

### Proposal Full View

**Applicant Information**

Organization Name Pixley Irrigation District \*  
 Tax ID 946037606  
 Proposal Name 2012 Groundwater Banking Support Project \*  
 Proposal Objective The Proposal further develops and supports a groundwater banking project that will address the reliability of groundwater resources within the District. The Proposal involves the development of a numeric model, the expansion of PIXID's monitoring network and the development of two dedicated monitoring wells. \*

**Budget**

Other Contribution	\$0.00
Local Contribution	\$33,830.00
Federal Contribution	\$0.00
Inkind Contribution	\$0.00
Amount Requested	\$250,000.00 *
Total Project Cost	\$283,830.00 *

**Geographic Information**

Latitude \* DD(+/-)  MM  SS   
 Longitude \* DD(+/-)  MM  SS

Longitude/Latitude Clarification N/A Location Center of the Project is at the intersection of Tulare County Avenue 84 and Road 156 alignments.

County Tulare \*  
 Ground Water Basin San Joaquin Valley-Tule  
 Hydrologic Region Tulare Lake  
 Watershed CalWater Watershed: 116 7558 South Valley Floor

**Legislative Information**

Assembly District 30th Assembly District \*  
 Senate District 16th Senate District \*  
 US Congressional District District 21 (CA) \*

**Project Information**

Project Name 2012 PIXID Groundwater Banking Investigator

Implementing Organization	Pixley Irrigation District
Secondary Implementing Organization	
Proposed Start Date	4/1/2013
Proposed End Date	12/31/2014
Project Scope	The Project is an effort to further development of a project that will address major groundwater management need within PIXID

**Project Description**

PIXID has been developing and evaluating the proposed DEID-PIXID Groundwater Banking project for the last few years and has determined that it holds significant promise for the District to improve groundwater management within the District. Since 2008, PIXID and DEID have undertaken a Reconnaissance Study for the project, have developed a project financial model, have developed a groundwater conceptual model and have developed the needed water balance information to develop a numeric groundwater model. In 2011 the District completed a System Optimization Review Study funded by the Bureau of Reclamation that confirmed that the DEID-PIXID Groundwater Banking project was one of the top priority projects for the District. The banking projects location in PIXID is ideal because of the sandy conditions near Deer Creek and the deep groundwater depths within PIXID. The banking project is anticipated to have a 100,000 acre-foot storable maximum and be able to recharge and recover a maximum of 30,000 acre-feet per year. The banking project has the potential to develop new groundwater recharge facilities for PIXID, to generate a new "leave-behind" supply of water that benefits the District's groundwater resources, and generate a revenue stream that the District can use to develop additional conveyance and recharge projects. The proposed groundwater bank is located on the north side of Deer Creek at the approximate

	<p>intersection of Tulare County Road 156 and Avenue 44 alignments. The 2012 PIXID Groundwater Banking Investigation will evaluate the proposed project through a numeric groundwater model and estimate the benefits and impacts of the project to local landowners. The Project will also take steps to develop additional baseline data in the groundwater bank area through the inclusion of 20 ag wells into the District's groundwater monitoring network and the development of two new dedicated monitoring wells.</p>
Project Objective	<p>1. To develop a numerical groundwater flow model for the proposed groundwater banking area that will quantify groundwater inflows and outflows, consider seepage, precipitation and available surface water supplies, and also consider existing groundwater pumping in the area. 2. To develop greater understanding of current groundwater conditions around the groundwater banking project. 3. Provide the District with better information to guide decisions made for managing local groundwater resources.</p>

**Project Benefits Information**

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Groundwater Management-Monitoring wells installed	0	Increase monitoring network for PIXID
Secondary	Stormwater Flood-Water Supply Enhancement	500	Mange storm/flood runoff in Deer Creek
Tertiary	Modeling-Groundwater modeling developed or improved	0	Set up of numerical model for future planning and decision making.

