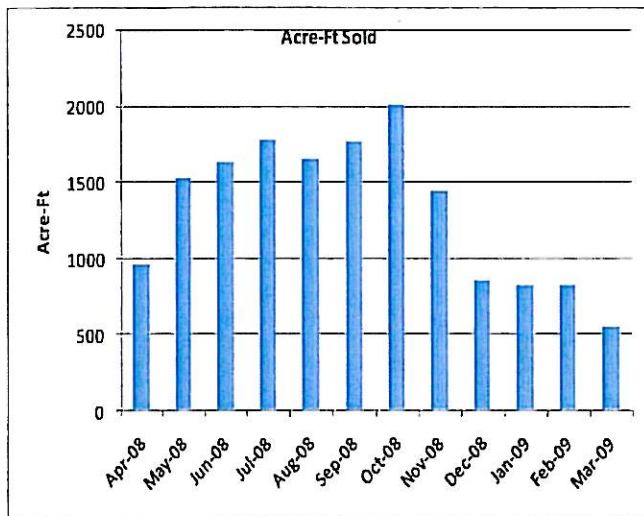
Upcoming Connections:

- Bellevue Cemetery (Ontario, 220 AFY)
- Montclair Park (Montclair, 90 AFY)
- Ontario-Montclair School District (Ontario, 177 AFY)
- Cintas I (Ontario, 120 AFY)
- Kaiser Hospital Cooling Tower (Ontario, 30 AFY)

Total New Connections:
135 AFY



RW Connected Demand Goals



Monthly Recycled Water Sales

Projected Direct Use Connections (AFY)					
	May-09	Jun-09	Jul-09	Aug-09	Total
Chino		93			1,500
Chino Hills		32			32
Ontario	1,605	1,065		2,784	5,454
MVWD		134			134
CVWD	25				25
Total (AFY)	1,630	2,731		2,784	7,145

Program Description & Financial Status

The 3 Year Business Plan

Summary. The Three Year Business Plan that was adopted in December 2007 is to be updated annually. The update includes changes made to the IEUA FY 2008/09 Budget and the Ten Year Capital Improvement Plan (TYCIP). The goal is to connect 50,000 AFY by FY 2011/12.

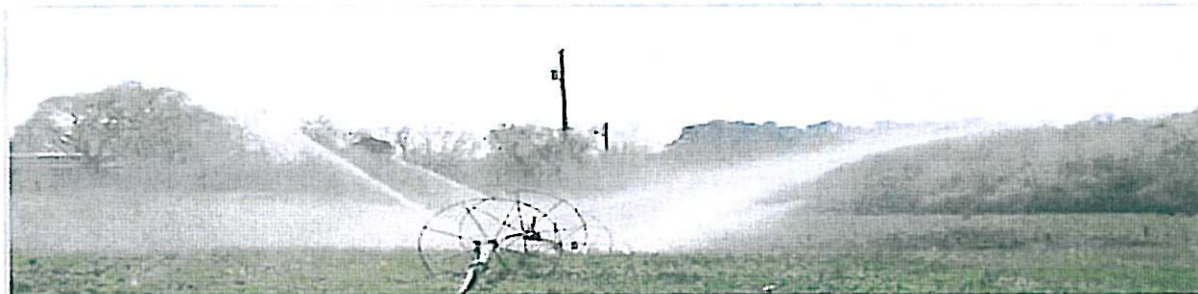
Discussion: The schedule of some Capital Projects has been delayed primarily due to the current economic conditions.

Annual Recycled Water Connection Goals

Year		Connected Demand (AFY)
1	2007/08	17,600
2	2008/09	27,455
3	2009/10	40,255
4	2010/11	44,465
5	2011/12	50,000

FUNDING DEVELOPMENTS: DWR Urban Drought Assistance

The Agency received the DWR Drought Assistance Grant for recycled water retrofits in the amount of \$1 Million. The disbursement strategy was approved by the Regional Technical and Policy Committees on December 4th, 2008 and by the Inland Empire Utilities Agency Board on December 17th, 2008.



FUNDING DEVELOPMENTS: Stimulus Funding

Stimulus Funding: President Obama signed the American Recovery and Reinvestment Act of 2009 on February 17, 2009 that allocated \$6 billion for water and wastewater infrastructure improvements. Wastewater Projects in California will receive \$280 million dollars through the Clean Water State Revolving Fund (CWSRF) Program and drinking water projects in California will receive \$160 million through the Drinking Water State Revolving Fund (DWSRF) Program. IEUA is aggressively pursuing stimulus funding for the NE Area Project through the CWSRF Program. Also, the United States Department of Interior, Bureau of Reclamation (USBR) has been allocated \$126 million for the Title XVI projects in the stimulus bill recently passed by Congress. IEUA is in line for \$19 million of the total appropriation through its Title XVI Recycled Water Business Plan Authorization. The President's 2009 Budget contained a \$5 million appropriation for the IEUA project and a request for these funds has been processed and the funds have been received. On April 6, 2009 IEUA submitted two applications to USBR for Title XVI stimulus funds totaling \$14 million. The breakdown of the two application were as follow:

- NE Area Project = \$10 million
- NW Area Project = \$4 million
- Total = \$14 million

Applications that will be funded by Title XVI Stimulus money are expected to be announced in late May. IEUA also assisted CVWD on a \$10 million USBR Stimulus Application for their Title XVI authorization. The application is for CVWD Baseline Pipeline Project that will interconnect the 1630 W and 1630 E pressure zones. If this request and 1630 E pressure zones. If this request is successful , it will also be announced in late May.

Program Description & Financial Status

Clean Water State Revolving Fund (CWSRF): The California Water Resources Control Board adopted a new CWSRF Policy at their March 17, 2009 meeting. The new policy is designed to streamline and simplify the financial aid application process. The revised policy allows financing of soft costs (design, etc) and public sector on-site retrofits as an eligible cost. Also on March 17th, 2009 The California Water Resources Control Board approved \$4.2 million grant and \$34 million SRF Loan for IEUA's Northeast Area Project.

FUNDING DEVELOPMENTS: *Funding Agreements*

Metropolitan Water District (MWD), Local Resources Program (LRP): IEUA has extended an LRP Agreement with MWD to provide funding assistance for the Recycled Water Business Plan. The agreement is for 33,000 AFY and will pay up to \$250/AF of recycled water. This LRP Agreement is the first to allow cost sharing for groundwater recharge of recycled water. With the existing MWD LRP agreement the total potential annual funding for MWD is over \$10 million.

FUNDING DEVELOPMENTS: *Retrofit Rebates*

MWD Public Sector Retrofit Rebates: IEUA is starting to receive rebate requests for processing through MWD. If you have not submitted your retrofit cost back-up information, please do so to insure funding availability to ghackney@ieua.org. These needs to be submitted by May 31, 2009 to IEUA to insure processing by MWD.

Chino Basin Water Conservation District Rebates: CBWCD also provides incentives for Public Sector Schools and Parks within its service area to help offset the costs of onsite irrigation system conversion as a result of connecting to the recycled water system. The application and program rules are available on the CBWCD website, www.cbwcd.org.



PROJECTS IN PLANNING

Northeast Project Area: The Projects are on schedule to deliver recycled water to Victoria and San Sevaire Recharge basins in Summer 2010.

Northwest Project Area: The project will design the 1630 pressure zone pipeline pump station and reservoir in the City of Upland. The project is in the preliminary design stage with anticipated design completion in Winter 2009.

Southern Project Area: The project will design the 930 pressure zone pipeline and reservoir in the City of Chino Hills. The project is in the preliminary design stage with anticipated Construction completion in Winter 2010.

Central Project Area:

The second draft of the North Chino Master Plan is being completed by IEUA and the City of Chino.

IEUA has begun the SRF loan application process for the Wineville Avenue Extension pipeline project located in the City of Fontana.

CAPITAL PROJECTS SUMMARY

PROJECTS IN DESIGN AND CONSTRUCTION

- **1630 East Segment A Pipeline** – The project includes the construction of a 36-inch pipeline from the 1630 E. Pump Station to the Victoria and San Sevaine Recharge Basins. The design has been completed and is going through permitting process and funding has been approved by the State Water Resources Control Board (SWRCB) as part of the State Revolving Fund (SRF) loan requirements. The project has been advertised for construction.
- **1299 East Regional Pipeline, 1299 East Reservoir and 1630 East Pump Station** – The project includes the construction of a 36-inch pipeline from the north end of the North Etiwanda Pipeline to the 1299 E Reservoir and 1630 E Pump Station. The design has been completed on these facilities and has been advertised for construction. The funding application has been approved by SWRCB as part of the SRF loan requirements.
- **MW & Lysimeters at Victoria & San Sevaine Basins** - The design has been completed on these facilities and the permits have been received. The funding application is under review with the SWRCB as part of the SRF loan requirements. The project is anticipated to be advertised for construction in May 2009.
- **Ontario and Montclair Public schools Retrofit Project** – The retrofit project consists of isolating the irrigation system to be supplied with a new recycled water connections at public schools within the Ontario and Monte Vista Water Districts. A total of seven schools have had retrofit modifications completed. Five Schools remain to be retrofitted.
- **RP-4 1158 Reservoirs, Pump Stations, and Pipeline** - The project provides storage in the 1158 pressure zone, pump stations for the 1158 and 1299 pressure zones, and pipeline from RP-4 to the 1158 Reservoirs. The project is in the construction phase, and is 95 percent complete. Construction of the reservoirs and the pump station is expected to be completed by June 30, 2009.
- **San Antonio Channel Segment B** –The regional pipelines will serve the cities of Ontario, Montclair, Monte Vista Water District and Brooks Street Basin. All piping has been installed and tested. The asphalt repair has been completed. The project is approximately 99 percent complete with the final punch list items remaining to be completed by May2009.



