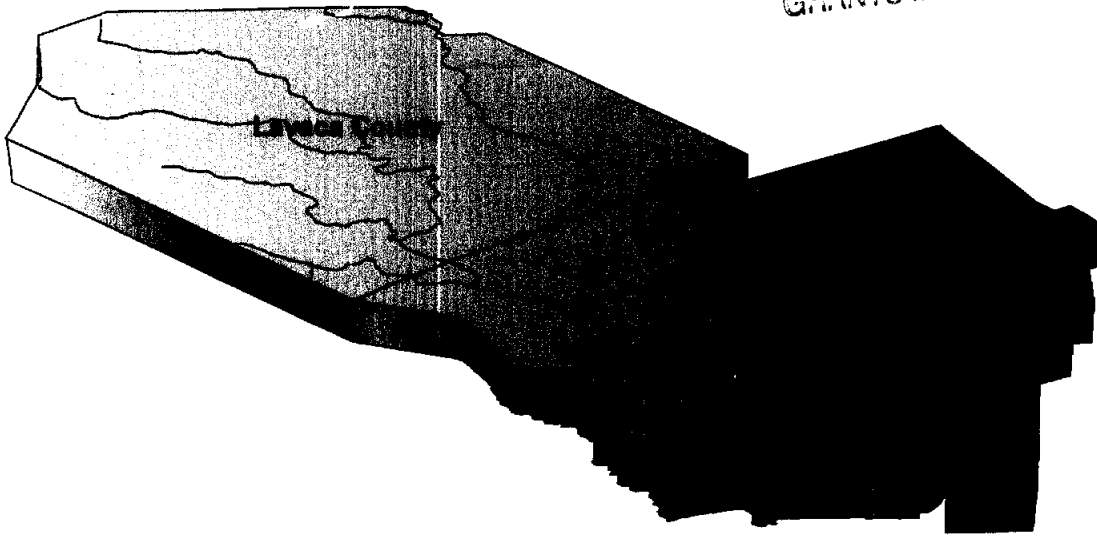


# 2002-483-437 FINAL REPORT

***Lavaca Regional Water Planning Group  
(Region P)***

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GRANTS MANAGEMENT

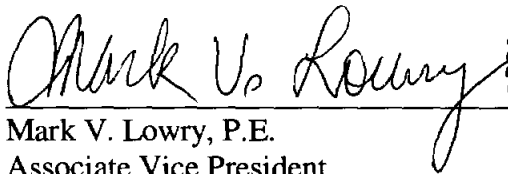


## ***Infrastructure Finance Report***

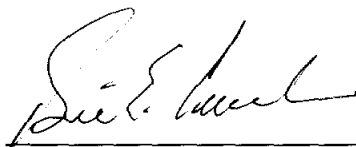
***Final Report  
May 2002***

**Lavaca Regional Water Planning Group  
(Region P)**

**Infrastructure Finance Report**

  
Mark V. Lowry, P.E.  
Associate Vice President



  
Bill E. Couch, AICP  
Senior Project Manager

**Final Report  
May 2002**

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## **Lavaca Regional Water Planning Group Infrastructure Finance Report**

### **BACKGROUND**

As a part of Senate Bill 2 (SB 2, 77<sup>th</sup> Texas Legislature), the Regional Water Planning Groups (RWPGs) are required by the Texas Water Development Board (TWDB) to examine the funding required to implement the water management strategies and projects that were identified and recommended in the SB 1 Regional Water Plans. These plans were adopted by the RWPGs in December 2000 and approved by the TWDB in 2001. Each Region's findings are to be presented to the TWDB in an Infrastructure Finance Report (IFR), June 2002.

The primary objectives of the Infrastructure Finance Report are:

- to determine (via mail-out survey) the number of political subdivisions with identified needs for additional water supplies that will be unable to pay for their water infrastructure needs without some form of outside financial assistance;
- to determine (via mail-out survey) how much of the infrastructure costs in the regional water plans cannot be paid for solely using local utility revenue sources;
- to determine (via mail-out survey) the financing options proposed by political subdivisions to meet future water infrastructure needs (including the identification of State funding sources considered); and,
- to determine (via RWPG policy statement) what role(s) the RWPGs propose for the State in financing the recommended water supply projects.

### **LAVACA REGIONAL PLANNING AREA IFR SURVEYS**

The Lavaca Regional Water Planning Group (LRWPG) did not have any political subdivisions with needs for additional water supplies identified in the SB1 Lavaca Regional Water Plan. However, the LRWPG had concerns that political subdivisions in

Region P that did have sufficient existing water supplies during the 50-year planning period would not have adequate existing facilities to meet projected demands without infrastructure replacements. Therefore, the scope of the IFR was expanded to include Region P's Municipal Water User Groups (WUGs) that have sufficient existing water supplies to adequately meet projected demands. Surveys, designed to determine if there are any financial needs for infrastructure replacements to existing facilities, were sent to 14 Municipal Water User Groups (WUGs) within Lavaca, Jackson, and western Wharton counties, which are listed below:

<i>Jackson County WCID No.1</i>	<i>Wharton County WCID No. 1 - Louise</i>
<i>Jackson County WCID No.2</i>	<i>Cape Carancahua Water Supply Corp.</i>
<i>Isaacson Municipal Utility Dist.</i>	<i>La Salle Landing Water System</i>
<i>City of Edna</i>	<i>City of Hallettsville</i>
<i>City of Ganado</i>	<i>City of Moulton</i>
<i>City of Shiner</i>	<i>City of La Ward</i>
<i>City of Yoakum</i>	<i>City of El Campo</i>

The TWDB also requires that the RWPGs provide summary discussions detailing probable funding mechanisms that could meet identified water needs for county aggregate WUGs for which there are no political subdivisions responsible for providing water supplies. The Lavaca Regional Water Plan had identified significant infrastructure issues for agriculture and livestock aggregate categories in Region P that could affect their future viability and existence. In order to obtain the best possible information to address these issues, the LRWPG elected to send out optional surveys to try to obtain more specific financial needs information, if possible, instead of providing generalized summaries. Approximately 20 farms in each of the Region's three counties were identified to participate in the agricultural survey and the Cattleman's Association was chosen to participate in the livestock survey. **Appendix A** details Region P's IFR survey procedure; **Appendix B** contains copies of the Municipal and Agricultural surveys, as well as each of the three time-specific cover letters, and the TWDB's definition of the State Participation Program; **Appendices C - E** contain the TWDB-required survey response records, survey results, and actual survey responses, respectively.

