

Fresno Irrigation District 2012 LGA Grant

4 Attachment 4 – Project Description

4.1 Background Information

General

The Fresno Irrigation District, formed in 1920, is a California Irrigation District, pursuant to the California Irrigation District Law (Division 11 of the California Water Code). The District is governed by a board of five directors. Each director represents a separate geographical division of the District and is elected to a term of four years by the qualified voters within the division. Regular board meetings are held twice a month.

Location

The District is located in the geographic center of Fresno County and extends from the San Joaquin River in the north, south to near the City of Fowler, and roughly from the Friant-Kern Canal on the east to about 5 miles west of the City of Kerman. A map of the District is shown in **Figure 1** along with a groundwater basin map **Figure 2** and a Neighboring Agency Map as **Figure 3**.

The District encompasses and provides service to approximately 245,000 acres and includes the Fresno/Clovis metropolitan area near its center. In a normal year, the District diverts approximately 500,000 AF.

History

The District was formed in 1920 as the successor to the privately owned Fresno Canal and Irrigation Company. The District purchased all of the rights and property of the company for the sum of \$1,750,000. The assets of the company consisted of over 600 miles of canals and distribution works which were constructed between the years 1860 and 1900, as well as extensive water rights on the Kings River.

Water Supply

The District typically delivers about 500,000 acre-feet (average annual) of surface water from the Kings River and San Joaquin River through the Friant Division of the Central Valley Project (CVP). Water from the Kings River is diverted at two (2) locations along the Kings River downstream of Pine Flat Dam. Water from the CVP is conveyed to the District from Millerton

Fresno Irrigation District 2012 LGA Grant

Lake behind Friant Dam through the Friant-Kern Canal. Most of the District's water supplies are delivered to agriculture, although an increasing share is used for groundwater recharge in the urban area and direct delivery to two recently constructed surface water treatment plants. In addition to receiving surface water deliveries, individuals and the Cities pump a significant amount of groundwater in and around the District to meet urban and agricultural demands.

The primary water supply for the District comes from its Kings River rights administered by the Kings River Water Association. A significant improvement in the control and management of the waters of the river occurred with the completion of the Pine Flat Dam project by the U.S. Army Corps of Engineers in 1954. Although built primarily as a flood control project, the Dam provides significant water conservation stemming from the storage and regulation of irrigation water by the 28 water right entities on Kings River including Fresno Irrigation District. The District has contracted for 11.9% of the 1,000,000 acre-foot capacity of the Pine Flat Reservoir. While the District is entitled to approximately 26% of the average Kings River runoff, much of its entitlement occurs at times when it can be used directly for irrigation of crops without the need for regulation at Pine Flat.

The District has a contract with the U.S. Bureau of Reclamation for CVP water. The current contract was executed in 2001 and provides water service for 25 years. The contract includes up to 75,000 acre-feet of Class 2 water from the Friant Division. Class 2 water is typically made available in normal to wet years.

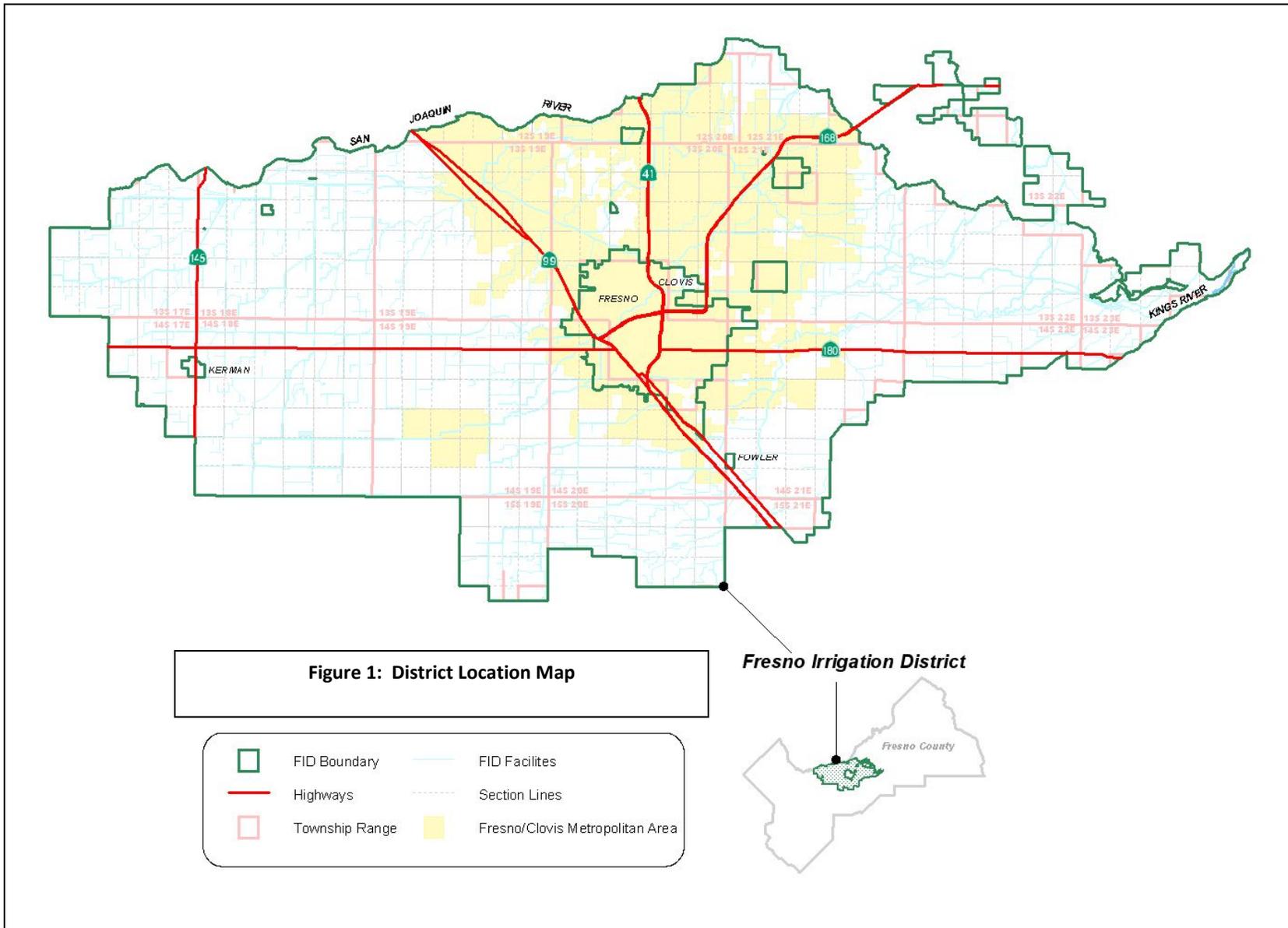
The District's water users include municipal, industrial and agricultural water users. Most of this water is delivered to agriculture, although an increasing share of the District's water supply is used for groundwater recharge in the urban area. Since 2004, the District has delivered water to two surface water treatment facilities, owned and operated by the cities of Fresno and Clovis.

In addition to surface water deliveries, a significant amount of groundwater pumping occurs in the District to meet demands. The cities of Fresno, Clovis and Kerman own and operate numerous wells within the District, while all other wells are privately owned and operated. Municipal and industrial groundwater pumping has created a significant cone of depression beneath the Fresno/Clovis metropolitan area. Groundwater levels in the District range from 10 feet to 140 feet below the ground surface and the present water level in the project area is typically 70 feet below the ground surface or lower.

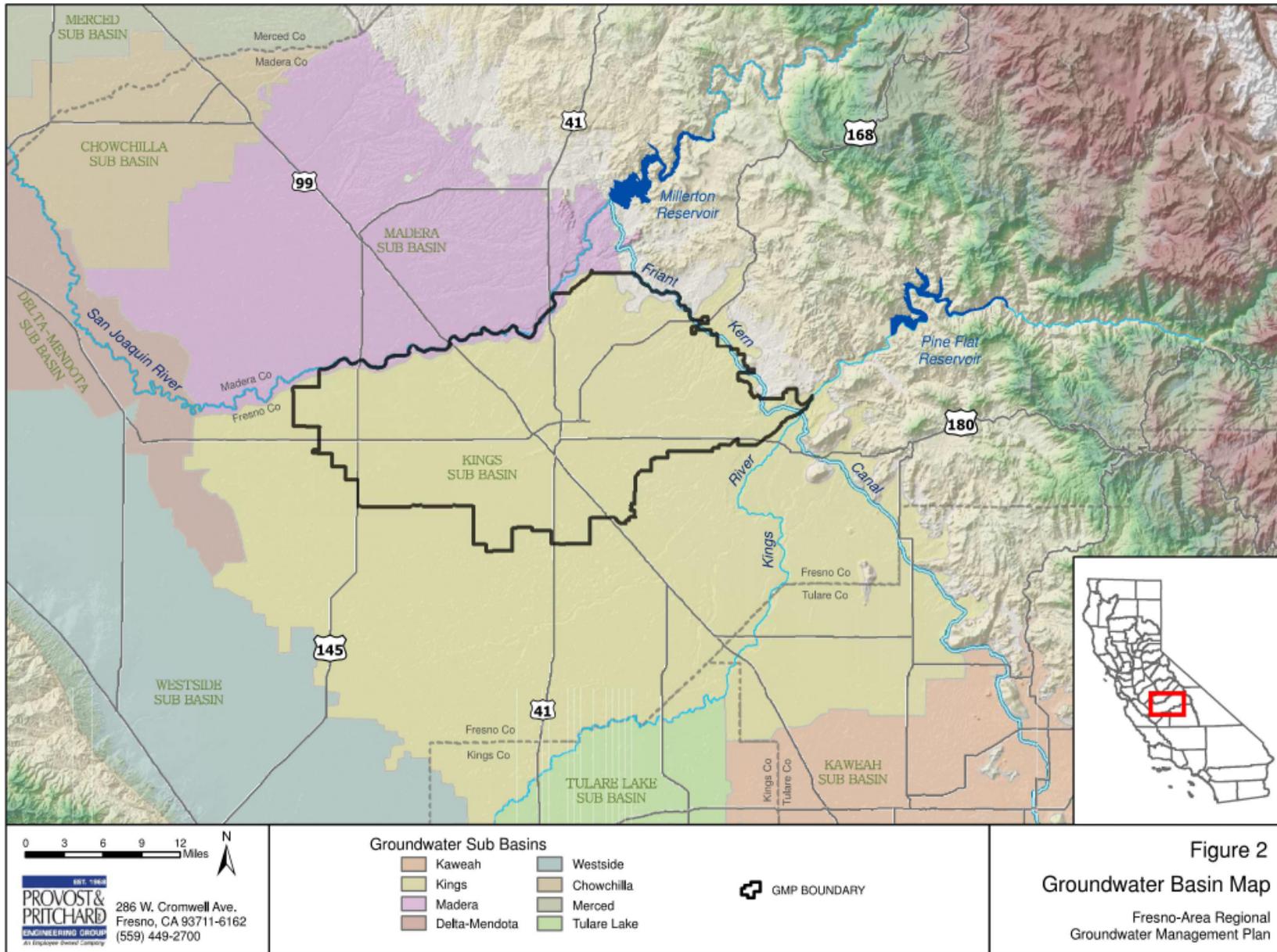
Historically, excess water applied by the farmers has percolated beyond the root zone and recharged the extensive aquifer underlying the Fresno Irrigation District. Between 85% and 90% of the groundwater supply can be attributed to water imported and distributed by the District.

Fresno Irrigation District 2012 LGA Grant

However, the conversion of agricultural lands to high-density urban uses in the expanding Fresno-Clovis metropolitan area has reduced the capacity to utilize surface water because all municipal and industrial water is obtained by pumping groundwater. A local overdraft has developed in and around the urban area, and this situation has been exacerbated by recent dry years.