Vina Danks, Elementary School City of Ontario

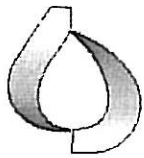


Frito Lay, CVWD



Corona Elementary School, City of Ontario

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Inland Empire
UTILITIES AGENCY

Date: May 20, 2009
To: The Honorable Board of Directors
Through: Public, Legislative Affairs and Water Resources Committee (05/13/09)
From: Richard W. Atwater
Chief Executive Officer/General Manager
Submitted by: Martha Davis
Executive Manager of Policy Development
Subject: April Legislative Report from Geyer and Associates

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Bill Geyer and Jennifer West provide a monthly report on their state activities on behalf of IEUA.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD

Enclosure

BILL GEYER
JENNIFER WEST



CONSULTING AND ADVOCACY IN CALIFORNIA GOVERNMENT 1029 K ST., SUITE 33, SACRAMENTO, CA 95814, (916) 444-9346 FAX: (916) 444-7484, EMAIL: geyerw@pacbell.net

MEMORANDUM

TO: Richard Atwater and Martha Davis
FROM: Jennifer West
DATE: April 30, 2009
RE: April Legislative Report

Attached are three bill lists 1) the watch list 2) the positions list 3) the recommended positions list 4) a side-by-side short summary of the water bond measures.

This week marks the deadline for bills with a fiscal impact to pass out of policy committees. I have removed all bills that are now two-year bills or spot bills.

IEUA continues to lead a large coalition effort in support of its sponsored bill, AB 1366 (Feuer/Caballero/Strickland). The measure will give local agencies additional flexibility in controlling salt discharges from residential self-regenerating water softeners. The bill passed out of the Assembly Water Parks and Wildlife Committee this week on an 11-2 vote, with two Republicans on the committee voting yes. The water softening industry is strongly opposed to the measure. The bill now goes to the Assembly Appropriations Committee.

Inland Empire Utilities Agency
Watch List
April 30, 2009

AB 39 (Huffman) Final Delta Vision

Status: Assembly Appropriations

This bill requires the yet-to-be-created California Delta and Ecosystem Water Council (CDEWC) to prepare a plan to implement the Delta Vision Strategic Plan, issued by the Delta Vision Blue-Ribbon Task Force, and to submit that plan to the Legislature by January 1, 2011.

AB 49 (Feuer/Huffman) Water Conservation

Status: Assembly Appropriations

Requires a 20% reduction in urban per capita water use by the end of 2020 and requires agricultural water suppliers to implement best management practices (BMPs) by July 31, 2012. Requires DWR to develop by 2010 regional urban water use targets consistent with the goals of reducing urban per capita water use by at least 10% before 2015 and 20% by 2020, as well as per capita water use calculation procedures.

AB 231 (Huffman) Climate Protection Trust Fund

Status: Assembly Appropriations

Requires CARB to adopt by regulation no later than March 30, 2010, after a public workshop, a schedule of fees to be paid by the sources of regulated greenhouse gas emissions regulated. The fees would go into a Legislative controlled "Climate Protection Trust Fund."

AB 300 (Caballero) Subdivisions: Water Supply

Status: Assembly Appropriations

This bill would require, until January 1, 2020, any city, county, or public water system preparing a water supply assessment to reduce the projected water demand for the project to an amount below the current statutory and regulatory requirements, as defined, based on the project applicant's voluntary water demand management measures, as defined. Water savings projections would be authorized to be calculated using the water savings projections adopted by the California Urban Water Conservation Council. Water savings projections for measures for which the California Urban Water Conservation Council does not have adopted findings would be required to be based on substantial evidence in the record and included in the water supply assessment adopted by the water supplier. If a project applicant proposes to use a new voluntary water reduction demand management measure that is not based on water savings projections adopted by the California Urban Water Conservation Council, the legislative body of a city or county or the advisory agency would be required to have the project applicant enter into an agreement with the water utility to implement and monitor the actual water savings over time, as specified. The public water system would be required to prepare a written report of the projected water demand versus the actual water use 5 years after the project has been fully developed. By adding to the duties of the public water system, this bill would impose a state-mandated local program.

Sponsored by CBIA

AB 408 (Saldana) Local Planning: Water Supplies

Status: Assembly Local Government

Requires planning agencies to confer with the affected RWQCB before general plan is substantially amended. The RWQCB must provide comments and recommended amendments to the general plan which will reduce pollution and increase local water supplies. The bill also sets a goal for the SWRCB to take action to increase local water supplies by 2015 through a combination of increasing conservation, recycled water use, and stormwater recharge and reuse and by using low-impact development water management strategies

AB 626 (Eng) IRWMP: Disadvantaged Communities

Status: Assembly Appropriations

Directs the Department of Water Resources (DWR) to achieve the 10% statewide allocation of Prop 84 implementation grants, planning grants, local groundwater assistance grants, and CALFED scientific research grants to address the critical water supply needs of disadvantaged communities required by current state law by awarding the grants for those purposes to disadvantaged communities within a hydrologic region in a total dollar amount that is equivalent to 10% of the total dollar amount of grants awarded in that region.

AB 752 (Arambula) State Water Pollution Control Revolving Fund: Severely Disadvantage Communities

Status: Assembly Appropriations

This bill defines "severely disadvantaged community," as that term is used in relation to Chapter 6.5 of the Water Code, as a median household income that is less than 60 % of the statewide average.

AB 958 (Eng) Design-Build: Metropolitan Water Districts: Solar Energy Systems

Status: Assembly Appropriations

This bill would authorize a metropolitan water district to enter into design-build contracts for projects involving the design, construction, fabrication, and installation of a solar energy system in excess of \$1,000,000, in accordance with specified provisions.

AB 1098 (Hagman) Chino Agricultural Preserve

Status: Assembly Local Government

This bill would authorize the County of San Bernardino to exchange property it owns within the Chino Agricultural Preserve that was purchased with those bond funds under the same conditions. The bill would revise one of those conditions to alternatively require the property received in an exchange and all the proceeds from a sale to be used for the improvement, operation, and maintenance of existing or replacement land within the Chino Agricultural Preserve.

AB 1100 (Duvall) Potable Reuse Demonstration

Status: Assembly Appropriations

This bill would allow the bottling of potable reuse demonstration water, as defined, to be distributed, free of charge, for educational purposes or to promote water recycling. The bill would establish specific bottling, labeling, and sanitation for potable reuse demonstration water. WateReuse is working with the author on amendments.

AB 1187 (Huffman) Water Bond 2010

Status: Not Set

(See attached summary of water bonds)

AB 1242 (Ruskin) State Water Policy

Status: Assembly Appropriations

Declares the "established policy of the state" that a human being has the right to clean and accessible water on an equitable basis, that is adequate for the health and well-being of the individual and family, and that no one shall be deprived of that access or quality of water due to individual economic circumstances. Requires relevant state agencies, including the Department of Water Resources (DWR), the State Water Resources Control Board (SWRCB) and the State Department of Public Health (DPH), to employ all feasible means to implement this policy.

AB 1408 (Krekorian) Subdivisions: water conservation mitigation fund

Status: Assembly Appropriations

This bill would establish a Water Conservation Mitigation Fund to be administered, as specified, by a public water system. A legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disprove the tentative map, would be required to include as a condition in any tentative map that includes a subdivision a requirement that the subdivision have a sufficient water supply be available or that sufficient water supplies will be made available through a Water Conservation Mitigation Fund held by the public water system. The amount of funding needed for voluntary participation by the subdivision applicant in the Water Conservation Mitigation Fund would be required to be based on offsetting at least 100 percent of the projected water demand associated with the subdivision, as determined by the public water system. The public water system would be required to expend all funds in the Water Conservation Mitigation Fund on water conservation measures that will offset at least 100 percent of the projected demand associated with the subdivision, as specified.

AB 1438 (Conway) Safe Drinking Water State Revolving Fund

Status: Assembly Appropriations

This bill would allow the Department of Public Health to establish a wellhead protection account within the Safe Drinking Water State Revolving Fund.

AB 1482 (Anderson) Water: public Use

Status: Assembly Appropriations

This bill would require DWR, in consultation with the Pacific Quality Water Association, to study whether the Legislature should establish a rating system to measure the efficiency levels of self-regenerating water softener systems. The bill will be revised to require that they study water softener efficiency and no salt alternatives.

SB 7 (Wiggins) Renewable Energy: Net Metering

Status: Senate Appropriations

This bill requires utilities to compensate customers that use net metering for any generation in excess of their load or, for customers on time of use rates any net dollar value, on an annual basis, or to roll

that excess generation over, on a kilowatt hour basis, to the next 12-month cycle. The compensation rate would be set by the CPUC at a rate not less than the MPR.

SB 12 (Simitian) Delta

Status: Senate Appropriations

This bill creates the Delta Ecosystem and Water Council which must adopt a Delta Ecosystem and Water Plan by December 1, 2010. The bill requires the Delta Protection Commission to revise its resource protection plan to be consistent with the Delta Ecosystem and Water Plan. Requires that the general plans of Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties and the cities within those five counties must be consistent with the Delta Ecosystem and Water Plan.

SB 261 (Dutton and Ducheny) Water use

Status: Senate Appropriations

Require each urban water supplier, or regional water management group acting on behalf of the urban water supplier, to develop and implement a water use efficiency and efficient water resources management plan. Urban water suppliers achieving extraordinary water use efficiency would be exempt from these requirements. Extraordinary water use efficiency would be defined as:

The use of less than 70 gallons per person per day for indoor residential uses and The use of less than 70 percent of reference evapotranspiration for outdoor residential uses. The plans would be required to accomplish one or more of the following:

Reduce residential per capita potable water use by 20 percent by 2020 as compared to water use in 2000.

Reduce total residential potable water use by 2020 by a total of 20 percent as compared to the 2020 projection in the agency's 2005 urban water management plan, which reduction shall include water conservation measures already included in the 2005 urban water management plan.

Achieve, by 2020, extraordinary water use.

Sponsored by SAWPA and Western Municipal Water Agency. The bill is still a work in progress.

SB 301 (Florez) Water Supply Reliability and Ecosystem Recovery and Restoration Act of 2009

Status: Senate Natural Resource & Water

(see attached water bond summary)

SB 310 (Ducheny) Water Quality: Stormwater and Other Runoff

Status: Senate Appropriations

This bill would authorize a county, city, or special district that is a permittee or copermittee under an NPDES permit for a municipal separate storm sewer system to develop a watershed improvement plan that addresses major sources of pollutants in receiving water, stormwater, urban runoff, or other surface runoff pollution within the watershed or subwatershed to which the plan applies. The regional boards would be authorized to participate in the preparation of the watershed improvement plan. The bill would authorize a county, city, or special district, or combination thereof, to impose fees on activities that generate or contribute to runoff, stormwater, or surface runoff pollution to pay the costs of the preparation of a watershed improvement plan or the implementation of a plan that is approved by a regional board if the plan will facilitate compliance with one or more water quality requirements. The bill would authorize a county, city, or special district, or combination thereof, to plan, design, implement, construct, operate, and maintain controls and facilities to improve water quality. Sponsored by CBIA.