## **SURVEY RESULTS**

### **Municipal Infrastructure Surveys**

The response rate for the Municipal Infrastructure Surveys was 71 percent. Of those responding, 70 percent indicated a need for funding for infrastructure replacements to their existing municipal water supply facilities in order to meet projected demands during the 50-year planning period. In addition to drilling additional wells, typical infrastructure needs indicated include upgrading/replacing distribution system service pumps, distribution mains, booster stations, and storage tanks. Only one respondent provided implementation dates for needed infrastructure replacements. Three respondents stated they could contribute 50 percent of the capital costs, one indicated they could contribute \$25,000, and three stated the amount they could afford was unknown. None of the needed facilities appear to qualify for state participation funding, and respondents were unsure of the amount of financing help that would be needed. Total estimated need for those responding to the survey was approximately \$20,000,000 with many respondents unable to provide costs of needed facilities. However, no respondents with funding needs indicated that they would be able to provide more than 50 percent of the capital costs. As a result, state-funding assistance is needed at a minimum of \$10,000,000 based on survey responses. See *Appendices C – E* for survey result details.

### **Agricultural Infrastructure Surveys**

There was a 46 percent response rate for the Agricultural Infrastructure Surveys. Of those responding to the survey, 70 percent have already incorporated some sort of water conservation practices into their farming practices. The most common practices employed were laser leveling the fields (along with incorporating multiple inlets) and replacing irrigation canals with underground piping. Based on those respondents who provided an answer, there are approximately 12,900 acres that have already been laser leveled and approximately 14,000 additional acres still needing this procedure. The laser-leveling procedure lasts for about three uses. This would require maintenance procedures to be repeated on a nine-year cycle, given that about one-third of a farmer's land is irrigated per year and is rotated every year. The estimated cost for these

respondents to maintain existing laser-leveled fields and to create new laser-leveled fields on the additional acreage would be \$2,940,000 per nine-year cycle.

Based on those respondents who provided an answer, approximately 7,500 acres have had canal replacement and an additional 6,600 acres still need to have underground piping installed (based on those respondents providing this information). Surveys also indicate that 73 percent of respondents currently have unlined canals for which the sum from those providing data is about 423,000 feet, which would cost approximately \$3,600,000 to convert to pipelines.

Of those respondents indicating a need for water conservation measures, 83 percent are interested in pursuing water conservation efforts, but cannot due to lack of funding. It is not clear from the survey responses how much money the farmers could contribute to these water conservation efforts – only 46 percent of respondents provided this type of information; and of these, half gave dollar values while the others answered in terms of the percent of the cost that they could pay. See *Appendices C – E* for survey result details.

Less than half of the survey respondents provided answers to the quantitative demand and cost questions. A primary reason for this may be that they were hesitant to become responsible for these identified values. Therefore, the following table provides regional estimations of the projected funding needed for agricultural infrastructure, based on information from the Lavaca Regional Water Plan (December 2000):

Region P County	Annual Planted Rice Acreage*	Total Annual Costs for Laser Level	State Funds Needed for 50 % Participation	Total Costs for Pipeline Replacement of Canals**	State Funds Needed for 50 % Participation
Lavaca	3,290	\$ 358,610	\$ 179,305	\$ 560,616	\$ 280,308
Jackson	24,873	\$ 2,711,157	\$ 1,355,579	\$ 4,238,359	\$ 2,119,180
Wharton (partial)	23,553	\$ 2,567,277	\$ 1,283,639	\$ 4,013,431	\$ 2,006,716
<b>Total</b>	<b>51,716</b>	<b>\$ 5,637,044</b>	<b>\$ 2,818,522</b>	<b>\$ 8,812,406</b>	<b>\$ 4,406,203</b>

\* 5-Year average planted rice acreage based on data from 1994 through 1998.

\* Estimate that 1/3 of a farmer's land is planted per year for rice; and planted acreage is rotated every year.

\*\* Cost based on estimate of an average of 20 feet of canal per acre.

## **CONCLUSIONS**

There is a definite need for state-sponsored funding programs to help meet both projected municipal demands for existing facilities and agricultural water conservation goals within the Lavaca Regional Planning Area. It was not possible to determine the magnitude of the funding needed from these surveys due to a lack of response to the survey's quantitative demand and cost questions. A minimum need of \$10,000,000 was developed based on those who responded to the survey.

The majority of municipal survey respondents indicated they do not have sufficient revenue sources to cover the capital costs required for the needed infrastructure replacements and they would consider any sources of available funding.

The majority of agricultural survey respondents indicated they are interested in implementing water conservation practices, but are unable to do so primarily due to the lack of funds needed to cover capital costs. Another important obstacle exists for farmers that lease the land they farm, usually on a year-to-year basis. Landowners typically are not willing to invest in water conservation improvements to their land. Without participation from the landowner or the option of an extended lease, it is not cost effective for the tenant farmer to pay for water conservation improvements when there is no guarantee that they will be able to farm the same property in consecutive years and receive the benefit from their investment. Some tenant farmers have invested in a certain amount of laser leveling; however, state-matching funds would need to be available to replace canals with underground piping. The Agricultural IFR Survey was not designed to differentiate between owner-farmers and tenant farmers since the issue was not raised during the survey form review and adoption process. However, this issue was brought to the attention of the LRWPG through follow-up conversations with survey respondents and regional planning group meeting attendees that are tenant farmers.