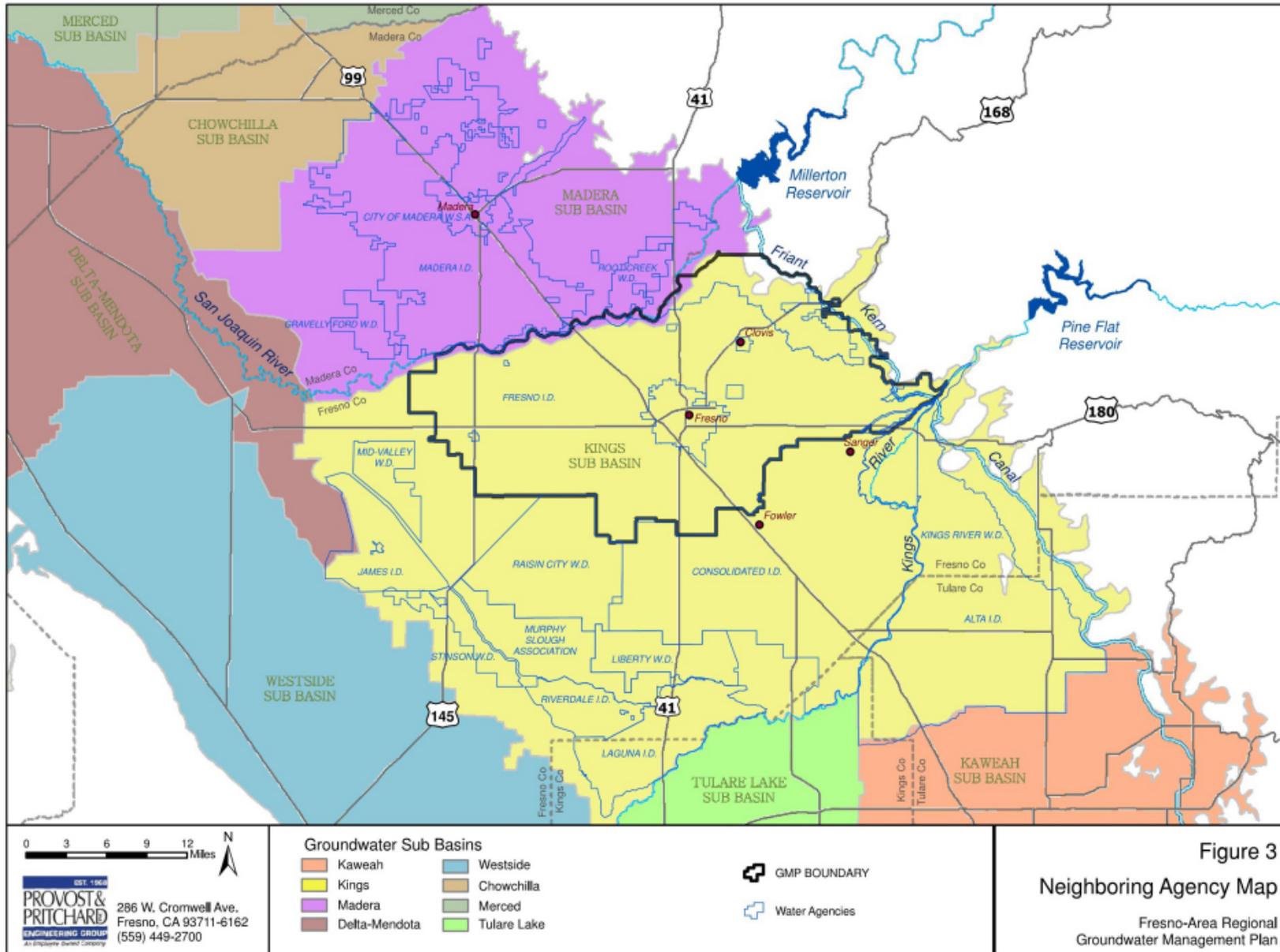


Fresno Irrigation District 2012 LGA Grant





Fresno Irrigation District 2012 LGA Grant





Existing Facilities

The District has two primary diversion points along the Kings River. The headwork at Fresno Weir diverts water to the Fresno Canal and the headwork at Gould Weir diverts water to the Gould Canal. The headwork capacities for the Fresno Canal and Gould Canal are 1,550 and 500 cubic-feet-per-second (CFS), respectively. From these two locations, about 680 miles of District conveyance facilities direct Kings River water throughout the District. The location of the conveyance facilities is shown in **Figure 4**. Water from the Friant-Kern Canal can also be delivered to these two primary canal systems.

Since the mid-1950's, about 350 miles of District and private canals have been piped. Currently, there are still about 330 miles of open canal. Along the approximately 680 miles of conveyance system, there are approximately 4,000 customer turnouts and several hundred control and flow measurement structures maintained and operated by the District. Additionally, the District maintains and operates 42 regulating and recharge reservoirs totaling about 612 acres. The District also maintains and operates a telemetry system that provides data from locations throughout the District with some sites providing both data acquisition and control capabilities.



Fresno Irrigation District 2012 LGA Grant

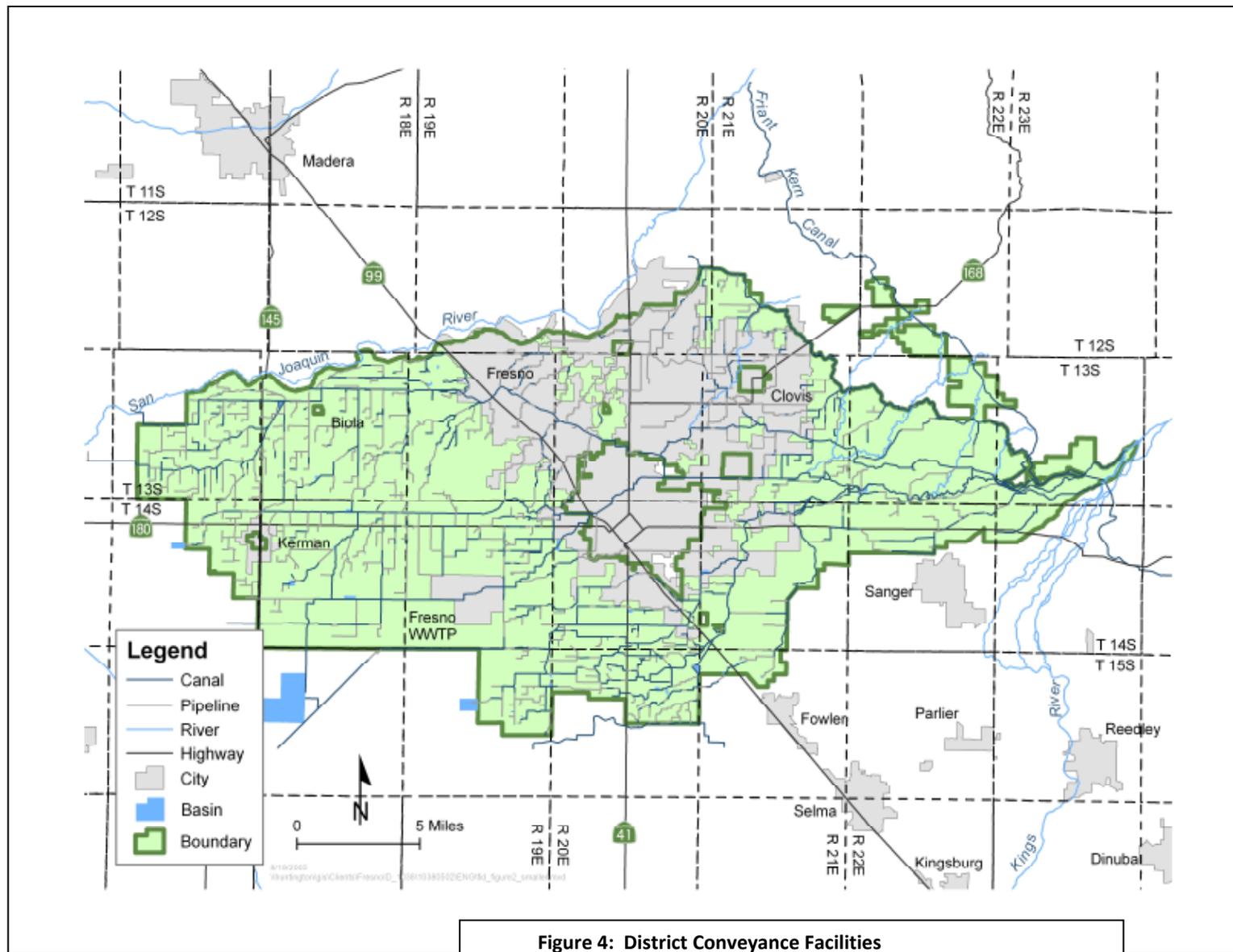


Figure 4: District Conveyance Facilities



Fresno Irrigation District 2012 LGA Grant

Climate

The climate of the District area is characterized by hot, dry summers with temperatures often exceeding 100° F. The winters are mild and semi-arid with some frost. The precipitation in the area usually takes place from November to March and averages about 10.9 inches per year. Typically about 80 percent of the rainfall takes place during the November through March period. Fog is common during the period from mid-November through January and, on occasion, persists for days or weeks at a time. The average maximum temperatures range from 55° F in January to 98° F in July. The average minimum temperatures range from 37° F in January to 65° F in July. The climate in the region is ideal for growing many crops.

Terrain and Soils

Land in the district slopes gently and uniformly from east to west approximately 200 feet in elevation, with elevations ranging from about 200 to 400 feet above sea level. This results in a gentle slope of approximately 5 feet per mile.

The soils found within the District are predominately somewhat excessively drained to moderately well drained soils of young alluvial fans and well-drained soils of low alluvial terraces. The soils can be characterized as mostly sandy-loams to loams. Some areas are susceptible to the occurrence of hardpan. A small portion of the lands within the District is characterized as soils of recent alluvial fans and flood plains, primarily along Dry Creek and Dog Creek. Very small portions are also in well-drained high alluvial terraces and valley basin/foothill soil associations.

Cropping Patterns

The climate and soils in the service area provide ideal conditions for the establishment of a vibrant agricultural industry with many varieties of permanent and annual crops. As with much of the San Joaquin Valley, many of the crops grown in these highly productive areas have shifted from annual crops to permanent crops over the years. The agricultural lands in the District remain predominantly permanent crops (about 68 percent). Historically, the predominant crop in the District has been of agricultural lands to urban uses in the expanding Fresno-Clovis metropolitan area has significantly increased in recent years and has reduced the amount of agricultural grapes, and continues to be so. Grape vineyards make up nearly 30 percent of the total District acreage. Nuts, citrus, and deciduous fruits have also increased as cotton and pasture has declined. The conversion crops as the land has been converted. Currently, about 150,000 acres or 60 percent of the District remains as farmed agricultural land. Nearly 30 percent of the District is now urban, with the remaining 10 percent of land area classified as rural residential.



Fresno Irrigation District 2012 LGA Grant

4.2 Detailed Project Description

The District desires to improve the measurement capabilities at several of its recharge ponds and basins. The District currently has 40 different ponds and basins, but approximately 10 of these facilities still require a flow meter to measure and record surface water deliveries into the basins. The District is planning on improving up to 10 of the remaining sites that still require measurement. Currently the District utilizes daily (or less frequent) measurements of the flow rate in the canal that delivers water to the basin, or estimates diversion into the basin using the gate opening and head loss through the gate. These measurements are estimates, and are difficult for District's water system operators to obtain on a daily or regular basis. The location of each basin anticipated basin to be improved is shown in **Figure 5**, and a listing of the basins and their priority is included in **Table 1**. These basins are located primarily along the western portion of the District, which has maintained groundwater levels at or near the same elevation for many years (as shown in the contours included in the 2010 Annual Report included as **Figure 7 and 8** in this section). Groundwater recharge has contributed significantly to this stabilization of groundwater levels, however the recharge amounts in this area has not been quantified as accurately as it could be with improved measurement capability.

The project will focus on recharge basins currently owned and utilized by the District. Private or leased facilities are not planned for this project. As shown in **Table 1**, these basins total approximately 109 acres and have an average annual recharge estimated at approximately 14,000 acre-feet which is a significant amount of recharge in this area. Completion of these improvements will nearly complete metering at all basins, with the exception of only a few inline and private ponds, which is a goal within the GWMP.

Nearly all of the basins do not include staff gauges within the basin. Staff gauges are needed to provide water level information for operations, but more importantly can be utilized to monitor infiltration rates. The western portion of the District is primarily sandy loam material, and while geologic conditions vary some in the area, recent long-term infiltration testing at FID's Waldron Banking Facility have indicated recharge rates between 0.2 – 0.5 feet per day or more. The staff gauges and ongoing operation will provide further clarification of these basin characteristics.

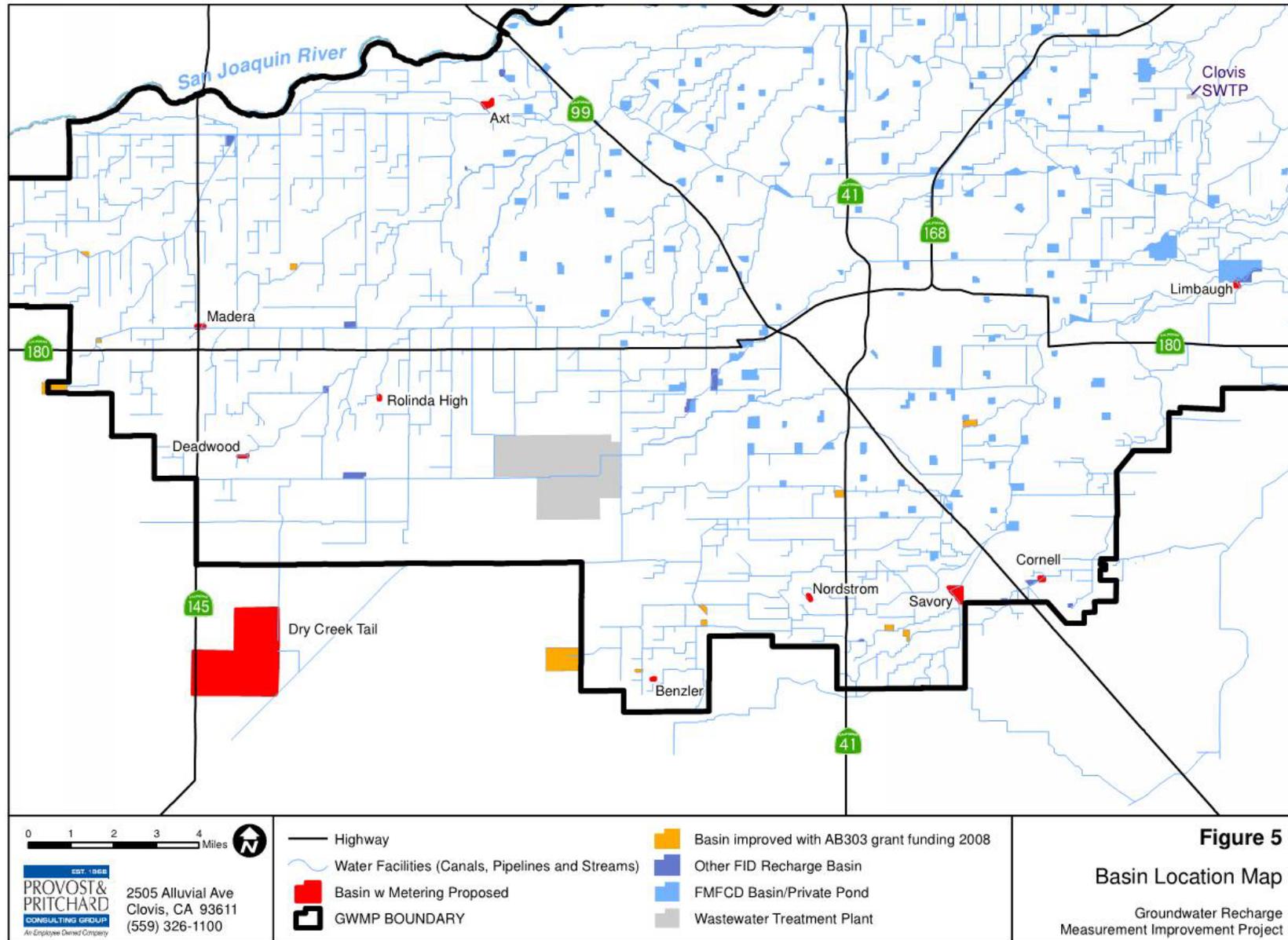
An investigation of basins that require improvements and preparing cost estimates for those improvements has already been completed and a summary is provided in **Table 1**. The proposed project consists of three remaining elements which include:

