KINGS BASIN WATER AUTHORITY

2014 ANNUAL REPORT

(OCTOBER 2013 – SEPTEMBER 2014)

PREPARED BY:

KINGS BASIN
Water Authority

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Attachments

1 – INTRODUCTION

The Kings Basin Water Authority (KBWA) adopted an updated Integrated Regional Water Management Plan (IRWMP) in October 2012. The IRWMP established a goal of preparing an annual report (see Section 9.5 of IRWMP) to document progress and serve as a reference document for future IRWMP updates. This report includes information on current water conditions in the Kings Basin; status of IRWMP objectives and implementation projects; changes in governance, policies and membership of the Kings Basin Water Authority; and proposed IRWMP amendments.

This report discusses and documents project activities directly related to or processed through the Authority or IRWM related funding. It should be recognized that the stakeholders undertake numerous activities outside of IRWM that may contribute to the Goals and Objectives of the region, however this report is not intended to document all individual stakeholder activities outside of IRWM efforts.

This is the second annual report for the KBWA and follows the Kings River water year, covering the timeframe from October 1, 2013 to September 30, 2014.

2 – PHYSICAL CONDITIONS IN BASIN

2.1 – Surface Water Hydrology

Kings River

The water supply in the Kings River is commonly reported as a measure of 'Percent Hydrologic Year' (PHY). PHY represents the percent of river runoff compared to the long-term historical average. This reflects precipitation, snowpack, and river flow, and is directly related to the volume of water available to local water users. The PHY for the 2012, 2013 and 2014 Kings River water years is shown in Table 1. These last three years have been the driest 3-year period on record.

Table 1 - Kings River Percent Hydrologic Year

Kings River Water Year	Percent Hydrologic Year
2011-2012	48%
2012-2013	40%
2013-2014	32%

San Joaquin River

Water deliveries in the Friant Division of the Central Valley Project (CVP) are based on Class I and Class II allocations. Class I water is generally reliable and only restricted in very dry years. Class II water is generally only available in wet years, or when reservoir storage is temporarily unavailable. The allocations vary each year based on water supplies that are a function of precipitation, snowpack and reservoir storage. The CVP water year differs from the Kings River water year and runs from March 1 to February 28. The Class I and Class II allocations for the 2012, 2013 and 2014 water years are shown in Table 2.

Table 2 – San Joaquin River Water – Friant Division Allocations

Water Year	Class I	Class II
2012	50%	0%
2013	62%	0%
2014	0%	0%

The long-term average Class I and Class II allocations are approximately 94% and 40%, respectively.

2.2 – Groundwater Levels

The Kings River Conservation District produces groundwater contours for the KBWA based on data collected from agencies within the area. At the time of last year's annual

report, groundwater contours had not yet been developed using Spring 2013 data, so this year's report includes groundwater level contours for Spring 2013 and Spring 2014. The following maps are included as attachments:

- Attachment 1 – Spring 2013 Water Surface Elevation in Wells
- Attachment 2 – Spring 2013 Depth to Water in Wells
- Attachment 3 – Change in Depth to Water from Spring 2012 to Spring 2013
- Attachment 4 – Spring 2014 Water Surface Elevation in Wells
- Attachment 5 – Spring 2014 Depth to Water in Wells
- Attachment 6 – Change in Depth to Water from Spring 2013 to Spring 2014

The effects of the driest 3-year period on record are evident in the estimated change in groundwater storage over the last two years. The groundwater storage was estimated to decrease by more than 1,000,000 AF from 2012 to 2013 and a further decrease from 2013 to 2014 of 896,000 AF. The calculation is performed by Kings River Conservation District staff and is based on an assumed average specific yield of 11.6% in the aquifer using the change in groundwater levels shown on the attachments for each year.

Reviewing Attachment 3 and Attachment 6, the drop in groundwater levels is evident. In 2013 as shown in Attachment 3, the areas of the basin with the greatest drop in groundwater levels (approximately 20 feet from the prior year) were primarily along the south and western edges of the basin. Attachment 6 shows how much more area to the north and east of the basin experienced a 20 foot drop in groundwater elevation from 2013 to 2014.

Figure 1 below is the graph that the region has developed to compare the actual change in groundwater storage to the projected change in storage based on the historic trend within the region. The projected change was calculated as part of the 2012 update of the IRWMP using data through 2011. As Figure 1 shows, the effects of the current drought period have dropped the change in storage more than 1,000,000AF below the projected line.

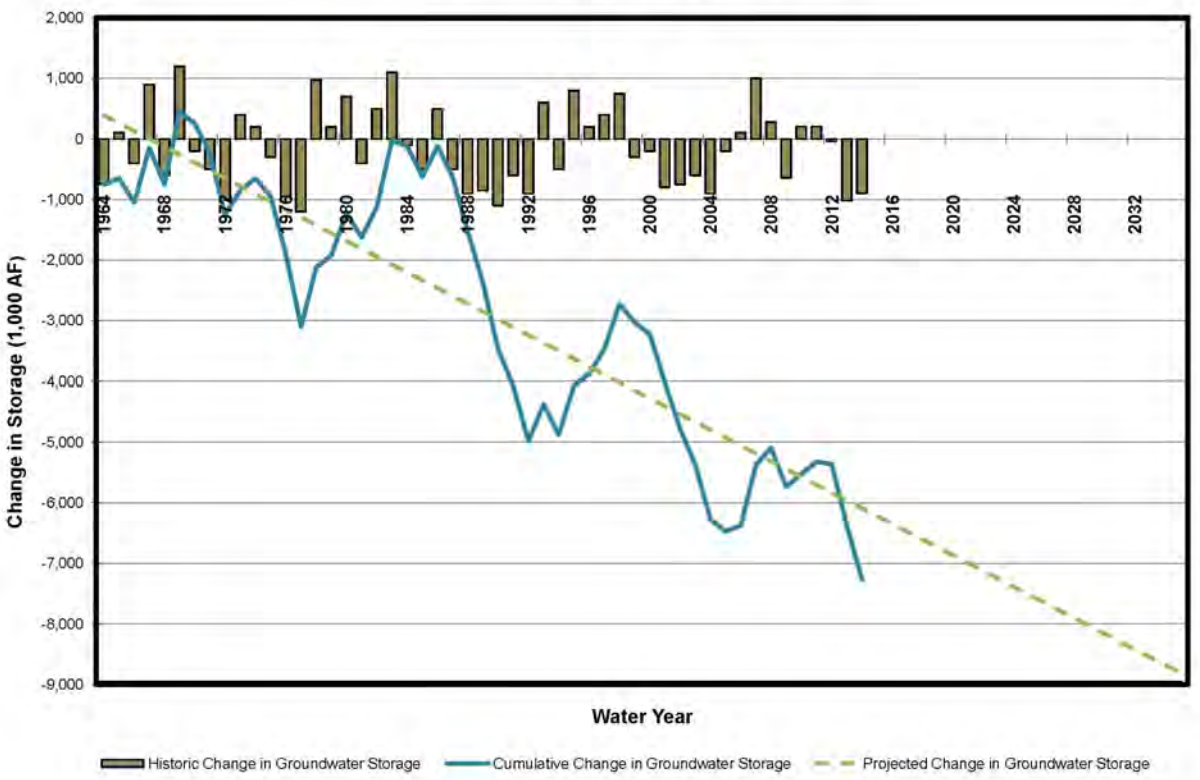


Figure 1 - Change in Groundwater Storage in Kings Basin (1964-2035)

2.3 – Water Quality

As discussed in the 2013 Annual Report, the Kings Basin Water Authority Disadvantaged Community Pilot Project Study developed a summary of drinking water, wastewater and stormwater quality concerns and characteristics for disadvantaged communities in the Kings Basin. As a direct result of the study, two rural residential areas with private wells conducted more extensive water quality sampling; the results are summarized in the following table.

Community Area	Constituent	Percent of wells over MCL
Orange Center School District - Surrounding Residential Area (near Easton, south of the City of Fresno)	Nitrate	80%
	Uranium	60%
	Coliform	10%
Perry Colony (near Raisin City)	Nitrate	63%
	Uranium	100%
	Coliform	12%

These testing results have led to further efforts including outreach, education and additional studies in the area; more discussion is provided in Section 3.

Passage of Assembly Bill 1249 requires IRWMPs to identify and discuss areas with known nitrate, arsenic, perchlorate or hexavalent chromium contamination within the IRWM boundaries.

- There are known nitrate and arsenic contamination in several areas throughout the region. Projects have and continue to provide solutions for these contaminants in the region, including the recently funded Bakman Water Company project that will add blending to a well site to lower the nitrate levels in the water supply.
- Recently several communities and small water systems on the west side of the IRWM region have been identified as having elevated hexavalent chromium levels; some are reporting levels above the MCL and some are not. There are ongoing efforts to identify solutions in these communities.
- There are no known Perchlorate contamination areas in the region; however, the IRWM will remain vigilant in identifying and discussing any concerns that arise in future annual reports or the IRWMP Update.

Further analysis and discussion regarding the nitrate contamination has been presented in the University of California report to the State Water Resources Control Board, *Addressing Nitrate in California's Drinking Water*.

The IRWM will continue efforts to put forth projects that will help in addressing the water quality contamination for these as well as other constituents.

3 – STATUS OF MEASURABLE OBJECTIVES

Following is list of Measureable Objectives (MO) from Chapter 5 of the 2012 IRWMP and progress made in meeting those objectives during the year. Progress for most objectives is documented when projects are completed that were either funded through grants secured by KBWA, or were on the KBWA projects list and funded through other sources. Some objectives, such as those related to public outreach or education, are not necessarily performed as part of projects on the KBWA list, and their progress is reported on an ongoing basis.

Measurable Objective No. 1: Increase amount of groundwater in storage with intent to eliminate the groundwater overdraft in 20 years
Measurement: Report of change in overdraft in accordance with Section 12.2 of the IRWMP and net effect of new projects capacity/performance.