SB 371 (Cogdill) Safe, Clean, Reliable Drinking Water Supply Act of 2009
Status: Senate Natural Resources & Water
(see attached bond summary)

SB 456 (Wolk) Safe, Clean, Reliable Drinking Water Supply Act of 2010
Status: Senate Natural Resources & Water
(see attached water bond summary)

SB 457 (Wolk) Sacramento-San Joaquin Delta
Status: Senate Appropriations

This bill would create a 7-member Delta Stewardship Council in the Natural Resources Agency with specified powers and responsibilities relating to the Delta, including approving the Delta Stewardship Plan to guide and shape management of the Delta. The bill would require the commission to present the council with a draft plan on or before October 1, 2010. The bill would require the council to adopt the plan on or before January 1, 2011. The bill would require the council to review, and if necessary, amend the plan at least every 5 years.

SB 458 (Wolk) Conservancies: Sacramento-San Joaquin Delta Conservancy
Status: Senate Appropriations

This bill would establish the Sacramento-San Joaquin Delta Conservancy to undertake various activities related to the Delta, as defined, including monitoring projects within the watershed of the delta, providing stewardship, and coordinating with other delta governance entities. The bill would prescribe the management, powers, and duties of the conservancy. The bill would create the Sacramento-San Joaquin Delta Conservancy Fund in the Treasury. Moneys in the fund would be available, upon appropriation, for the purposes of the conservancy.

SB 460 (Wolk) Water Conservation: Urban Water Use
Status: Senate Appropriations

Sponsored by ACWA. The bill is the Association's effort to address the 20% water conservation mandate called for in the Governor's Executive Order. It requires urban water suppliers to provide additional information in their urban water management plans on water conservation. It requires agricultural water suppliers to prepare agricultural water management plans by an unspecified date. The bill is still a work in progress.

SB 565 (Pavley) Water Recycling
Status: Senate Appropriations

This bill would require the state board to develop a plan to ensure that at least 50% of wastewater that is annually discharged into the ocean, as of the year 2009, is recycled and put to beneficial use by the year 2030. The bill would prescribe various requirements with respect to that plan. The bill would require the state board to impose a fee on each person discharging wastewater into the ocean and would require that fee to be deposited into the Ocean Discharge Recycling Fund, which the bill would

establish. The bill would authorize the state board to expend the moneys in that fund, upon appropriation by the Legislature, for the purposes of carrying out the wastewater recycling plan.

SB 735 (Steinberg) Safe, Clean, and Reliable Drinking Water Supply Act of 2010

Status: Senate Natural Resources & Water and E.Q.

(see attached bond summary)

SB 736 (Pavley) Water Consumption Fee

Status: Senate Natural Resources & Water

This bill, with specified exceptions, beginning on an unspecified date, would impose, on a person diverting or extracting more than an unspecified amount of water, a water resource consumption fee in an unspecified dollar amount per acre-foot of water diverted or extracted. The fees would be deposited in the Water Resources Consumption Fund, which the bill would create, the proceeds of which would be available, subject to appropriation, for unspecified purposes.

SB 790 (Pavley) Stormwater Management

Status: Senate Appropriations

Under the Watershed, Clean Beaches, and Water Quality Act Clean Beaches Program, the bill authorizes grants to implement or promote low impact development that will contribute to improving water quality or reducing stormwater runoff, and to implement a stormwater management plan. Under the Integrated Regional Water Management Planning Act, it authorizes a regional water management group to coordinate its planning activities to also incorporate stormwater management planning. Authorize a city, county, or special district (individually or jointly) to develop a stormwater management plan that meets certain requirements (e.g., be developed on a watershed basis, provide for community participation, assist in compliance with TDML implementation plans and applicable NPDES permits). Provides that a stormwater management plan must be designed to augment local water supply through infiltration, and reuse of stormwater; reestablish natural water drainage treatment and infiltration systems.

SB 799 (Wiggins) Local Agencies: Bonds

Status: Senate Local Government

The bill prohibits local agencies from entering into a financial advisory, legal advisory, underwriting, or similar relationship with an individual or firm, with respect to a bond issue that requires voter approval on or after January 1, 2010, if that individual or firm, or an employee, agent, or person related to an employee or agent of the individual or firm, provided or will provide bond campaign services to the bond campaign.

SB 808 (Wolk) San Francisco Bay/Sacramento-San Joaquin Delta Estuary: Strategic Work Plan

Status: Senate Natural Resources & Water

This bill would require the State Water Resources Control Board to implement its resolution entitled the Strategic Workplan for Actions to Protect Beneficial Uses of the San Francisco Bay/Sacramento-San

Joaquin Delta Estuary by commencing an investigation of the reasonableness of the methods of diversions from the Sacramento-San Joaquin Delta used by the State Water Project and the federal Central Valley Project, ensuring that the implementation is consistent with its duties to protect the public trust and prevent the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water, and taking other action.

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Positions
Inland Empire Utilities Agency
April 30, 2009

AB 13 (Salas) Sacramento-San Joaquin Delta Conservancy

Status: Assembly Appropriations

Support

This bill would establish the Sacramento-San Joaquin Delta Conservancy to provide policy oversight, foster implementation of, and manage funds to implement the restoration and management of habitat and lands in the Sacramento-San Joaquin Delta and Suisun Marsh, and to develop and implement projects to address the economic viability of the Delta region, consistent with a comprehensive Delta sustainability program.

AB 28 (Jeffries) Natural Gas Engines: water pumps

Status: Assembly Natural Resources 5/4

Support

The bill prohibits air pollution control districts and air quality management districts from restricting the use of engines powered by natural gas by a city, county, or special district, including a water district, to operate water pumps.

AB 410 (De La Torre) IRWMP Funds/Recycling

Status: Assembly Appropriations 4/29

Support

This bill would provide that, of the \$100 million unallocated in Prop. 84 for the IRWMP, \$5,000,000 shall be made available to specified regions for the preparation of salt and nutrient management plans consistent with the recycled water policy of the SWRCB. This bill would refer to the statewide recycling goal as a target, and would additionally set a target to recycle a total of 1,300,000 acre-feet of water per year by the year 2020, and 2,000,000 acre-feet of water per year by the year 2030. The bill would require DWR to assess progress toward meeting that target every 5 years, based on information provided in urban water management plans.

AB 474 (Blumenfield) Contractual Assessments: Water efficiency Improvements

Status: Assembly Floor

Support

MWD Sponsored. It expands the AB 811 program to include water conservation efforts. The measure would authorize public agencies to provide upfront financing for the installation of permanently fixed water use efficiency improvements. Property owners within a designated assessment area would agree to assess themselves for associated principal, interest and administrative costs. Property owners would pay an annual assessment until costs advanced are repaid to the public agency.

AB 804 (Hall) Invasive Species: Mussels

Status: Assembly Appropriations

Support

Would ensure that if a water supply system operator follow the requirements of current law to address quagga infestation, then the water entity and its employees will not be held civilly or criminally liable for the spread of quaggas.

AB 900 (DeLeon) Water Diversions

Status: Assembly Appropriations

Support

Will require every person who diverts water, a publically-owned resource, to measure and report diversions to the State Water Resources Control Board thus creating a baseline of water diversion information, parallel to that required of other diverters in the state.

AB 560 (Skinner) Net Energy Metering

Status: Assembly Appropriations

Support

Increases the current cap on the amount of electricity that can be generated under the net-metering program for solar and wind generation. Currently the cap for the net metering is set at 2.5 % of each of the participating electric utilities' aggregate peak demand. This bill increases the cap to 10%.

AB 1061 (Lieu) Common Interest Development: Water Efficient Landscapes

Status: Senate

Support

Sponsored by MWD. Will eliminate the ability for CIDs to prohibit, fine or assess a property owner for installing or maintaining water efficient landscaping that is in compliance with the state's model landscape ordinance, local ordinances or water conservation requirements adopted pursuant to Water Code Section 353 or 375.

AB 1366 (Feuer/Caballero/A. Strickland) Residential self-regenerating water softeners

Status: Assembly Appropriations

IEUA Sponsor

Gives local agencies additional control over salt discharges from residential self-regenerating water softeners, consistent with the recommendations of the Water Recycling Task Force. IEUA is leading a major lobbying effort on this measure, which is strongly opposed by the water softening industry.

SB 26 (Simitian) Home Generated Pharmaceutical Waste

Status: Senate Appropriations 5/4

Support

This bill would require the California State Board of Pharmacy to coordinate with other state agencies, local governments, drug manufacturers, and pharmacies to develop sustainable, efficient policies and programs to manage pharmaceutical wastes and the disposal of devices. The bill would authorize a pharmacy to accept the return of home-

generated pharmaceutical waste and home-generated sharps waste, as defined. The measure would make local pharmaceutical waste disposal programs available for grant funding.

SB 407 (Padilla) Plumbing Fixtures: High Water Use

Status: Senate Judiciary 5/5

Support

This bill requires the owner of a property to replace high-water-using plumbing fixtures prior to any sale or transfer of the property that occurs on or after January 1, 2014. MWD sponsored.

SB 802 (Leno) Retention Proceeds

Status: Senate Floor

Oppose

The bill requires that local governments reduce their payment retention amount from 10% to a 5% cap for construction projects. A large coalition of labor unions and contractors are supporting this measure.

Recommended Positions
Inland Empire Utilities Agency
April 29, 2009

AB 234 (Huffman) Water/Energy Efficiency Projects

Status: Assembly Appropriations

Recommend Support

The bill requires the CEC to coordinate with the SWRCB and local water suppliers on planning and implementation of energy efficiency actions that also can result in water use savings when using funding received pursuant to the federal stimulus package. The bill requires CEC and SWRCB to establish criteria and priorities for partnering with the water board programs and projects that have both water and energy efficiency benefits.

AB 1465 (Hill) Urban Water Management Plan

Status: Assembly Appropriations

Recommend Support

This bill would revise provisions relating to the information that the urban water supplier is required to include in the plan with regard to water demand management measures. The bill would require the urban water supplier to describe in the plan the opportunities for development of recycled water supplies, including opportunities for nonpotable and indirect potable reuse, and the opportunities for stormwater recapture and reuse as a long-term water supply.