1. Design of Measurement Improvements
 - 1.1. Prepare Environmental Documents
 - 1.2. Survey of Existing Facilities
 - 1.3. Prepare Construction Drawings and Specifications

Fresno Irrigation District 2012 LGA Grant



2. Measurement Improvement Construction
 - 2.1. Construction of Improvements
 - 2.2. Construction Inspection and Observation
 - 2.3. Prepare Record Drawings
3. Reporting
 - 3.1. Progress Reports
 - 3.2. Measurement Reading and Reporting at Improved Basins
 - 3.3. Public Information and Awareness
 - 3.4. Draft Project Report
 - 3.5. Final Project Report



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2012 FID POND LIST (PROPOSED NON-METERED AND NON-SCADA PONDS)

PRIORITY	NO	FACILITY NAME	FACILITY LOCATION	EXISTING METER	NOTES/RECOMMENDATIONS	BASIN ACREAGE (ACRES)	AVERAGE ANNUAL RECHARGE (ESTIMATED)	ESTIMATED METER INSTALLATION COST (FID)*	METER INSTALLATION COST (CUMULATIVE)
1	197	DRY CREEK TAIL	S/E Lincoln & Madera	NO	(meter/structure)	50.0	6,400	\$ 25,000.00	\$ 25,000.00
2	191	NORDSTROM	N/W Lincoln & Fig	NO	POND NOT EXPANDED (2 meters/structure)	4.0	600	\$ 35,000.00	\$ 60,000.00
3	167	AXT	N/W Barstow & Chateau Fresno	NO	LOW FLOWS; EX SCADA AT SITE (meter/structure)	14.4	1,900	\$ 30,000.00	\$ 90,000.00
4	179	MADERA (G1)	N/E Nielsen & Madera	NO	(meter/structure)	9.0	1,200	\$ 15,000.00	\$ 105,000.00
5	172	CORNELL	N/W Jefferson & Clovis	NO	(meter/structures)	6.7	600	\$ 15,000.00	\$ 120,000.00
6	177	LIMBAUGH	S/W Olive & McCall	NO	(1 meter/structure)	8.0	600	\$ 25,000.00	\$ 145,000.00
7	168	BENZLER (CLAY)	N/W South & Brawley	NO	LOW FLOWS (meter/structure)	2.7	400	\$ 25,000.00	\$ 170,000.00
8	181	ROLINDA HIGH (STIGGINS)	S/E California & Jameson	NO	LOW FLOWS (meter/structure)	1.2	200	\$ 25,000.00	\$ 195,000.00
9	193	SAVORY	N/W Lincoln & Chestnut	NO	(meter/structure)	10.0	1,400	\$ 25,000.00	\$ 220,000.00
10	187	DEADWOOD	S/W Jensen & Sycamore	NO	(meter/structures)	3.4	500	\$ 25,000.00	\$ 245,000.00

Table 1-Listing of Basins

Note: See Figure 11 for a detailed breakdown of estimated construction costs

Fresno Irrigation District 2012 LGA Grant

4.3 Goals of the Project

The goals of this project are to:

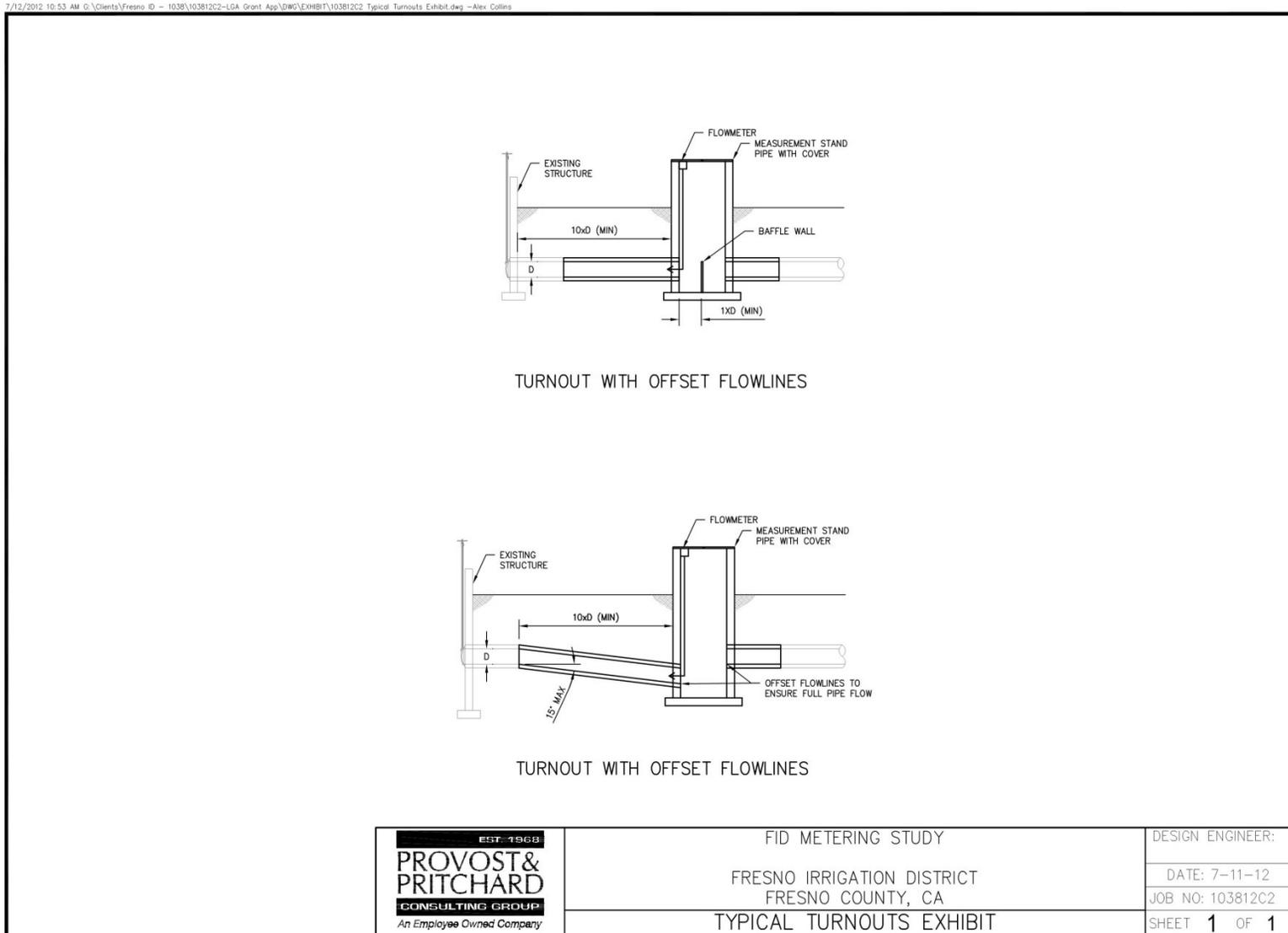
- Improve measurement and recording of surface water deliveries to recharge facilities
- Install staff gauges at each basin to allow for improved measurement and infiltration rate observation
- Provide for ongoing use of flow rate, volume and infiltration rate measurement to facility recharge basin utilization and modification decisions
- Further develop the water budget for the region by clarifying recharge rates in FID ponds and basins

4.4 Needed Facilities

Improved measurement at the basins will likely include installation of flow meter devices and staff gauges at existing facilities. Pipeline segments from the canal to the basin may need to be replaced to allow for proper flowmeter installation, and construction of a standpipe for flowmeter access may be required. Example plans of a typical flowmeter installation are shown in **Figure 6** of this section of the application.



Figure 6-Typical Flowmeter Installation



Fresno Irrigation District 2012 LGA Grant

4.5 Location of the Facilities and the Area Covered

Figure 5 of this section shows the location of FID basins and ponds. A list of the priority sites has been identified in **Table 1** and it is anticipated that construction of measurement improvements will be completed for up to 10 of the basins.

4.6 Need and Value of the Project

This project is specifically identified in Section 8.1 of the GWMP as a planned activity under bullet item 5, "Install flowmeters on all unmetered turnouts to recharge basins in FID." The data collected from the project will be included in the Annual Groundwater Report and placed into a table similar to **Table 2** of this Section, identifying how surface water was delivered. Further, the project will provide valuable recharge quantity information that the District has not historically had available. The year to year analysis of the measurement of these recharge deliveries will provide the basis for groundwater recharge delivery decisions, as well as any needed maintenance or modification to the basin based on a review of the recharge records. The basins were typically constructed as regulation basins, but are now used conjunctively for recharge purposes. Delivery records to the basin will help to provide the District with a benchmark for maximizing the use of the basins for recharge by using the information for infiltration enhancements efforts like discing or identifying best basins to use first. This project is similar to the District's 2008 Local Groundwater Assistance Fund project that was awarded and will bring the GWMP goal of metering all turnouts to basins within the District to near completion, leaving just a few remaining inline and private ponds to be improved.

In addition to the valuable information gained, and consistency with the GWMP, this project is needed because of the water supply conditions of the region. These include:

1) Groundwater Level Declines

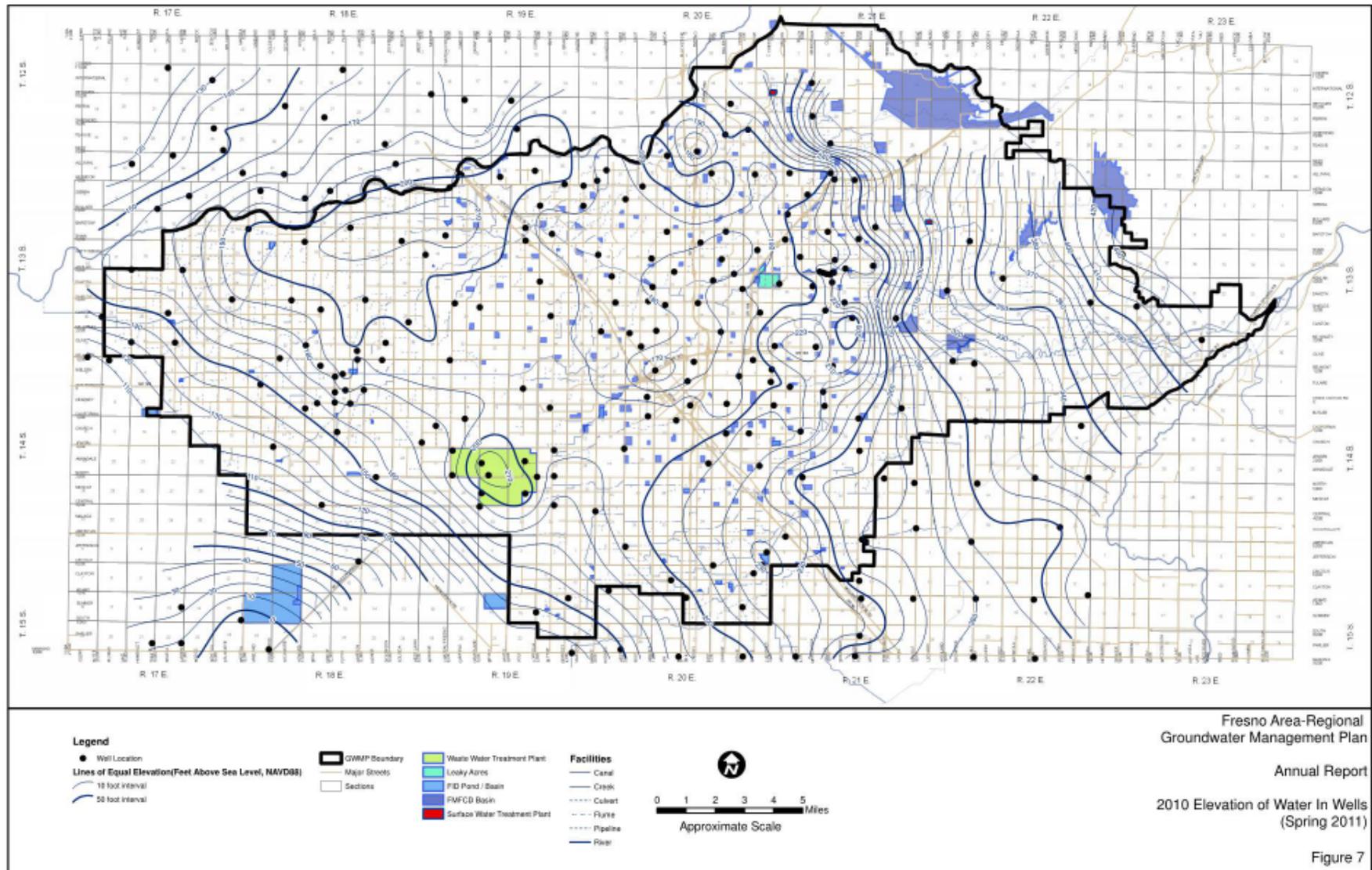
The District is located in the Kings Groundwater Basin (DWR Bulletin 118-80), which has been identified as ***critically overdrafted***. The District's 1996 Groundwater Management Plan identified that the overdraft of the underground basin was approximately 20,000 acre-feet per year within the Fresno Irrigation District service area for the period 1970 to 1995. Any reductions in surface water deliveries or increases in water demand from the 1970-1995 basis would increase the groundwater overdraft within the District. Groundwater recharge is a critical component to the overall sustainability of the water supply in the region.

