TRANSITION FROM A TRADITIONAL IRRIGATION DISTRICT TO A REGIONAL WATER RESOURCE AGENCY

Chris M. Kapheim[1]

Jim Wegley, P.E.[2]

ABSTRACT

Alta Irrigation District (District) has transitioned from a traditional irrigation district that historically focused on delivering agricultural water with some limited groundwater recharge to developing and implementing a comprehensive regional water management plan involving groundwater recharge, groundwater extraction, a water quality program, and storm water management. Alta Irrigation District has within its boundaries seven elected divisions comprising a total area of 130,000 acres of both agricultural and urbanized lands.

The District developed its initial Water Management Plan in 1999 under AB 3616. This was a voluntary effort formalized through a Memorandum of Understanding, between agencies, to address efficient water management practices; numerous changes were identified that refocused the policies of the District. First, development of a program to implement water measurement and volumetric pricing at the turnout. This is useful in providing a means of verification of (i) water use on an occurrence basis and (ii) equitability of water use within the District. Second, implementing a program to enhance the efficiency of agricultural water deliveries by constructing in strategic locations recharge and extraction facilities (Traver, Harder, and Dinuba Ponds) that store surplus water in the groundwater and extract such surplus water during periods when the irrigation demand is exceeded (see District map, page 15).

Issues relating to contamination of groundwater quality ultimately moved the District to evaluate surface water treatment and delivery to provide for a sustainable long-term water quality solution for local communities, especially disadvantaged communities, struggling with meeting drinking water standards. The concept of surface water treatment and delivery developed over a period of time due to the effort required to monitor, review data, perform a water supply study, and develop a long-term plan to integrate surface water and groundwater resources into a regional resource plan.

[1] General Manager, Alta Irrigation District, 289 N. L Street, Dinuba, CA, 93618; cmk@altaid.org
[2] Professional Engineer, Keller/Wegley Engineering, 209 S Locust St, Visalia, CA, 93291; Kelweg1@aol.com

BACKGROUND

The District's predecessor was the 76 Land and Water Company that was formed on June 7, 1882. Originally, there were seven stockholders that invested $280,000 in capital stock divided into 14 shares. The intent of the private company was to purchase land previously not irrigated for a low price and resell the property with access to surface water at a substantially higher price, resulting in a financial gain for the stockholders.

In March 1884, water was delivered by means of the newly constructed Traver Canal from the Kings River to several thousand acres in the vicinity of Traver, California. These early water deliveries established a precedent for water use that was used to determine a schedule of water diversions in later years. Litigation troubles and issues involving riparian water rights on the Kings River created the need for a publicly-elected agency. In 1890, all the assets of the 76 Land and Water Company were purchased by the newly organized Alta Irrigation District for four hundred and ten thousand dollars ($410,000.00). The vote to develop the new public agency comprising 129,300 acres was held on August 14, 1888, with the decision being 326 in favor and 19 opposed[3].

The Kings River is one of the largest streams entering the San Joaquin Valley and is the surface water supply to the District. The River's watershed covers 1,742 square miles, ranging in elevation from 500 to 14,000 feet above sea level. The majority of the watershed area is located in the high Sierra Mountains and receives heavy snowfall in the winter months. Usually, this snowpack melts slowly. As a result, in average runoff years peak flows incur during mid-May or early June. The average annual runoff for the Kings River is 1,689,700 acre-feet[4].

The water rights on the Kings River were still uncertain at the time the District was formed, resulting in significant legal entanglements and costs as described in this excerpt:

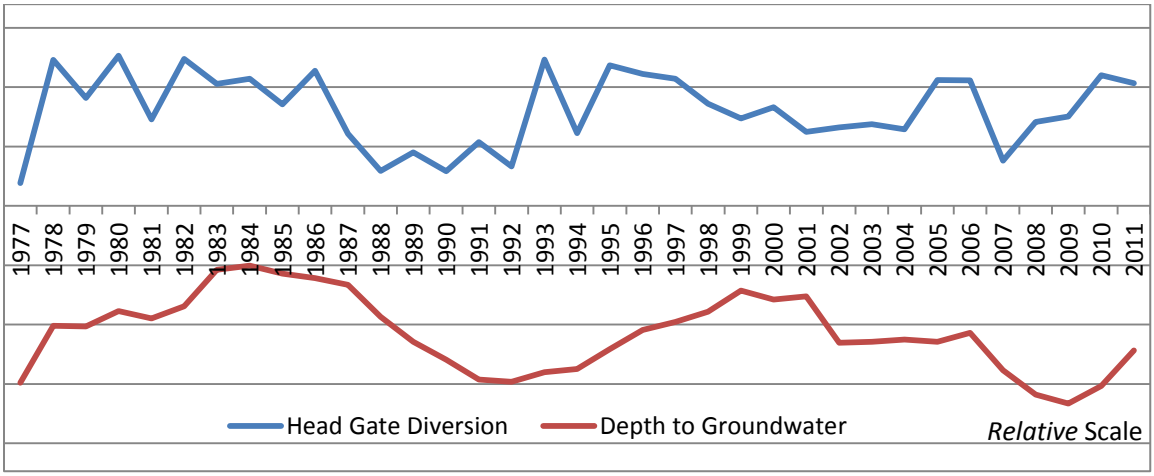
> "Water right litigation on the Kings River was for many years the chief worry of its managing officers; this was also a great worry and expense to the officers of all the other canal companies. Not less than 150 suits were filed between 1880 and 1910. Alta Irrigation District, the only public district, was in hot water all the time as a defendant[5]."