AB 1560 (Evans) Statewide Watershed Program

Status: Assembly Appropriations

Recommend Support

This bill would establish the Statewide Watershed Program as a voluntary and nonregulatory program to provide the means by which the state may provide assistance and funds to local community-based efforts in the conservation, protection, and restoration of the state's watersheds and to promote coordinated management of watersheds under the authority of the Secretary of the Natural Resources Agency and the Department of Conservation.

SB 283 (DeSaulnier) Dual Plumbing Recycled Water

Status: Senate Appropriations

Recommend Support

Requires the Department of Water Resources, on or before July 1, 2008 and in consultation with Department of Public Health (DPH), to adopt and submit to the Building Standards Commission (BSC) regulations to establish a version of Appendix J of the Uniform Plumbing Code for California for design standards for both potable and recycled water systems.

SB 696 (Wright) Emission Reduction Credits

Status: Senate Energy 5/12

Recommend Support

Due to a state court CEQA decision, the SCAQMD has been forced to stop issuing any permits relaying the District's internal offset accounts. Over 1000 permits are now on hold. This bill provides a limited CEQA exemption for implementation of specific SCAQMD rules creating or providing offset from the SCAQMD's internal bank. Individual permits would not be exempted from CEQA. The bill would require SCAQMD rules to apply stringent best available control technology, air quality impact modeling and air toxics limits.

Comparison of Water Bond Proposals March 2, 2009

Project Description	AB 1187 (Huffman)	SB 735* (Steinberg)	SB 456* (Volk)	SB 371* (Coghill)	SB 301* (Fibres)
Regional Water Supply Reliability	\$2 B	\$2 B	\$2 B	\$2.125 B	\$2.5 B
- Integrated regional water management	- \$1.5 B	- \$1.5 B	- \$1.5 B	- \$1.450 B	- \$1.450 B
- Drought relief projects	- \$500 M	- \$500 M	- \$500 M	- \$1.25 M	- 0
- SWP rec., fish & wildlife enhancement	- 0	- 0	- 0	- \$50 M	- \$50 M
- Regional conveyance projects	- 0	- 0	- 0	- \$500 M	- \$1 B
Sac - San Joaquin Delta Sustainability	\$1.9 B	\$1.9 B	\$1.9 B	\$1.9 B	\$2.0 B
- Levees, water quality, agric., fish & wildlife	- \$700 M	- \$700 M	- \$700 M	- \$700 M	- \$700 M
- Delta ecosystem - BDCP etc	- \$1.2 B	- \$1.2 B	- \$1.2 B	- \$1.2 B	- \$1.3 B
	Res. Agency or New Delta entity; For Public benefits	Res. Agency or New Delta entity; For Public benefits	Res. Agency or New Delta entity; For Public benefits	Res. Agency or New Delta entity; For Public benefits	Water Commission;
Statewide Water System Operational Improvement	\$3 B	\$3 B	\$3 B	\$3 B	\$7 B
- CALFED Surface Storage	- Res. Agency or New Delta entity;	- Water Commission;	- Water Commission;	- Water Commission;	- Water Commission
- Groundwater storage	- Max. 50% public share	- Max. 50% public share;	- Max. 50% public share;	- Includes recreational and emerg. response	- No limit on public or state share
- Regional and local storage				- Max 50% state share	- Cont approp.
				- Cont. approp.	- Funding eligible for transfer to locals
Conservation & Watershed Protection	\$1.585 B	\$1.335 B	\$1.335 B	\$1.385 B	\$2.5 B
- Watershed Protection, etc.	- \$1 B	- \$1 B	- \$1 B	- \$1 B	- \$1 B
- Protection Against Invasive Species	- \$85 M	- \$85 M	- \$85 M	- \$85 M	- \$250 M
- Fire-Damaged Areas And Fuel Reduction	- \$100 M	- \$100 M	- \$100 M	- \$100 M	- \$100 M
- Fishery Improvements	- \$400 M	- \$150 M	- \$150 M	- \$200 M	- \$150 M
- Delta water and ecosystem projects	- 0	- 0	- 0	- 0	- \$1 B
Groundwater Prot. & Water Quality	\$1.05 B	\$1.05 B	\$1.05 B	\$1.05 B	\$800 M
- Groundwater Protection	- \$360 M	- \$360 M	- \$360 M	- \$360 M	- \$300 M
- Disadvantaged Community Dking Water	- \$90 M	- \$90 M	- \$90 M	- \$90 M	- 0
- Small Community Wastewater Projects	- \$200 M	- \$200 M	- \$200 M	- \$200 M	- \$100 M
- Stormwater Management	- \$300 M	- \$300M	- \$300 M	- \$300 M	- \$300 M
- Ocean Protection	- \$100 M	- \$100 M	- \$100 M	- \$100 M	- \$100
Water Recycling and Advanced Water Management Technology	\$500 M	\$500 M	\$500 M	\$500 M	\$200 M
State of CA Water Use Efficiency	-0-	-0-	\$20 M	\$20 M	0
New Water User Fee	Yes	Yes; cont. appropriated	No	No	No
TOTAL	\$10.035 B	\$9.785 B	\$9.805 B	\$9.980 B	\$15.0 B

* Urgency

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Date: May 20, 2009

To: The Honorable Board of Directors

Through: Public, Legislative Affairs, and Water Resources Committee (05/13/09)

From: Richard W. Atwater
Chief Executive Officer/General Manager

Submitted by: Martha Davis
Executive Manager of Policy Development

Subject: April Legislative Report from Agricultural Resources

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Dave Weiman provides a monthly report on his federal activities on behalf of IEUA.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD

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Agricultural Resources

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agresources@erols.com

April 29, 2009

Legislative Report

TO: Richard W. Atwater
General Manager, Inland Empire Utility Agency

FR: David M. Weiman
Agricultural Resources
LEGISLATIVE REPRESENTATIVE, IEUA

SU: Legislative Report, April 2009

Highlights:

- *Governor, Secretary of the Interior Salazar Announce Stimulus Funds, Drought Relief and Recycling Funding – \$135 Million for Title XVI Projects*
- *Stimulus Oversight Hearing, House Water and Power., Title XVI*
- *BuRec Stimulus Project Selection, Decisions and Funding Levels*
- *BuRec FY 10 Budget – Braced for Low Title XVI Budget Funding Request*
- *IEUA's Martha Davis Testified Before Senate Environment and Public Works Committee (Subcommittee on Water and Wildlife) on EPA's Role in Water Use Efficiency*
- *MWD's Pete Silva Nominated to be Assistant Administrator for Water, EPA.*
- *Obama Submits Nominations for A/S Secretary for Army, Civil Works, A/S of the Interior for Water and Science*
- *Sub-Cabinet Appointments, Obama-Salazar Interior Appointments*
- *Key Pending Appointments – Key Agencies – DOI, USDA, EPA, DOD.*

CEQ

- *Climate Change, Energy Legislation*
- *Drought Conditions/Water Supply*
- *IEUA Working Partners*

Governor, Secretary of the Interior Salazar Announce Stimulus Funds, Drought Relief and Recycling Funding – \$135 million for Title XVI Projects. On April 15 Secretary Salazar Announced \$260 Million in BuRec Stimulus funds for California to “*expand water supplies, repair aging water infrastructure, and mitigate the effects of a devastating drought the state is currently experiencing.*” In addition, the Secretary also announced that “*an additional \$135 million is available for grants for water reuse and recycling projects; California is emerging as a leader in the development of these projects and is expected to also significantly benefit from this funding.*” This announcement is significant. Congress provided “*not less than \$126 million for water reuse and recycling (the Title XVI program)*” and the Bureau provided \$135 million – nine million more above the congressional baseline. These are stimulus program dollars (exclusive of FY 2009 appropriations and exclusive of FY 2010 (pending announcement and release). These funds will help California – and especially Southern California – develop long-term “drought-proofing” local programs.

Stimulus Oversight Hearing, House Water and Power, Title XVI. Water and Power Subcommittee Chairwoman Grace Napolitano convened a hearing with USGS and the Bureau of Reclamation and select outside witnesses, including IEUA’s Rich Atwater. Subcommittee’s basic question – when are BuRec funding decisions being made and when will funds be “out the door.” Acting BuRec Commissioner, Bill McDonald, “half” answered the question. Instead of coming to the Subcommittee with a stimulus/Title XVI roll-out plan, McDonald was unable to answer the question, except in vague terms. The purpose of the hearing was to receive the BuRec plan and the Acting Commissioner didn’t have one. His response to the Subcommittee – sometime in May (maybe) – was considered inadequate by all panel members. Atwater testified and made a powerful observation – one that none on the panel had thought about. That is, the BuRec received \$1 billion in stimulus funds. Of that, \$126 million was dedicated to Title XVI. The cost-sharing requirements of Title XVI means that the overall stimulus number for Title XVI will be approximately \$500 million. That was fresh perspective. Even the Acting Commissioner repeated the same point beginning his statement with “*as Mr. Atwater said...*”

BuRec Stimulus Project Selection, Decisions and Funding Levels – Title XVI. Right now, the “sometime in May” deadline is all we have. The Corps of Engineers published their program selections in late April, but the BuRec remains unwilling to commit to a

hard date. We have learned that the program review at the BuRec's Denver Center was completed and submitted to headquarters in DC by mid-April. I feel compelled to point out that, immediately after Stimulus was enacted, BuRec notified IEUA and all water districts/agencies that they had three weeks to submit an application for project support. IEUA complied with that request. BuRec has now taken six weeks to make a decision – and yet that decision is still pending!

BuRec FY 2010 Budget – Braced for Low Title XVI Budget Funding Numbers. In a typical year, the Congress convenes, and shortly thereafter the President delivers his State of the Union speech. Immediately thereafter, the Administration's proposed budget for the next fiscal year is submitted to Congress (by first week of February at the latest). That doesn't apply to a "new" presidency such as we have this year. The Obama Administration's proposed budget will be released in the first week of May. At Interior, none of President Obama and Secretary Salazar's "team" has been confirmed beyond the Secretary himself (several are now ready and are expected shortly). Thus, the BuRec proposed budget was put together by the existing staff with little or no guidance from the new Administration. We have been told (and this is little more than a high quality "rumor") that the BuRec request for Title XVI will be low. Remember, last year, the Administration only requested \$7.5 million, but Congress appropriated \$50 million PLUS the \$126 million in the stimulus bill. We are both alarmed and concerned at the prospect of another low request. We suspect the BuRec argument may be that Congress provided "too much money" for the programs and not enough projects were "shovel ready." Therefore, the budget ask for the Title XVI program will likely be limited, reduced or restricted. We have been told that some within the BuRec will do anything to prevent the water recycling program from getting incorporated into their budget baseline.