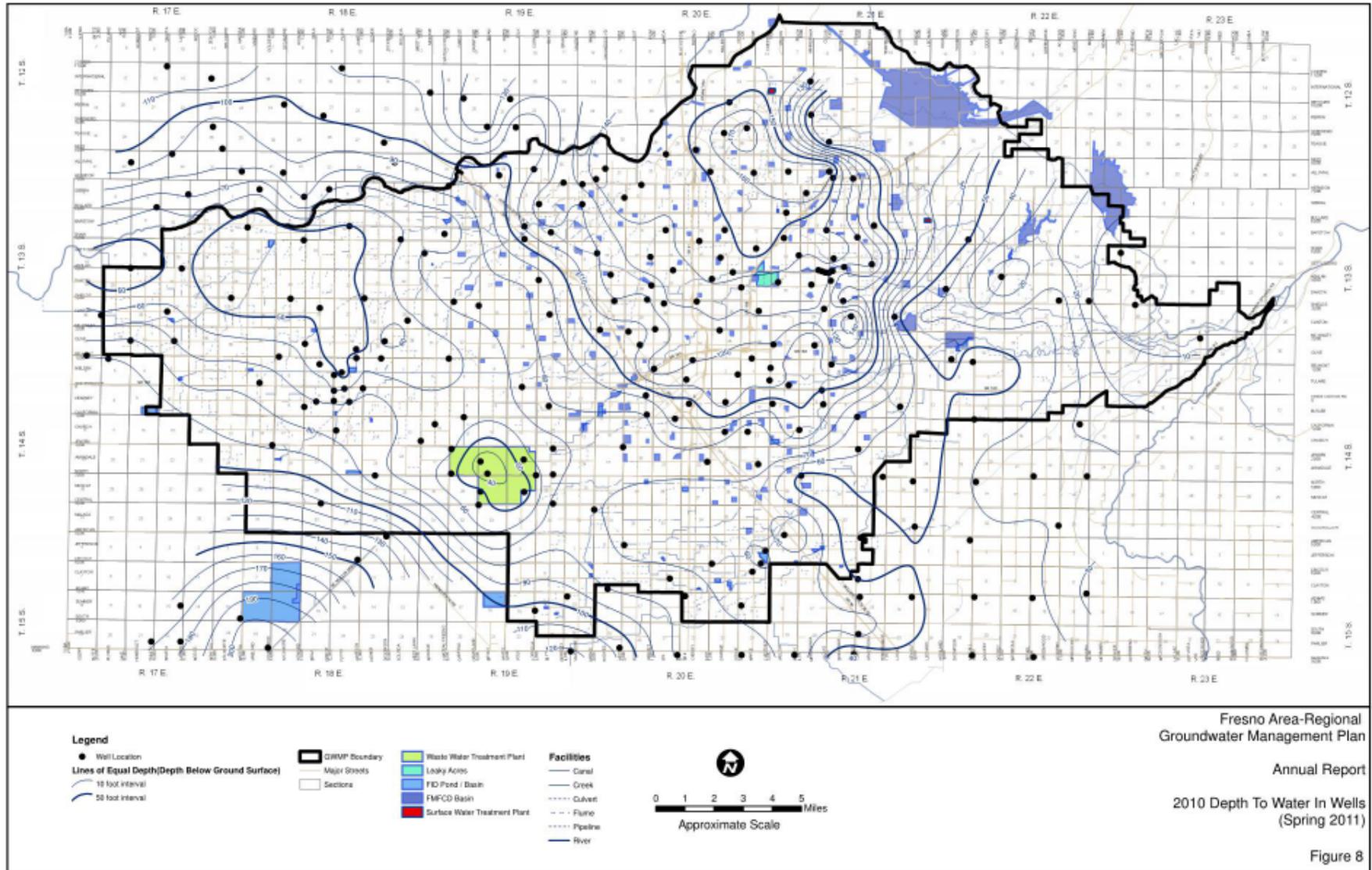
Groundwater currently provides the sole source of potable water for the small water systems, and is still the major supply for the large metropolitan suppliers located within the District. The

Fresno Irrigation District 2012 LGA Grant

Fresno/Clovis metropolitan area lies on the eastern side of a large cone of depression that underlies the Fresno-Clovis Metropolitan area.

Groundwater is also an important firm supply for over 103,000 acres permanent crops when surface water is not as available during dry years. **Figures 7 and 8** are recent contour maps pulled from the 2010 Annual Groundwater Report showing water surface elevation contours and depth to water respectively.





Fresno Irrigation District 2012 LGA Grant

2) Groundwater Budget

The sub-basin has been identified as Type C in DWR Bulletin 118-03; indicating that there are not enough data to provide either an estimate of the basin's groundwater budget or groundwater extraction from the basin. The Technical Advisory Committee (TAC), of the Fresno Area Regional GWMP has indicated a desire to prepare a water budget for the Plan Area, but further classification of the budget components is needed to develop that budget. Groundwater recharge is a critical component of that effort, and this project will provide needed measurement information to be included in the annual report.

3) Reduction in Surface Water Allocation

Friant Division CVP supplies have been recently curtailed due to the settlement agreement of NRDC v. Rodgers on the San Joaquin River. The agreement provided additional supplies to the San Joaquin River Restoration effort while protecting the existing water users as much as possible. The impact to existing diversions will be in the range of 200,000 acre-feet per year to the restoration effort, under an agreed to delivery schedule known as the Kondolf hydrograph. With less available supplies on the Friant Division CVP system, FID and the City of Fresno (who both have CVP contracts from the Friant Division) expect to see less available surface water available to purchase during the growing season. Reductions in the overall CVP supply for the region from the settlement agreement will mean that the district will more heavily rely on groundwater in the future. This project will provide needed record keeping for the overall contribution of recharge made by basins in the District.

4.7 Support of Goals and Objectives in GWMP

This project is specifically mentioned in the GWMP. Under Section 8.1 – Groundwater Recharge, on Page 8-3 of the Fresno Area Regional GWMP, the fifth bulleted item mentioned under the Planned Activities is to “Install flowmeters on all unmetered turnouts to recharge basins in FID.”

The project is also consistent with, and in support of goals and objectives in the Groundwater Management Plan. As stated in the GWMP, these are to:

- 1) “Correct the overdraft and stabilize groundwater levels at the highest practical level” (BMO #2, page 4-1 of the GWMP). This project will provide new information on the performance of each basin and the volume of water recharged. This information will provide needed information to determine basin improvements and evaluate changes in basin performance and use, in an effort to maximize recharge efforts at these basins.
- 2) “Preserve untreated groundwater as the primary source of domestic water” (BMO #3, page 4-1 of the GWMP). FID owned recharge basins are located primarily along the

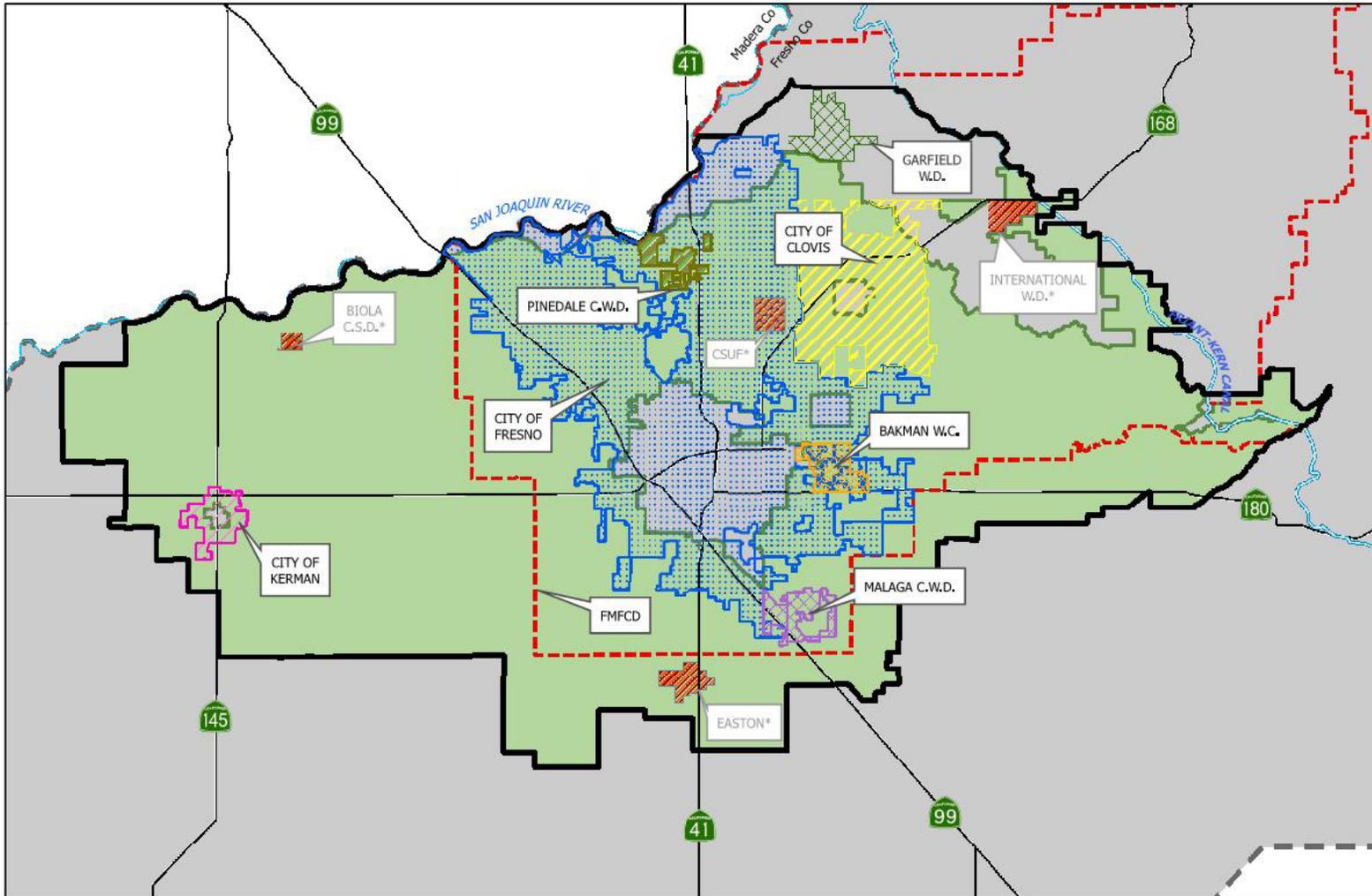
Fresno Irrigation District 2012 LGA Grant

western portion of the District, near the City of Kerman and outlying rural areas which rely solely on groundwater as their domestic supply.

- 3) “Manage groundwater resources to the extent necessary to ensure reasonable, beneficial, and continued use of the resource” (BMO #6, page 4-1 of the GWMP). This project will provide recharge volume information and infiltration rate information to allow for improved management of recharge efforts.
- 4) “Monitor groundwater quality and quantity to provide the requisite information for establishing groundwater policies, goals and recommended actions” (BMO #7, page 4-1 of the GWMP). This project will provide recharge volume information and infiltration rate information to allow for improved management of recharge efforts.

4.8 Public Outreach and Community Support

It is important to recognize that all of the agencies actively involved in groundwater delivery and management within the Plan area are included as participants to the GWMP and have lent their support to the GWMP and this project. Figure 1-2 of the GWMP (also included as **Figure 9** in this section) shows the location of the water purveyors and agencies within the Plan area.



<p>0 1 2 3 4 Miles</p> <p>PROVOST & PRITCHARD EST. 1952 ENGINEERING GROUP A Sinclair-Suwest Company</p> <p>286 W. Cromwell Ave. Fresno, CA 93711-6162 (559) 449-2700</p>	<p>LEGEND</p> <table border="0"> <tr> <td> COUNTY OF FRESNO</td> <td> BAKMAN W.D.</td> <td> *Agencies within plan boundary, not participating</td> <td> GWMP BOUNDARY</td> </tr> <tr> <td> CITY OF FRESNO</td> <td> GARFIELD W.D.</td> <td> FRIANT-KERN CANAL</td> <td></td> </tr> <tr> <td> CITY OF KERMAN</td> <td> MALAGA C.W.D.</td> <td></td> <td></td> </tr> <tr> <td> PINEDALE W.D.</td> <td> FRESNO I.D.</td> <td></td> <td></td> </tr> <tr> <td> CITY OF CLOVIS</td> <td> FMFCD Boundary</td> <td></td> <td></td> </tr> </table> <p>The Plan area lies entirely within the County of Fresno, and the County is a participant to the Plan. The Plan area lies within the Kings River Conservation District.</p>	COUNTY OF FRESNO	BAKMAN W.D.	*Agencies within plan boundary, not participating	GWMP BOUNDARY	CITY OF FRESNO	GARFIELD W.D.	FRIANT-KERN CANAL		CITY OF KERMAN	MALAGA C.W.D.			PINEDALE W.D.	FRESNO I.D.			CITY OF CLOVIS	FMFCD Boundary			<p>Figure 9 Participating Agencies Fresno-Area Regional Groundwater Management Plan</p>
COUNTY OF FRESNO	BAKMAN W.D.	*Agencies within plan boundary, not participating	GWMP BOUNDARY																			
CITY OF FRESNO	GARFIELD W.D.	FRIANT-KERN CANAL																				
CITY OF KERMAN	MALAGA C.W.D.																					
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Fresno Irrigation District 2012 LGA Grant

Existing Public Outreach Efforts

FID has a well developed in-place process for informing groundwater users, stakeholders, and the general public about the proposed project.