Rainfall occurs primarily in the winter months with virtually no rainfall in the summer months. The average rainfall within the District for the fifty-year period preceding 1956 was 11.39 inches with the annual applied use per-acre ranging from 24 to 36 inches. As a result, the agricultural crops within the District do not depend upon rainfall for all their irrigation needs; they depend upon surface water deliveries and deep well pumps[6]. Historically, the District enjoyed a shallow water table. In the early 1900's, the depth to groundwater averaged less than ten feet. In the 1920's, the District experienced a long

[3] William Morrision, 1988, The Alta Empire
[4] SB 1938 Groundwater Management Plan, 2010
[5] Charley K. Kaupke, Forty Years on the Kings River 1917 – 1957, 1957
[6] SB 1938 Groundwater Management Plan, 2010

dry period. As a result, many farmers installed groundwater pumps to supplement surface water supplies. Pump technology and capacity has evolved to the point that pumped extractions exceed the rate of aquifer recovery. As a result, in wet years, the groundwater table rises due to ample surface water deliveries and reduced groundwater pumping. Conversely, in dry years, active groundwater pumping reduced surface water deliveries resulting in a lower groundwater table (see Table 1)[7].

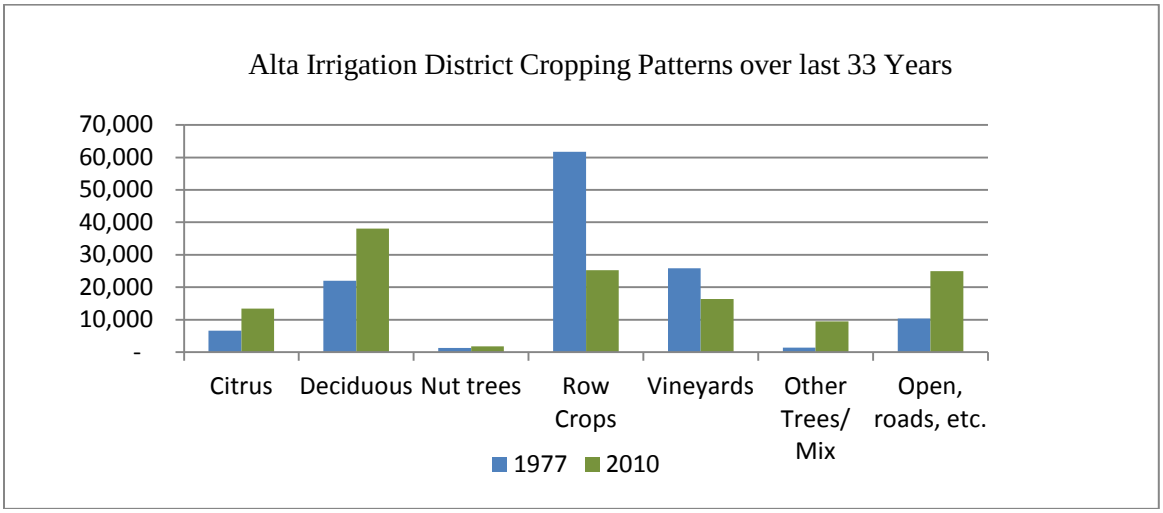
Table 1 - Head Gate Diversions and Depth to Groundwater



Over the last 100 plus years, cropping patterns have changed with the reliability of water resources. In the early years prior to the formation of the District, most of the farming focused on dry-land wheat production. Irrigation, during that time, was done mostly on a small scale for subsistence farming, domestic needs, and for stock watering[8]. Due to the reliable water supply and favorable climate, there has been a steady trend to higher value permanent crops within the District (see Table 2)[9].

[7] Alta Irrigation District Annual Report, 2011
[8] William Morrision, The Alta Empire, 1988
[9] Alta Irrigation District Annual Report, 2011

Table 2 - Crop Survey Report



WATER MANAGEMENT PLANNING

The District's AB 3616 Water Management Plan evaluated measurement and pricing for agricultural water deliveries. The District has, since its inception, charged for water on a per-acre basis and measured water deliveries as an operational tool to equitably allocate water to irrigation customers. Charging for water on a per acre basis does not allow the District to set an equitable charge that reflects actual costs for those lands receiving surface water versus those lands not using surface water. The Water Management Plan did recognize several significant issues related to measurement and pricing: (i) water measurement and volumetric pricing would ultimately be required for agricultural water deliveries, (ii) water measurement and volumetric pricing would allow for a more equitable means to assess cost to those using its service and (iii) water measurement and volumetric pricing would allow an equitable means of balancing surface water distribution costs to its water users. As a result, all landowners are charged a per-acre fee for general and administrative costs and a volumetric surcharge per acre-foot for surface water deliveries that are measured at a water users' turnout[10].