IEUA's Martha Davis Testified Before Senate Environment and Public Works Committee (Subcommittee on Water and Wildlife) on EPA's Role in Water Use Efficiency. Chairman Ben Cardin (D-MD) held his first hearing as subcommittee chair on the EPA's water efficiency program. Martha presented a comprehensive statement about IEUA's programs. And, in the process, IEUA was acknowledged to be a national leader.

MWD's Pete Silva Nominated to be Assistant Administrator for Water, EPA. According to the formal White House announcement, "Peter S. Silva, Nominee for Assistant Administrator for Water Programs, Environmental Protection Agency. *Peter S. Silva is a Civil Engineer with nearly 32 years of experience in the water and wastewater fields. He has served in varying capacities in the public sector specializing in water resources policy with extensive experience in U.S.-Mexico border issues. Mr. Silva currently is a Senior Policy Advisor for the Metropolitan Water District of Southern California. Prior to this he was the Vice-Chair of the California Water Resources Control Board for six years, having been appointed by both Governors Davis*

and Schwarzenegger. Mr. Silva was appointed by President Clinton to serve for three years on the Board of the Border Environment Cooperation Commission (BECC). He also served as the BECC Deputy General Manager for three years in Ciudad Juarez, Mexico. His other experience includes ten years at the City of San Diego, four years in charge of the IBWC San Diego office and five years with the California RWQB in San Diego. Mr. Silva lives in the community of Jamul, California with his wife, Ana and son, Diego. He is a registered Civil Engineer in the state of California.”

Obama Nominations for A/S of the Army Civil Works (Army Corps of Engineers) and A/S of the Interior, Water and Science Submitted to US Senate for Confirmation. Here is the White House announcement for Jo-Ellen Darcy and Ann Castle.

Anne Castle, Nominee for Assistant Secretary for Water and Science, Department of the Interior. *Anne Castle joined Holland & Hart LLP as a lawyer in 1981 and became a partner in 1987. She is a practitioner in water rights and water quality law, and has over twenty-five years of experience in water rights practice. She has represented a wide variety of clients in water court litigation, including adjudications of water rights, changes in water rights and plans for augmentation, and appeals. She has also represented clients in numerous water rights and water quality administrative proceedings. Her practice includes water rights conveyancing, contracts for purchase, use, and supply of water, and the evaluation and assessment of water rights. Castle is the former Chair of Holland & Hart's Management Committee (2002 to 2004) and former Chair of the firm's Natural Resources Department (1998 to 2001). In 2004, members of the Colorado Bar voted her the top water lawyer in the Denver Business Journal's Best of the Bar survey. She was a finalist for Outstanding Women in Business—Professional Services awarded by the Denver Business Journal in 2005. Castle was appointed by Governor Bill Ritter to the South Platte River Task Force in 2007. She was designated "Best of the Bar" in Water Law in 2006-2008 and was listed in Best Lawyers in America for water law in 2007, the first year in which water law was a listed category, and again in 2008. Ms. Castle was honored in 2008 by the Women's Vision Foundation with its Woman of Vision Award and was featured in Law Practice Management magazine (Oct. / Nov. 2008) in its "Leadership Profile."*

Jo-Ellen Darcy, Nominee for Assistant Secretary of the Army (Civil Works), Department of Defense. *Ms. Darcy is currently Senior Environmental Advisor to the U.S. Senate Committee on Finance, working to develop energy, environmental and conservation initiatives using the tax code. Previously, she served as Senior Policy Advisor, Deputy Staff Director and Professional Staff on the U.S. Senate Committee on Environmental and Public Works. Darcy has held a number of other positions, including Executive Director at the Great Lakes and Water Resources Planning Commission in Michigan, Assistant to the Director of Personnel for Gubernatorial Appointments for the Office of the Michigan Governor and Legislative and Policy Analyst in the U.S. House of Representatives Banking Subcommittee on Economic Stabilization. Darcy holds a Master of Science in Resource Development from Michigan State University.*

Subcabinet Appointments – Interior. The David Hayes nomination for Deputy Secretary, US

Department of the Interior is being blocked by at least two GOP senators. It is not clear when or how the underlying issues will be addressed or resolved. The President also announced that he would nominate Michael Conner as Commissioner, Bureau of Reclamation.

Key Administration Appointments – Resources.

Nominee	Title (Position)	Status
David Hayes	Deputy Secretary, DOI	Nominated, Energy Committee Reported Nomination, Consideration Being Blocked
Tom Strickland	A/S Fish, Wildlife and Parks, DOI	Nominated, Confirmed
Ann Castle	A/S Water and Science, DOI	Nominated, Confirmation Hearing Pending
Mike Conner	Commissioner, BuRec, DOI	Nominated, Confirmation Hearing Scheduled for early May
Pete Silva	Assistant Administrator, Water, EPA	Nominated, Confirmation Hearing Pending
Nancy Sutley	Chair, Council on Environmental Quality, White House	Nominated, Confirmed. Serving.
	Deputy Under Secretary, Natural Resources, USDA	Nomination pending
David White	Director, NRCS, USDA	Appointed. Serving.
	Assistant Administrator, Renewables, DOE	Nomination Pending
Ashton Carter	Under Secretary of Defense for Acquisition, Technology and Logistics (ATC), DOD	Nominated, Confirmed.

Wayne Army	Deputy US for Installations and Env., DOD	Appointed (Holdover). Serving. Long-Term Status Unclear
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Climate Change/Energy Legislation. Waxman and Markey introduced their Cap and Trade Climate change bill and initiated extensive hearings. This past month, the Energy and Commerce Committee has already heard from almost 70 witnesses. The Natural Resources Committee has initiated a review of that bill and is proposing to draft a committee amendment for the bill. IEUA is being asked to review the water language as it emerges.

Drought Conditions and Water Supplies. The NOAA/USDA Drought Monitor reports that almost all of California remains in moderate to severe drought, from the Oregon to the Mexican border. Snow pack increased during the March-April snowfalls, but the water content is low. The Colorado River remains in deficit. This month only South Dakota is not in drought. Worst condition in the West (and entire US) is found in South Texas.

IEUA Continues to Work With Various Partners. On an on-going basis in Washington, IEUA continues to work with:

- a. Metropolitan Water District of Southern California (MWD)
- b. Milk Producer's Council (MPC)
- c. Santa Ana Watershed Project Authority (SAWPA)
- d. Water Environment Federation (WEF)
- e. Association of California Water Agencies (ACWA)
- f. WateReuse Association
- g. CALStart
- h. Orange County Water District (OCWD)
- i. Cucamonga Valley Water District (CVWD)
- j. Western Municipal Water District
- k. Chino Basin Watermaster



Date: May 20, 2009

To: The Honorable Board of Directors

Through: Public, Legislative Affairs, and Water Resources Committee (05/13/09)

From: Richard W. Atwater
Chief Executive Officer/General Manager

Submitted by: Martha Davis
Executive Manager of Policy Development

Subject: April Legislative Report from Dolphin Group

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Michael Boccadoro provides a monthly report on the Dolphin Group's activities on behalf of the Chino Basin/Optimum Basin Management Program Coalition.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD

Enclosure

April 30, 2009

To: Chino Basin/OBMP Coalition
From: Michael Boccadoro
President
RE: April Status Report



Please find attached the status report from The Dolphin Group for the month of April 2009.

A number of key energy bills moved forward at the California Legislature, including SB 32, a measure co-sponsored by IEUA that will enhance and improve the existing renewable energy feed-in tariffs. The key question still pending is whether the Legislature will move to increase the renewable portfolio standard (RPS) to 33%, as they are currently weighing a number of measures that would implement that goal.

Also preoccupying the Capitol is the upcoming special election to implement the 2009-10 budget measures adopted in February. If the measures fail, the currently estimated budget shortfall of \$8-13 billion would greatly expand. If that happens, legislators will have to scramble to put together additional cuts, fees and taxes to keep the state solvent.

At the California Energy Commission, regulators have begun workshops to establish the process for dispersing hundreds of millions of federal stimulus dollars on renewable energy projects and other energy efficiency efforts. The funds are expected to be invested in local governments and other projects within the next 2-3 months.

Chino Basin / OBMP Coalition

Status Report – April 2009

ENERGY/REGULATORY

CEC Begins Process to Disperse Federal Stimulus Dollars

With hopes of having monies flowing to local governments and other organizations by mid-Summer, the California Energy Commission has begun to hold a number of workshops to outline the process to determine how federal stimulus dollars will be spent. The CEC has focused on three key areas with regards to these funds:

1. Alternative and Renewable Fuel and Vehicle Technology Program

On April 27, the CEC held a workshop on this program. The state may receive up to \$50 million in matching funds for the AB 118 (Nuñez – 2006) program.

2. State Energy Program

On April 29, the CEC held a workshop regarding the \$226 million from the federal stimulus package that will be dedicated to renewable energy projects and energy efficiency programs in California. A series of local workshops will be held in the next few weeks for interested parties and local governments to further learn about the program. The details for the Southern California Workshop are below (the other two workshops will be held in Fresno and Sacramento):

Monday, May 4, 2009
1:00-3:00 PM
South Coast Air Quality Management District
Diamond Bar, CA

3. Energy Efficiency and Conservation Block Grant Program

It is estimated that there will be \$56 million available for this program, with 68% dedicated to local government. Details of this program are expected to be discussed at the above-referenced local workshop.

STATEWIDE SPECIAL ELECTION

Purporting to resolve the \$42 billion budgetary shortfall for the 2008-09 and 2009-10 budgets, there are six propositions on the ballot for May 19th, all of which are directly tied to the budget agreement reached in February.