Examples are provided below:

1) FID Engineers Report and 3-Year Plan

The District completed an Engineer's Report for Proposition 218 Procedures and Benefit Assessment in water measurement and basin improvements were included in the District's multi-year capital improvement project list. The District included this project in its 5-year plan, as part of the Engineering Report for a Proposition 218 Procedures for Benefit Election. The District conducted the required election and tallied the results by public hearing on 6-12-2006. The Board adopted the election results approving the rate increase on 7-12-06. A copy of the Board Meeting Minutes **Exhibit 4.1** and Resolution **Exhibit 4.2** are included in this section.

2) Technical Advisory Committee (TAC)

The TAC of the GWMP meets semi-annually to discuss issues and concerns of the Plan area and prepare the Annual Groundwater Report. The TAC is comprised of local agency representatives and landowners and was formed to provide input during preparation of the Plan. The Committee has the following responsibilities found in page 5-1 of the GWMP:

- Review trends in groundwater levels and groundwater quality;
- Evaluate the effectiveness of current groundwater management policies and facilities;
- Discuss the need for new groundwater management policies and procedures;
- Discuss the need for new groundwater supply/enhancement facilities;
- Evaluate the progress of on-going groundwater related projects;
- Assess the overall progress in implementing the programs outlines in the Groundwater Management Plan;
- Recommend updates or amendments to the Groundwater Management Plan;
- Identify regional and multi-party groundwater projects;
- Identify and share information on funding opportunities for groundwater projects;
- Share new ideas and methods for managing groundwater;
- Update Plan participants on the efforts of other regional groups; and
- Review and comment on the Annual Groundwater Report

Fresno Irrigation District 2012 LGA Grant

Information obtained from this improvement project will lead into data that is used in the Annual Groundwater Report, and as a result landowners and representatives of the Plan will have an opportunity to review information obtained from the project.

3) Newsletter

The District publishes a newsletter twice a year to help educate local growers on important issues such as water supplies, water conservation, water quality protection, and groundwater management. The newsletter has included articles on proposed groundwater recharge and banking basin improvements, as well as informed District stakeholders on the multi-year improvement projects being performed by District staff. During the implementation of this grant, articles on the proposed project will be published in issues of the Newsletter (see **Exhibit 4.3**: for an example newsletter).

4) Board Meetings

The District holds monthly board meetings that are publicly advertised and open to the public. At the beginning of each meeting there is a public comment period where anyone can voice their opinion or concern on any issue. **Exhibit 4.4** is an attached agenda from the June 2012 Board meeting included a public comment period and an item to discuss the proposed project and application. Therefore, the public was made aware of this project prior to submitting this grant application. During the course of the proposed project, regular presentations will be made at the monthly Board meetings on the project status and any important project issues.

Public outreach efforts will continue to be used during the course of the project and are included in the work plan, budget and schedule. These efforts will include:

5) Website

The District maintains a website (www.fresnoirrigation.com) to keep its growers and the public informed of water, environmental, and agricultural issues. The proposed project will be mentioned on the web site, and a copy of the grant report will be available on the website.

Fresno Irrigation District 2012 LGA Grant

6) District Office

The FID office is open to the public almost every work day and during lunch for the public's convenience. Growers are always welcome to talk to the District Manager or operations staff about issues and concerns. Copies of reports such as the GWMP and Annual Reports are also available in the office for the public's review. A copy of the grant application, draft report, and final report will be available in the FID office for public review.

7) Multi-Agency Organizations

As has been mentioned, the District is already involved with many neighboring and regional agencies on groundwater management projects. Involvement in these groups gives the District opportunities to present and explain groundwater projects, as well as mechanisms for multi-agency dispute resolution. These agencies are described in more detail in the IRWMP and GWMP.

8) Groundwater Reports

The District, as part of the Fresno Area Regional GWMP, will continue to prepare an Annual Groundwater Report. The report will document groundwater recharge improvement efforts, as included in the Draft 2010 Annual Report, and as **Table 2** in this section. Copies of these reports are available in the District office for the public. The public will be notified of their availability on the District website and quarterly newsletter, as well as through the other GWMP participants' educational efforts.

Public outreach is an important and integral part of the proposed work plan. The District continues to try to educate all stakeholders of the importance of the groundwater recharge within the Plan area. Public outreach efforts will include TAC meetings, District Board of Director's meetings, newsletter articles, and website articles. Input from the TAC, Board of Directors, and landowners will be documented in meeting minutes and site visit reports.

Fresno Irrigation District 2012 LGA Grant

Support from Impacted Parties

Support for the proposed project has been gained from local landowners, the Technical Advisory Committee, the other Plan Participants, other local agency representatives and the FID Board of Directors. Letters of support for this project (included in this section of this application as **Exhibit 4.5**) have been provided by the following:

- City of Clovis
- City of Kerman
- Fresno Metropolitan Flood Control District (FMFCD)
- Bakman Water Company
- Kings Basin Water Authority
- Friant Water Authority

The project involves the addition of measurement devices at recharge ponds and basins owned and operated by FID. A similar effort occurred many years ago to meter recharge deliveries to facilities owned by FMFCD. The City of Fresno and FID jointly applied for and received loans from the State of California under Propositions 82 and 44 to intertie storm water basins with FID's surface water canals and pipelines for the delivery of recharge water during the non-storm season. The interties allow FID to delivery surface water paid for by the city to be delivered to the FMFCD basin for groundwater recharge. This is a significant program within the area, including more than 60 basins used for recharge, and providing more than 49,000 acre-feet of recharge annually, as described in Section 5.1 of the Draft 2010 Annual Report of the Fresno Area Regional GWMP. These interties included measurement devices, primarily propeller meters. In addition, FID has worked with the City of Fresno and Clovis to install similar measurement devices on basins not included in those loan programs.

There is no known opposition to the project. No letters of opposition have been received, and no opposition to the project was made during the TAC, Board of Directors meetings, or during individual meetings with landowners. The project will involve only FID facilities and there are no project partners.

Flowmeter readings will be recorded by District operational staff on a daily and weekly basis. These records will be tabulated in a spreadsheet, similar to how the District maintains all delivery records, and recharge records at other basins in the urban area. The data will then be summarized and presented to the District's Board of Directors, along with records from other recharge facilities. This data will also be presented to the TAC of the Fresno Area Regional GWMP for evaluation, consideration, and inclusion in the Annual Groundwater Report. The

Fresno Irrigation District 2012 LGA Grant

surface water deliveries will be added to the Annual Report. **Table 2** below is an example of a groundwater recharge summary from the Draft 2010 Annual Groundwater Report.

Fresno Area Regional Groundwater Management Group
2010 Annual Groundwater Report
Surface Water Usage (direct deliveries and groundwater recharge)

Table 2

(all values in acre-feet)

Fresno Irrigation District Surface Water

Participant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Fresno SWTP	173	1,180	1,338	1,906	2,131	2,512	2,745	2,753	2,483	2,117	0	244	19,582
Fresno Recharge	248	1,218	2,772	2,895	7,240	7,620	9,031	9,816	6,845	4,855	0	57	52,597
Clovis SWTP	46	408	424	555	693	828	1,040	1,188	1,154	946	0	157	7,439
Clovis Recharge	153	321	699	619	982	1,179	1,193	997	712	703	0	206	7,764
FID Growers and Recharge Basins	14	3,867	30,834	53,134	70,226	78,573	83,660	57,034	36,691	49,798	69	0	463,900
Total Fresno Irrigation District	634	6,994	36,067	59,109	81,272	90,712	97,669	71,788	47,885	58,419	69	664	551,282

The information dissemination efforts will focus on providing recharge information to District staff, the Technical Advisory Committee of the GWMP, District Board of Directors, local agencies and the general public. It should be noted that the general public has shown little interest in these topics, nonetheless the District is committed to increasing awareness of the importance and value of groundwater recharge to the overall water supply in the region.

The goals of information dissemination for the proposed project include the following:

1. Educate public on the technical aspects of the project;
2. Update public on progress;
3. Collect and discuss comments and suggestions.

Information dissemination will be accomplished through the following:

1. Monthly public Board meetings.
2. Articles on the project will be published in the District Newsletter.
3. Meetings with the Technical Advisory Committee to the GWMP.
4. Meetings with other agencies at multi-agency groups such as the Friant Water Authority, Upper Kings River Basin IRWMP Group, and San Joaquin Valley Water Quality Coalition will disseminate information outside of the Plan area and throughout several groundwater subbasins.
5. Information on the project, including draft and final reports, will be available in the District office for the public to review, and placed on the District's website.
6. Information and data on the project will be published in Annual Groundwater Reports.
7. Data and information will be shared with Kings IRWM authority

Fresno Irrigation District 2012 LGA Grant

All groundwater level measurement data will be shared with the DWR and the USBR, for inclusion in the statewide database.

4.9 Post Project Efforts and Funding

After completion of the project and all grant funding is expended, the on-going monitoring of recharge deliveries will be added to the measurements already taken by the District's water system operators. Summary of the data will be provided by the District's operational staff and engineering department, along with similar data already presented by the staff. These include delivery records to all urban recharge facilities and daily flow readings within the District's conveyance system. Some minor consulting work will be needed, but otherwise no extra District staff will be needed to cover these additional work requirements. The on-going work and funding sources are considered a part of the District's General Fund which covers labor forces to gather and maintain data as well as pay for minor repairs. A copy of the District's General Fund Budget is included as **Exhibit 6.1** in Attachment 6.

4.10 Adaptive Management Strategy

Adaptive management of groundwater will be accomplished through the Technical Advisory Committee during meetings for the Annual Groundwater Reports. This committee is primarily responsible for reviewing and approving Annual Groundwater Reports and recommending changes to the program.

EXHIBIT 4.1
7-12-06
BOARD MINUTES

**FRESNO IRRIGATION DISTRICT
MINUTES OF THE REGULAR MEETING
HELD JULY 12, 2006**

Fresno Irrigation District's Board of Directors met in regular session at the District office located at 2907 South Maple Avenue – Fresno, California on July 12, 2006. Meeting was called to order at 5:00 pm by Board President Jacob C. Andresen.

DIRECTORS PRESENT

President Jacob Andresen
Vice President Jeff Boswell
Eddie Niederfrank
Jeff Neely
Steven Balls

DIRECTORS ABSENT

None

STAFF PRESENT

General Manager Gary R. Serrato
Assistant General Manager Laurence Kimura
Watermaster Jim Irwin
Chief Engineer Bill Stretch
HR Director Regina Davis
Recording Secretary Lynn B. Rowe

OTHERS PRESENT

Legal Counsel Dan Dooley
Reporter Don Wright

REVIEW AGENDA

Staff requested that Resolutions 2006-16 and 2006-17 be added to the agenda under Administrative Matters.

M/S/C/(Boswell/Balls) That Board of Directors approve adding Resolutions 2006-16 and 2006-17 to the Administrative Matters portion of the agenda by unanimous vote. (Ayes 5, Nays 0, Absent 0, Abstain 0)

Mr. Serrato informed the Board that the District has been awarded a \$300,000 Challenge Grant from the US Department of Interior. The grant funds will be used for a new control structure on the Enterprise Canal.

REVIEW OF FUTURE MEETINGS

Staff reminded the Board of the upcoming AB 1234 Seminar training on Friday, July 14, 2006. CSDA will be sponsoring the training which will be held at the District office.

PUBLIC PRESENTATION

None

**FRESNO IRRIGATION DISTRICT
MINUTES OF THE REGULAR MEETING
HELD JULY 12, 2006**

POTENTIAL CONFLICTS OF INTEREST

None

CONSENT CALENDAR

- a. **Approval of Regular Meeting Minutes – June 21, 2006**
- b. **March and April 2006 Financials**
- c. **June 2006 Check Register**
- d. **June 2006 Special Funds**
- e. **June 2006 Payroll Register**
- f. **June 2006 Attorneys Fees**
- g. **June 2006 Consultants Fees**
- h. **June 2006 Assessments Collection Report**
- i. **Standard Developer Project – SCE-1398, LLC will pipeline the Dawson Canal No. 114 located SW Shaw and Sunnyside Avenues in accordance with Board Policy. Action request 2006-21**

M/S/C/(Neely/Balls) That Board of Directors approve the Consent Calendar by unanimous vote. (Ayes 5, Nays 0, Absent 0, Abstain 0)

380: WATER REPORT

- a. **Current water conditions**

Watermaster Jim Irwin reviewed the current and projected water supply. Magnacide-H applications will continue throughout the canal system next week. Staff reported there are preliminary discussions taking place with some of the Lower River Units who may be interested purchasing water later in the season.

CHIEF ENGINEER'S REPORT

Chief Engineer Bill Stretch reported on the following:

- a. **Developer and Agency Project Schedule for 2006/07 – Brief update of on-going projects**

At this time there are no developer projects under construction.

FID is currently processing six agency bridge/pipeline projects for the 2006/2007 maintenance season.

Fancher Creek Project – Gary Serrato, Laurence Kimura and Bill Stretch met with the Fancher Creek Development Project developers (the proposed “Riverpark” project for the southeast Fresno area). This project will be bordered by Clovis, Fowler, Tulare and Kings Canyon Avenues. Centex Homes is developing the housing portion of the project which will take place in three phases. Staff is working with this developer on several options to maintain the District’s access to the easement along the Creek.