In January 2000, the board decided to move forward with a Proposition 218 election to authorize a volumetric surcharge. The District sent post cards to its irrigation water users to implement measurement and volumetric pricing along with rules and regulations for implementing the surcharge. Proposition 218 is a California Constitutional Amendment specifying election requirements for increasing assessments, fees, and charges. The initial price was determined to be up to $1.71 per acre foot (see Figure 1)

[10] Water Management Plan, California AB 3616, 1990

NOTICE OF PUBLIC HEARING
PERTAINING TO INCREASING PROPERTY RELATED FEES AND CHARGES

Date of Public Hearing:	**Thursday, March 30, 2000**
Time of Public Hearing:	**2:00 p.m.**
Location of Public Hearing:	**Alta Irrigation District Boardroom**
Amount of Water Increase:	**Up to $1.71 per acre-foot for up to five years**
Basis of Increase:	**Maintain a balanced budget**
Public Hearing Agenda:	
Staff Report	**2:00 p.m. to 2:30 p.m.**
Public Hearing	**2:30 p.m. to 4:00 p.m.**
Protest Review	**4:00 p.m. to 5:00 p.m.**

All protests must be in writing stating the landowner's name(s) and specific identification of parcels to be included.

Figure 1 - January 2000, 218 Election Notice

At the public hearing on March 30, 2000, the large attendance resulted in an overflow crowd with people sitting in the boardroom and the remainder standing in the lobby. The landowners were concerned with the method of measurement, accuracy of measurement and the possibility of future increases in the proposed acre-foot surcharge. Furthermore, it was explained to the landowners that the District had updated its turnouts over the last several years to adequately meet the accuracy necessary to base volumetric pricing on a turnout measurement. The submerged orifice method was discussed in detail as the preferred means of measurement primarily due to the District having mostly open canals with many submerged orifice-type turnouts already in place. The procedure to increase water cost under statutory requirements of Proposition 218 was also clarified. The initial Proposition 218election passed with very few opposition votes. Currently, the volumetric charge has been increased to $4.10 in accordance with the District's third Proposition 218 election conducted in 2005. The District identified specific distribution costs associated with delivery of surface water that are included in the acre-foot surcharge. These costs include fuel and maintenance for ditchtender trucks, cell phones for ditchtenders, ditchtender labor costs, answering service, billing, system maintenance, algaecide, and materials required for the delivery of surface water[11].

STRATEGIC PLANNING AND IMPLEMENTATION OF MISSION STATEMENT

Subsequent to initiating measurement and pricing changes, a strategic planning process was implemented to clarify the role and direction for the District. Urban development within the District was becoming a significant issue requiring the updating of irrigation district facilities with proposed urban-type improvements. For example, open canals in urban areas are pipelined for liability reasons. As a result, over a five-year period, several efforts were made to identify changes in the traditional role of the irrigation

[11] Engineer's Report Proposition 218 Procedures Alta Irrigation District, 2005

district and means available to address current and future changes. During board meeting sessions, it was self-evident that (i) water quality issues (both for surface water and groundwater) were going to be high priority, and (ii) making sure that the District is able to maintain a balanced budget. The District's top priority is to provide efficient water service to its customers. In Addition, public outreach and education about water issues are necessary actions to garner public support for the evolving role of the District in becoming more involved in urban water issues. As a result, on May 16, 2007 the District's Mission Statement was adopted (see attached Mission Statement).

Mission Statement

MISSION STATEMENT: To protect Alta Irrigation District's surface water rights and groundwater authority, easements and facilities along with utilizing all available water resources for the betterment of the District.
OBJECTIVE: Plan, monitor and provide incentives to support the District's groundwater and surface water conjunctive use program;
OBJECTIVE: Plan, monitor and implement a program to evaluate and address water quality issues (surface and groundwater) within the District.
STRATEGY: Develop a funding strategy that provides for a diversified revenue stream. The goal is to generate one-third of the District's revenue from non-agricultural related water delivery programs. This would allow the District to (i) fund and implement water conservation programs and upgrade District facilities, (ii) address water quality exchanges to meet urban drinking water standards, and (iii) provide incentive pricing to support and maintain agricultural surface water deliveries.
OBJECTIVE: To protect the District's facilities and mitigate all costs associated with storm water impacts.
STRATEGY: Develop a comprehensive program to evaluate and mitigate financial and water quality impacts from storm water.
OBJECTIVE: To enhance the general public's knowledge of the District's regional role as a water resource agency;
OBJECTIVE: To promote, educate and inform the general public and policy maker's role about the importance of surface water for agricultural and urban deliveries and groundwater quality and quantity.
STRATEGY: To facilitate landowner, local, state and federal agency information sharing utilizing a web site.
Adopted May 16th, 2007