## **LRWPG POLICY STATEMENT**

In response to the Region P Infrastructure Finance Survey results, the Lavaca Regional Water Planning Group has developed recommendations for the TWDB to present as policy recommendations to the State Legislature. In regards to the funding of necessary



Municipal and Agricultural water supply infrastructure projects, the LRWPG recommends that a five-cent state tax be placed on the sale of all bottled water. This tax should be dedicated solely to the funding of water infrastructure projects, including municipal and agricultural conservation infrastructure, within the State. For Agricultural water supply infrastructure needs, the LRWPG further recommends that the State develop, through the TWDB, a program similar to that provided under the Rural Utilities Service of the U.S. Department of Agriculture (USDA). Such a program would provide matching funds for water conservation improvements to individual farmers. There is an existing federal program available to farmers through the USDA called the Environmental Quality Incentive Program (EQIP). Texas began participating in this program in 1997, which addresses a wide range of natural resources issues including water quantity; however, the funding is very limited and many farmers are never able to participate. On average, the entire State receives only about \$2,000,000 per year and this level of funding is expected to decrease annually over the next several years. Last year was unique in that several small areas of the state were designated as EQIP “priority areas” and therefore Texas received a total of approximately \$4,000,000-\$5,000,000; the field office in the Wharton County area alone requested \$1,000,000. Funding for laser leveling and canal pipe replacement were included in this priority. The recommended State matching funds program would provide the necessary assistance that the federal incentive program cannot.

**APPENDIX A**  
**PROCEDURE FOR COLLECTING SURVEY RESPONSES**

## IFR SURVEY PROCEDURE

SB 2 specifies that each RWPG will prepare an Infrastructure Finance Report (IFR) that examines the funding needed to implement the water management strategies and projects that were identified and recommended in the SB 1 Regional Water Plans that were approved by the TWDB in 2001.

The SB1 Lavaca Regional Water Plan stated that Region P has no identified municipal water needs during the 50-year planning period. However, this was based on the simplifying planning assumption that the RWPG was addressing only infrastructure needs for NEW water supplies; it was assumed that existing facilities would last for the duration of the 50-year period.

Current Region P's water use:

~96% agricultural (~85% of this is for rice)	~1.5% municipal
~1.5% manufacturing	<1% livestock, etc.

Since Region P had no identified needs, the LRWPG decided to address existing infrastructure replacement needs for entities that have sufficient water supplies during the planning period. For Region P, this will include all of the larger Municipal WUGs (14 total). In addition Region P will perform a survey of the county-level aggregate WUGs that do not have a political subdivision responsible for supplying water. The TNRCC's database of water utilities was used to create the list of 14 Municipal WUGs, which included their addresses (see *Appendix C*)

Region P identified water supply issues for the agricultural and livestock aggregate WUGs. The Texas and Southwestern Cattle Raisers Association was chosen to participate in the Livestock survey; and initially, the 20 Agricultural WUGs that received the largest federal farm subsidies between 1996-2000 in each county were chosen to participate in the Agricultural IFR survey. This information was obtained from the Environmental Working Group's (EWG's) website (<http://www.ewg.org>) on county-level farm subsidy data. This database did not provide mailing address information however, so the Project Consultant sent the list of chosen agricultural survey participants to the RWPG voting members for their input as well as contacting each county's Appraisal District, Farm Service Agency, and Agriculture Extension Service for assistance in finding mailing addresses for the chosen farms. In addition, the LRWPG members were given the opportunity to add any farms to this list that they felt would be beneficial to the survey. Agricultural IFR surveys were also sent to the county-level offices for the Farm Bureau, Farm Service Agency (FSA), Natural Resource Conservation Commission (NRCS), and the Texas A&M Extension Service (TAES).

Using the TWDB IFR guidelines, the Project Consultant prepared a cover letter and survey questions for both the Municipal and Agricultural IFR surveys. The Project Consultant sent on or around January 18, 2002 a printed cover letter, survey, and postage-paid return envelope to each participant. The cover letter requested that entities please return their survey responses by February 15, 2002. Follow-up letters and surveys were mailed out on February 18<sup>th</sup> and March 18<sup>th</sup>, as required by the TWDB. Responses received were compiled in a Microsoft Excel spreadsheet and also in a data table formatted by the TWDB. Results are presented in this report (See *Appendix D*).

**APPENDIX B**  
**MUNICIPAL AND AGRICULTURAL SURVEYS**  
**(AND COVER LETTERS)**

## **Lavaca Region (P)**

### **Municipal Water Infrastructure Financing Survey**

**Background:** On January 5, 2001, each of the 16 Regional Water Planning Groups (RWPGs) across the State of Texas formally submitted an adopted regional water plan to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). These regional water plans examined and analyzed the water supply needs for all of the water users in the State. Based on these analyses, the RWPGs identified water management strategies that would be necessary to ensure sufficient additional water supplies for the 50-year planning period. Preliminary capital cost estimates were also developed for each of the strategies recommended.

This year Senate Bill 2 (77<sup>th</sup> Texas Legislature) has expanded the RWPGs' assignments to include the examination of what financial assistance, if any, is needed to implement each of the recommended water management strategies. Specifically, the RWPGs are required to report to the TWDB how all of the political subdivisions (municipalities, counties, water districts, etc.) in Texas propose to pay for future water infrastructure needs identified in each of the Regional Water Plans.

The Lavaca Regional Water Plan did not identify any additional municipal water needs, so the TWDB was requested to survey the infrastructure improvement needs for existing facilities that have an existing and sufficient water supply for the 50-year planning period. **Your input is crucial to completing this task successfully.**

Attached is a **survey** requesting information on facility infrastructure improvements that are currently needed or are projected to be necessary during the 50-year planning period to adequately service **your** water utility customers. Your participation in this survey would be greatly appreciated.