Status: Annual reporting information is shown in Figure 1. It will take several years of monitoring to determine if the long-term goal of correcting the overdraft in the basin is being accomplished. The KBWA will continue to monitor groundwater conditions annually and is in the process of updating the basin model to include more recent data and understanding of the groundwater conditions since the original basin model was developed. As described in Section 4 of this report, several projects from the IRWMP Project List have been implemented and are helping to reduce the overdraft.

Many cities within the region have adopted the new California Emergency Drought regulations or enacted their own water conservation drought requirements including Kerman, Fresno, Clovis, Dinuba, Bakman Water Company, San Joaquin, East Orosi Community Service District (CSD), Sultana CSD and others. These efforts will lead to reduced water consumption, which benefits the overall groundwater in storage for the basin.

Of particular note within the region is the development and expansion of Surface Water Treatment facilities, particularly by the Cities of Fresno and Clovis. The City of Clovis notes that through the expansion of their Surface Water Treatment Plant and reductions in demand, the City was able to cut its groundwater use in September 2014 by over 41% compared to September 2013.

This objective is consistent with the recent Sustainable Groundwater Management Act of 2014. The region has been actively engaged in the discussions regarding this legislation, and is working to educate its stakeholders on regional baseline conditions and the requirements of the legislation. Discussions are in the very early stages regarding identification/formation of the Groundwater Sustainability Agencies (GSAs) and the required Groundwater Sustainability Plans that will require this objective be met.

Measurable Objective No. 2: Identify opportunities and Projects
Measurement: List of projects and opportunities and their potential.

Status: The KBWA solicited potential projects from members and interested parties in March 2014. The final project list was updated at a Special Board meeting held in May 2014. The Project List is adopted by separate action of the KBWA Board and is available on the KBWA website. A copy of the current Project List is included as Attachment 7.

As identified in the 2013 Annual Report, the KBWA DAC Study identified 38 potential projects. Of these projects 11 are now on the KBWA Project List; it is anticipated several more will be added to the Project List at a later date.

KBWA participated in the Tulare Basin Watershed Connections meeting and workshop arranged by the Tulare Basin Wildlife Partners (TBWP) and Tulare Basin Water Initiative (TBWI). The meeting was on February 25, 2014, and workshop on June 10, 2014. The resulting Tulare Basin Watershed Connections Working Group, which met first on August 26, 2014 and will meet again on October 28, 2014. This effort is designed to link IRWM and conservation activities between the Sierra and the valley floor and is based on ACWA's Headwaters Policy Principles.

Measurable Objective No. 3: Identify DAC priority needs and promote/support solutions to DAC water issues
Measurement: DAC studies and project development/implementation

Status: The DAC Work Group worked on a proposal in response to DWR funding allocated for technical assistance. The proposal was submitted and the communities recommended for funding were the cities of Lanare and Orange Cove. If any funding remains, the Orange Center School District will be included. Both projects were identified in the Kings Basin DAC Pilot Project Study completed last year.

The communities of Easton, Lanare and Perry Colony were all engaged in the DAC study completed last year. As a result of the stakeholder meetings and IRWM exposure and involvement, all are working toward separate studies to further quantify the drinking water and wastewater needs in each community and potential solutions. These efforts are being aided by Self-Help Enterprises (SHE) and Community Water Center (CWC), both Interested Parties of the IRWM. Additional assistance was provided by the Department of Water Resources (DWR) to Easton for the purpose of facilitating four community/outreach meetings to develop a clear direction for a future Feasibility Study concerning the community's drinking water and wastewater concerns.

As a direct result of the DAC Pilot Project outreach, SHE was able to connect with Camden MHP, a small mobile home park (26 homes) near Riverdale, that is served by a single well high in arsenic. Through this connection, SHE was able to secure

Proposition 84 funding for 26 point of use reverse osmosis units that have been installed.

KBWA continues to discuss the inclusion of the community of Armona and the Armona Community Services District, which is located immediately adjacent to but outside of the IRWM boundary.

One recommendation cited in the DAC Pilot Project Study was that a DAC Coordinator position be created and staffed; Self-Help Enterprises has applied for funding through the Rose Foundation to fund the position.

The County received grant funding for the Drummond-Jensen Sewer Connection Study through the Prop. 84, Round 1 IRWM Implementation Grant Program. This project is underway and included in Attachment 8. The project promotes and supports solutions to DAC water issues by completing the project development and design phase of a sewer connection which will, once constructed, allow for the removal of a DAC from septic system reliance. This will reduce the soil permeation of nitrates and other contaminants, that will limit groundwater exposure and, over time, improve water quality.

The recently funded Prop. 84, Round 2 IRWM Implementation Grant application will provide direct benefit to three communities classified as DACs; Bakman Water Company (portion of the County and City of Fresno) and the cities of San Joaquin and Kerman.

Measurable Objective No. 4: Increase average annual supply and reduce demand
Measurement: Documentation of amount of increase/decrease

Status: Groundwater banking projects within the region have increased average annual supply by capturing water that would otherwise be lost to the region and making it available through extraction at a later time. In addition, water meters installed within the region are providing incentive to reduce demand that is proving to range from 10-20% reductions within the region. A listing of the IRWMP projects implemented within the region is included in Section 4.

In August 2014, the City of Dinuba implemented Stage II of the City's Water Conservation Plan, Mandatory Conservation Measures, in compliance with recent SWRCB emergency regulations; City Wells production for September 2014 was approximately 15% less than September 2013.

As stated previously, many water agencies within the region have adopted the California Emergency Drought Regulation or other water conservation measures. Through these conservation efforts, water demands are decreasing.

Measurable Objective No. 5: Increase dry year supply
Measurement: Documentation of amount of increase

Status: Similar to Measurement Object No. 4, groundwater banking and water conservation efforts remain the focus of improving dry year supply within the region. Refer to Attachment 7 for a project list.

Three of the projects funded with the Prop. 84 Round 2 IRWM Implementation Grant will increase dry year supply (Bakman Water Company, FID and Laguna Irrigation District). These projects are not constructed yet but are underway and construction will begin in the 2014-15 year. The benefits of each will be discussed in the annual report prepared after the projects' completion.

Measurable Objective No. 6: Increase regional conveyance capacity
Measurement: Total acre-feet available (both capacity and re-operation)

Status: Some of the IRWMP projects implemented have included conveyance capacity, including the McMullin On-Farm Flood Capture and Recharge Project, and Fresno Irrigation District's Southwest Banking Project. No IRMWP projects that solely increase conveyance capacity have been initiated.

Measurable Objective No. 7: Compile baseline water quality data for ground and surface water
Measurement: Report of data collected and evaluate changes in the basin in annual report by considering population served and compliance orders from available sources such as ECHO and SDWIS.

Status: All of the permitted water suppliers perform water quality testing, which is available upon request. The region has not initiated a specific region-wide water quality data analysis.

Measurable Objective No. 8: Encourage Best Management Practices, policies and education that protect water quality
Measurement: Documentation of efforts/education

Status: As a result of relationships developed during the KBWA DAC Pilot Project Study, Self-Help Enterprises continues working with leaders from small communities to educate them on water quality impacts as well as BMPs.

Tulare Basin Watershed Coordinator, Kathy Wood McLaughlin, participated on the water panel discussion with Cristel Tufenkjian (KRCD) and Gary Serrato (FID) at the Dinkey Landscape Restoration Collaborative on May 15, 2014 representing downstream interests in the KBWA.

Measurable Objective No. 9: Identify sources of water quality problems and promote/support solutions to improve water quality
Measurement: Report of information gathered

Status: The Fresno County Drummond-Jensen Sewer Connection Study promotes and supports water quality solutions by completing the project development and design phase of a sewer connection which will, once constructed, allow for the removal of a community from septic reliance. This will reduce groundwater exposure to contaminates and improve quality.

The private well testing that has occurred in Perry Colony and Orange Center School District (discussed above) has provided firm data on the suspected water quality problems in these areas and has enabled the first steps to be taken concerning finding a solution for the problem.

The MCL for hexavalent chromium is of concern within portions of the basin and potable water suppliers are tracking the impacts to existing water supplies. As an example, the City of Kerman has wells that average 22 micrograms per liter, above the MCL of 10 micograms per liter. The City is working toward identifying a financially feasible option to remove the contaminant but has not found one at this time.

Measurable Objective No. 10: Increase surface storage
Measurement: Documentation of amount

Status: The increase of surface storage was limited to minimal surface storage increase associated with the groundwater recharge basin or banking facilities included on the IRWMP project list. No larger or significant surface storage project has been undertaken within the region.

Measurable Objective No. 11: Sustain the Kings River Fisheries Program
Measurement: Report on program

Status: The Kings River Conservation District, Kings River Water Association, and California Department of Fish and Wildlife continue to implement the Kings River Fisheries Management Program.

The Consolidated Irrigation District (CID) South and Highland Banking Project funded through a DWR Round 1 Implementation grant will help sustain the fisheries management program, facilitating the routing of supply for the fisheries, then recharge of the water within CID. The project is still under construction, but the basins have been completed this year and CID will be able to route water to the basin. The FID Southwest Groundwater Banking, recently funded through the Round 2 Implementation Grant but not under construction, will also provide the same facilitation of the fisheries

management program. Once constructed, more information will be included in the relevant annual report.

Measurable Objective No. 12: Pursue opportunities to incorporate habitat benefits into projects
Measurement: List of opportunities considered and accomplishments

Status: The Department of Conservation extended the Watershed Coordinator (WC) grant by 6 months to allow the WC to assist with Drought related needs in the Tulare Basin. This extension allowed the WC to specifically assist with review and submission of projects under the Prop 84 DWR Drought solicitation in May and June. The WC also commented on the Terranova USDA NRCS RCCP project related to wetlands and NRCS Wetland Reserve Easements.

The basin work is completed for the CID South and Highland Basin project previously mentioned, which provides approximately 50 acres of waterfowl habitat, including the incorporation of two island features within the basins. The FID Southwest Groundwater Banking and LID Recharge Basin 11 projects, recently funded through the Round 2 Implementation Grant but not yet constructed, will provide up to 60 and 50 acres, respectively, of waterfowl habitat. Once constructed, more information will be included in the relevant annual report.