Project Objective

**Budget**

Other Contribution	<input type="text" value="0"/>
Local Contribution	<input type="text" value="35000"/>
Federal Contribution	<input type="text" value="0"/>
Inkind Contribution	<input type="text" value="0"/>
Amount Requested	<input type="text" value="250000"/>
Total Project Cost	<input type="text" value="285000"/>

**Geographic Information**

Latitude DD(+/-)	<input type="text" value="35"/>	MM 56	<input type="text" value="SS 33"/>
Longitude DD(+/-)	<input type="text" value="-119"/>	MM 13	<input type="text" value="SS 26"/>
Longitude/Latitude Clarification	<input type="text" value="N/A"/>	Location	<input type="text" value="Center of the Project is at the intersection of Tulai"/>
County Tulare Ground Water Basin San Joaquin Valley-Tule Hydrologic Region Tulare Lake WaterShed			
CalWater Watershed: 116 7558 South Valley Floor			

**Legislative Information**

Assembly District	30th Assembly District
Senate District	16th Senate District
US Congressional District	District 21 (CA)

**Section : Applicant Information and Question's Tab**

APPLICANT INFORMATION AND QUESTION'S TAB

**Q1. Applicant Information**

**Provide the agency name, address, city, state, and zip code of the applicant submitting the application.**  
 Pixley Irrigation District 357 East Olive Ave. Tipton, CA 93272

**Q2. Proposal Description:**

**Provide a brief abstract of the Proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. Within the abstract, please describe how the proposal relates to the GWMP's BMO's.**

Pixley ID is a conjunctive use ag district whose landowners heavily rely on groundwater. Between 2007-2010 District groundwater levels dropped significantly and prompted the District to investigate current conditions and evaluating possible ways to improve the reliability of local groundwater resources. One project generated from District investigations is a new groundwater bank within Pixley ID that would be developed through a partnership with a neighboring district. Also, evaluations of recent and historic groundwater level information from District's current groundwater monitoring network has prompted the District to pursue acquiring additional monitoring sites to help provide greater detail for better District understanding of groundwater conditions. The District believes that the implementation of the PIXID 2012 Groundwater Support Project (Project) will significantly improve Pixley ID's groundwater resource management through the developed information and better understanding of the District's groundwater aquifer. Pixley ID's Project involves the GPS survey of several existing ag wells for their inclusion in the District's

groundwater monitoring network, the development of the District's first two dedicated monitoring wells and their outfitting with automated level loggers, and the development of a groundwater model in the southeastern part of the District for a proposed groundwater banking project. The primary issues for PIXID groundwater management are the lack of recharge facilities to take advantage of available surplus water in wet years and the lack of available funding to develop those kinds of projects. Given these issues PIXID has developed a project that targets both. The proposed groundwater banking project within PIXID has the potential to increase the groundwater recharge capacity of the District, to capture previously un-storable supplies for groundwater recharge during wet years, to develop a new recharge supply through volumes of banked supplies that are left behind, and to generate financial resources so that other groundwater management projects can be developed by the District. The goals of the Project match up well with the goals and objectives of the DCTRA GWMP. On page 1-3 of the DCTRA GWMP there is a list of the highest priority goals for the GWMP. These goals include: ?1) Continue to monitor groundwater levels annual during the Spring within the DCTRA by measuring the depth to groundwater of existing wells?. The Project will expand the District's groundwater monitoring network with 20 additional existing wells.?5) Establish additional groundwater re-charge facilities for groundwater banking?. The Project includes a numeric groundwater model that will evaluate the impacts and benefits of a potential groundwater banking project that has been in development by the District since 2008.?7) Investigate potential groundwater banking opportunities, and continue to monitor and evaluate existing groundwater banking project?. The Project will develop a numeric groundwater model to evaluate a potential groundwater banking project and will expand the District's groundwater monitoring network so that a more accurate record of baseline groundwater level information existing in the area of the potential groundwater banking project. On page 3-1 of the DCTRA GWMP the following list of BMOs to help provide a more reliable groundwater supply are listed: ?2) To facilitate groundwater resource sustainability?. The Project's development of a numeric groundwater model and additional groundwater monitoring sites will support District projects that promote groundwater resource sustainability.?4) To develop groundwater basin understanding?. The Project will significantly expand the District's groundwater monitoring network, provide a more accurate representation of groundwater conditions in the District and develop an understanding in the basin about how semi-confined groundwater banking projects could benefit the region.