**PLEASE RETURN** the completed survey in the postage-paid return envelope by **Friday February 15, 2002** to:

Mark V. Lowry, P.E.  
400 W. 15<sup>th</sup> Street, Suite 500  
Austin, Texas 78701  
FAX (512) 472-7519  
E-mail: [mark.lowry@tcb.aecom.com](mailto:mark.lowry@tcb.aecom.com)

If you have any questions regarding this survey, please contact:

Mark V. Lowry, P.E. @ (512) 457-7736; or Connie M. Hinojos @ (512) 457-7732

## Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Telephone: ( \_\_\_\_\_ ) \_\_\_\_\_ E-mail: \_\_\_\_\_

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes\_\_\_\_\_ No\_\_\_\_\_

If **Yes** - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

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2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes\_\_\_\_\_ No\_\_\_\_\_

If **No** - How much of the necessary capital costs could your utility pay? \$\_\_\_\_\_

If **No** - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes\_\_\_\_\_ No\_\_\_\_\_

If **No** - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

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**2<sup>nd</sup> Notice, February 18, 2002**  
**Our records indicate that we have not yet heard from you**

**Lavaca Region (P)**  
**Municipal Water Infrastructure Financing Survey**

The Lavaca Regional Water Planning Group (LRWPG) sent out surveys on or about January 18, 2002 to the Municipal Water User Groups in Lavaca, Jackson, and western Wharton counties. **The primary objectives of this survey are:**

- to determine the number of municipal entities that have projected infrastructure replacement needs during the 50-year planning period, but are unable to pay for these needs without some form of outside financial assistance;
- to determine how much of the infrastructure replacement costs needed cannot be paid for solely using local utility revenue sources; and,
- to determine the financing options proposed by the municipal entities to meet future water infrastructure replacement needs (including the identification of State funding sources considered).

**Your input is crucial to completing this task successfully.** This survey is your opportunity to have your voice heard and your community's needs considered. Your participation in this survey is the only way to obtain important information for use in making financial decisions that could profoundly affect the ability of municipal entities to provide water supply services in Region P.

**If you have any questions regarding this survey, please contact:**

Mark V. Lowry, P.E. @ (512) 457-7736; lowrym@tcbaus.com

**or**

Connie M. Hinojos @ (512) 457-7732; hinojos@tcbaus.com

**PLEASE** take a few minutes to fill out the attached survey and **RETURN** the completed survey in the **POSTAGE-PAID RETURN ENVELOPE** by Friday **March 15, 2002**.

Thank you for your assistance!

### **3<sup>rd</sup> & Final Notice, March 18, 2002**

Our records indicate that we have not yet heard from you

## **Lavaca Region (P)**

### **Municipal Water Infrastructure Financing Survey**

The Lavaca Regional Water Planning Group (LRWPG) sent out surveys on or about January 18, 2002 to the Municipal Water User Groups in Lavaca, Jackson, and western Wharton counties. Follow-up surveys were sent February 18th to those who had not responded by February 15, 2002. This is your final opportunity to participate in this important financial needs survey. **The primary objectives of this survey are:**

- to determine the number of municipal entities that have projected infrastructure replacement needs during the 50-year planning period, but are unable to pay for these needs without some form of outside financial assistance;
- to determine how much of the infrastructure replacement costs needed cannot be paid for solely using local utility revenue sources; and,
- to determine the financing options proposed by the municipal entities to meet future water infrastructure replacement needs (including the identification of State funding sources considered).

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If you have **any** questions regarding this survey, please contact:

Mark V. Lowry, P.E. @ (512) 457-7736; lowrym@tcbaus.com

**or**

Connie M. Hinojos @ (512) 457-7732; hinojos@tcbaus.com

**PLEASE** take a few minutes to fill out the attached survey and **RETURN** the completed survey in the POSTAGE-PAID RETURN ENVELOPE by Friday **April 15, 2002**.

Thank you for your assistance!



## **Lavaca Region (P)**

### **Agricultural Water Infrastructure Financing Survey**

**Background:** On January 5, 2001, each of the 16 Regional Water Planning Groups (RWPGs) across the State of Texas formally submitted an adopted regional water plan to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). These regional water plans examined and analyzed the water supply needs for all of the water users in the State. Based on these analyses, the RWPGs identified water management strategies that would be necessary to ensure sufficient additional water supplies for the 50-year planning period. Preliminary capital cost estimates were also developed for each of the strategies recommended.

This year Senate Bill 2 (77<sup>th</sup> Texas Legislature) has expanded the RWPGs' assignments to include the examination of what financial assistance, if any, is needed to implement each of the recommended water management strategies. Specifically, the RWPGs are required to report to the TWDB how all of the political subdivisions (municipalities, counties, water districts, etc.) in Texas propose to pay for future water infrastructure needs.

**Since 96% of Region P's water use is for agriculture**, the TWDB was requested to survey the infrastructure needs that exist for agricultural water users in the Lavaca Regional Water Planning Area. **Your input is crucial to completing this task successfully.**

Attached is a **survey** requesting information on existing and/or potential water conservation saving strategies that currently apply or could apply to **your** agricultural water practices. Your participation in this survey would be greatly appreciated.

**PLEASE RETURN** the completed survey in the postage-paid return envelope by Friday **February 15, 2002** to:

Mark V. Lowry, P.E.  
400 W. 15<sup>th</sup> Street, Suite 500  
Austin, Texas 78701  
FAX (512) 472-7519  
E-mail: [mark.lowry@tcb.aecom.com](mailto:mark.lowry@tcb.aecom.com)

If you have any questions regarding this survey, please contact:

Mark V. Lowry, P.E. @ (512) 457-7736;  
**or**  
Connie M. Hinojos @ (512) 457-7732.