Measurable Objective No. 13: Increase public awareness of IRWM efforts
Measurement: Public relations and annual reporting

Status: Integrated Regional Water Management planning has been well established and very active in the Kings Basin region for more than a decade. Through this effort, current and historic groundwater conditions, as well as lands within the region which are suitable to groundwater recharge, have been identified. To promote understanding between regional water managers and land use decision makers, grant funding was sought and awarded from the California Water Foundation. The grant assisted in preparing educational materials to be used in outreach to local land use planning organizations, elected officials, and others. The goal is to create a dialog and foster closer relationships with the planning community and decision makers to improve the quality and effectiveness of land use planning as it relates to integrated regional water management, in particular groundwater. The tools developed included:

- KBWA website: www.kingsbasinauthority.org - Since the launch of the website in July 2014, there have been roughly 4,000 unique visitors to the site.
- General Awareness Packet
- Video – (available here www.kingsbasinauthority.org, and on youtube). The video was published on YouTube on April 30, 2014. It has had 184 viewings.
- PowerPoint Presentation Materials

- Land Use Planners Kit

As part of the outreach to land use planners, the KBWA was a partner in conducting a Groundwater Land Use Symposium. Over 200 people from the water management and land use sectors in the region participated including staff and elected.

The KBWA also created a twitter account, @KingsWater. The account has 150 followers and 580 tweets have been sent out. In addition, several stakeholders have links to the KBWA website on their respective websites.

The following outreach events were conducted for year 2013-14:

Event	Date	Attendance	Communication Tool
SWRCB IRWMP Workshop	3/4/14	30	presentation, poster
Area Exec. Luncheon	3/26/14	4	highlights document/ General Awareness Packet
Water Ed. Foundation Tour	4/25/14	48	highlights doc/presentation
Sanger Rotary Club	4/25/14	40	highlights doc/presentation
Assembly Member Patterson's staff	4/28/14	2	Highlights doc/General Awareness Packet
Flood Control Newsletter	Spring 2014	1,300	article
Outreach to DACS	5/1/14	10	highlights doc
FCFB FAACT Class Kings River tour	5/12/14	13	highlights doc
Dinkey Creek Collaborative	5/15/14	35	highlights doc/presentation
Golden State Water Summit	6/18/14	15	presentation
Stanford Water Governance and Climate Workshop	9/25/14	50	presentation

The following were planned during this annual report year for the following report year:

San Joaquin Valley Regional Association of CA Counties 2014 Conference	10/9/14	100	presentation
Groundwater Land Use Symposium	10/29/2014	200	highlights doc/ presentation/land use planners packet

A portion of the KBWA DAC Pilot Project study team is also involved in Governor's Drinking Water Stakeholder Group; a relationship which has allowed the local efforts and DAC needs to be communicated to a higher level. This communication and education between KBWA's project team and State officials contributed, at least in part, to the continuation of the pre-planning Legal Entity Formation Assistance (LEFA) funding opportunity. This funding opportunity is being utilized by three DACs that gained awareness through the outreach completed as part of the KBWA DAC Pilot Project study.

There continues to be engagement and efforts within several Disadvantaged Communities that are a direct result of the KBWA DAC Pilot Project.

- Easton has received Pre Planning LEFA funding. Easton is at the beginning stages of a wastewater planning study, and is seeing increased awareness and involvement in water and wastewater issues. The community and the governing board have gained understanding and considering possible recharge, conservation and water quality alternative solutions that the community may not have otherwise understood without involvement with the Kings IRWM.
- For this reporting period, Lanare CSD had initiated the process of joining the KBWA as an interested party. Lanare has faced operation, administrative and financial difficulties and is gaining assistance from SHE and the State Board.
- The information gained from the Pilot study and subsequent water quality testing within the Orange Center School area convinced local property owners they needed to learn more about their drinking water supply and options for provision. A Pre-Planning (LEFA) grant from SWRCB was secured to continue education and outreach to the residents of this area.
- Perry Colony, near Raisin City, was a community that initially participated in the Pilot Study. Because of the initial contact from the Pilot Study, a grant was secured to evaluate the need to perform outreach related to addressing water supply management concerns.

There continues to be increased awareness of IRWM specific efforts through the various communication methods of the KBWA's members and interested parties. The TBWI distributes a monthly e-newsletter regarding Tulare Basin watershed-related news, grant information, and reports on IRWM activities at their semi-annual meetings, outreaches to Federal agencies through the Combined Federal Campaign, and participated in the Dinky Landscape Restoration Collaborative panel at the US Forest Service office in Clovis with KBWA members (discussed above). Recipients of grant funding, such as Bakman Water Company and FMFCD, have mentioned the IRWM program and receiving grant monies in their newsletters and reporting.

Measurable Objective No. 14: Involve local water districts and land use agencies in generating and confirming the current and future water needs to ensure compatibility and consistency with land use and water supply plans.
Measurement: Tracking of involvement with land use planning officials and inclusion in planning documents.

Status: Members of the KBWA were invited and participated in the Tulare Basin Working Group joint meeting with the San Joaquin Valley Council of Governments (led by Fresno COG) Greenprint in October 2013. The KBWA representatives provided feedback on the mapping efforts underway related to water resources.

The KBWA planned a Groundwater Land Use Symposium, specifically targeting Land Use Planners and discussion of water related concerns and IRWM efforts in the Kings

Basin and the region. Details of the symposium will be included in next year's annual report.

Measurable Objective No. 15: Comply with SBX7-7
Measurement: Review of compliance by stakeholders
Status: The Fresno Irrigation District has completed a measurement evaluation study. Both the Fresno Irrigation District and the Consolidated Irrigation District are working to complete their respective Agricultural Water Management Plans. The cost of compliance with the legislation remains significant for agricultural districts within the region, and some in the region continue to show concern about whether any water conservation benefits will be obtained, particularly in a conjunctive use basin such as the Kings.

The City of Kerman has completed installation of 1,722 residential water meters through 2010. The City plans to install the remaining meters on their water system through the Water Conservation project funding in the Prop.84 Round 2 IRWM Implementation grant. Construction of these meters is anticipated to begin in 2015.

4 – IMPLEMENTATION PROJECTS

4.1 – Regional Studies

Disadvantaged Community Pilot Project Study. The majority of work completed with this study was discussed in the 2013 Annual Report; however, once the original scope of the study was completed, DWR granted the KBWA authorization to utilize the remaining budget on the project to conduct additional outreach and develop outreach materials for ongoing IRWM educational purposes. The additional outreach included holding stakeholder meetings to review the final findings of the study and present opportunities and ideas on how the DACs that had been engaged could continue to move forward with progress on their individual or collaborative projects. These additional efforts were summarized in an addendum to the Final Report and submitted to DWR for their records and use. These efforts were completed in November 2013.

Kings Basin Water Model Update. The KBWA is in the process of porting the existing Integrated Groundwater and Surface-water Model (IGSM) to the new Integrated Water Flow Model (IWFM). The new model will include data for more recent years since the completion of the IGSM. Funding for the model work is through a grant from the California Water Foundation.

4.2 – Project List

The KBWA Projects Work Group solicited projects from Members and Interested Parties in the Spring of 2014. New projects were reviewed and the list was updated in May 2014. A copy of the list is attached to this report. The current list is maintained on the KBWA website, www.kingsbasinauthority.org.

4.3 – Completed or Ongoing Projects

Completed and ongoing projects since the KBWA was first established are listed in Attachment 8 – Past and Present Grant Contracts.

4.4 – Grant Funding

The following grant funds were awarded in the 2014 water year:

DWR IRWM Implementation Grant Round 2. A DWR Implementation Grant application, submitted in early 2013, was recommended for funding in February 2014 and contract signed in mid 2014. The grant includes five projects:

- Fresno Irrigation District's Phase 1 – Southwest Flood Water Protection & Utilization Project
- Laguna Irrigation District's Laguna Irrigation District Recharge Basin 11 Project
- Bakman Water Company's Water Supply Reliability and Conservation Project
- City of San Joaquin Water Supply Reliability and Conservation Project
- City of Kerman's Water Supply Reliability and Conservation Project

The grant amount totals $8.734 million. The total estimated costs for all the projects are $10.438 million. The funding agreement has been executed for the projects and all five are beginning to progress towards construction. KRCD is managing the grant.

DWR IRWM Implementation Drought Solicitation Grant Application. A DWR Grant application was submitted in the summer of 2014 as part of DWR's Drought Solicitation Round that included five projects:

- Consolidated Irrigation District Adams and Academy Basin
- City of Fresno Nielsen Recharge Basin
- Fresno Metropolitan Flood Control District Regional Groundwater Recharge
- East Orosi CSD Water Conservation and Meter Project
- Sultana CSD Water Conservation and Meter Project

The application requested approximately $11.3 million. The total estimated costs for all the projects are approximately $14.5 million. The grant application was not recommended for funding.

4.5 – Lessons Learned

Self-Help Enterprises has noted two significant lessons learned. The first is that relationships with DAC members are crucial to success in identifying areas of concern and developing solutions to correct those problems. The relationships developed during the KBWA DAC Pilot Project study have proven invaluable to continued progress with the DACs in the KBWA region. Additionally, staffing a permanent DAC Coordinator would aid in the continued efforts to build trust between the DACs and other agencies and help them to find solutions to their drinking water and wastewater challenges.

5 – GOVERNANCE, POLICIES AND MEMBERSHIP

5.1 – Changes in Governance and Policies

The KBWA formed a Boundaries Work Group to discuss the possibility of changing the KBWA's boundaries.

The KBWA adopted *Resolution No. 14-01 – Authorization to File an Application for a Grant under the 2014 IRWM Drought Solicitation*. The resolution provides authorization to file a grant application and enter into an agreement with the DWR if the grant application is successful.

The KBWA approved the *UKB-006 - Expense Authorization Limits Policy* on July 16, 2014. The policy establishes the Program Manager has the Authority to expend up to $5,000 in unallocated budgeted monies if the expense is within the goals and objectives of the Authority, without formal Board approval, but with the review and approval of the Chairman, Vice-Chairman or Treasurer of the Authority.