- Proposition 1A** – Creates a special “Rainy Day” fund, puts new limits on state spending and if passed would extend temporary tax increases
- Proposition 1B** – Alters repayment schedule for schools and community colleges owed Proposition 98 funds by the state
- Proposition 1C** – Allows the State to borrow money for the general fund based on future profits from the state lottery
- Proposition 1D** – Temporarily shifts cigarette taxes away from California Children and Families Program and into the general fund and eliminates the state’s First 5 Commission and uses money for the general fund
- Proposition 1E** – Amends the “millionaire’s tax” for mental health services from 2004’s Proposition 63 to change which mental health programs the money funds
- Proposition 1F** – Forbids the California Citizens Compensation Commission from raising legislator’s and state officer’s pay when the state is running a deficit

Organizations traditionally aligned with both parties have been split in their support of the package of initiatives, with a number of conservative and liberal organizations coming out in opposition to the measures, particularly Proposition 1A. The California Republican Party voted to oppose all of the initiatives. Even the California Democratic Party failed to endorse Proposition 1A.

Taxpayer watchdogs such as the Howard Jarvis Taxpayers Association have also opposed Proposition 1A because it extends the period of time that the temporary taxes will be in effect. Similarly, the Service Employees International Union (SEIU) has also opposed the measure because of fear the spending cap could endanger expansion of state services.

Governor Schwarzenegger and legislative leaders continue to support the measure, but recent polling indicates that all of the budget-related measures will likely fail. Proposition 1F, which is polling well, may be the only initiative that passes in the special election.

If the measures are rejected, particularly 1A and 1C, the state will again face a significant budgetary shortfall that will likely require attention before the end of session in August. The Legislative Analyst Office has already estimated that the 2009-10 budget, approved in February, will be short by \$8-13 billion due to declining tax revenues. The failure of some or all of these propositions will greatly exacerbate that shortfall.

Turnout is estimated to be extremely low, perhaps as low as 20%. Low turnout tends to favor conservative voters, which have largely opposed the slate of initiatives.

LEGISLATIVE UPDATE

Major Legislation

April is the month when the majority of legislation receives its first policy hearing, and this was no exception for a slew of energy related measures that were weighed by committees in the both the Senate and Assembly. Most measures must be approved by their respective policy committees prior to May 1 in order to warrant further consideration this year.

SB 32 (Negrete-McLeod D-Chino) is cosponsored by IEUA, and will expand and improve the feed-in tariffs originally created by AB 1969 (Yee – 2006), also sponsored by IEUA. The bill will order the CPUC to consider other environmental and economic benefits of the feed-in tariffs in establishing the price paid for delivering renewable energy to the utility, with the hopes of increasing the economic payoff of installing renewable energy. It also expands the eligible size from 1.5 MW to 3 MW, and provides existing net-metering (NEM) customers an avenue to move off NEM onto a feed-in tariff. **The measure was approved by the Senate Energy, Utilities and Communications Committee on a bi-partisan 10-0 vote.**

CA SB 32

AUTHOR: Negrete McLeod [D]
TITLE: Renewable Electric Generation Facilities.
DISPOSITION: Pending
FILE: 13
LOCATION: Senate Second Reading File
SUMMARY:

Requires an electrical corporation to file with the Public Utilities Commission a standard tariff for electricity purchased from an electric generation facility located within the service territory of, and developed to sell electricity to, the electric corporation. Requires the facility to have a specified effective capacity. Amends provisions regarding owners, payments by a market price referent, peak demand, expedited interconnection procedures, net metering, rate-payer funded incentives and contracts.

VOTES:

04/21/2009 Senate Energy, Utilities and
Communications Committee

P 10-0

Position: Support

IEUA also supports AB 560 (Skinner D-Berkeley), which will increase the size of the existing NEM programs. Under current law, each utility is only permitted to allow NEM customers up to 2.5% of the size of their system. PG&E is in danger of reaching this level in the next year, with SCE and other utilities also approaching this level. SB 560 would expand the cap to 10%. **The measure was approved by the Assembly Utilities and Commerce Committee on a 10-3 vote.**

CA AB 64

AUTHOR: Krekorian [D]
TITLE: Renewable Energy Resources: Generation and Transmission
DISPOSITION: Pending
LOCATION: Assembly Second Reading File
SUMMARY:

Recasts the renewables portfolio standard program to require that a retail seller and a local publicly owned electric utility procure specified percentages of its electricity from renewable energy resource. Relates to tariffs filed by electrical corporations for energy purchased from small-scale renewable source facilities. Establishes the Renewable Infrastructure Authority and related fund. Provides for renewable energy designation zones and transmission corridor zones. Requires procurement goals.

VOTES:

04/01/2009 Assembly Utilities and Commerce P 8-5
Committee
04/29/2009 Assembly Natural Resources Committee P 6-3
Position: Watch

CA SB 14

AUTHOR: Simitian [D]
TITLE: Utilities: Renewable Energy Resources
DISPOSITION: Pending
LOCATION: ASSEMBLY
SUMMARY:

Revises the requirement for retail sellers of electricity to meet and exceed a specified percentage of their procurement targets from renewable energy resources. Requires an accounting system to verify compliance by retail sellers and local publicly owned electric utilities to comply with the renewables portfolio standards program. Relates to Public Utility Commission and Independent System Operator responsibilities under the program. Relates to thermal energy facilities certification. Requires reports.

VOTES:

03/03/2009 Senate Energy, Utilities and P 6-3
Communications Committee
03/23/2009 Senate Appropriations Committee P 7-5
03/31/2009 Senate Floor P 21-16
Position: Watch

CA SB 805

AUTHOR: Wright [D]
TITLE: Energy: Renewable Energy Sources: Procurement
DISPOSITION: Pending
COMMITTEE: Senate Appropriations Committee
HEARING: 05/04/2009 11:00 am
SUMMARY:

Revise the renewables portfolio standard. Requires each retail seller, in order to fulfill long-term resource needs, to increase its total procurement of eligible renewable energy resources so that a percentage are procured from eligible renewable energy resources. Requires an electrical corporation to procure a minimum quantity of electricity from renewable energy resources. Provides that the cost limitation on electrical corporations shall be a percentage of the annual revenue requirement.

VOTES:

Position: Watch

Other Energy Legislation

CA AB 19 **AUTHOR:** Ruskin [D]
TITLE: Greenhouse Gas Emissions: Consumer Product Labeling
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:
Enacts the Carbon Labeling Act of 2009. Requires the State Air Resources Board to develop and implement a program for the voluntary assessment, verification, and standardized labeling of the carbon footprint of consumer products sold in this state.

VOTES:

04/13/2009 Assembly Natural Resources Committee P 6-3

Position: Watch

CA AB 45 **AUTHOR:** Blakeslee [R]
TITLE: Distributed Generation: Small Wind Energy Systems
DISPOSITION: Pending
COMMITTEE: Assembly Local Government Committee
HEARING: 05/13/2009 1:30 pm
SUMMARY:
Authorizes a local agency to provide for the installation of small wind energy systems and to establish a process for the issuance of conditional use permits for these systems. Authorizes the agency to impose conditions on the installation. Provides an application approval process for a local agency which has not established such permit process. Authorizes a local agency to require a system be removed if it is inoperable for a specified period of time.

Position: Watch

CA AB 46 **AUTHOR:** Blakeslee [R]
TITLE: Energy: Energy Conservation Assistance
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:
Amends the provisions of existing law that provides for the administration of the State Energy Conservation Assistance Account that provides grants and loans to local governments and public institutions for energy use savings. Extends the operation of those provisions. Extends the financial assistance program and the Local Jurisdiction Energy Assistance Account that provides loans to local jurisdictions for energy projects.

VOTES:

03/23/2009 Assembly Utilities and Commerce P 14-0
Committee

Position: Watch

04/20/2009 Assembly Natural Resources Committee P 8-0

CA AB 212

AUTHOR: Saldana [D]
TITLE: Energy: Building Standards: Zero Net Energy Buildings
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 04/29/2009 9:00 am
SUMMARY:

Requires the State Energy Resources Conservation and Development Commission to adopt building design and construction standards and energy and water conservation standards to require new residential constructions on a date by which the commission determines that the use of photovoltaic technology is cost effective, to be zero net energy buildings.

VOTES:

04/13/2009 Assembly Natural Resources Committee P 6-3

CA AB 222

AUTHOR: Adams [R]
TITLE: Energy: Biofuels
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:

Modifies the definition of in-state renewable electricity generation facility for the purposes of the Public Interest Research, Development, and Demonstration Program administered by the Energy Resources Conservation and Development Commission to include a facility that uses conversion at a biorefinery. Amends the definition of solid waste facility under the Integrated Waste Management Act of 1989 to include a biorefinery that processes solid waste and repeals a provision of the Act defining gasification.

Position: Watch

CA AB 228

AUTHOR: Huffman [D]
TITLE: Energy: Outdoor Lighting Efficiency
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:

Requires the State Energy Resources Conservation and Development Commission to adopt minimum energy efficiency standards for outdoor lighting that would achieve a specified reduction in energy consumption. Eliminates the requirement that the Commission consult with the Department of Transportation to ensure that those standards are compatible with the Department's policies and standards for safety and illumination levels on state highways.

VOTES:

04/13/2009 Assembly Utilities and Commerce Committee P 9-5

CA AB 238

AUTHOR: Adams [R]
TITLE: Renewable Energy Resources
DISPOSITION: Pending
LOCATION: ASSEMBLY
SUMMARY:

Revises the legislative findings and declarations to declare that new and modified electric transmission facilities, including the employment of smart grid

technologies, may be necessary to facilitate the state achieving its energy efficiency goals and renewables portfolio standard targets.

CA AB 413

AUTHOR: Fuentes [D]
TITLE: Energy: Rates
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:

Prohibits the Public Utility Commission from requiring or permitting an electrical corporation to employ time-variant pricing for residential customers. Authorizes the commission to allow such corporation to offer customers the option of receiving service pursuant to time-variant pricing under certain conditions. Requires the establishment of a CARE program for electricity and gas customer assistance with specified requirements for utilities. Relates to charges for baseline quantities or electricity.

Position: Watch

CA AB 758

AUTHOR: Skinner [D]
TITLE: Energy: Energy Audit
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 04/29/2009 9:00 am
SUMMARY:

Requires the Energy Commission to establish a regulatory proceeding to develop a program to achieve greater energy savings in the state's existing residential and commercial buildings. Requires the Public Utilities Commission to open a proceeding to investigate the ability of electrical corporations to provide energy efficiency financing options to their customers. Provides for no-cost energy audits. Requires a local publicly owned utility to be responsible for implementing an energy efficiency program.