**FRESNO IRRIGATION DISTRICT
MINUTES OF THE REGULAR MEETING
HELD JULY 12, 2006**

b. Running Horse Development & Kearney Basin Project Update

Mr. Stretch gave a brief presentation on the progress of the Kearney Basin project. Excavation is slow going. Staff and Alex Peltzer, FID's legal counsel, are continuing to work on a response to the Developer concerning Running Horse's request to stockpile dirt on the south portion of the existing basin.

c. Jefferson Pipeline Repair Update – SW Shaw and DeWolf Avenues

During some recent grading activities on Tract 5484 (Shaw and DeWolf Avenues), the earthmoving contractor damaged the Jefferson Pipeline. The pipeline was shut down for seven days and the developer was fined \$500 each day that the pipeline was inoperable.

d. City of Sanger Meeting Update

Gary Serrato, Laurence Kimura and Gary Serrato met with the City of Sanger's Public Works Director, City Engineer and Development Services Director. Topics of discussion included FID's Pipeline Policy, groundwater issues, stormwater conveyance, FID's assessments of urbanized lands and other topics related to Sanger's development and the impact on FID.

ASSISTANT MANAGER'S REPORT

Assistant Manager Laurence Kimura reported on the following:

a. Nielsen Site Rubble Pile Update

All agreements have been signed between the City of Fresno and Mr. Erickson. Staff is waiting for the requested schedule of activities from Mr. Erickson. At the end of June, Staff had submitted the required dust plan to the San Joaquin Valley Air Pollution Control Board and is waiting for their response.

b. Waldron Banking Project Update

The earthwork contractor has essentially completed the work at all three sites. Some minor gate and fencing work still needs to be performed.

Well drilling work by Myers Bros. is just being started. The drilling sites have been staked.

There are no significant changes in the financial status of the project since the last meeting. Another pay request will be sent to the Department of Water Resources and the City of Clovis as soon as June's expenses have been completed.

c. General Maintenance and Equipment Update (May/June Maintenance Report)

Crews are fixing pipelines and taking care of trash pickup. Brush removal is taking place as time permits. Weed control is taking place throughout the District.

**FRESNO IRRIGATION DISTRICT
MINUTES OF THE REGULAR MEETING
HELD JULY 12, 2006**

MANAGER'S REPORT

General Manager Gary Serrato reported on the following:

KINGS RIVER WATER ASSOCIATION

Kings River Fishery Management Program (Implementation Agreement)

The Implementation Agreement was distributed at the last Fish and Game meeting. The Agreement was to include the following: 1) Britz Fund, 2) Non-Demand Flow Agreement, 3) South Fork Agreement, 4) Replacement Policy, and 5) Exhibit "D" Flow Agreement. A meeting with the Upper River Units will take place next week. Mr. Serrato has scheduled a meeting with Mr. Bill McGlasson, engineer for Lemoore Canal and Irrigation Company.

Exhibit "D" Flows

KRWA Watermaster has called for 20,300 acre-feet to meet Exhibit "D" flows for the 2006/2007 season. FID's contribution to the pool is 4,066 acre feet.

FRIANT WATER AUTHORITY / FRIANT WATER USERS AUTHORITY

Friant flood releases have stopped. All other Friant matters will be discussed during Closed Session.

OTHER ISSUES

Meeting with the City of Clovis

Mr. Serrato and Laurence Kimura met with the City of Clovis' staff to discuss water development in addition to what the Waldron Banking Facilities will yield.

FID staff has been working with the developer of the Harlan Ranch Development to negotiate the development of 6,000 to 9,000 acre feet of new water for the project. The City has now indicated that they would like negotiations for the new water to be directly with them.

Ag Waiver Discharge

The Regional Water Quality Control Board has extended the Waiver an additional five years. The Board has also defined and announced what a discharger is.

Proposition 50

KRWA Legislative Committee in conjunction with ACWA, is asking the State Department of Water Resources to explain their criteria on the allocation of the proposition funding and also ask that during the second round of funding that the money be divided equally between the North, Central and South regions of the State.

ADMINISTRATIVE MATTERS

a. Adoption of Resolution 2006-16

This Resolution is to approve the additional assessment rates as outlined in the Proposition 218 election process.

**FRESNO IRRIGATION DISTRICT
MINUTES OF THE REGULAR MEETING
HELD JULY 12, 2006**

M/S/C/(Boswell/Balls) That Board of Directors approve the adoption of Resolution 2006-16 by a roll call vote. (Ayes Neely, Balls, Andresen, Boswell, Niederfrank, Nays 0, Absent 0, Abstain 0)

b. Adoption of Resolution 2006-17

This Resolution is to approve the rate increase on water rental lands.

M/S/C/(Balls/Boswell) That Board of Directors approve the adoption of Resolution 2006-17 by a roll call vote. (Ayes Neely, Balls, Andresen, Boswell, Niederfrank, Nays 0, Absent 0, Abstain 0)

DIRECTORS' REPORT

None

CLOSED SESSION

Open Session adjourned at 6:00 pm and after a short break the Board went into Closed Session at 6:15 pm to discuss the following matters:

Conference with Legal Counsel—Anticipated Litigation (Government Code Section 54956.9(b)). The Board met in closed session to confer with counsel on potential litigation arising out of the District's handling of 39 Certificates of Sale resulting from delinquent charges and assessments. On advice of counsel, the Board has concluded that, based on existing facts and circumstances, there is significant exposure to litigation against the District.

National Resource Defense Council vs. Rodgers (Government Code Section 54956.9). The Board conferred with counsel on pending litigation.

Government Code Section 54956.7. Conference with labor negotiators regarding terms and conditions of employment with represented bargaining groups.

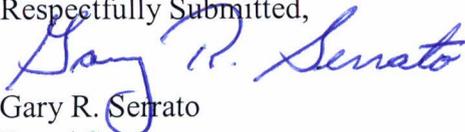
ADJOURNMENT

President Andresen adjourned Closed Session at 7:29 pm.

REPORT OF ACTION TAKEN IN CLOSED SESSION

President Andresen stated there was nothing to report and the meeting was adjourned at 7:30 pm:

Respectfully Submitted,



Gary R. Serrato
Board Secretary

EXHIBIT 4.2
PROPOSITION 218
RESOLUTION

RESOLUTION NO. 2006-16**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
FRESNO IRRIGATION DISTRICT****RESOLUTION REVISING THE AMOUNT TO BE COLLECTED FROM GENERAL
SERVICE CHARGES, AND SETTING THE RATE FOR THE APPORTIONMENT OF
SAID CHARGES FOR 2007**

WHEREAS, the Board of Directors in 2005 previously determined that additional funds were required to carry on the business and affairs of the District in the calendar years 2006 through 2010; and approved Staff's recommendation of the following:

1. to proceed with an election under Section 4 of Proposition 218 (Assessment Process) to cover the four categories of service: a) water service, b) non-water service, c) pump from ditch, and d) lift pump;
2. to proceed with the preparation of an engineers report tasked to investigate and take into account all of the following costs to the District in connection with the Section 4 election:
 - i. cost for improvement to the water conveyance/delivery system of the District to implement water assessments under Section 4 of Proposition 218;
 - ii. cost of associated expenses and indicators that affect the District in implementing a water assessment under Section 4 of Proposition 218;
 - iii. cost of current and anticipated increases in or additional federal, state, regional and local regulatory fees that will be charged to the District in connection with its delivery of water;
 - iv. cost for refurbishing or updating aging infrastructure already owned/operated by the District; and
 - v. cost to maintain new and existing infrastructure owned/operated by the District;

and

WHEREAS, the Board of Directors directed Staff to hire an independent engineering firm to conduct an independent engineers evaluation of potential assessment rate increases and produce an engineers report; and

WHEREAS, the Board of Directors directed Staff to hold a Proposition 218 Election; and

WHEREAS, the Board of Directors adopted the independent engineers report on September 7, 2005, and an election of the affected property owners was conducted to increase assessment rates of the affected categories of service up to a maximum increase through 2010 of \$15.38 per acre, subject to indexing to actual Consumer Price Index (Western Urban Area) and loan or bond repayment obligations for \$11.3 million for maintenance and facility upgrades; and

WHEREAS, the independent engineers report estimated the annual assessment rate increases to the affected categories of service for the period 2006 through 2010, based on an annual increase of three (3) percent per year and loan or bond obligations for \$11.3 million, to be approximately:

2006	\$6.90 per acre
2007.....	\$2.81 per acre
2008.....	\$2.52 per acre
2009.....	\$1.92 per acre
2010.....	\$1.23 per acre

and

WHEREAS, the election approving the above specified rate increases was held and passed by a majority vote on December 6, 2005, and the tabulations were adopted by the Board of Directors on December 7, 2005, as stated in Resolution 2005-14; and

WHEREAS, the specified Consumer Price Index indicates that the inflation rate from May 2005 to May 2006 was at 4.1 percent; and

WHEREAS, the Board has met as a Board of Equalization to hear and determine objections to the classifications so established and the charges to be fixed and for the purpose of equalizing such charges; and

WHEREAS, the Board as the Board of Equalization has established the relative value of services furnished by the District for the next calendar year, beginning January 1, 2007.

NOW THEREFORE, BE IT RESOLVED:

The Board hereby approves an increase in assessment rates based on a three (3) percent inflation rate resulting in an increase of \$2.81 per acre for the next calendar year starting January 1, 2007 for each of the following four categories of service approved by the property owners under Proposition 218 balloting: a) water service, b) non-water service, c) pump from ditch, and d) lift pump.

The Board hereby determines that, in order to implement the voter-approved rate increases, it is appropriate and necessary to adjust the general service charge rate that is applied to the Values of Service for each respective category of lands in determining the per-acre rate of assessment. Accordingly, the Board instructs the Controller/Assessor-Collector to compute and apportion said general service charges among the lands within the District by applying a rate of \$34.71 to each \$100.00 of the relative value of the services furnished to each acre of land according to the classifications of service, resulting in per acre assessments as follows:

Water Service	\$34.71
Underground	\$23.46
Pump from Ditch	\$29.71
Lift Pump	\$40.96
Minimum Size Parcel	\$12.50
Annex – Developed Lands	\$10.00
Annex – Undeveloped Lands	\$4.50
Freewater District	\$4.50

The Board further instructs the Controller/Assessor-Collector to enter said charges in the records of the District in that office and to proceed to collect said charges pursuant to the rules heretofore adopted by the Board for that purpose. The Board declares that when so entered, said charges shall become charge against the person or persons owning or claiming a possessory interest in said lands and against each parcel or land to which said services were rendered.

PASSED, APPROVED AND ADOPTED THIS 12th day of July, 2006

By: Jacob C. Andresen

Jacob C. Andresen, President

I, GARY SERRATO, Secretary of the Board of Directors of the Fresno Irrigation District (the "Board"), hereby certify that the foregoing is a full, true and correct copy of Board Resolution No. 2006-16 (the "Resolution"), that the Board has not amended or repealed the Resolution, and that the Board adopted the Resolution at a regular Board meeting held on the 12th day of July 2006, and that the Board adopted the Resolution by the following vote:

	<u>Aye</u>	<u>Nay</u>	<u>Absent</u>	<u>Abstain</u>
President Andresen	<u>✓</u>	—	—	—
Vice-President Boswell	<u>✓</u>	—	—	—
Director Niederfrank	<u>✓</u>	—	—	—
Director Balls	<u>✓</u>	—	—	—
Director Neely	<u>✓</u>	—	—	—

Gary R. Serrato
Gary R. Serrato, Secretary

EXHIBIT 4.3
FID NEWSLETTER

Published for Fresno Irrigation District Water Users

October 2011

District Faces New Measuring Mandate

A state water management law will soon require the Fresno Irrigation District to measure water deliveries to all users.

SBX 7-7, enacted in 2009, mandates that FID measure water delivered to farm customers with sufficient accuracy to provide an annual report to the state summarizing collective farm-gate delivery data.

"The State Department of Water Resources has recently developed the interpretation of the law that will require measurement at each individual turnout," said Gary Serrato, FID General Manager.

"We are gearing up, with the help of consultants, on how to proceed with complying with these state-mandated regulations," Serrato said. "FID has tested a variety of water measurement meters to determine the most economical measurements."

The law also requires FID to develop a water management program and to submit annual water diversion reports to the State. Agricultural water management plans will have to be prepared, adopted, updated and implemented every five years. The District must by law adopt a pricing structure for customers that is based at least in part on quantity delivered.

FID Users Enjoy Big Water Supply

Twice-Average Runoff Extends Deliveries, Leaves District With Good Carryover Storage

A big water year has paid off with extended deliveries to Fresno Irrigation District growers even as the 2011-12 season has been given a soggy sendoff adding up to wet effects that will linger for months.

FID's water deliveries will be extended into November, said FID General Manager Gary Serrato.

The new water year, which began October 1, got off to a wet start only five days later when a surprisingly potent early-season winter-type storm brought more than enough rainfall to cause grief to many farmers still working on harvest activities.

It also brought heavy rain and, generally above 7,000 feet, the season's first major Sierra Nevada snowstorm, covering higher elevation slopes with up to two feet. Many higher slopes had been bare of snow cover for only a few months. Much of the unusually heavy early snow has now melted.

By the time its water run ends, FID will have delivered water through its extensive system for well over eight months and expects to have provided a total of 525,000 acre-feet to users, District Watermaster Jim P. Irwin said.

That includes 63,500 acre-feet of Central Valley Project water. FID's gross entitlement of Kings River water amounted to 633,000 acre-feet, among the 10 biggest years in district history, Irwin said.

In addition, the District will be able to carry over about 100,000 acre-feet of stored water into the 2012 irrigation season to use as a supply cushion or enhancement, Irwin said.

A long-term NOAA Climate Prediction Center forecast indicates another La Niña cool-water weather-spawning pattern has taken shape in the tropical Pacific. Such

(Continued on back page)

FID Lauded In State Grant Audit

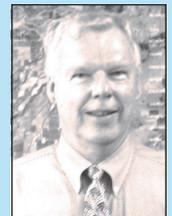
State Department of Finance auditors have given the Fresno Irrigation District high marks in an audit of use, management and accounting of water development bond funds.

A \$2.6 million Proposition 50 grant was awarded for Jameson Groundwater Banking Facility development.

The audit's lead official was highly complimentary of FID's engineering and accounting staffs on their detailed record-keeping.