The KBWA adopted *Resolution No. 14-02 – Support of Proposition 1 – The Water Quality, Supply and Infrastructure Improvement Act of 2014.*

The Advisory Committee appointed a new Chair and Vice Chair in September 2014.

5.2 – Changes in Government Regulations

The California State Legislature passed Assembly Bill 1249, which will modify the reporting and content requirements of the next IRWMP in 2017. The KBWA is proactively providing initial discussions of this required information in Section 2 of this annual report, provide reference to prior studies that cover the region, and continue to reference new information in future annual reports and updates. The requirements of the bill include:

> If an area within the boundaries of an integrated regional water management plan has nitrate, arsenic, perchlorate, or hexavalent chromium contamination, the bill would require that the plan include a description of (1) the location and extent of that contamination in the region, (2) the impacts caused by the contamination to communities within the region, (3) existing efforts being undertaken in the region to address the impacts, and (4) any additional efforts needed to address the impacts. If a grant application includes areas that have nitrate, arsenic, perchlorate, or hexavalent chromium contamination, the bill would require the regional water management group include in the grant application information regarding how a project or projects in the application helps to address the contamination or an explanation why the application does not include such a project or projects.

5.3 – Changes in Members and Interested Parties

The City of Orange Cove joined as Interested Party in October 2013.

5.4 – Coordination with Other IRWMPs

The KBWA has participated in several efforts to coordinate with neighboring IRWMPs. These efforts continued in 2014 and included:

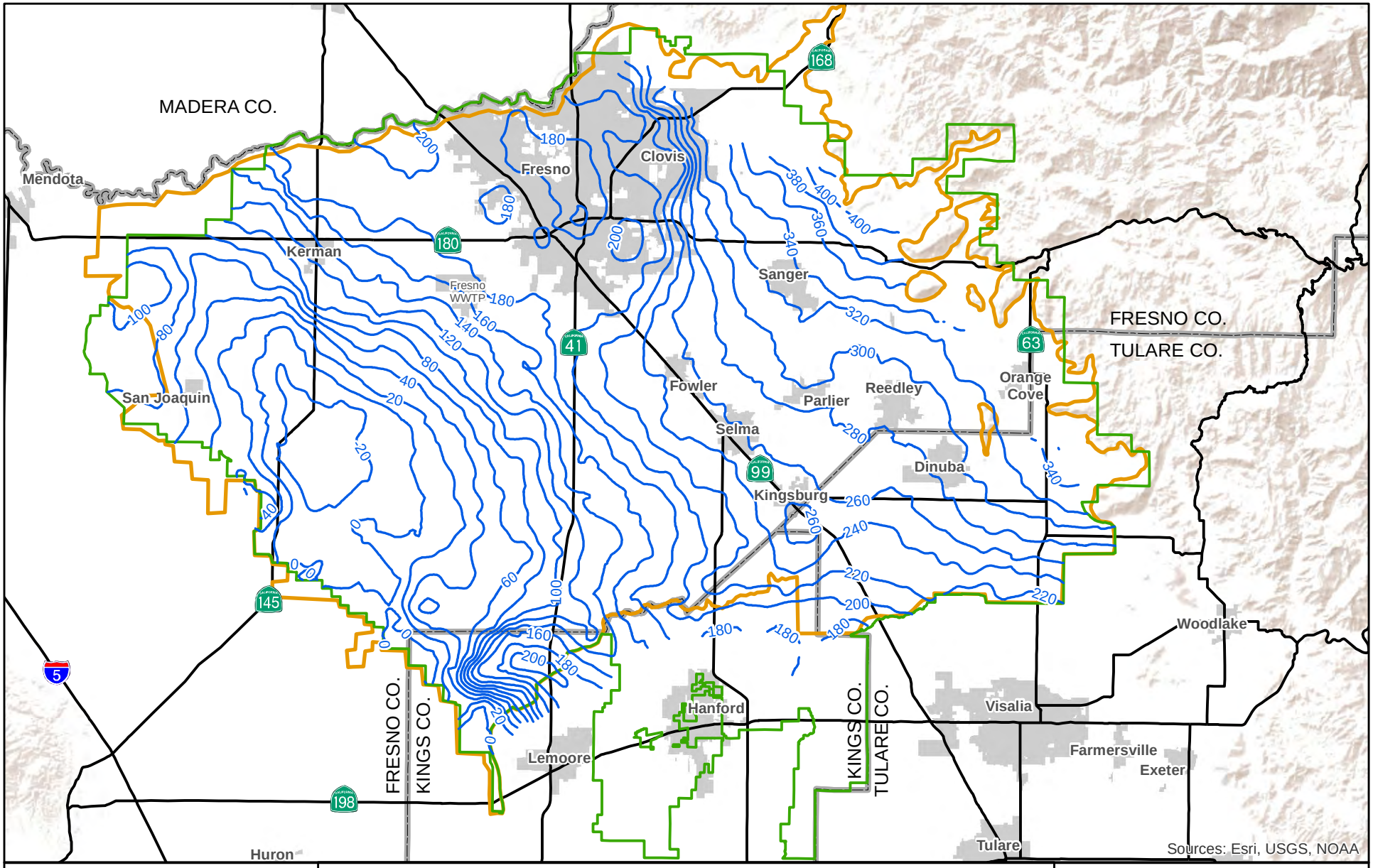
- Participation in IRWMP 'Round Table of Regions' meetings, a statewide effort to bring all IRWMPs together to discuss important issues.
- Regularly attending meetings for the Tulare Basin Integrated Regional Planning Effort, a regional collaboration by several IRWMPs to discuss inter-regional topics in the Tulare Lake Basin.
- Presented at the California Municipal Utilities Executive Association workshop regarding the KBWA IRWMP.
- Presented, along with eleven other IRWMs, at the State Water Resources Control Board workshop in March 2014 about the challenges and opportunities of IRWMPs.
- Participation in CV-Salts Phase II ARC stakeholder meeting; the intent of the meeting was to provide input to the modeling team and the CV-Salts and Regional Board staff from stakeholders.

6 – PROPOSED IRWMP AMENDMENTS

No amendments to the IRWM were proposed by any stakeholders.

The 2012 KBWA IRWMP was developed according to IRWMP Guidelines developed by the Department of Water Resources and is in compliance with the Final IRWMP Guidelines released in November 2012. Since the IRWMP was adopted, new legislation, namely AB 1249, has passed that will affect the IRWMP content during the next update in 2017. KBWA included information regarding the new requirements in Section 2 of this annual report.

ATTACHMENTS



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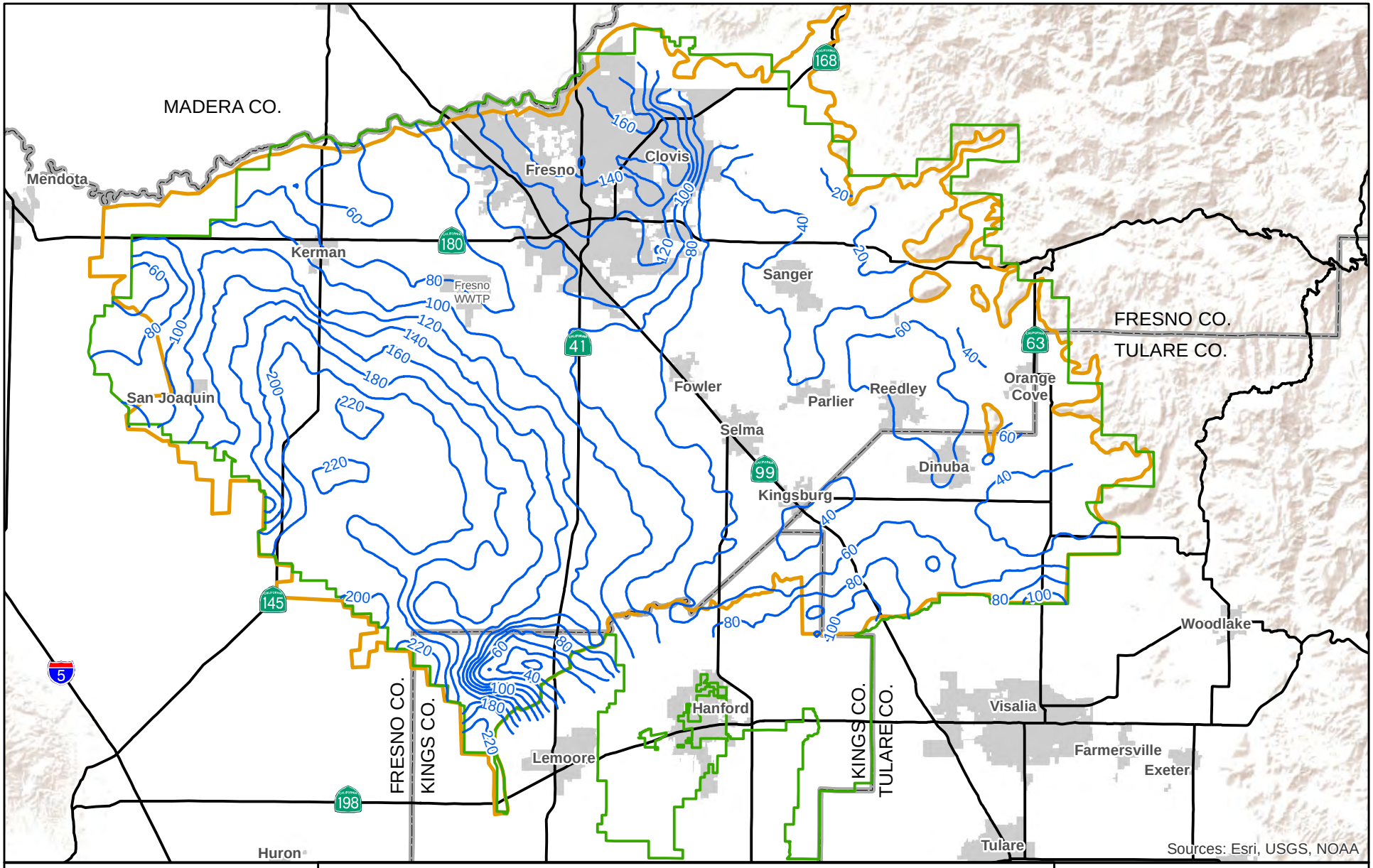