The result of the strategic planning process and updated Mission Statement was for the District to confidently move forward with improving delivery of agricultural surface and ground water but also address water quality issues on a regional basis. In 2007, Alta Irrigation District, Cutler Public Utilities District, and Orosi Public Utilities District signed an MOU to jointly fund a $75,000 water supply study to evaluate water quality and to recommend options for providing potable water in the Cutler-Orosi area. It was extremely important to have a unified strategy to be able to proactively move in a direction to fund studies and activities that are solution orientated.

GROUNDWATER ACTIVITIES

The primary groundwater focus for the District is sustainability through (i) conjunctive use of both surface and groundwater, (ii) evaluating subsidence impacts on the available groundwater storage capacity, and (ii) addressing water quality issues primarily associated with disadvantaged communities that are currently limited to using contaminated groundwater for drinking water. California authorized local agencies to manage groundwater under AB 3030 and subsequently incorporated regional approaches under SB 1938. It was determined that these issues could be more effectively addressed on a regional basis by updating and amending the District's current AB 3030 Groundwater Management Plan to bring it compliant with SB 1938. The District's AB 3030 Plan was adopted on March 14, 1994; the SB 1938 Plan was adopted on June 6, 2010. To address issues on a regional or basin-wide basis, interested parties in the Kings sub-Basin formed the Upper Kings Basin Integrated Regional Water Management Plan and Joint Powers Agency ("Kings Basin JPA") in 2009. Currently there are 51 public, private and non-governmental agencies that have signed on as either a paying member or interested party. The Kings Basin JPA's primary goals and objectives are to evaluate and prioritize water quality issues, monitor depth to groundwater and subsidence on a regional basis and implement and fund a plan to address water quality and groundwater overdraft issues. The District's SB 1938 Groundwater Plan provides a blueprint on how to integrate the District's groundwater plan with the regional effort being developed through the Kings Basin JPA (see Figure 2).[12]

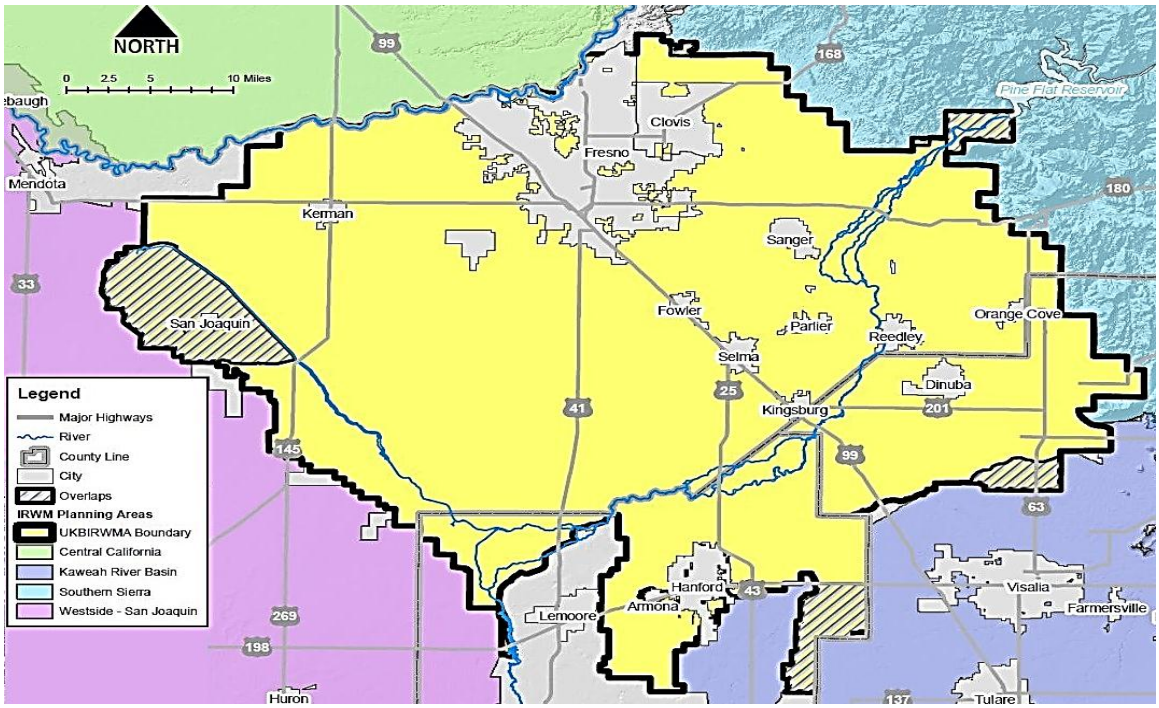


Figure 2 - Map Upper Kings Basin JPA Service Area

[12] Kings River Conservation District, Upper Kings Basin Water Authority, www.krcd.org, 7/03/2012