### Q3. Project Director:

**Provide the name and details (including email) of the person responsible for executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.**

Dan Vink, General Manager, Pixley ID 357 East Olive Ave. Tipton, CA 93272 Phone Number: (559) 686-4716 Email address: [dvink@ltrid.org](mailto:dvink@ltrid.org)

### Q4. Project Manager:

**Provide the name and contact information (including email) of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.**

Dan Vink, General Manager, Pixley ID (see above)

### Q5. Additional Information:

**Based on the region's location, what is the applicable DWR region office (Northern, North Central, South Central, or Southern)? The following link can be used to view each DWR region office boundaries:**

[http://www.water.ca.gov/groundwater/groundwater\\_basics/gw\\_contacts\\_info.cfm](http://www.water.ca.gov/groundwater/groundwater_basics/gw_contacts_info.cfm)

- 1)  Northern Region
- 2)  North Central Region
- 3)  South Central Region
- 4)  Southern Region

### Q6. Additional Information:

**Provide the Date of GWMP Adoption, if any, and list the pursuant Water Code Section or other legal Authority in which it was adopted.**

1. March 1995 - Assembly Bill 3030 2. July 2006 - Part 2.75 of Division 6 of the California Water Code commencing with Section 10750, otherwise known as AB3030, the Groundwater Management Act of 1992 (as amended in 2002 through Senate Bill 1938 and Assembly Bill 105 in 2004 and then again through DWR Bulletin 118, Appendix C). 3. May 2012 - Part 2.75 of Division 6 of the California Water Code commencing with Section 10750, otherwise known as AB3030, the Groundwater Management Act of 1992 (as amended in 2002 through Senate Bill 1938 and Assembly Bill 105 in 2004 and then again through DWR Bulletin 118, Appendix C).

### Q7. Additional Information:

**Provide a list of documents that support and indicate collaboration with other local public agencies with regard to the management of the affected groundwater basin (e.g., MOUs, MOAs, JPAs, adoption of a GWMP, recognition of county ordinances in permitting processes, or party to a groundwater basin adjudication order).**

DCTRA? The Deer Creek and Tule River Authority (DCTRA) is a joint powers Authority comprised of seven regional districts. The DCTRA's primary purpose is the joint exercise of the power in order to facilitate more efficient operations and management of their activities. Integral to this purpose is the joint conjunctive management of the DCTRA member's surface water and groundwater supplies. The DCTRA works with its members and other water entities to insure an adequate water supply. DCTRA GWMP MOU - The DCTRA Groundwater Management Plan (GWMP) recognizes stakeholders through the execution of a Memorandum of Understanding (MOU). The original stakeholders comprising the DCTRA executed a MOU to indicating their support of the GWMP. The purpose of the MOU is to document the interests and responsibilities of participants in the adoption and implementation of the GWMP. The MOU also promotes the sharing of information, the developing of a course of action and the resolving of differences that may arise regarding the GWMP. 2008 Pixley ID and Delano-Earlimart ID Reconnaissance Study on a Joint Groundwater bank in Pixley ID ? PIXID and DEID jointly pursued a study to evaluate the potential to develop a groundwater bank in PIXID. The study indicated that the project was feasible and had a positive benefit to cost ratio for both Districts. Benefits and costs were evaluated at a conceptual level and recommendations were made as to necessary steps to move the project forward. This joint study has since developed into a financial model, a groundwater conceptual model, a seepage test in Deer Creek, a seepage test near the proposed groundwater banking site and the development of the water balance information needed to develop a numeric groundwater model. Annual surplus surface water transfers ? PIXID participates in annual transfers with other DCRTA districts in an effort to keep as much surface water within their common groundwater subbasin. Tule Integrated Regional Water Management Group ? PIXID participates in the Tule IRWM Group meetings and is a part of the effort to develop a nIRWMP for that region. 2011 PIXID System Optimization Review Study ? This Bureau of Reclamation funded District study on how to optimize available resources through an evaluation of projects to rank them in terms of priority. This study ranked the groundwater banking project as one of the highest ranked District projects. It also evaluated potential coordinated operational schemes with Lower Tule River ID in order to optimize the resources of both Districts. 2012 Avenue 116 Lateral? This \$4.8 Million project was recently awarded a Water, Energy and Efficiency Grant from the Bureau of Reclamation. The project involves the development of a surface water delivery system that will serve a currently unserved 8,000 acre area within PIXID. The project also involves the expansion of a Lower Tule River ID canal from the Friant-Kern Canal to point of diversion for the new conveyance system.