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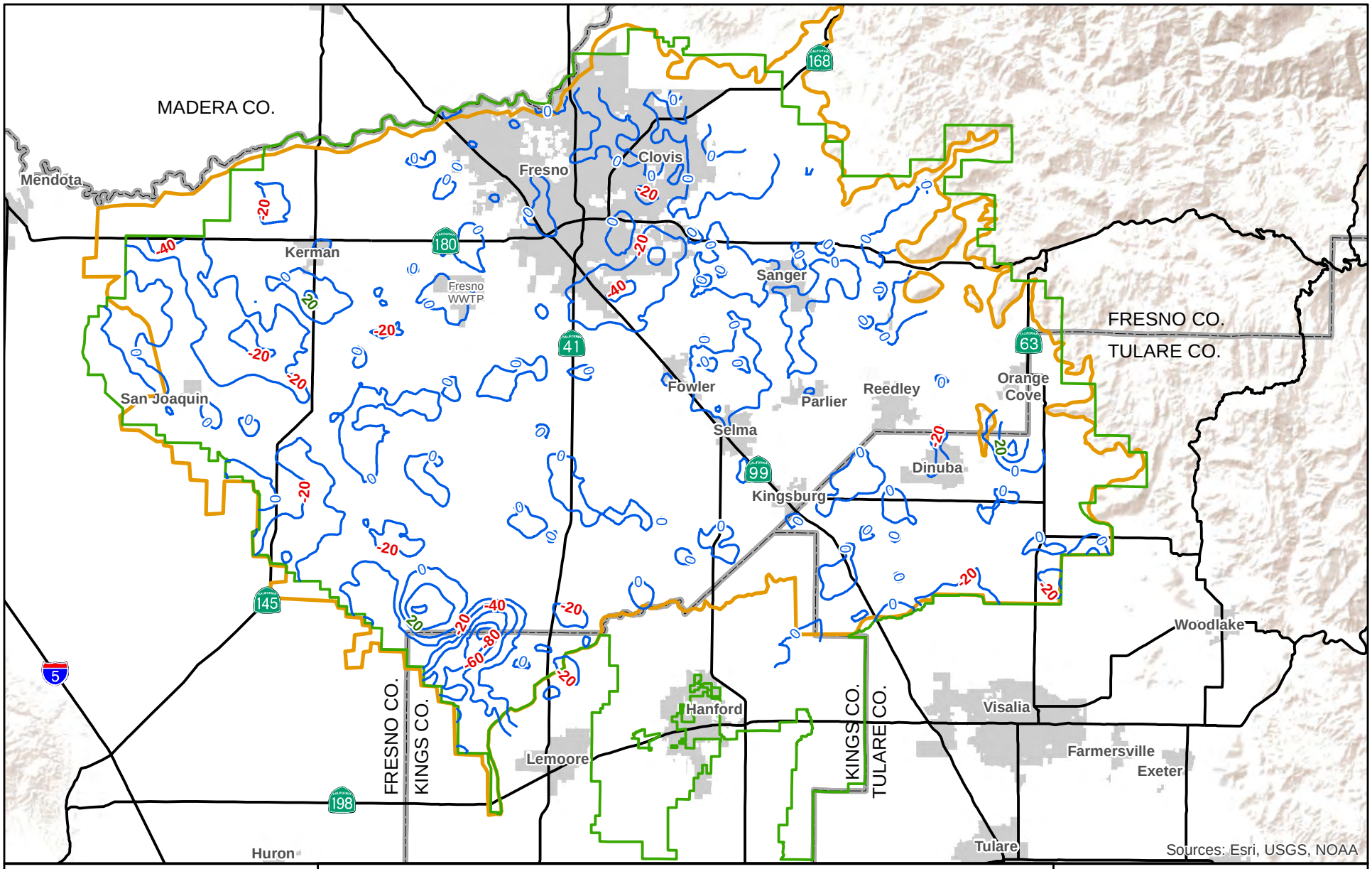

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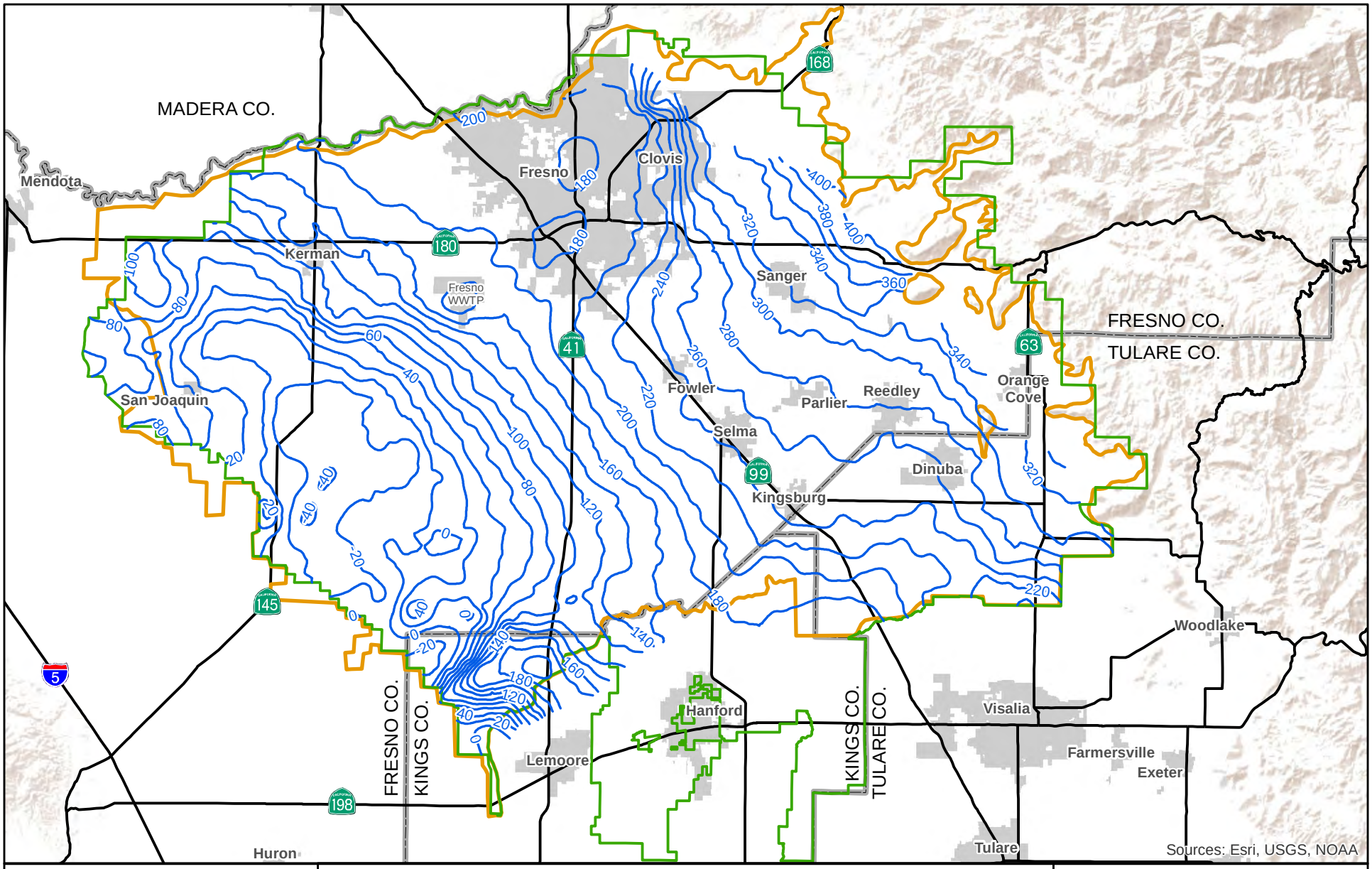


KINGS BASIN Water Authority

0 2 4 6 Miles

Legend

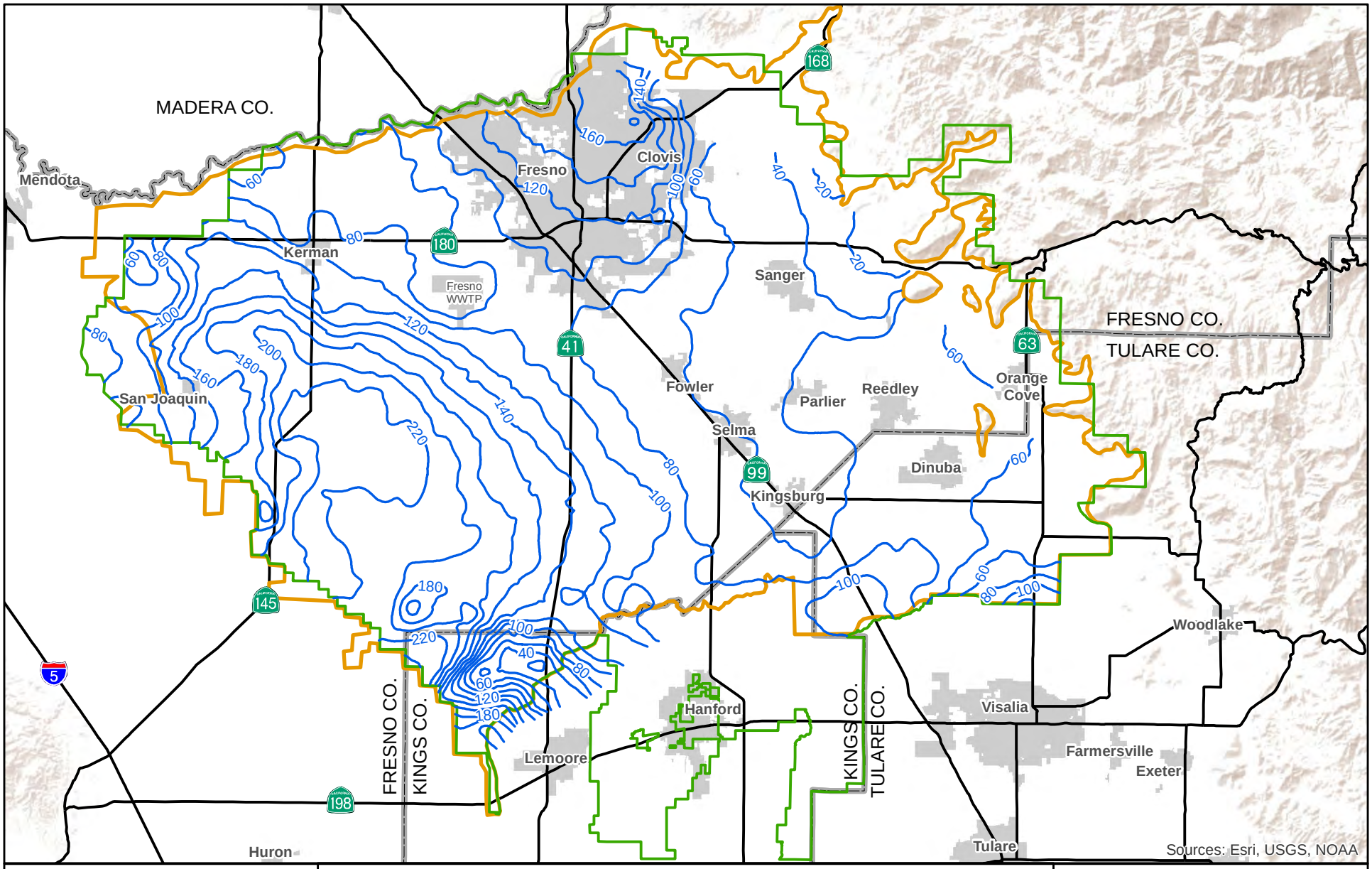
- Line of Equal Water Elevation (20ft Interval)
- City
- UKBIRWMA
- Kings Groundwater Subbasin (CA DWR Bulletin 118)