To initiate the SB 1938 Plan, the District formed an advisory committee comprised of diverse interests within district: City of Dinuba, City of Reedley, County of Tulare, Kings River Conservation District, Cutler Public Utility District, Orosi Public Utility District and Community Water Center. Listed below are action items contained in the District's original AB 3030 Plan that are still being effectively used:

1. Water Monitoring
2. Direct Recharge
3. Indirect Recharge
4. Water Conservation – Water Regulation
5. No Exportation of Groundwater
6. Well Drilling and Abandonment
7. Groundwater Banking
8. Intra-district Water Transfer
9. Inter-district Water Transfer
10. Reduction in Groundwater Outflow
11. Pumping Restrictions
12. Additional Water Supply and Storage
13. Redistribution of Surface Water

The SB 1938 Plan also includes a water banking focus that is used in meeting water quality goals and objectives. The intent is to conserve water supplies by means of groundwater recharge basins and utilize the conserved water by extracting some of the recharged groundwater thereby creating a new source of water. By utilizing conserved water to meet localized water demand in the lower reaches of the District, the District can reduce its flow demand from its storage account in Pine Flat Reservoir. As a result, the conserved water that is pumped to meet downstream demand can be made available as a new surface water supply to serve disadvantaged communities currently relying on contaminated groundwater. The District activities in this regard will facilitate construction of a surface water treatment plant to blend groundwater and treated surface water to ensure that drinking water standards are met in the easterly region of the District. An additional benefit of delivering surface water to those communities will be the reduction in groundwater pumping in the Cutler-Orosi area of the District, thereby reducing the stress on the existing aquifer.

In regards to groundwater overdraft, the most efficient means of groundwater recharge is to reduce groundwater pumping. This is referred to as "in-lieu groundwater recharge." The overall groundwater levels within the District are trending downward. It would take approximately 22,000 acre-feet per year of additional surface water to correct the overdraft situation that presently exists. Based on average soil porosity and specific yield, current groundwater trends result in a decline in the available groundwater storage equal to of one foot of groundwater for every 7,000 acre-feet of overdraft. Within the District, landowners are rapidly converting to low volume irrigation practices. The District recognized the impact of this issue on water use and created a program to encourage landowners to use surface water when available, i.e., flexible use policies for low volume irrigation users and incentive pricing for surface water. With landowners converting to more efficient irrigation practices and using surface water when available, the District is able to operate with lower flow rates in its canals and still meet irrigation demands, resulting in longer periods of surface water delivery to landowners for the same water supply and enhanced opportunity for in-lieu groundwater recharge[13].

[13] SB 1938 Groundwater Management Plan, 2010

In areas where groundwater overdraft is an issue, recharge basins have been constructed. A good example is the recharge basins (Traver and Harder Ponds) constructed near Traver California. These engineered basins collect and recharge surplus water from storm water sources and operational spill (see Figure 3)[14]. Where suitable sites are available, the District will continue to consider development of additional recharge basins.