New FID Water Bank Is Named For Boswell



A newly-expanded recharge facility has been named the Jeff Boswell Recharge Facility in honor of Boswell, who resigned from the Fresno Irrigation District board for a church mission. A sedimentation channel brings water to two recharge cells. (More about FID's Maintenance and Facility Upgrade Plan projects, Pages 2-3.)

Four Years Of Upgrades

Bond-Financed Improvement Projects Nearly All Completed



Revenue bonds approved by voters five years ago with millions of dollars invested in infrastructure have resulted in dozens of major Fresno Irrigation District improvement projects to be put in place over the past four years.

“FID’s Maintenance and Facility Upgrade Plan has largely accomplished what the District’s voters told us to do, allowing us to rehabilitate major infrastructure deficiencies and meet other needs,” said Gary Serrato, FID General Manager.

Only a handful of the many projects planned remain to be completed.

“We have focused on deferred maintenance projects and capital improvements that have already resulted in tremendous efficiencies and savings in the facilities we use and the water FID delivers to its growers,” he added.

The past winter’s work had to be carried out in the midst of a much above-average precipitation season that included a March 1 start to FID’s water deliveries. It included development of groundwater recharge facilities, pipelines, new control structures, improved communications and other projects.

Since the upgrade plan was launched, capital improvements made by FID have included retrofitting existing weir structures with long crested weirs and automated gates; installation of a Supervisory Control and Data Acquisition System (SCADA) and telemetry improvements; improved measurement at lateral headings and some grower turnouts; and construction of regulation and recharge basins.

The worst of many leaky pipelines have been replaced and sections of canals that have caused problems have been lined

with concrete. Numerous automated trash racks have been installed and FID rights-of-way have been improved. Handling construction were contractors as well as the District’s construction forces.

“Due to the specialized nature of the majority of the capital improvements, the District was able to minimize costs and construct a greater number of projects by utilizing its own construction forces,” said District Engineer Bill Stretch.

During the program, FID has constructed improvements valued at \$15.6 million, with \$10.3 million coming from bonds and the remaining funds coming from outside funding sources. Those have included federal and state grants, local agencies, and utilizing District construction labor and equipment.

Nearing the end of construction is FID’s new main office, located on the south end of the District’s Maple Avenue campus and next door to the existing inefficient 50-year old structure that is being replaced. Although construction is behind schedule, the new office project is within its budget. It is about 20% smaller than the office being replaced although some space for future growth has been provided.

Vastly improved energy efficiency will be achieved, resulting in considerable energy savings. Work space assigned to various departments is arranged logically and natural light is to be used to create an efficient and productive working environment.

“The whole purpose of this project is to be more efficient,” Serrato said.

When the new structure is completed, the old office – a former cotton company headquarters built a half century ago – will be demolished and replaced with parking.

ABOVE: *New control gates are installed in a control structure along a newly-lined section of canal, one of the past year’s Fresno Irrigation District projects carried out under the District’s Maintenance and Facility Upgrade Plan that was largely funded through revenue bonds approved by FID voters five years ago.*

BELOW: *FID crews retrofitted six regulating structures with long crested weirs this past year. These redesigned weirs allow a large flow rate to pass with a small increase in water surface elevation upstream of the check structure. By providing more weir length, upstream water surface levels can be better controlled and regulated, improving efficiency and safety.*



RIGHT: *Better measurement of water delivered to laterals is the result of projects such as this, completed by FID earlier in the year.*

Another Big Year For FID Improvements

Three important new regulation and groundwater recharge basins finished this year are among the latest projects to be completed under the Fresno Irrigation District's Maintenance and Facility Upgrade Plan.

"These basins will greatly improve water service to users while improving groundwater conditions," said FID General Manager Gary Serrato. The projects include:

- **Boswell Banking Facility** – Newly named to honor former FID Board Chairman Jeff Boswell (and formerly known as Jameson Basin), the project included expansion of existing a 36 acre regulation and recharge basin site to include a new 64-acre recharge basin, three recovery wells, conveyance facilities, three monitoring wells, and telemetry equipment. The site can now be used for water banking and has been accepting water since March. The recovery and monitoring wells are expected to be completed by January 2012. FID received two state grants totaling \$3,285,365 under Proposition 50 for the project.
- **Pacheco Pond** – A 10 acre basin near McKinley and Plumas avenues being utilized for regulation and recharge off of the Big Sandridge Canal.
- **Pursell Pond** – A 12.2 acre basin near Jefferson and Cedar avenues. It is used for regulation and recharge.

Also installed or improved during the past year were measurement at the headgates of 14 laterals. Automated gates were installed at some locations and improvements were made to existing automation and telemetry on the Dry Creek headgate.

FID received a Department of Water Resources grant for \$250,000 to install 10 meters to measure diversions into FID basins. Six have been installed along with telemetry.

To improve canal regulation, FID crews retrofitted six regulating structures with long-crested weirs this past year. An automated Langemann Gate was installed on the Central Canal at the Dane Head.



Construction of a new flume over Fancher Creek in 2008 was among the program's earlier major projects.

Some 340 feet of concrete canal lining was placed on the left bank of the Enterprise Canal near Riverbend Avenue.

District Engineer Bill Stretch said that although development has slowed, Caltrans, local agencies and developers this year installed 1.6 miles of rubber gasketed reinforced concrete pipeline valued at \$1.2 million, with the majority of it being part

of the Highway 180 improvement project east of Fresno. Some 6,150 feet of the Hansen Canal was piped.

The City of Fresno is constructing a temporary surface water treatment facility near Dakota and Temperance avenues that will be supplied by FID's Jefferson and Gunn canals.

This project required extensive improvements to ensure a *(Continued on back page)*



Part of a new SCADA installation stands over a Fresno Irrigation District check structure.

Communications Investment Pays Off

Revenue bond financing approved by Fresno Irrigation District voters five years ago has greatly enhanced automated control and data collection systems along with field radio communications upon which FID's staff relies for smooth communications.

Work has included automating key water diversion points where canals and basins can be regulated to permit operation and monitoring from FID's office in Fresno.

Commonly known as telemetry, the technology is more formally called Supervisory Control and Data Acquisition (SCADA).

District Engineer Bill Stretch

says SCADA "is a valuable tool which has allowed the Water Department to better manage its water supply and provide better service to our water users by making more accurate, fast, and reliable adjustments. This allows FID to deliver a more regulated and reliable water supply."

Along with irrigation deliveries, SCADA also helps FID manage storm water, recharge water to the City of Fresno's Leaky Acres and other storm drainage basins, and deliveries to the surface water treatment plants operated by the cities of Fresno and Clovis for municipal and industrial uses.

"SCADA has improved FID's

overall efficiency by improving water deliveries and by decreasing maintenance costs due to fewer canal breaks occurring," Stretch said.

As part of the four-year Maintenance and Facility Upgrade Program, FID has added some 50 new SCADA sites, 15 in 2010-11 alone, bringing the total SCADA locations to 90. Fifty control sites and 40 are monitor-only sites.

FID has made other radio upgrades, including three additional master radios and antennas, while improving existing radios and adding two repeater sites to improve radio coverage and data collection.

Big Water Supply Extends FID's Deliveries

(Continued from front page)

patterns often lead to Central California drought conditions, but not always. A strong La Niña took shape a year ago but much above-average storm activity occurred in California.

Creating the outstanding 2011 water supply was a generally well-spaced series of major storms that began in the fall of 2010 and continued through Memorial Day weekend in 2011, followed by some fairly potent summer thunderstorm events.

The Kings River Water Association reports that when the water year concluded September 30, the Kings River had generated natural runoff of 3,318,698

acre-feet, 196% of average. Of that, 3,052,574 acre-feet was released for irrigation, according to provisional data.

April-through-July peak season runoff on the Kings was 2,294,715 acre-feet, 184% of average. It all added up by July 7 to Pine Flat Reservoir virtually filling – 996,652 acre-feet (99.6% of capacity) – for the first time in five years.

Kings River Water Association and U.S. Army Corps of Engineers officials know they will have to keep a close eye on Pine Flat Reservoir storage in the coming months.

At just over 588,000 acre-feet (58% full) as of October 20, Pine Flat storage

will likely encroach sometime in the coming winter into space reserved for flood control, which could prompt the Corps to order flood releases.

The 2010-11 water year resulted in the first Kings River flood releases since 2006.

There were actually three separate flood release events, with 500,930 acre-feet of water lost to the Kings River service area. The Kings had 167 days of flood releases.

They were, in total, the third longest since construction of Pine Flat Dam but the total discharge ranks No. 12 on the river's all-time flood release list.

FID Has Another Big Year In Improving System

(Continued from Page 3)

reliable water supply as well as improved water quality.

Stretch said the upcoming winter dewatering season will be shortened and will focus on maintenance. Construction will include a new 23-acre Oleander Pond, five-acre Herndon West Pond, Briggs Canal improvements funded by a \$300,000 Water and Energy Efficiency Grant from the U.S. Bureau of Reclamation, and installation of 10-15 flow meters at headworks of several laterals, basin interties, turn-outs, and spillways.

In the Maintenance and Facility Upgrade Plan's first three years, a variety of improvement projects took place in all parts of the District. They in-



cluded replacement facilities and repairs to the District's large and aging water system. Many existing regulating structures and delivery facilities were retrofitted. Regulation basins have been built and communications, water measurement and control systems have been improved.

FID has obtained several grants from Reclamation and the California Department of Water Resources. Most required matching funds from FID and were paid for through the assessments approved by FID land-owners during the Proposition 218 election in December 2005.

Fresno Irrigation District pipeline construction during the spring of 2009.

LOGO

2907 South Maple Avenue
Fresno, California 93725

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EXHIBIT 4.4
6-12-12
BOARD MEETING AGENDA

**FRESNO IRRIGATION DISTRICT
BOARD OF DIRECTORS REGULAR MEETING
2907 S MAPLE AVENUE – FRESNO, CA 93725
JUNE 12, 2012, at 5:10 P.M.
AGENDA**

Members of the public may directly address the Board of Directors on any item of interest to the public within the Board's subject matter jurisdiction before or during the Board's consideration of the item (***Presentations are limited to 5 minutes per person; no more than 15 minutes per topic.***)

Written Materials related to an item on this agenda to be considered in open session that are public documents and that are distributed to board members after the posting of the agenda will be made available for public inspection when they are so distributed at the offices of the Fresno Irrigation District located at 2907 South Maple Avenue, Fresno, California during normal business hours. Documents that are public documents provided by others during a meeting will be available at the same location during business hours after the meeting.

1. **REVIEW AGENDA**
(Additional Agenda Items – Requires Majority Approval Of Board - §54954.2(b))
2. **REVIEW OF FUTURE MEETINGS**
3. **PUBLIC PRESENTATION**
None Scheduled
4. **POTENTIAL CONFLICTS OF INTEREST**
(Any Board Member who has a potential conflict of interest may now identify the item and recuse themselves from discussing and voting on the matter.) [FPPC §87105]
5. **CONSENT CALENDAR** (All Consent Calendar items are considered to be routine action items and will be enacted by one motion. There will be no separate discussion of these items unless requested, in which event the item will be removed from the Consent Calendar and considered following approval of the Consent Calendar.)
 - a. Approval of Regular Board Meeting Minutes – May 22, 2012
 - b. May 2012 Check Register
 - c. May 2012 Payroll Registers
 - d. May 2012 Unpaid Assessment Report
 - e. May 2012 Unpaid ISIP Assessment Report
 - f. May 2012 Investment Account
6. **CONTROLLER'S REPORT**

In compliance with The Americans With Disabilities Act, if you need assistance to participate in this meeting, please contact the district at (559) 233-7161. Notification 48 hours prior to the meeting will enable the district to make reasonable arrangements to ensure accessibility to this meeting.

**FRESNO IRRIGATION DISTRICT
BOARD OF DIRECTORS REGULAR MEETING
2907 S MAPLE AVENUE – FRESNO, CA 93725
JUNE 12, 2012, at 5:10 P.M.
AGENDA**

7. **WATER OPERATIONS**

- a. Current Water Conditions Report

8. **CHIEF ENGINEER'S REPORT**

- a. Developer and Agency Project Schedule Update for 2012-13
- b. FID Projects Update for 2012-13
- c. Grant Application – Approve Funds to Prepare Application for DWR Local Groundwater Assistance Grant. Resolution No 2012-05 and Action Request 2012-13

9. **ASSISTANT MANAGER'S REPORT**

- a. Nielsen Site Rubble Pile Update
- b. District Office Plan
- c. General Maintenance and Equipment Update
- d. Review of Recommendations from Equipment Committee (action item)

10. **MANAGER'S REPORT**

11. **ADMINISTRATIVE MATTERS**

- a. Assessment Dispute – John Schafer
- b. Kular Agreement - Groundwater Pump Update (action item)

12. **DIRECTORS' REPORTS**

CLOSED SESSION

Natural Resource Defense Council vs. Rodgers (Government Code Section 54956.9). To confer with counsel on pending litigation.

Conference with Legal Counsel–Anticipated Litigation (Government Code Section 54956.9(b)). Conference with Legal Counsel – Anticipated Litigation (G.C. §54956.9. Significant Exposure to Litigation pursuant to subdivision (b)): Nielsen Avenue Property.

Government Code Section 54956.7. Conference with Labor Negotiators Regarding Terms and Conditions of Employment with Represented Bargaining Groups.

In compliance with The Americans With Disabilities Act, if you need assistance to participate in this meeting, please contact the district at (559) 233-7161. Notification 48 hours prior to the meeting will enable the district to make reasonable arrangements to ensure accessibility to this meeting.

**FRESNO IRRIGATION DISTRICT
BOARD OF DIRECTORS REGULAR MEETING
2907 S MAPLE AVENUE – FRESNO, CA 93725
JUNE 12, 2012, at 5:10 P.M.
AGENDA**

Conference with Legal Counsel–Anticipated Litigation (Government Code Section 54956.9(b)).