ATTACHMENT 4

Spring 2014 - Groundwater

Water Surface Elevation

1/5/2015 : G:\Clients\Upper Kings Basin IRWMA - 2048\20481401-2014 KBWA IRWMP Annual Report\GIS\Map\groundwater2014_WSE.mxd



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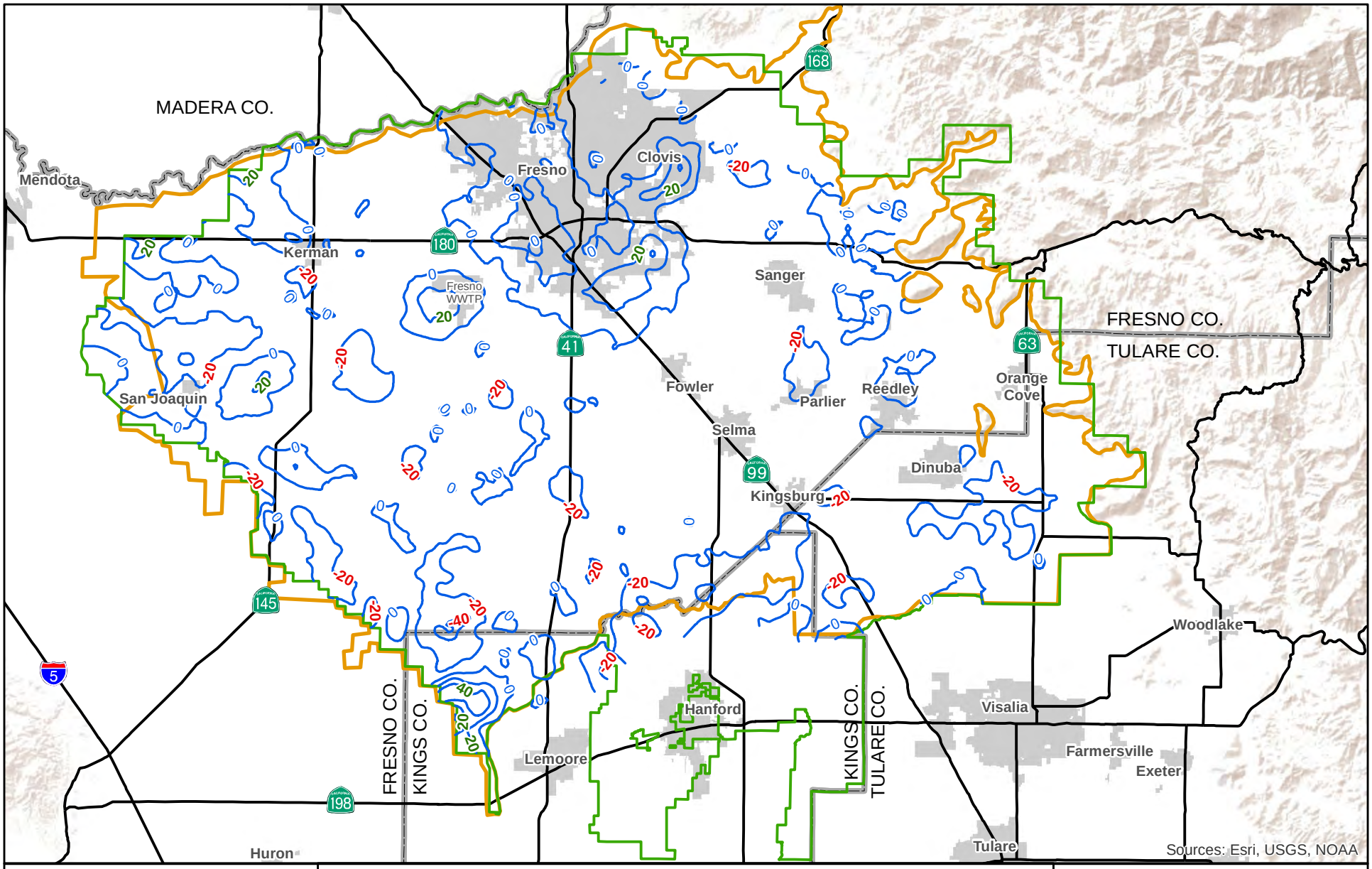

KINGS BASIN Water Authority

0 2 4 6 Miles

Legend

- Line of Equal Change in Depth to Water (20ft Interval)
- City
- UKBIRWMA
- Kings Groundwater Subbasin (CA DWR Bulletin 118)

ATTACHMENT 6

Spring 2014 - Groundwater

Change of Groundwater Surface
2013 - 2014

1/5/2015 : G:\Clients\Upper Kings Basin IRWMA - 2048\20481401-2014 KBWA IRWMP Annual Report\GIS\Map\groundwater2014_delta13_14.mxd