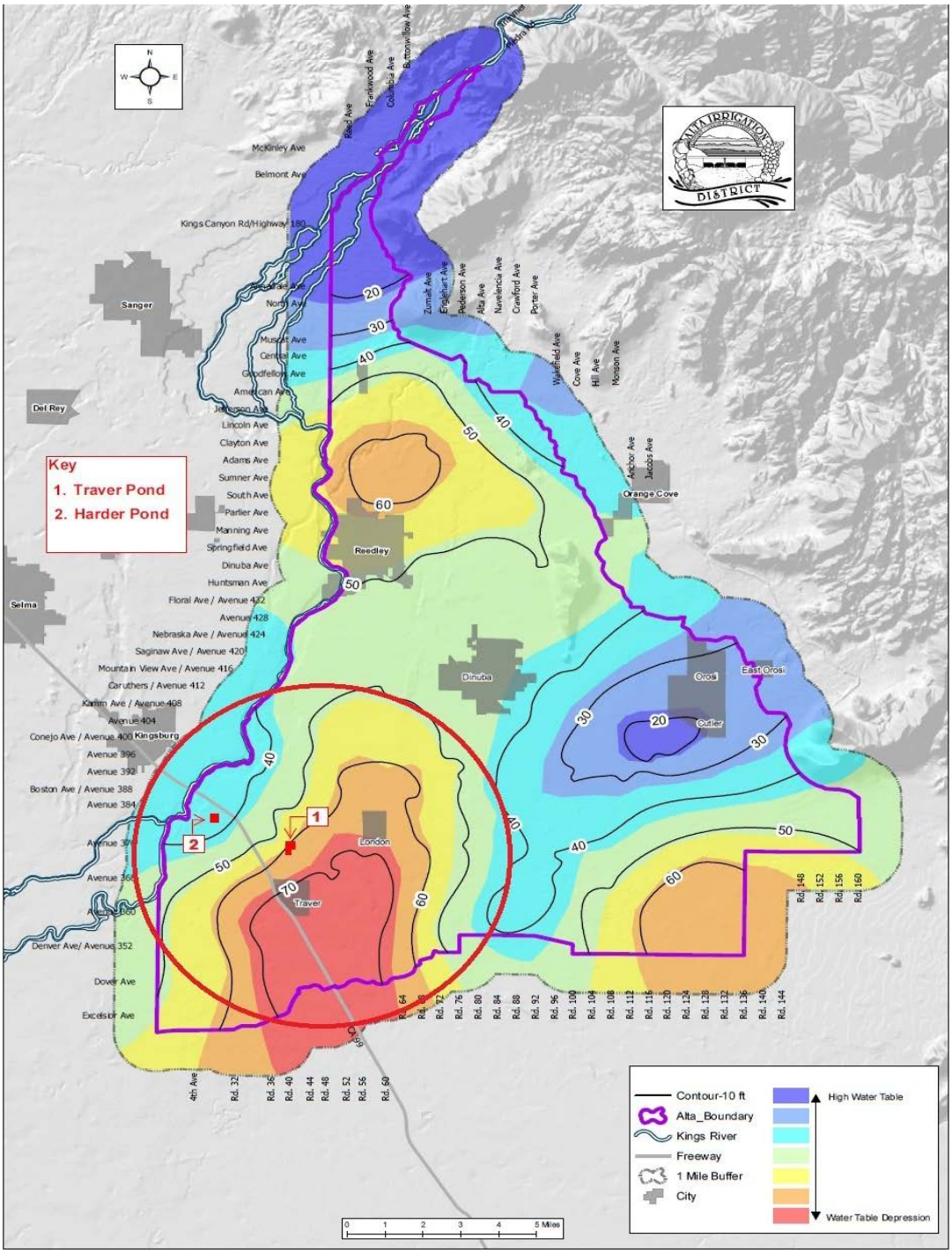


Figure 3 - Depth to Groundwater Map 2011

[14] Alta Irrigation District, www.altaid.org, 7/03/2012

SYSTEM EFFICIENCIES; UPDATES INCLUDING STORM WATER CAPTURE, RECHARGE/ OPERATION BASINS, STORM WATER INTEGRATION

To enable the use of available water supplies, the District and the City of Dinuba have made a joint effort to collect, manage and recharge storm water. Previous to the joint project, both entities were working on independent projects to address their specific issues. The City of Dinuba needed a storm water collection basin for the northern area of the city, which was rapidly urbanizing. The District was sustaining damages from uncontrolled runoff from an upland area east of Dinuba. In addition, the District was attempting to manage the storm water generated from within the City of Dinuba that was discharged into the District's system. By combining efforts, the City of Dinuba was able to purchase the necessary land for a 28 acre basin in an area with good recharge capability and the District was able to design the project to meet the specific goals and constraints of their system. The intent of this project is to effectively manage and recharge sufficient storm water from the City of Dinuba, thus creating additional capacity for storm water generated from the upland area east of Dinuba. The recharge site, being located west of the City of Dinuba, correlates with nearby City of Dinuba extraction wells. This cooperation between both agencies will allow storm water to be properly managed and result in an overall enhancement to the water resources of this area (see Figure 4)[15].