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Telephone: ( \_\_\_\_\_ ) \_\_\_\_\_ E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	\$8.52 per foot	Canal lining – assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

\_\_\_\_\_

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

\_\_\_\_\_

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes – How many thousands of feet? \_\_\_\_\_

If Yes – Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2<sup>nd</sup> Notice, February 18, 2002**  
**Our records indicate that we have not yet heard from you**

**Lavaca Region (P)**  
**Agricultural Water Infrastructure Financing Survey**

The Lavaca Regional Water Planning Group (LRWPG) sent out surveys on or about January 18, 2002 to the larger farms in Lavaca, Jackson, and western Wharton counties. **The primary objectives of this survey are:**

- to determine the amount of water-related agricultural needs that are projected for the 50-year planning period in Region P;
- to determine how much of the infrastructure costs needed cannot be paid for solely using local agricultural revenue sources; and,
- to determine the financing options proposed by the agricultural entities to meet future water infrastructure needs (including the identification of State funding sources considered).

**96% of the Lavaca Region's water use is for agriculture and your input is crucial to completing this task successfully.** This survey is your opportunity to have your voice heard and your needs considered. Your participation in this survey is the only way to obtain important information for use in making financial decisions that could profoundly affect the viability of agriculture in Region P.

**If you have any questions regarding this survey, please contact:**

Mark V. Lowry, P.E. @ (512) 457-7736; lowrym@tcbaus.com

**or**

Connie M. Hinojos @ (512) 457-7732; hinojos@tcbaus.com

**PLEASE** take a few minutes to fill out the attached survey and **RETURN** the completed survey in the **POSTAGE-PAID RETURN ENVELOPE** by Friday **March 15, 2002**.

Thank you for your assistance!

### **3<sup>rd</sup> & Final Notice, March 18, 2002**

**Our records indicate that we have not yet heard from you**

## **Lavaca Region (P)**

### **Agricultural Water Infrastructure Financing Survey**

The Lavaca Regional Water Planning Group (LRWPG) sent out surveys on or about January 18, 2002 to the larger farms in Lavaca, Jackson, and western Wharton counties. Follow-up surveys were sent February 18th to those who had not responded by February 15, 2002. This is your final opportunity to participate in this important financial needs survey. **The primary objectives of this survey are:**

- to determine the amount of water-related agricultural needs that are projected for the 50-year planning period in Region P;
- to determine how much of the needed infrastructure costs cannot be paid for solely using local agricultural revenue sources and require some form of outside financial assistance; and,
- to determine the financing options proposed by the region's agricultural entities to meet future water infrastructure needs (including the identification of State funding sources considered).

**96% of the Lavaca Region's water use is for agriculture and your input is crucial to completing this task successfully.** This survey is your opportunity to have your voice heard and your needs considered. Your participation in this survey is the only way to obtain important information for use in making financial decisions that could profoundly affect the viability of agriculture in Region P.

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Thank you for your assistance!

**Definition of the State Participation Program (SPP):**

The SPP enables the TWDB to purchase a temporary ownership interest in a regional project when local sponsors are unable to assume the debt for an optimally sized facility. The TWDB may acquire ownership interests in the water rights or a co-ownership interest in the property or treatment works. Currently, the TWDB's participation is limited to a maximum of 50 percent of the project costs and to the portion of the project designated as "excess" capacity. There is also a requirement that the project cannot be reasonably financed without state participation assistance, and that the optimum regional development of the project cannot be reasonably financed without the state participation. (for additional information, see the TWDB website at [http://www.twdb.state.tx.us/assistance/assistance\\_main.htm](http://www.twdb.state.tx.us/assistance/assistance_main.htm))