### Q8. Additional Information

**Name the entity(ies) providing the fund(s) reported in the above Budget section under the category "Other Contribution". If there are no "Other Contributions" Please answer this question with, "No Other Contributions".**

No Other Contributions.

**Q9. Eligibility:**

List the urban water suppliers that will receive funding from the proposed grant. Please provide the agency name, a contact phone number and email address. Those listed must submit self certification of compliance with CWC §525 et seq. and AB1420, see Attachment 10. If there are none, so indicate.  
 There are no urban water suppliers that will receive funding from the proposed grant.

**Q10. Eligibility:**

Have all of the urban water suppliers, listed in Q9 above, submitted complete 2010 UWMP to DWR? If not, explain why. Have those plans been verified as complete by DWR? If not, explain current status.  
 There are no urban water suppliers that will receive funding from the proposed grant.

**Q11. Completeness Check:**

Have all of the fields in the application been completed?

Yes

**Q.11. Completeness Check (cont)**

If no, please explain. If yes, answer this question with "NA".

NA

**Section : Application Attachments Tab**

APPLICATION ATTACHMENTS TAB

**Attachment 1. Authorizing Documentation**

Upload authorizing documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments: Att1\_LGA12\_PIXID\_AuthDoc\_1of1.pdf

**Attachment 2. Eligible Applicant Documentation**

Upload eligible documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments: Att2\_LGA12\_PIXID\_EligDoc\_1of1.pdf

**Attachment 3. Status of GWMP**

Upload the GWMP documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments:  
 Att3\_LGA12\_PIXID\_GWMP\_1of5.pdf,Att3\_LGA12\_PIXID\_GWMP\_2of5.pdf,Att3\_LGA12\_PIXID\_GWMP\_3of5.pdf,Att3\_LGA12\_PIXID\_GWMP\_4of5.pdf,Att3\_LGA12\_PIXID\_GWMP\_5of5.pdf

**Attachment 4. Project Description**

Upload project description here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments: Att4\_LGA12\_PIXID\_ProjD\_1of1.pdf

**Attachment 5. Work Plan**

Upload work plan here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments: Att5\_LGA12\_PIXID\_WrkPln\_1of1.pdf

**Attachment 6. Budget**

Upload budget here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments: Att6\_LGA12\_PIXID\_BUDGET\_1of1.pdf

**Attachment 7. Schedule**

Upload schedule here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments: Att7\_LGA12\_PIXID\_SCHED\_1of1.pdf

**Attachment 8. Quality Assurance**

Upload quality assurance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".  
 Last Uploaded Attachments: Att8\_LGA12\_PIXID\_QA\_1of1.pdf

**Attachment 9. Past Performance**

Upload past performance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att9\_LGA12\_PIXID\_PERFORM\_1of1.pdf

**Attachment 10. AB1420 and Water Meter Implementation Compliance**

**Upload 1420 and water meter implementation documentation here, if applicable. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Subm**

Last Uploaded Attachments: Att10\_LGA12\_PIXID\_1420\_1of1.pdf

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