Attachment 7

KINGS BASIN IRWMP PROJECT LIST

Adopted 05-30-2014

Project ID	Member/IP Organization	Project Title	Project Status	RG1	RG2	RG3	RG4	RG5	MO1	MO2	MO3	MO4	MO5	MO6	MO7	MO8	MO9	MO10	MO11	MO12	MO13	MO14	MO15
				Halt, and ultimately reverse, the current overdraft and provide for sustainable management of surface and groundwater	Increase the water supply reliability, enhance operational flexibility, and reduce system constraints	Improve and protect water quality	Provide additional flood protection	Protect and enhance aquatic ecosystems and wildlife habitat	Increase amount of groundwater in storage with intent to eliminate the groundwater overdraft in 20 years	Identify opportunities and Projects	Identify DAC priority needs and promote/support solutions to DAC water issues	Increase average annual supply and reduce demand	Increase dry year supply	Increase regional conveyance capacity	Compile baseline water quality data for ground & surface water	Encourage Best Management Practices, policies & education that protect water quality	Identify sources of water quality problems & promote/support solutions to improve water quality	Increase surface storage	Sustain the Kings River Fisheries Management Program	Pursue opportunities to incorporate habitat benefits into projects	Increase public awareness of IRWM Efforts	Invoove local water districts and land use agencies in generating and confirming the current and future water needs to ensure compatibility and consistency with land use and	Comply with SBx7-7
1	Bakman Water Company	Bakman Water Company Water Meter Installation	Ready For Construction	P	S	S			S		S	S	S			S							P
2	Bakman Water Company	SCADA system for wells improved groundwater management, operations, supply reliabilty & conservation	Planning	S	P	S			S		P	S	S				S						S
3	Biola Community Services District	Biola CSD Drinking Water Improvement Project	Preliminary Design	S	P	S					P	S				S					S		
4	City of Clovis	City of Clovis, Water Intertie (North)	Preliminary Design	S	P				S			S	S	P									
6	City of Clovis	Clovis Harlan Recycled Water Extension	Preliminary Design	P	S				P			S	S										
7	City of Clovis	Tarpey Village Metering Project	Planning	P	S				P			S	S								S		
8	City of Dinuba	Dinuba Reclamation Conservation & Recreation (RCR) Project	Preliminary Design	P	S	S		S	P			S			S	S	S	S		S		S	
11	City of Fresno/Water Division	Nielsen Recharge Facility	Preliminary Design	P	S	S	S		P		S	S	S					S					
12	City of Fresno/Water Division	Three Reclamation Water Wells at the Fresno/Clovis Regional Wastewater Reclamation Facility	Preliminary Design	P	S	S			P		S	S	S										
15	City of Fresno/Water Division	Tertiary Treatment at Fresno/Clovis Regional Reclamation Facility	Ready For Construction	P	S	S			P		S	S	S										
16	City of Fresno/Water Division	Northwest Fresno Regional Recharge Facility	Preliminary Design	P	S	S	S		P		S	S	S					S					
17	City of Fresno/Water Division	Southeast Fresno Stormwater Detention, Greenbelt and Environmental Habitat Restoration Area	Conceptual	S	P	S	S	S	P		S	S	S	S		S		S		S			
18	City of Fresno/Water Division	Regional Groundwater Banking Facility	Planning	P	S	S	S		P		S	S	S										
19	City of Fresno/Water Division	Southeast Surface Water Treatment Facility	Preliminary Design	P	S	S			P		S	S	S	S		S							
20	City of Fresno/Water Division	Southeast Fresno Regional Recharge Facility	Planning	P	S	S	S		P		S	S	S					S					
21	City of Fresno/Water Division	Southwest Fresno Regional Recharge Facility	Planning	P	S	S	S		P		S	S	S					S					
22	City of Fresno/Water Division	Northeast Fresno Recycled Water Transmission Pipeline and Reclamation Facility Supply Pipeline	Conceptual	P	S	S			P			S	S										
24	City of Fresno/Water Division	Sunnyside Area Sewer Conversion	Conceptual		S	P							S				P							
25	City of Fresno/Water Division	Fort Washington Sewer Conversion	Conceptual		S	P							S				P							
26	City of Kerman	City of Kerman Water Meter Project	Preliminary Design	P	S				P			S	S										
127	City of Kerman	City of Kerman Median Landscaping Renovation Project	Preliminary Design	P	S				P			S												S
128	City of Kerman	City of Kerman Water Meter Project, Phase 4	Preliminary Design	P	S				P			S				S								S
129	City of Orange Cove	City of Orange Cove Water System Feasibility Study	Planning		P						P							S						
27	City of Parlier	Parlier Water Storage Project	Planning & Preliminary Des	S	P				P									S						
29	City of San Joaquin	City of San Joaquin Water Meter Project	Conceptual	P					P		S	S										S		
130	City of San Joaquin	Recycled Water Upgrade to Wastewater System	Ready For Construction		P	S					S	S	S			S								
131	City of San Joaquin	City of San Joaquin Water Storage Tank	Preliminary Design	S	P				P	S	S		S			S		S				S		S
32	City of Selma	Storm Drain Upgrade	Ready For Construction				P							P										
33	City of Selma	Storm Drain Storage/Recharge Project	Planning				P							P										
34	Consolidated Irrigation District	Recharge Basin near South and Highland	Preliminary Design	P	S	S	S	S	P			S	S		S			S	S		S			
35	Consolidated Irrigation District	Ward Drainage Canal Capacity Enlargement and Recharge Project	Conceptual	P	S	S	S	S	P			S	S	S				S	S					
36	Consolidated Irrigation District	Recharge Pond Near Kingsburg/Selma Branch Canal Divide	Planning	P	S	S	S	S	P			S	S					S	S					
37	Consolidated Irrigation District	Fowler Switch Capacity Improvement Project	Conceptual	S	P		S		S					P										
38	Consolidated Irrigation District	Fowler Switch / C&K Canal Intertie Project	Planning	S	P		S		S					P										
39	Consolidated Irrigation District	Rechange Pond off Kingsburg Branch Canal	Planning	P	S	S	S	S	P			S	S					S	S					
40	Consolidated Irrigation District	Recharge Pond off Ward Drainage Canal	Conceptual	P	S	S	S	S	P			S	S					S	S					
41	Consolidated Irrigation District	Recharge Pond off Cole Slough Canal	Conceptual	P	S	S	S	S	P			S	S					S	S					
42	Consolidated Irrigation District	Westside Banking Facility	Planning	P	S	S	S	S	P			S	S					S	S					
43	Consolidated Irrigation District	C&K Canal Capacity Improvement Project	Conceptual	S	P		S		S					P										
44	Consolidated Irrigation District	Santa Fe Pond Enlargement	Conceptual	P	S	S	S	S	P			S	S					S	S					
54	County of Fresno	CSA 43 Raisin City Sewer Feasibility Study	Conceptual & Planning			P					P							S						
126	County of Tulare	Juvenile Detention Facility - Cottonwood Creek (JDF Complex)	Ready For Construction	S	S	S	P	S	S	S	S	S	P	S	S	S	S	S	S	S	S	S	S	S
123	County of Tulare	Seville Sontag Ditch Flood Control Project	Preliminary Design				P			S	P			S										
124	County of Tulare	Yettem-Button Ditch Flood Control Project	Conceptual				P			S	P			S										
132	East Orosi CSD	East Orosi Water Conservation and Meter Project	Preliminary Design	P	S	S			P		S	S					S							S
61	Easton CSD	Easton Safe Drinking Water Feasibility Study Project	Conceptual		S	P				S	P					S	S				S			
65	Fresno Irrigation District	FID Measurement and Metering Project	Planning	P	S				S			S												P
66	Fresno Irrigation District	Southwest Flood Water Protection and Utilization Project	Planning	P	S	S	S	S	P			S	S	S	S			S	S		S			

P = Primary
S = Secondary

KINGS BASIN IRWMP PROJECT LIST

Adopted 05-30-2014

Project ID	Member/IP Organization	Project Title	Project Status	Halt, and ultimately reverse, the current overdraft and provide for sustainable management of surface and groundwater	Increase the water supply reliability, enhance operational flexibility, and reduce system constraints	Improve and protect water quality	Provide additional flood protection	Protect and enhance aquatic ecosystems and wildlife habitat	Increase amount of groundwater in storage with intent to eliminate the groundwater overdraft in 20 years	Identify opportunities and Projects	Identify DAC priority needs and promote/support solutions to DAC water issues	Increase average annual supply and reduce demand	Increase dry year supply	Increase regional conveyance capacity	Compile baseline water quality data for ground & surface water	Encourage Best Management Practices, policies & education that protect water quality	Identify sources of water quality problems & promote/support solutions to improve water quality	Increase surface storage	Sustain the Kings River Fisheries Management Program	Pursue opportunities to incorporate habitat benefits into projects	Increase public awareness of IRWM Efforts	Invovle local water districts and land use agencies in generating and confirming the current and future water needs to ensure compatibility and consistency with land use and	Comply with SBx7-7
				RG1	RG2	RG3	RG4	RG5	MO1	MO2	MO3	MO4	MO5	MO6	MO7	MO8	MO9	MO10	MO11	MO12	MO13	MO14	MO15
67	Fresno Irrigation District	Jameson Pond	Preliminary Design	P	S				S			S	P		S								
68	Fresno Irrigation District	Oleander Basin Banking Project	Planning	P	S				S			S	P		S								
71	Fresno Irrigation District	Eastside Streams Improvement Project	Conceptual		P		S	S	S				P										
72	Fresno Irrigation District	Big Dry Creek Recharge Project	Conceptual	P	S		S	S	P			S		S									
73	Fresno Metropolitan Flood Control District	Dry Creek Improvement Project	Conceptual, Planning, Preli	S		S	P	S	S			S	S	S			S	P		S			
133	Fresno Metropolitan Flood Control Disttrict	Regional Groundwater Recharge and Surface Water Reuse Project	Preliminary Design	P	S	S	S	S	P			S	S	S			S	S		S			
74	Fresno State University	Recycling Well Water with Nitrates for Crop Production	Conceptual		P	S										P	S						
75	Fresno State University	Recycling Turbid Well Water for Crop Production	Conceptual		P								P			S							
76	Fresno State University	Developing a Model GWMP of Integrated, All-in-One Strategy for Conservation, Groundwater, and Wastewater Management	Conceptual	P	S	S							S			P	S				S		
77	Fresno State University	Experiment Using Non-Potable Water as an Alternative to Potable Groundwater or Surface Water in Cooling Towers and then Re-cycling that Water for Crop Production	Conceptual	S	P	S										P	S						
136	Hardwick Water Company	Hardwick Water Distribution System Replacement and Hookup Project	Preliminary Design		P	S				S	P						S						
80	Kings River Conservancy	The Kings Ribbon of Gems - North Riverside Park	Ready For Construction			S		P															
100	Kings River Conservancy	The Kings Ribbon of Gems - Sanger Kings River Park and River Access	Preliminary Design			S		P									P		S				
106	Kings River Conservation District	Kings River Levee Evaluation	Ready For Construction		S		P			P				S									
107	Kings River Conservation District	Kings River Levee Critical Repairs	Planning		S		P				P			S									
108	Kings River Conservation District	North Fork Channel Recharge Project - Site 16	Conceptual	P	S	S	S	P	P			S	S	S									
116	Kings River Conservation District	McMullin Recharge Project - Site #1	Planning	P	S	S	S	P	P			S	S	S									
117	Kings River Conservation District	Kings River North Fork Flood Protection and Wildlife Enhancement Project	Preliminary Design		S		P				P			S									
118	Laguna Irrigation District	Laguna Groundater Recharge Site 11	Planning	P	S	S	S	S	P			S	S	S									
120	London Community Services District	London Water Conservation Project	Ready For Construction	P	S	S			P		S	S											S
134	Malaga County Water District	Malaga County Water District Water Supply Conservation Project	Ready For Construction	P	S	S			P	S	S	S	S			S					S		S
135	Sultana Community Services District	Sultana Water Conservation and Meter Project	Preliminary Design	P	S	S			P		S	S					S						S
125	Sultana Community Services District	Sultana Safe Drinking Water Feasibility Study Project	Planning		S	P				S	P						S						

P = Primary
S = Secondary

Attachment 8 - Kings Basin Water Authority – Past & Present Grant Contracts

Last updated: November 4, 2014

Program & Agency	Project Title	Project Proponents	Project Description	Grant Award/Request	Status
Prop 13 Groundwater Storage Construction Grant Program (CDWR)	Alta Irrigation District Coordinated Groundwater Storage Project	KRCD Alta ID City of Dinuba	Dinuba project is a twenty-eight acre, three-cell stormwater retention and recharge basin located within the City of Dinuba. AID's Traver Pond project is the enlargement of an existing five-acre recharge basin to a size of sixteen-acres.	Grant: $4,615,072 Project Cost: $5,187,903 Contract executed with CDWR, June 2006	Completed in 2011
Prop 13 Groundwater Storage Construction Grant Program (CDWR)	Fresno Irrigation District Waldron Pond Banking Facility Expansion	FID	The Waldron Pond Banking Facility is a groundwater recharge and recovery project that provides water to urban suppliers, agriculture suppliers, and facilitates the environmental benefits of improving the Kings River fishery. The project constructed eight recovery wells, five monitoring wells, and thirteen new recharge basins expanding the existing facility to 270 aggregate acres of recharge area.	Grant: $4,615,072	Completed in 2008
Prop 50 IRWM Planning Grant Program (CDWR)	Upper Kings Basin Water Forum Integrated Regional Water Management Plan	KRCD/Water Forum	Initial development of the Upper Kings Basin IRWMP.	Grant: $500,000 Project Cost: $1,000,000	Completed July 2007
Prop 50 IRWM – Discretionary Funds – Integrated Regional Groundwater Model Demonstration (CDWR)	Kings Basin Integrated Groundwater Surface-water Model (Kings IGSM)	KRCD/Water Forum	The Kings IGSM was developed to support the planning analysis required for the Upper Kings Basin IRWMP project. It provides an analytical tool for the region that can represent the groundwater and surface water flow systems and their interactions; and can provide quantitative information on a comparative basis to help evaluate alternative conjunctive water management strategies.	Grant: $500,000 Project Cost: $1,000,000	Completed model development Spring 2007; calibration report published November 2007
Prop 84 River Parkways and Urban Streams Restoration Grant Programs (CA Resources Agency)	Kings Ribbon of Gems – North Riverside Park	Kings River Conservancy KRCD/Water Forum	Implementation of a project identified in the "Kings Ribbon of Gems" plan. 38-acre river parkway located below Pine Flat on the north bank of the Kings River upstream of Choinumni Park. Two components: 1) 1.5-mile river access trail with 0.5-mile ADA compliant section plus picnic areas, 2) ADA restroom, with adjacent ADA parking area.	Grant: $284,674 Project Cost: 298,374 Contract executed with Resources Agency Summer 2011.	Project is complete. Ribbon cutting ceremony occurred in Spring 2013.