VOTES:

04/20/2009 Assembly Utilities and Commerce P 11-4
Committee

Position: Watch

CA AB 828

AUTHOR: Lieu [D]
TITLE: Green Building Standards
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:

Requires the Buildings Standards Commission and other state agencies proposing green building standards to seek input from other agencies and specified groups. Requires any agency providing input to recommend whether the standard should be voluntary or mandatory. Requires that approved green building standards be inserted into the Building Standards Code. Authorizes the Energy Resources Conservation and Development Commission to develop and adopt voluntary energy efficiency standards.

VOTES:

04/14/2009 Assembly Business and Professions P 7-3
Committee

Position: Watch

CA AB 887 **AUTHOR:** Krekorian [D]
TITLE: Energy
DISPOSITION: Pending
LOCATION: ASSEMBLY
SUMMARY:
States the intent of the Legislature to enact legislation to address the impediments to the siting of facilities that produce electricity from renewable sources of energy, and the placement and construction of transmission infrastructure necessary to allow that electricity to be consumed by California taxpayers.
Position: Watch

CA AB 958 **AUTHOR:** Eng [D]
TITLE: Design-build: Metropolitan Water District
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:
Authorizes the Metropolitan Water District of Southern California to enter into design-build contracts for projects involving the design, construction, fabrication, and installation of a solar energy system.
VOTES:
04/15/2009 Assembly Local Government Committee P 5-1
Position: Watch

CA AB 1234 **AUTHOR:** Skinner [D]
TITLE: State Capitol: Modernization Plan
DISPOSITION: Pending
LOCATION: Assembly Second Reading File
SUMMARY:
Requires the Department of General Services to submit to the Legislature a State Capitol Smart Building Modernization Plan that would be required to include certain elements. Requires the department to develop the plan in consultation with the Historic State Capitol Commission and to ensure the plan is consistent with the commission's master plan.
Position: Watch

CA AB 1347 **AUTHOR:** Price [D]
TITLE: Water Resources: Desalination
DISPOSITION: Pending
LOCATION: Assembly Water, Parks and Wildlife Committee
SUMMARY:
Relates to desalination and water resources.
Position: Watch

CA AB 1453 **AUTHOR:** Buchanan [D]
TITLE: Solar Energy Systems
DISPOSITION: Pending
LOCATION: ASSEMBLY
SUMMARY:
Makes technical, nonsubstantive changes to existing statutes that require the Public Utilities Commission to undertake certain steps in implementing the State Solar Initiative.
Position: Watch

CA AB 1536 **AUTHOR:** Blakeslee [R]
TITLE: Clean Technology Incentive Program
DISPOSITION: Pending
LOCATION: Assembly Second Reading File
SUMMARY:
Requires the Public Utilities Commission to administer the clean technology incentive program for distributed generation until a specified date. Authorizes incentives to be provided pursuant to the program for energy storage facilities meeting certain requirements.
VOTES:
04/20/2009 Assembly Utilities and Commerce P 15-0
Committee
Position: Watch

CA SB 7 **AUTHOR:** Wiggins [D]
TITLE: Renewable Energy Sources: Net Metering
DISPOSITION: Pending
LOCATION: Senate Second Reading File
SUMMARY:
Relates to the Public Utilities Act, which imposes various duties and responsibilities on the Public Utilities Commission. Relates to a standard contract or tariff for net energy metering. Requires an electricity distribution utility or cooperative, at the discretion of a customer-generator to take specified action in relation to net surplus electricity produced. Provides that only part or all of the electricity needed by a consumer is eligible for monetary incentives under solar initiative programs.
Position: Watch

CA SB 17 **AUTHOR:** Padilla [D]
TITLE: Electricity: Smart Grid Systems
DISPOSITION: Pending
LOCATION: Senate Second Reading File
SUMMARY:
Requires the Public Utilities Commission to determine the requirements for a smart grid deployment plan consistent with the policies set forth in federal law. Requires that the smart grid improve overall efficiency, reliability, and cost-effectiveness of electrical system operations, planning, and maintenance. Requires each electrical corporation to develop and submit a smart grid deployment plan to the Commission. Authorizes full or partial recovery of an electrical corporation's expenditures.
Position: Watch

CA SB 31 **AUTHOR:** Pavley [D]
TITLE: Global Warming Solutions Act
DISPOSITION: Pending
LOCATION: Senate Second Reading File
SUMMARY:
Relates to the Global Warming Solutions Act of 2006. Requires that revenues collected pursuant to compliance mechanisms adopted by the State Air Resources Board be deposited in the Air Pollution Control Fund. Specifies certain uses of the revenues collected pursuant to the fee and the compliance mechanisms.

VOTES:
04/20/2009 Senate Environmental Quality Committee P 5-2
Position: Watch

CA SB 42 **AUTHOR:** Corbett [D]
TITLE: Coastal Resources: Once Through Cooling
DISPOSITION: Pending
LOCATION: Senate Energy, Utilities and Communications Committee
SUMMARY:
Prohibits a state agency from authorizing, approving or certifying a new powerplant or industrial facility that uses once-through cooling Requires the implementation of a statewide policy on once-through cooling at coastal and estaurine powerplants. Requires a fee on powerplants and industrial installations using once-through cooling.
VOTES:
03/24/2009 Senate Natural Resources and Water P 6-3
Committee
Position: Watch

CA SB 104 **AUTHOR:** Oropeza [D]
TITLE: Global Warming Solutions Act of 2006: Greenhouse Gases
DISPOSITION: Pending
LOCATION: Senate Second Reading File
SUMMARY:
Amends the Global Warming Solution Act of 2006; Includes in the definition of greenhouse gas under the Act nitrogen trifluoride, and any other gas designated as a greenhouse gas by the United Nations Framework Convention on Climate Change. Expresses the intent of the Legislature that the State Air Resources Board take all feasible actions to include in the regulations to be adopted pursuant to the Act emission limits and emission reduction measures for nitrogen trifluoride.
VOTES:
04/27/2009 Senate Environmental Quality Committee P 5-2
Position: Watch

CA SB 128 **AUTHOR:** Padilla [D]
TITLE: State Climate Change Institute
DISPOSITION: Pending
COMMITTEE: Senate Appropriations Committee
HEARING: 05/04/2009 11:00 am
SUMMARY:
Creates the Climate Change Institute to identify and support, through a merit-based peer-reviewed competitive grant process, research and education to be undertaken at academic and research institutions and laboratories throughout the state, and to oversee, coordinate and manage a nonduplicative, targeted research and development program for the purposes of achieving the state's targets for reducing emission of greenhouse gas.
VOTES:
04/27/2009 Senate Environmental Quality Committee P 5-2
Position: Watch

CA SB 225 **AUTHOR:** Florez [D]
TITLE: Emission Reduction Credits

DISPOSITION: Pending
LOCATION: Senate Environmental Quality Committee
SUMMARY:

Authorizes an air quality management district and an air pollution control district to create an emission reduction credit from the emission reductions resulting from a project that is funded from both public and private moneys if specified requirements are met.

Position: Watch

CA SB 429

AUTHOR: Benoit [R]
TITLE: Public Utilities Act
DISPOSITION: Pending
LOCATION: Senate Rules Committee
SUMMARY:

Makes technical changes to the Public Utilities Act.

Position: Watch

CA SB 463

AUTHOR: Strickland T [R]
TITLE: Tax Credits: Renewable Energy Projects
DISPOSITION: Pending
FILE: 8
LOCATION: Senate Second Reading File
SUMMARY:

Amends the Personal Income Tax Law and the Corporation Tax Law. Allows a credit for costs paid or incurred for the purchase and installation of renewable energy resources or renewable energy resources conversion technology projects.

VOTES:

04/21/2009 Senate Energy, Utilities and
Communications Committee

P 10-0

Position: Watch

CA SB 488

AUTHOR: Pavley [D]
TITLE: Energy: Energy Usage Information
DISPOSITION: Pending
LOCATION: Senate Appropriations Committee
SUMMARY:

Require each local publicly owned electric utility and each local publicly owned gas utility to periodically disclose, on the billing statement of a residential subscriber, information documenting the amount of energy used by the metered residence compared to similar residences in the area. Requires a report to the Energy Commission on the energy savings resulting from the program adopted by the utility pursuant to these requirements.

Position: Watch

CA SB 581

AUTHOR: Leno [D]
TITLE: Hetch Hetchy Water and Power
DISPOSITION: Pending
COMMITTEE: Senate Energy, Utilities and Communications Committee
HEARING: 05/05/2009 9:30 am
SUMMARY:

Authorizes the City and County of San Francisco to elect to designate specific renewable electricity generation facilities at-site renewable generation as Hetch

Hetchy Water and Power remote renewable generation. Authorizes the City and County of San Francisco to elect to designate specific renewable facilities or a portion of specific renewable electricity generation facilities.

Position: Watch

CA SB 605

AUTHOR: Ashburn [R]
TITLE: California Environmental Quality Act: Biogas Pipelines
DISPOSITION: Pending
LOCATION: Senate Second Reading File
SUMMARY:

Exempts from CEQA a project of less than eight miles in length within a public street of highway or another public right-of-way for the installation of a new pipeline, or the maintenance, repair, restoration, reconditioning, relocation, replacement, removal, or demolition of an existing pipeline, that is used to transport biogas.

VOTES:

04/27/2009 Senate Environmental Quality Committee P 7-0

Position: Watch

CA SB 721

AUTHOR: Steinberg [D]
TITLE: Energy: Greenhouse Gas Emissions
DISPOSITION: Pending
COMMITTEE: Senate Appropriations Committee
HEARING: 05/04/2009 11:00 am
SUMMARY:

Creates the Climate Action Team responsible for coordinating the state's overall climate policy and preparing, adopting, and presenting to the Legislature, a strategic research, development, demonstration, and development plan that establishes priorities and identifies key expenditure categories for research, development, demonstration, and development funds to be expended by the state agencies represented on the team.

VOTES:

04/20/2009 Senate Environmental Quality Committee P 5-2

Position: Watch

CA SB 729

AUTHOR: Walters [R]
TITLE: Global Warming Solutions Act
DISPOSITION: Pending
LOCATION: Senate Rules Committee
SUMMARY:

Relates to the Global Warming Solutions Act of 2006 which requires the State Air Resources Board to adopt regulations to require the reporting and verification of emissions of greenhouse gases and to monitor and enforce compliance with the reporting and verification program, and requires the board to adopt a specified statewide greenhouse gas emissions limit. Makes a technical, nonsubstantive change to a legislative finding within the act.