**APPENDIX C**  
**TWDB-REQUIRED SURVEY RESPONSE RECORD**

Agricultural IFR Survey Results Table

Agricultural Entity	County	Water User Type	Response to Survey (Y/N)	Already Incorporated Ag Water Conservation Strategy(s)? (Y/N)	List Incorporated Water Conservation Strategy(s)	# acres to benefit from any of the WC Strategies?	Do you have any unlined canals? (Y/N)	Length of Unlined Canals? (feet)	Are you interested in canal lining or piping? (Y/N)	Lack of funding - major reason for not doing WC Strategy(s)? (Y/N)	Can contribute if some type of matching funds available?	List Other WC Strategies that you would be interested in
1. Gabrysch Farms	Jackson	None	Y	-	Dry Land Farmers - they do not irrigate	-	-	-	-	-	-	Dry Land Farmers - they do not irrigate
2. S&W Farms	Jackson	Irrigation	Y	Y	have laser leveled - 800 acres	1,600	Y	57,000	Y	Y	25%	-
3. Morales Farms	Jackson	Irrigation	Y	Y	laser leveling, multiple inlets and pipe conversion	-	Y	5,000	-	Y	50	-
4. Triple K Farms	Jackson	Irrigation	Y	Y	have laser leveled - 1,000 acres	-	Y	25,000	Y	Y	\$ - 40,000	using tail water
5. Mustang Exploration Co., Ltd.	Jackson	Irrigation	Y	Y	laser leveling + multiple inlets (300 acres); replaced canals w/pipes (1,500 acres)	2,000	Y	1,000	Y	Y	20%	-
6. OR & M Kubecka Farms	Jackson	Irrigation	Y	Y	laser leveling + multiple inlets (100 acres)	-	Y	1,000	Y	Y	\$ 5,000	spinkler system
7. H&S Farms	Jackson	Irrigation	Y	N	-	3,200	Y	10,000	Y	Y	\$10,000/yr canals; \$15,000/yr laser level	presently constructing facilities to catch runoff and tailwater from rice fields and reuse in irrigation system
8. Stuhrenberg Farms	Jackson	Irrigation	Y	Y	Replaced canals w/ underground pipe on 324 acres	-	N	-	-	Y	\$30,000	could make improvements to 30-100 acres/year with funding assistance
9. Harry Mauritz Farms	Jackson	Irrigation	Y	Y	Laser level/multiple inlets (250 ac); improved seed varieties (250 ac)	-	Y	32,000+	N	Y	-	-
10. TAES, Jackson Co.	Jackson	County-wide Irrigation	Y	Y	Laser leveling (80% of acreage); underground pipeline (1,000 acres); improved varieties (all)	-	Y	all existing canals are unlined	Y	Y	50%	possibilities include sprinkler irrigation; conservation tillage to germinate rice seed w/o additional flooding
11. Smith Farms	Jackson	Irrigation	Y	N	his 4 wells caved in and are beyond repair; has not farmed rice since 1996	-	-	-	-	-	-	his 4 wells caved in and are beyond repair; has not farmed rice since 1996
12. Jackson Cty. NRCS	Jackson	-	Y	-	-	-	-	-	-	-	-	only wrote that he had no personal farming interest
12. Bergstrom Family JV	Jackson	None	Y	-	does not irrigate	-	-	-	-	-	-	-
1. Appling Farms	Lavaca	Irrigation	Y	Y	Replaced canals w/ underground pipe & land leveled	900	Y	2,000	Y	Y	-	store all waste water for reuse
2. Schmidt Brothers	Lavaca	Irrigation	Y	Y	have laser leveled - 200 acres	300	Y	2,000	Y	Y	-	-
3. Lynell Freeman & Freeman Family Trust	Lavaca	Irrigation	Y	Y	laser leveling & multiple inlets (~840ac)	560	Y	33,000	Y	Y	15%	natural grade of property would be good for a large lake to store large quantity of water and pipe back up to top of property for irrigation - would dramatically cut down on use of groundwater, but can't afford cost; have considered this for ~20 years.
4. Lavaca City Farm Bureau	Lavaca	County-wide Irrigation	Y	Y	improved seed varieties of grass	-	don't use canals	-	-	-	-	There is very little irrigation done in Lavaca Co. & its from direct groundwater
5. Four E Dairy	Lavaca	Livestock	Y	N	dairy farmers - do not irrigate	-	-	-	-	-	-	Dairy farmers - do not irrigate
6. Anthony & Amy Drik JV	Lavaca	Irrigation	Y	N	-	800	Y	7,020	N	Y	50%	has 800 ac to benefit from laser level/multiple inlets & 1.5 miles of unlined canals that could be lined or piped
7. BMB Investments, Ltd.	Lavaca	Irrigation	Y	N	-	-	N	-	N	N	unknown	preventing erosion
8. Borchers S.Y Ranches, L.P.	Lavaca	Irrigation	Y	N	-	none	N	-	N	N	-	No
9. Wigginton Family JV	Wharton	Irrigation	Y	N	-	1,200	Y	18,000	Y	Y	25%	-
10. A.A. Priesmeyer & Sons	Wharton	Irrigation	Y	Y	laser leveling + multiple inlets	1,000	Y	-	Y	N but could use some assistance	-	-
11. Schmidt Brothers (Wharton Co)	Wharton	Irrigation	Y	Y	replaced 4,950 feet of unlined canals w/ pipes	-	Y	26,190	Y	Y	-	-
12. NRCS - Wharton Co.	Wharton	Region P Irrigation	Y	Y	for all of the Region P portion of Wharton County have used laser leveling, underground pipeline, multiple inlets	-	Y	Region P 400,000	Y	Y	-	tail water recovery systems, pest management on existing canal systems, inline flow meters
13. Lowell Farms/Wolf Run Farms	Wharton	Irrigation	Y	Y	have laser leveled 2,000 acres; replaced 700 acres of unlined canals w/ pipes	500ac mult.inlets; 1,500ac canal lining; 1,500ac pipelines	Y	44,000	Y	Y	\$ 20,000	-
14. Arroz Joint Venture	Wharton	Irrigation	Y	Y	3,000ac. Laser leveled; 1,500ac. Multiple inlets; 2,400ac. Replace canals with pipelines	-	Y	18,000	Y	N	-	-
15. Tomcat JV	Wharton	Irrigation	Y	Y	multiple inlets on all fields (~550ac/yr); improved seed varieties early or very early maturing on every acre; laser leveling to fill in ponds with high (~10% of acreage).	-	Y	10,000	Y	Y	depends on new farm bill	I would like to learn about canal lining
16. Stephen Goersch Farms	Wharton	Irrigation	Y	Y	laser level/multiple inlets, canal replacement, improved seed varieties (~500 acres)	-	Y	4,000	Y	Y	\$ 10,000	-
17. K&L Farms	Wharton	Irrigation	Y	Y	Laser level/multiple inlets	-	Y	80,000	Y	Y	can't give answer until we have a farm program	I have started placing drop boxes at the outlets in place of backhoe cuts in the levees. These are ~5400 each; have placed new pipes & bulkheads to require less water in the canal to water specific fields.
18. Pin Oaks Farms II	Wharton	Irrigation	Y	Y	Laser leveled ~200ac - 200ac can be watered w/o use of canals	1,000	Y	12,500	Y	Y	\$150,000 (over time)	Interested in laser leveling & underground pipe; I'm unaware of canal lining & its conservation level
19. 441-S Farms	Wharton	Irrigation	Y	Y	laser level/multiple inlets (800ac); replace canals w/pipes (750' ac or ft)	-	Y	2,500	Y	Y	60%	-
20. Pear Farms	Wharton	Irrigation	Y	Y	have laser-leveled 250 acres and have installed underground irrigation pipes on 400 acres.	-	Y	2,500	Y	Y	\$4,000	-
21. FSA, Wharton Co.	Wharton	None	Y	-	he answered as an individual instead of as a county agent for statistics within Wharton Co.	-	-	-	-	-	-	-
22. Frank Zboril & Sons	Wharton	Irrigation	Y	Y	(# acres unknown) laser leveling; replacing canals w/ pipes; improved seed varieties	-	Y	-	Y	Y	unknown	-

Important issue raised by several farmers during survey follow-up & Region P meetings: He leases the land he farms on a year-to-year basis. The landowners won't make any water conservation improvements and without an extended lease, it would not be cost effective for him to pay for improvements himself. He has done some laser-leveling on his own, but to do underground pipe there would have to be some type of cost-sharing (canals and eventual leases would be very helpful as well).