Conference with Legal Counsel – Anticipated Litigation (G.C. §54956.9. Significant Exposure to Litigation pursuant to subdivision (b)): Applegate Johnston, Inc.

13. **REPORT ON ACTION TAKEN IN CLOSED SESSION**

ADJOURNMENT

Note: This agenda is posted pursuant to the provisions of the Government Code commencing at Section 54950. The date of this posting is June 8, 2012. Posting locations are: 1) District Office; 2) FID Website; and 3) Mail box located in front of 2907 S Maple Avenue – Fresno, CA.

"In accordance with California Government Code Section 54957.5, any writing or document that is a public record, relates to an open session agenda item and is distributed less than 72 hours prior to a regular meeting, will be made available for public inspection in the District offices during normal business hours. If, however, the document is not distributed until the regular meeting to which it relates, then the document or writing will be made available to the public at the location of the meeting."

In compliance with The Americans With Disabilities Act, if you need assistance to participate in this meeting, please contact the district at (559) 233-7161. Notification 48 hours prior to the meeting will enable the district to make reasonable arrangements to ensure accessibility to this meeting.

FRESNO IRRIGATION DISTRICT

BOARD OF DIRECTORS MEETINGS

2012 SCHEDULE OF MEETINGS / EVENTS- *Subject to Change with Proper Notice

June 12, 2012	5:00 p.m.	Board of Equalization
June 12, 2012	5:10 p.m.	Regular Board Meeting
June 26, 2012	5:00 p.m.	Regular Board Meeting
July 10, 2012	5:00 p.m.	Regular Board Meeting
July 24, 2012	5:00 p.m.	Regular Board Meeting
August 14, 2012	5:00 p.m.	Regular Board Meeting
August 28, 2012	5:00 p.m.	Regular Board Meeting
September 11, 2012	5:00 p.m.	Regular Board Meeting
September 25, 2012	5:00 p.m.	Regular Board Meeting
October 9, 2012	5:00 p.m.	Regular Board Meeting
October 23, 2012	5:00 p.m.	Regular Board Meeting
November 13, 2012	5:00 p.m.	Regular Board Meeting
November 27, 2012	5:00 p.m.	Regular Board Meeting
Dec 4-Dec 7, 2012	San Diego, CA	ACWA Fall Conference
December 11, 2012	5:00 p.m.	Regular Board Meeting
December 25, 2012	5:00 p.m.	Regular Board Meeting

EXHIBIT 4.5
LETTERS OF SUPPORT



FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

File 160.8341
170.511

July 6, 2012

Mr. Tom Lutterman
Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

To Whom It May Concern,

Support for Local Groundwater Assistance Fund Grant Applications

This letter is intended to demonstrate the Fresno Metropolitan Flood Control District's support for the Local Groundwater Assistance Fund Grant Application that is being made by the Fresno Irrigation District, within the Fresno Area Regional Groundwater Management Plan. We have prepared our own application for grant funding, and also strongly support the Fresno Irrigation District's application from the Plan area for measurement improvements at their ponds. The Fresno Irrigation District's project will provide measurement improvement of groundwater recharge efforts within their district, an important factor in providing a better understanding of groundwater changes in the area.

As a member of the Fresno Area Regional Groundwater Management Plan, the Fresno Metropolitan Flood Control District cooperatively manages groundwater and surface supplies within the region to provide a safe and sustainable water supply. The Plan Area is located in a groundwater basin that has been classified as critically overdrafted. Each of these projects is located in a different area of the Fresno Area Regional Groundwater Management Plan area and each is important to gaining new information regarding groundwater in the area.

The Fresno Metropolitan Flood Control District strongly supports the Fresno Irrigation District's application, and believes that each will provide unique and critical steps for continued improvement of groundwater resources in the region.

Sincerely,

Jerry Lakeman
District Engineer

JL/sy

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FRIANT WATER AUTHORITY

July 9, 2012

Harvey A. Bailey
Chairman of the Board

Nick Canata
Vice Chairman

Tom Runyon
Secretary/Treasurer

Ronald D. Jacobsma
General Manager

Jennifer T. Buckman
General Counsel

Member Agencies

*Arvin-Edison W.S.D.
Delano-Earlimart I.D.
Exeter I.D.
Fresno I.D.
Ivanhoe I.D.
Kaweah Delta W.C.D.
Kern-Tulare W.D.
Lindmore I.D.
Lindsay-Strathmore I.D.
Lower Tule River I.D.
Madera I.D.
Orange Cove I.D.
Pixley I.D.
Porterville I.D.
Saucelito I.D.
Shafter-Wasco I.D.
Stone Corral I.D.
Tua Pot Dome W.D.
Terra Bella I.D.
Tulare I.D.*

Mr. Tom Lutterman
Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

RE: Support for Local Groundwater Assistance Fund Grant Application for Basin Measurement

Dear Mr. Lutterman:

This letter is intended to demonstrate Friant Water Authority's support for the Local Groundwater Assistance Fund Grant Application that is being made by the Fresno Irrigation District within the Fresno Area Regional Groundwater Management Plan.

The Authority is a Joint powers authority consisting of twenty water-related districts in the southern San Joaquin Valley that contract for water supplies from the Friant Division of the Central Valley Project. The Authority operates and maintains the Friant-Kern Canal, which is a major conveyance feature of the Friant Division, and represents the common interests of its members on various water resources and water policy issues. The Friant Diversion service area includes approximately one million acres and 15,000 mostly small family farms on the east side of the southern San Joaquin Valley (Merced, Madera, Fresno, Tulare and Kern Counties).

We strongly support FID's application for measurement improvements at FID's ponds. This project will provide improved measurement of groundwater recharge efforts within FID, an important factor in providing a better understanding of changes in the groundwater basin.

As a member of the Fresno Area Regional Groundwater Management Plan, the Friant Water Authority cooperatively manages groundwater and surface supplies within the

Main Office
854 N. Harvard Avenue
Lindsay, CA 93247

Phone: 559-562-6305
Fax: 559-562-3496

Sacramento Office
1107 9th Street, Suite 640
Sacramento, CA 95814

Phone: 916-346-4165
Fax: 916-346-3429

Website: www.friantwater.org

Tom Lutterman
July 9, 2012
Page 2

region to provide a safe and sustainable water supply. The Plan Area is located in a groundwater basin that has been classified as critically over drafted. Each of these projects is located in a different area of the Fresno Area Regional Groundwater Management Plan area, and each is important to gaining new information regarding groundwater in the area.

The Friant Water Authority strongly supports these applications, and believes that it will provide unique and critical steps for continued improvement of groundwater resources in the region.

Sincerely,



Ronald D. Jacobsma
General Manager

BAKMAN WATER COMPANY

TELEPHONE (559) 255-0324 • P.O. BOX 7965 • 5105 E. BELMONT • FRESNO, CA 93747

July 9, 2012

Mr. Tom Lutterman
Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

RE: Support for Local Groundwater Assistance Fund Grant Application for Basin
Measurement

Dear Mr. Lutterman:

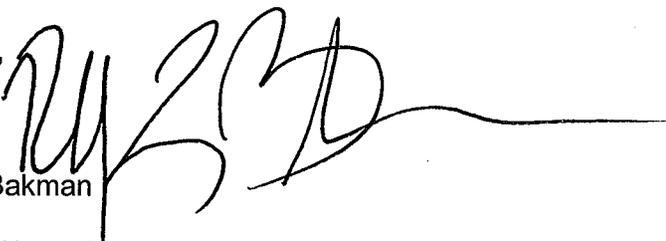
This letter is intended to demonstrate Bakman Water Company's support for the Local Groundwater Assistance Fund Grant Applications that is being made by the Fresno Irrigation District within the Fresno Area Regional Groundwater Management Plan.

We strongly support FID's application for measurement improvements at FID's ponds. This project will provide improved measurement of groundwater recharge efforts within FID, an important factor in providing a better understanding of changes in the groundwater basin.

As a member of the Fresno Area Regional Groundwater Management Plan, the Bakman Water Company cooperatively manages groundwater and surface supplies within the region to provide a safe and sustainable water supply. The Plan Area is located in a groundwater basin that has been classified as critically over drafted. Each of these projects is located in a different area of the Fresno Area Regional Groundwater Management Plan area, and each is important to gaining new information regarding groundwater in the area.

The Bakman Water Company strongly supports these applications, and believes that it will provide unique and critical steps for continued improvement of groundwater resources in the region.

Sincerely,


Richard Bakman
President
Bakman Water Company





City of Clovis Public Utilities Department

155 N. Sunnyside Avenue, Clovis, CA 93611 (559) 324-2600

July 9, 2012

Mr. Tom Lutterman
Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

Letter of Support Local Groundwater Assistance Fund Grant Application for Basin Measurement

Dear Mr. Lutterman:

This letter is intended to demonstrate City of Clovis' support for the Local Groundwater Assistance Fund Grant Application that is being made by the Fresno Irrigation District within the Fresno Area Regional Groundwater Management Plan.

We strongly support FID's application for measurement improvements at FID's ponds. This project will provide improved measurement of groundwater recharge efforts within FID, an important factor in providing a better understanding of changes in the groundwater basin.

As a member of the Fresno Area Regional Groundwater Management Plan, the City of Clovis cooperatively manages groundwater and surface supplies within the region to provide a safe and sustainable water supply. The Plan Area is located in a groundwater basin that has been classified as critically over drafted. Each of these projects is located in a different area of the Fresno Area Regional Groundwater Management Plan area, and each is important to gaining new information regarding groundwater in the area.

The City of Clovis strongly supports these applications, and believes that it will provide unique and critical steps for continued improvement of groundwater resources in the region.

Sincerely,

Mike Leonardo
City of Clovis, Public Utilities Director

4886 East Jensen Avenue
Fresno, CA 93725
phone: (559) 237-5567
fax: (559) 237-5560
www.kingsbasinauthority.org



July 10, 2012

Mr. Tom Lutterman
Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

Re: Support for Local Groundwater Assistance Fund Grant Application
for Basin Measurement

Dear Mr. Lutterman:

This letter is intended to demonstrate Kings Basin Water Authority's support for the Local Groundwater Assistance Fund Grant Application that is being made by the Fresno Irrigation District (FID) within the Fresno Area Regional Groundwater Management Plan.

FID's application for measurement improvements at the district's ponds is consistent with goals and objectives of the Upper Kings Basin Integrated Regional Water Management Plan. If funded, this project will provide improved measurement of groundwater recharge efforts within FID, an important factor in providing a better understanding of changes in the Kings Groundwater Subbasin.

If you wish to discuss FID's application, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "David Orth", is written over the word "Sincerely,".

David Orth,
Secretary/Treasurer

DO/EO/sjs

cc: Felix Vaquilar, Fresno Irrigation District

UKB L12-0024
File: UKB 101.01.04

OFFICE OF THE CITY MANAGER

Luis Patlan

Mayor – Gary Yep

Council Members

Doug Wilcox

Raj Dhaliwal

Richard Stockwell

Jack Sidhu



850 S. Madera Avenue
KERMAN, CA 93630

Phone: (559) 846-9386

Fax: (559) 846-6199

www.cityofkerman.net

June 10, 2012

Mr. Tom Lutterman
Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

RE: Support for Local Groundwater Assistance Fund Grant Application for Basin Measurement

Dear Mr. Lutterman:

This letter is intended to demonstrate the City of Kerman's support for the Local Groundwater Assistance Fund Grant Applications that is being made by the Fresno Irrigation District within the Fresno Area Regional Groundwater Management Plan.

We strongly support FID's application for measurement improvements at FID's ponds. This project will provide improved measurement of groundwater recharge efforts within FID, an important factor in providing a better understanding of changes in the groundwater basin.

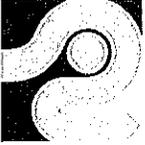
As a member of the Fresno Area Regional Groundwater Management Plan, the City of Kerman cooperatively manages groundwater and surface supplies within the region to provide a safe and sustainable water supply. The Plan Area is located in a groundwater basin that has been classified as critically over drafted. Each of these projects is located in a different area of the Fresno Area Regional Groundwater Management Plan area, and each is important to gaining new information regarding groundwater in the area.

The City of Kerman strongly supports these applications, and believes that it will provide unique and critical steps for continued improvement of groundwater resources in the region.

Respectfully Submitted,

A handwritten signature in blue ink that reads "Luis Patlan".

Luis Patlan
City Manager



FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

File 160.8341
170.511

July 6, 2012

Mr. Tom Lutterman
Department of Water Resources
1416 Ninth Street, Room 338
Sacramento, CA 95814

To Whom It May Concern,

Support for Local Groundwater Assistance Fund Grant Applications

This letter is intended to demonstrate the Fresno Metropolitan Flood Control District's support for the Local Groundwater Assistance Fund Grant Application that is being made by the Fresno Irrigation District, within the Fresno Area Regional Groundwater Management Plan. We have prepared our own application for grant funding, and also strongly support the Fresno Irrigation District's application from the Plan area for measurement improvements at their ponds. The Fresno Irrigation District's project will provide measurement improvement of groundwater recharge efforts within their district, an important factor in providing a better understanding of groundwater changes in the area.

As a member of the Fresno Area Regional Groundwater Management Plan, the Fresno Metropolitan Flood Control District cooperatively manages groundwater and surface supplies within the region to provide a safe and sustainable water supply. The Plan Area is located in a groundwater basin that has been classified as critically overdrafted. Each of these projects is located in a different area of the Fresno Area Regional Groundwater Management Plan area and each is important to gaining new information regarding groundwater in the area.

The Fresno Metropolitan Flood Control District strongly supports the Fresno Irrigation District's application, and believes that each will provide unique and critical steps for continued improvement of groundwater resources in the region.

Sincerely,

Jerry Lakeman
District Engineer

JL/sy

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