Position: Watch



Date: May 20, 2009

To: The Honorable Board of Directors

Through: Public, Legislative Affairs, and Water Resources Committee (05/13/09)

From: Richard W. Atwater
Chief Executive Officer/General Manager

Submitted by: Martha Davis
Executive Manager of Policy Development

Subject: April Legislative Report from Innovative Federal Strategies, LLC

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Letitia White provides a monthly report on their federal activities on behalf of IEUA.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD

Enclosure

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Comprehensive Government Relations

MEMORANDUM

To: Rich Atwater and Martha Davis
IEUA

From: Letitia White, Alex Shockey and Heather McNatt

Date: April 30, 2009

Re: April Monthly Legislative Update

April was very busy in Washington, despite the two week Congressional recess in the middle of the month. Congress worked through the annual budget resolution and began taking submissions for the massive transportation reauthorization bill.

Early in April, IFS was thrilled to notify IEUA that the FY 2010 request for the Recycled Water Initiative was listed on the appropriations websites of three House Members – Congressmen Dreier, Calvert and Baca. At the end of the month, we were happy to see Rich back in Washington, where he delivered compelling testimony to the Water and Power Subcommittee on the House side. Rich fielded many questions from committee members on both sides of the aisle, including some tough ones from Rep. Hastings of Washington State. Throughout the month, we emailed grant announcements and legislative updates as Congress considered water-related provisions. We also stayed in close contact with IEUA about the pending application for ARRA funds under Title 16. And it was a relief to see that Rich expects the FY 2009 funding of \$5 million from the Bureau to arrive very soon (if it hasn't already arrived).

Water Legislation Update

IFS was very focused on the House as they considered H.R. 1145, the National Water Research and Development Initiative Act of 2009. The bill calls for the creation of a National Water Research and Development Initiative to improve the federal government's role in designing and implementing federal water research, development, demonstration, data collection and dissemination, education, and technology transfer activities to address changes in U.S. water use, supply, and demand. House passage of this bill happened very quickly, but it remains unclear whether the Senate will act soon. There is not yet a Senate companion to HR 1145, and testimony given during a Senate hearing March suggested that they plan to take a different approach.

We have also been monitoring Senator Feingold's Clean Water Restoration Act, which already has 24 cosponsors in the Senate. Chairman Oberstar has not yet introduced the House version of the bill, although he did so in the last Congress and is widely expected to do so again. A powerful coalition of environmental groups is supporting the bill, which would implement a massive expansion of the authority of the Clean Water Act in response to several judicial

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decisions limiting the act. We will keep you posted as the House version is introduced and the bill moves forward.

Fiscal Year 2009 Supplemental Appropriations

On April 9, the Obama Administration sent Congress an \$83.4 billion supplemental funding request for the Afghanistan and Iraq wars. The military has said it needs the money by the end of May to continue funding its war-related operations and the House and Senate hope for quick consideration. House Defense Subcommittee Appropriators are slated to meet tomorrow to begin work on the request. In the wake of the news about the "swine flu" virus, President Obama has asked Congress to provide \$1.5 billion to fight the flu and prepare in case of a possible epidemic. This request may be the reason the FY 2009 supplemental moves quickly!

Fiscal Year 2010 Appropriations

The House and Senate Appropriations Subcommittees have been holding hearings all this month and last on the different federal agencies, policy and budget matters under their jurisdiction. This will allow Subcommittee and full Committee staff to gather the information necessary to draft the fiscal year 2010 bills and reports. After the hearing process is complete the mark-up process will proceed, the first subcommittees mark-ups likely starting in June. No mark-ups have been slated on fiscal year 2010 bills at this point.

Budget

Yesterday, Congress marked President Obama's 100th day in office by adopting a fiscal year 2010 budget resolution that sets the stage for moving the President's top domestic policy priorities. The House adopted the budget resolution conference report (S Con Res 13) 233-193; the Senate adopted it 53-43. As with initial House and Senate adoption of the budget, not a single Republican in either chamber voted for the final budget resolution. Seventeen House Democrats voted against the bill, mostly conservative Blue Dogs, while four Senate Democrats voted no.

The budget is a five-year spending and tax blueprint - - a non-binding resolution setting congressional spending limits for fiscal year 2010 - - which does not have to be signed into law by the President. The budget projects a total of \$3.555 trillion in outlays in fiscal year 2010 and would allow for \$1.086 trillion in new, non-war discretionary spending. It projects a deficit of \$1.2 trillion for the fiscal year that begins this October 1.

Transportation Reauthorization (TEA)

The day Congress went into spring recess, the House Transportation and Infrastructure Committee sent out its call to Members for their special project requests. The Committee form is a detailed, nine page questionnaire which most Members have personalized to a small degree. The Committee database opened on April 28 for Members to start making their requests and is slated to close on May 8. House Transportation and Infrastructure Committee Chairman James Oberstar (D-MN) has outlined an extremely ambitious timeline for his Transportation Reauthorization (TEA) legislation: a committee mark-up is scheduled for May 18 and floor consideration is slated for the first week of June. With that said, however, the Senate has shown no signs of movement on their version of the legislation. Many are speculating that Senator Boxer intends to wait until next year - - when she is up for re-election - before taking action. If

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that is the case, an extension of the current bill, which expires September 2009, will be necessary.

Senator Arlen Specter Changes Parties

Yesterday, in a surprise move, Senator Arlen Specter (R-PA) switched parties and will now caucus with the Democratic Party. After 28 years in the Senate as a Republican, Specter will enter the Democratic majority with his seniority intact. He has more seniority than four chairmen of the major panels on which he serves: Veterans' Affairs Chairman Daniel K. Akaka of Hawaii; Special Aging Chairman Herb Kohl of Wisconsin; Barbara Boxer of California, who leads the Environment and Public Works Committee; and Tom Harkin of Iowa, chairman of the Labor-HHS-Education Appropriations Subcommittee. Nevertheless, Senate Majority Leader Harry Reid (D-NV) has no intention of stripping current Chairmen of the gavels during this Congress to accommodate Specter switch. Nor does Reid plan to strip any Democrats of their current committee posts. Senator Reid intends to have overall committee membership remain the same; Specter would just move to the Democratic side of the dais.

Republicans are trying to figure out who will take over Senator Specter's ranking member committee posts and also to figure what this will do to the overall balance of power. Democrats appear poised to gain an additional seat in Minnesota, as courts thus far have upheld Democrat Al Franken's narrow lead over Republican Norm Coleman.

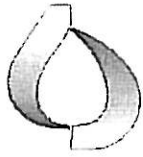
Swine Flu

Following the first death in the United States from the "swine flu" virus, President Obama has requested \$1.5 billion in supplemental fiscal 2009 funds to help fight swine flu and prepare for a possible bigger epidemic. Congressional leaders have promised swift action in approving these funds.

Federal health agencies are already in the midst of preparing a vaccine for the flu, designated the H1N1 strain. So far, several thousand people have been sickened in Mexico, and more than 150 have died there. Federal health officials describe the status of the outbreak as "pre-pandemic," and said that they would know more as cases were confirmed and investigated. Clinical trials will probably begin within a couple of months. It likely will take until the early fall of this year, however, to produce a vaccine. Federal authorities also have started deploying antiviral-drug stockpiles to states with confirmed cases, sending out 25 percent of the allotment for now. New York, where the majority of the cases are concentrated, has already received its allotment of supplies.

We will continue to keep you posted on news critical to your agenda.

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Date: May 20, 2009

To: The Honorable Board of Directors

Through: Public, Legislative Affairs and Water Resources Committee (05/13/09)

From: Richard W. Atwater
Chief Executive Officer/General Manager

Submitted by: Sondra Elrod
Public Information Officer

Subject: Public Outreach and Communications

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

Calendar of Events

May 2009

- **May 15**, OC Water Summit, Grand California Hotel Disneyland, 7:30 a.m. to 1:30 p.m.
- **May 18 - 19**, 13th Annual WaterReuse & Desalination Research Conference, Hilton Waterfront Beach Resort, Huntington Beach.
- **May 19 - 22**, ACWA Spring Conference & Exhibition Water Infrastructure 911, Sacramento
- **May 21**, Fontana Police and Fire Recognition Awards, Steelworkers Auditorium, 6:00 p.m.
- **May 22**, Cucamonga Valley Water District Open House for Water Awareness Day, 11:00 a.m. to 2:00 p.m.

June 2009

- **June 6**, Montclair Family Fun Festival, Alma Hofman Park, 11:00 a.m. to 5:00 p.m.
- **June 14 - 18**, American Water Works Association, The World's Water Event, San Diego.

August 2008

- **August 20**, BIA, San Bernardino Water Conference, Ontario Convention Center.

Outreach/Educational Inland Valley Daily Bulletin Newspaper Campaign

The 5 tips on ways to help conserve water ad will appear in the Daily Bulletin on the first Sunday of each month. The Earth Day two-page advertisement ran on Wednesday, April 22.

Water Conservation Outreach

IEUA is continuing to work with conservation partners to plan the Regional Conservation message. The new slogan is *Saving Water...It's the Right Thing to Do*.

IEUA is working on putting together meetings with our service clubs to talk about the drought. As soon as club meetings are confirmed we will notify the Board.

MWD is putting together legislative briefings with Director Santiago and IEUA's local state representatives to discuss drought and upcoming legislation.

GIES dedications should occur during the end of May and the beginning of June. The schools have not yet scheduled the garden dedications, but as soon as they provide us with dates, we will contact the Board.

May 1 – 3, 2009

IEUA was an event sponsor at the Inland Green Expo at the Ontario Convention Center. Sponsorship provided IEUA and its local water agencies a booth, and the opportunity to conduct classes. IEUA and its local water agencies were included in print advertising and on the web. IEUA had a four page 'supplement' hand out at the Green Expo.

Regional Conservation Outreach Campaign

- Ongoing ads in the Inland Valley Daily Bulletin, Champion Newspaper, Fontana Herald News, and La Opinion.
- Ongoing water wise gardening classes.
- 30 second PSA's on community TV/movie theaters/radio/internet with conservation tips
- Billboards.

Agency Tours

During the month of March, staff provided a number of tours of the HQ, RP-5. Numerous tours of the Chino Creek Wetlands and Educational Park were provided by SAWA. Earth Day event held on April 22, 2009 was a success with over 300 people attending.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.