Agricultural Survey Response Record

Contact Name	Job Title	Agricultural Entity	County	Street Address	City	State	Zip Code	Date Original Survey Mailed	Date Follow Up Survey #1 Mailed	Date Follow Up Survey #2 Mailed	Response Received (Y/N)
1	Johnay Kallus	Cty. Exec. Dir.	FSA, Jackson Co	Jackson	700 N Wells St., Ste 202	Edna	TX 77957	1/18/02	-	-	1/24/02
2	Dennis Mueck	Nat. Res. Dir.	NRCS, Wharton Co	Wharton	2225 Highway 59 Loop S	Wharton	TX 77488	1/18/02	-	-	2/1/02
3	Gary Skalky	Partner	S & W Farms	Jackson	Hwy 172 S	Ganado	TX 77962	1/18/02	-	-	1/28/02
4	Wayne, Kent, Glenn Gabrysch	Partners	Gabrysch Farms	Jackson	2488 CR 324	Edna	TX 77957	1/18/02	-	-	1/28/02
5	Ronald Gates	Owner	Morales Farms	Jackson	Yoakum Hwy	Edna	TX 77957	1/18/02	-	-	1/24/02
6	Bill Kubecka	Agent	O.R. Sr & M. Kubecka Farms	Jackson	P O Box 1024	Palacios	TX 77465	1/18/02	-	-	2/11/02
7	John H. Roades	-	Mustang Exploration Co., Ltd.	Jackson	8 County Road 117	Edna	TX 77957	1/18/02	-	-	2/7/02
8	Bill Schmidt	Partner	Schmidt Brothers Jv	Lavaca	19011 FM 530	Hallettsville	TX 77964	1/18/02	-	-	1/28/02
9	W H. Appling	Manager	Appling Farms	Lavaca	PO Box 1387	El Campo	TX 77437	1/18/02	-	-	1/28/02
10	Lynell Freeman	-	Lynell Freeman	Lavaca	PO Box 354	Brookshire	TX 77423	1/18/02	-	-	2/5/02
11	Arthur A. Priesmeyer	-	A. A Priesmeyer & Sons	Wharton	HC 62 Box 39	El Campo	TX 77437	1/18/02	-	-	2/4/02
12	Layton Raun	Partner	Arroz JV	Wharton	201 W. Webb	El Campo	TX 77437	1/18/02	-	-	2/5/02
13	Gavnard Wigginton	Partner	Wigginton Family JV	Wharton	1009 W. Norris	El Campo	TX 77437	1/18/02	-	-	1/24/02
14	LG Raun	Owner/Manager	Lowell Farms/Wolf Run Farms	Wharton	4 N Washington St	El Campo	TX 77437	1/18/02	-	-	2/11/02
15	Craig Schmidt	-	Schmidt Brothers JV	Wharton	PO Box 784	El Campo	TX 77437	1/18/02	-	-	2/4/02
16	David E Wagner	President	Farm Bureau, Lavaca Co.	Lavaca	PO Box M	Hallettsville	TX 77964	1/18/02	-	-	2/1/02
17	Stephen Heard	Partner	H & S Farms	Jackson	P O Box 74	Elmston	TX 77440	1/18/02	-	-	2/1/02
18	Tommy Turner	Partner	Tomcat JV	Wharton	HC 1 Box 58-B	Louise	TX 77455	1/18/02	-	-	2/11/02
19	Steven Goetsch	Partner	Steven Goetsch Farms	Wharton	RT 2 Box 176	El Campo	TX 77437	1/18/02	-	-	2/11/02
20	Jon L. Richards	Partner	Pin Oaks Farms	Wharton	HC 1 Box 69	Louise	TX 77455	1/18/02	-	-	2/13/02
21	Lance Raun	Partner	K & L Farms	Wharton	PO Box 686	El Campo	TX 77437	1/18/02	-	-	2/14/02
22	Marvin E. Lesikar	Cty. Ext. Agent	TAES, Jackson Co.	Jackson	411 North Wells	Edna	TX 77957	1/18/02	2/18/02	-	2/25/02
23	Billy Smith	-	Smith Farms	Jackson	County Road 240	Ganado	TX 77962	1/18/02	2/18/02	-	2/25/02
24	Bill, Steve, Marvin Stuhrenberg	Partners	Stuhrenberg Farms	Jackson	9724 State Hwy 35	Palacios	TX 77465	1/18/02	2/18/02	-	-2-19-02
25	Buddy Brock	Trustee	Harry Mauritz Farms	Jackson	PO Box 1208	Ganado	TX 77962	1/18/02	2/18/02	-	2/25/02
26	Elyse Chaloupka	Sec. - Tres	Four E Dairy Inc	Lavaca	784 CR 251	Moulton	TX 77975	1/18/02	2/18/02	-	2/25/02
27	Anthony & Amy Drlak	-	Anthony & Amy Drlak Jv	Lavaca	1377 Old Nada Road	Nada	TX 77460	1/18/02	2/18/02	-	2/28/02
28	Greg & Robert Schmidt	-	441 S Farms	Wharton	RT 1 Box 48-A	Louise	TX 77455	1/18/02	2/18/02	-	3/1/02
29	Leroy Mikeska	Nat. Res. Mgr.	NRCS, Jackson Co.	Jackson	700 North Wells St., Rm 200	Edna	TX 77957	1/18/02	2/18/02	-	3/7/02
30	Peter and Frankie Petr	-	Petr Farms	Wharton	RT 3 Box 79-B	El Campo	TX 77437	1/18/02	2/18/02	-	3/7/02
31	Chad Graham	-	Chad Graham	Lavaca	PO Box 1448	El Campo	TX 77437	1/30/02	2/18/02	-	unable to contact
32	-	-	J K Farm & Ranch	Jackson	-	Port Lavaca	TX 77979	1/18/02	2/18/02	-	unable to contact
33	-	-	Gadeke Bros	Wharton	PO Box 1029	El Campo	TX 77437	1/18/02	2/18/02	-	unable to contact
34	-	-	Cordele JV	Jackson	510 S. East Street	Edna	TX 77957	1/18/02	2/18/02	-	unable to contact
35	John Macha	President	Farm Bureau, Jackson Co	Jackson	PO Box 550	Edna	TX 77957	1/18/02	2/18/02	3/18/02	-