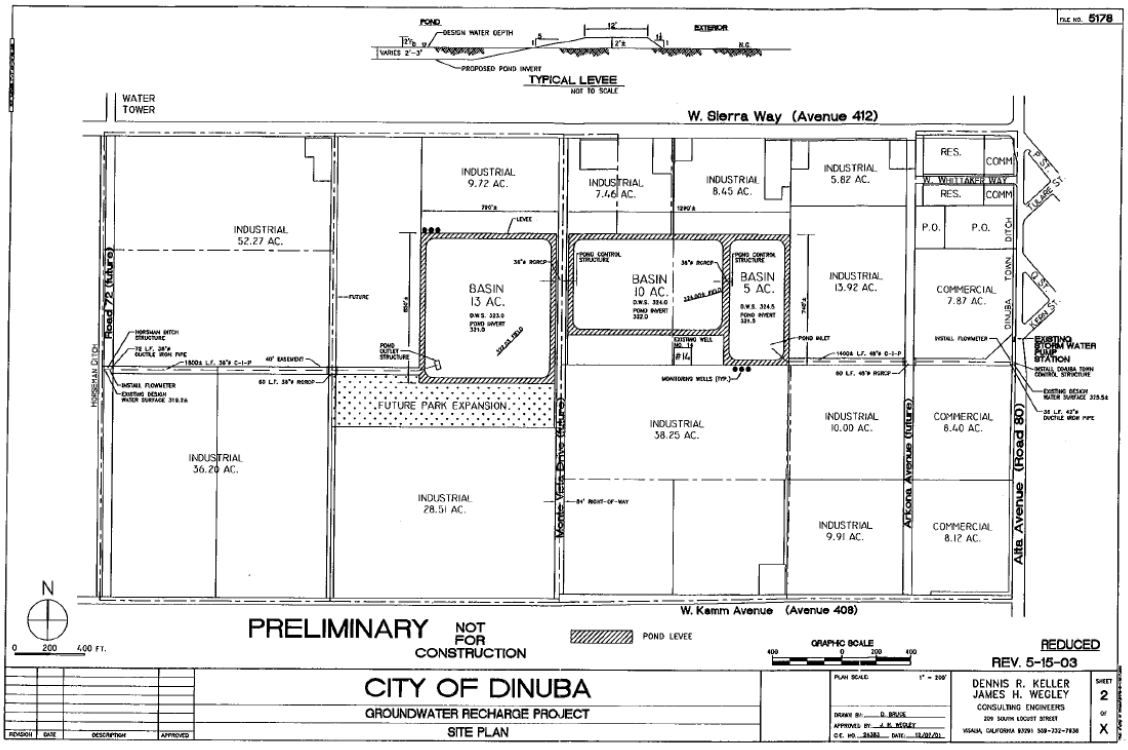


Figure 4 - Groundwater Recharge Site Plan

[15] Proposition 13, Groundwater Storage Construction Grant Application, 2003

The design uses the initial 5-acre settling basin for any heavy metals that may be present in the runoff derived from the City of Dinuba streets. This initial 5-acre basin does have underlying clay and hardpan layers. The remaining basins have sandy soil profiles that lend themselves to providing good groundwater recharge capability. Additionally, the District designed a means for routing water to an adjacent District facility, Horsman Ditch, if necessary, to provide additional storage capacity in the basins by draining the basins between significant storm events. Project inflow and outflow is measured by means of a Doppler type of measurement device. With this project, the City of Dinuba was able to remove four storm water pumps that directly discharged into the District's canal system. The discharge from the storm water service area for each of the four pumps was reconfigured into a pipeline collection system that then discharges the storm water into the new basins designed for groundwater recharge.

After completing construction of the project, the District and the City of Dinuba developed an operation and maintenance agreement for the project facilities. As a result, the City of Dinuba is responsible for heavy metal testing in the basins, and the District is responsible for general maintenance, groundwater monitoring, and data collection. Both agencies share in the replacement of capital assets, i.e., gates, structures, and measurement devices. This joint effort will likely be a template for the region to utilize storm water not as a byproduct, but rather, as a water source contributing to the region's total water balance.

Southwest of Dinuba, the District has developed a 60-acre basin, London Pond, to capture storm water from the City of Dinuba and from District operational spills. In addition, several pumps were retrofitted at the southeast corner of the basin to allow the utilization of the captured water for agricultural water deliveries. This project provides the District operational flexibility to meet its downstream demand and thereby increase the efficiency of their irrigation system deliveries. With the integration of the 28-acre basin, Dinuba Pond, located west of Dinuba and with the downstream 60-acre basin, London Pond, the District is able to provide better management and utilization of available water supplies in the area (see District Map, page 15). These activities complement the District's transition to a truly regional water resource agency.

WATER QUALITY AND ITS LINKAGE TO SUPPLY POTABLE WATER

The District's 2007 Mission Statement clearly set the foundation for a surface water supply program to address groundwater quality issues, which exist primarily in the easterly region of the District. Furthermore, the District considered the results of the Water Supply Study conducted in 2007 for the Cutler-Orosi area that concluded providing treated surface water would be the preferred alternative for supplying the area with potable drinking water[16]. In 2008, the District's role and direction evolved to address water quality issues associated with disadvantaged communities. Through the Kings Basin JPA, the District filed for a 2.4-million-dollar Phase II Implementation grant under Proposition 50 program to construct a groundwater recharge and extraction project. "The goals of the proposal are to increase water supply reliability, provide flood

[16] Water Supply Study Cutler-Orosi area, 2007

protection, provide environmental enhancements, address water quality problems and provide safe drinking water to disadvantaged communities." In the Proposition 50 application, the ultimate project benefit was the development of a new surface water source for the Cutler-Orosi area with the future construction of a surface water treatment facility. Due to the sensitivity of the low income nature of the communities being reviewed, i.e., Cutler, Orosi, East Orosi and Sultana, the program will manage the cost of the potable water supply by blending treated surface water with local groundwater to insure compliance with drinking water requirements. As drinking water requirements become more stringent over time, a greater reliance on surface water is anticipated. The cost of improvements, due to distance from the source of treated surface water, will determine the extent of involvement by other communities in the program, i.e., Monson, Yettem and Seville[17].