Prop 50 Round 2 IRWM Implementation Grant Program (SWRCB)	Upper Kings Basin Water Forum Project	KRCD/Water Forum Alta ID City of Fresno Fresno ID	AID Traver Pond Project provides dry year supply and is a component of a surface water exchange agreement w/ Cutler & Orosi PUDs. City's project installs 10k of a planned 110k residential water meters. FID Jameson Pond Expansion adds sixty additional acres to an existing forty-acre recharge facility.	Grant: $6,064,375 Project Cost: $18,112,895 Contract executed with SWRCB, December 2008	Completed September 2013.
Prop 50 Supplemental – AKA Mini 50 – Grant Program (CDWR)	The Fresno Irrigation District Jameson Pond Expansion Project Phase II The City of Fresno Residential Water Meter Project Phase II	UKBIRWMA City of Fresno Fresno ID	Fresno ID's Jameson Pond Phase II Expansion enhances water supply capacity by constructing an addition recovery well. The City's Phase II meter project installs an additional 5k meters (of planned 110k) complete with AMR devices and software.	Grant: $2,099,868 Project Cost: $4,661,500 Contract executed with CDWR, September 2011	FID and City projects were both completed under budget and approximately $253k in unused grant funds were reallocated to FID to carry out additional levee rock work. A contract amendment has been executed to cover the additional work. Contract close out winter 2014.
Prop 84 IRWM Disadvantaged Communities Pilot Program (CDWR)	UKBIRWMA – Disadvantaged Communities (DAC) Outreach & Planning Pilot	UKBIRWMA	Project seeks to map DACs and their water needs; develop mechanisms to effectively engage and integrate DACs into the IRWM planning process; develop conceptual project descriptions and cost estimates to include in the IRWMP project list; and identify/facilitate partnerships between member agencies and DACs.	Grant: $500,000 Project Cost: $500,000 Contract executed with CDWR, January 2012	Completed June 2014.
Prop 84 Round 1 IRWM Planning Grant Program (CDWR)	UKBIRWMA – Integrated Regional Water Management Plan Update	UKBIRWMA	The objective of the project is to update the 2007 Upper Kings Basin IRWMP to: 1) Satisfy new State guidelines for IRWMPs; 2) More thoroughly address Statewide Priorities and Program Preferences; 3) Update the plan to include recent information; 4) Address inadequacies in the existing IRWMP; 5) Expand the focus on Disadvantaged Communities; 6) Document successes and lessons learned since the original plan was drafted; 7) Document governance and policy improvements since the original plan was drafted; 8) Engage more stakeholders; and 9) Improve the overall regional planning process.	Grant: $236,890 Project Cost: $336,850 Contract executed with CDWR, September 2011	Completed April 2014.

Prop 1E Round 1 IRWM Stormwater Flood Management Grant Program (CDWR)	Fancher Creek Flood Control Improvement Project	City of Fresno w/ Fresno Metropolitan FCD (project is included in the Kings Basin IRWMP project list)	The Fancher Creek Detention Basin removes 682 acres from the 100-year floodplain, redirects runoff that may contain pollutants into stormwater management basins, and result in approximately 740 acre feet of additional surface water recharge per year. Once complete, the basin will have sufficient capacity to provide the 100-year control of the Fancher Creek flows.	Grant: $2,231,086 Project Cost: $4,462,173 Contract executed with CDWR, Summer 2012.	Completed September 2014.
Prop 84 Round 1 IRWM Implementation Grant Program (CDWR)	UKBIRWMA – Groundwater Overdraft Reduction and Disadvantaged Community Water Supply Reliability Projects	UKBIRWMA Bakman WC w/ FID Consolidated ID County of Fresno City of Clovis City of Fresno East Orosi CSD w/ AID	Bakman WC's project entails installation of 2,453 residential water meters. Consolidated ID's project develops a 75-acre groundwater banking facility. County of Fresno Drummond Jensen project removes an unincorporated neighborhood from septic by connecting to City of Fresno. City of Clovis' project entails expansion of its surface water treatment facility to reduce groundwater pumping. City of Fresno's project would install an additional 10k residential water meters. And East Orosi CSD's project rehabilitates two existing muni wells in a DAC to extract from a higher quality zone of the aquifer.	Grant: $8,496,000 Project Cost: $15,316,390 Contract executed with CDWR, July 2012	Invoicing is current through June 2014. City of Fresno's project is complete; City of Clovis and CID nearing completion. Contract concludes late 2015.
Prop 84 Local Levee Grant Program (CDWR)	Kings River Levee Evaluation Project	KRCD (project is included in the Kings Basin IRWMP project list)	The objective of this project is to reduce flood risk on the Kings River by evaluating flood project levees, identifying deficiencies, and recommending appropriate management actions.	Grant: $2,000,000 Project Cost: $2,292,922 Contact executed with CDWR, February 2013	Project is 50% complete. Levee coring work postponed until mid to late 2015.
Prop 1E Round 1 Flood Corridor Grant Program (CDWR)	McMullin On-Farm Flood Capture and Recharge Project	KRCD Terranova Ranch McMullin Recharge Group Raisin City WD James ID (project is included in the Kings Basin IRWMP project list)	Project is Phase 1 in a multi-phase project to capture North Fork Kings flood flows for on-farm recharge activities (direct/in-lieu recharge, irrigation). Objectives will be achieved through flood easements on 250 acres; upgrade to turnout along Kings River, McMullin Grade Crossing, Terranova Canal, and implementation of Flood Flow Capture on 1250 acres. Project will divert flood flows up to 500 cfs.	Grant: $5,000,000 Project Cost: $5,000,000 Contract executed with CDWR, February 2013	H&H study is complete. CEQA underway. Permitting, 30% design work nearing completion. Schedule is approximately 9-12 months behind.

California Water Foundation	Kings Basin Remote Groundwater Monitoring Project	KRCD	Installation of satellite-based remote groundwater monitoring equipment on nine existing wells located on or near Manning Avenue between James ID and Alta ID.	Grant $44,763 Project Cost ~$55,000 Contract executed with CWF, Summer 2012	Completed May 2013.
California Water Foundation	Implementation of Interlinked Groundwater Management Strategies in the Kings Basin	KRCD	Installation of constructed monitoring wells within Management Areas A & B, update of the Kings IGSM and model run of IRWMP projects, and land use outreach.	Grant $1,000,000 Project Cost ~$1,050,000 Contract executed with CWF, February 2013	Contract executed with CWF/RLF covering first $745k of work. Kings IWFM model approx.. 70% complete. Contract executed with Summers Eng. to assist with design and installation of 10-15 monitoring wells in the Lower Kings Basin. New KBWA website, land use planning page, land use planner's packet and Groundwater Land Use Symposium completed.
Prop 1E Round 2 IRWM Stormwater Flood Management Grant Program (CDWR)	Dry Creek Flood Control Improvement Project	Fresno Metropolitan FCD (project is included in the Kings Basin IRWMP project list)	The project consists of modifications to FMFCD's flood control facilities in the Big Dry Creek and Pup Creek watersheds. The project's primary goal is to provide better flood protection for the Cities of Fresno and Clovis, and surrounding areas. The project includes improving the structural integrity of the Big Dry Creek Dam, and channel improvements to allow more effective and flexible routing of flood waters at three points downstream of the Dam along the Dry Creek system. In addition, the project includes construction of one floodwater detention basin and expansion of an existing flood water detention basin in order to increase stormwater storage capacity, increase groundwater recharge, and improve groundwater quality.	Grant: $6,891,010 Project Cost: $13,782,021 Contract executed Spring 2014	FMFCD received full request (highest proposal score in the State). Contract awarded in early 2014. Design and permitting nearing completion.

Prop 84 Round 2 IRWM Implementation Grant Program (CDWR)	KBWA IRWM Implementation Grant Projects	UKBIRWMA City of San Joaquin Fresno ID Bakman Water Co. Laguna ID City of Kerman	The City of San Joaquin's project provides drinking water supply and quality benefits to DAC residents through well rehabilitation and installation of residential water meters. Fresno ID's project partners with James ID to utilize flood water for banking and recharge in the lower Kings Basin. Bakman's project provides drinking water supply and quality benefits to DAC residents through well head treatment of DBCP and installation of residential water meters. Laguna's project involves construction of a 52-acre recharge and banking facility between Laton and Riverdale. City of Kerman's project installs 665 residential water meters of the City's planned program to meter all residential users.	Grant: $8,734,000 Project Cost: $10,437,645 Contract executed July 2014	Received full funding of the KBWA application. KBWA received the highest proposal score in the State. Contract executed July 2014. Initial invoicing currently being prepared.

Cumulative Award: **$53,812,810**
Cumulative Projects Cost: **$87,108,745**