Currently, Orosi Public Utilities District has applied for funding through the State of California, Safe Drinking Water Program (SDWP) to complete the Feasibility Study (Study). The Study is required to be completed prior to proceeding with construction of a surface water treatment plant, pipelines and associated improvements (Improvements) to serve treated water to interested parties. The current application with the SDWP to prepare the Feasibility Study includes completion of eleven specific tasks that are integral and necessary to initiate construction of the Improvements, as stated below[18]:

1. Meet with adjacent communities
2. Develop organizational structure and service areas
3. Define Orosi and Cutler's capacity requirements
4. Identify water supply
5. Negotiate water transfers and conveyance
6. File application for regional water supply permit
7. Water treatment plant site identification
8. Pipeline alignment and right-of-way issues
9. Prepare preliminary (30%) plans
10. CEQA
11. Summary of Findings

The Feasibility Study has been put on hold due to the inability of the SDWP to assess regional type solutions. Recently with support from the Federal EPA, there has been a reevaluation of the SDWP's policy and SDWP requested that the agencies demonstrate local support of the Feasibility Study by the individual severely disadvantaged communities. As a result, a MOU was prepared to demonstrate the intent of water agencies representing severely disadvantaged agencies support for the Feasibility Study along with the County of Tulare representing areas not included by a water agency and the District. Upon the MOU being signed by the effected parties, the SDWP will consider a contract for implementing the $500,000 Feasibility Study for the Cutler-Orosi area.

---

[17] Proposition 50, Chapter Integrated Regional Water Management Grant Application, Round 2, Step 2 (call back), 2008

[18] Water Supply Study Cutler-Orosi area, 2007

The goal is to complete the Cutler-Orosi Feasibility Study, then evaluate whether there is support for financing a surface water treatment plant. If it is determined that there is sufficient support to finance, operate, and maintain the capital improvements, a Proposition 218 election will need to be conducted prior to implementing the surface water treatment contract due to the additional costs required to support the project. The effort to move forward and construct a surface water treatment plant will take significant community outreach and demonstrable support by the local communities.

The District has already developed the water supply required to serve the Cutler-Orosi area with treated surface water. This was accomplished through the Harder Pond Banking Project that has previously been constructed and the District's Proposition 50 funded Traver Pond Banking Project that will be completed in 2012. The intent of both projects is to provide for a new water supply to support a two (2) million gallons per day (MGD) surface water treatment plant.

The no project alternative for a surface water treatment plant in the Cutler-Orosi area will mean that the communities such as East Orosi will pay for their existing water service along with the additional cost for bottled water or other form of drinking water meeting current standards. Both the Orosi and Cutler Public Utility Districts (CPUDs) have maintained compliance with the drinking water standard by decommissioning wells where sampling has shown levels of Dibromochloropropane (DBCP) or Nitrates exceeding the Maximum Contaminant Level (MCL) for the specified constituent. Currently local water agencies are testing the groundwater for 1, 2, 3 Trichloropropane (TCP), a byproduct of a fumigant once used for agricultural purposes. There is no current MCL for TCP but it is anticipated that a MCL will be established for TCP in the next several years.

The Development of a Multipurpose Regional Water Resource Agency

For over 100 years, the District's primary purpose has been to provide a surface water supply for agricultural water users with some limited efforts directed towards groundwater recharge. Due to the limited storage available in the groundwater aquifer in the easterly portion of the District and a correspondingly unsustainable groundwater supply for drinking water purposes, the District's role has evolved to one with a better understanding and ability to address local water quality issues and implement regional solutions.

In 1990's, the District initiated a water quality monitoring program to determine priority areas of contamination for DBCP and Nitrates. As a result, the District developed a plan to improve water management along with addressing the water quality issues for disadvantaged communities. Although change takes time, successful solutions require community understanding and support resulting in a preferred community plan and means of financial support. By using a regional solution, the District is able to address multiple solutions in different areas, i.e., storm water utilization enhanced recharge in Traver and reduced groundwater pumping through the use of surface water for drinking water in the Cutler-Orosi area.

For conjunctive use to be sustainable, groundwater and surface water supplies will need to meet the total water demand over time. If the capacity or the reliability of using groundwater is reduced or there is a loss of surface water supply, such conjunctive use plan will not work effectively. As a result, it is important for the District to evaluate all of its water options from a regional perspective to insure that groundwater overdraft issues can be addressed in a long-term plan. No potential water supply should be labeled as a by-product, but rather, it should be thought of as an integral component of a regional resource plan. Wastewater from urban communities, uncontrolled storm water, and operational spill water are all opportunities for the District to address its long-term overdraft.

Agriculture is the principal economic engine for the region. It makes sense to protect agricultural water interests by keeping the cost of agricultural water advantageously priced for its intended use while, increasing the efficiency of delivering agricultural water. The end result is improved water service with economic incentives that support agricultural use and enhanced regional planning through which the Alta Irrigation District and its interested partners can address water quality issues on a regional basis.

MAP OF DISTRICT