36	Daniel Gavranovic	President	Farm Bureau, Wharton Co	Wharton	PO Box 548	Wharton	TX 77488	1/18/02	2/18/02	3/18/02	-
37	Lawrence Campbell	Cty. Exec. Dir.	FSA, Lavaca Co.	Lavaca	300 S La Grange St.	Hallettsville	TX 77964	1/18/02	2/18/02	3/18/02	-
38	John Williams	Cty. Exec. Dir.	FSA, Wharton Co	Wharton	2225 Highway 59 Loop S	Wharton	TX 77488	1/18/02	2/18/02	3/18/02	3/25/02
39	Don Fabryest	Dist. Technician	NRCS, Lavaca Co	Lavaca	310 South La Grange Street	Hallettsville	TX 77964	1/18/02	2/18/02	3/18/02	-
40	Shannon DeForest	Cty. Ext. Agent	TAES, Lavaca Co.	Lavaca	PO Box 301	Hallettsville	TX 77964	1/18/02	2/18/02	3/18/02	-
41	Richard L. Jahn	Cty. Ext. Agent	TAES, Wharton Co	Wharton	210 S Rusk St	Wharton	TX 77488	1/18/02	2/18/02	3/18/02	-
42	John E. Dudley	President	Cattle Raisers Association	Stac	1301 W. Seventh St.	Fort Worth	TX 76102	1/18/02	2/18/02	3/18/02	-
43	Bob McCann	1st Vice Pres	Cattle Raisers Association	Region P	Box 146	Victoria	TX 77902	1/18/02	2/18/02	3/18/02	-
44	Jeremy Nowlin	-	Koop Farms Jv	Jackson	P O Box 806	Edna	TX 77957	1/18/02	2/18/02	3/18/02	-
45	-	-	3n Farms	Jackson	PO Box 147	La Ward	TX 77970	1/18/02	2/18/02	3/18/02	-
46	-	-	Shoemate Brothers Farms	Jackson	P O Box 741	Edna	TX 77957	1/18/02	2/18/02	3/18/02	-
47	-	-	Allen Farms	Jackson	643 CR 107	Lolita	TX 77971	1/18/02	2/18/02	3/18/02	-
48	-	-	Sappington Farms	Jackson	7135 FM 234 S	Edna	TX 77957	1/18/02	2/18/02	3/18/02	-
49	-	-	McCormack Farming Co	Jackson	P O Box 486	Edna	TX 77957	1/18/02	2/18/02	3/18/02	-
50	Robert Bergstrom	-	Bergstrom Family JV	Jackson	607 Wilston St	Edna	TX 77957	1/18/02	2/18/02	3/18/02	3/25/02
51	Preston Ficus	-	P F Farms, Jv	Lavaca	1101 W. Norris	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
52	-	-	Bunge Farms Jv	Lavaca	PO Box 32	Garwood	TX 77442	1/18/02	2/18/02	3/18/02	-
53	-	-	Bar Z Ranch Jv	Lavaca	RR 3 Box 216	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
54	-	-	Glaze Farms	Lavaca	RR 3 Box 249	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
55	Charles L. Borchers	Partner	Borchers S. Y Ranches Lp	Lavaca	# 1 O'Conner Plaza	Victoria	TX 77901	1/18/02	2/18/02	3/18/02	3/27/02
56	Rav Allen Williamson	-	Rav Allen Williamson	Lavaca	PO Box 403	Hallettsville	TX 77964	1/18/02	2/18/02	3/18/02	-
57	William H Borchers	Partner	BMB Investments, Ltd.	Lavaca	251 S. Seguin Ave	New Braunfels	TX 78130	1/18/02	2/18/02	3/18/02	3/22/02
58	Otto Borchers	-	Otto Borchers	Lavaca	1307 E. Gonzales	Yoakum	TX 77995	1/18/02	2/18/02	3/18/02	-
59	Frank Zboril III	Partner	Frank Zboril Jr & Sons	Wharton	RT 3 Box 222	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	3/25/02
60	Herbert Rhoades	-	Rhoades Farms JV	Wharton	PO Box 467	Louise	TX 77455	1/18/02	2/18/02	3/18/02	-
61	Lowell Raun Sr	-	Raun Farms JV	Wharton	2706 Hutchins Lane	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
62	Donald Raiter	-	FJ Meria Sons	Wharton	HCR 1 Box 39	Louise	TX 77455	1/18/02	2/18/02	3/18/02	-
63	-	-	John Paul Appling Farms	Wharton	PO Box 1387	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
64	David & Lisa Green	-	David & Lisa Green Farms	Wharton	PO Box 486	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
65	Chrs & Patti Supak	-	Chrs & Patti Supak Farms	Wharton	HCR 1 Box 46	Louise	TX 77455	1/18/02	2/18/02	3/18/02	-
66	-	-	Harfat Family JV	Wharton	PO Box 749	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
67	-	-	Goff & Henry Farms	Wharton	RT 2 Box 132	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
68	-	-	Double A Farms	Wharton	HC 62 Box 26	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
69	Lawrence & Leithyn Roddy	-	L & L Roddy Jv	Wharton	RT 2 Box 124	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-
70	Daniel Sulak	-	Sulak Brothers	Wharton	PO Box 301	Louise	TX 77455	1/18/02	2/18/02	3/18/02	-
71	Kenneth & Patricia Korenek	-	K & P Korenek	Wharton	RT 3 Box 259	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-

Municipal Survey Response Record

Contact Name	Job Title	Municipal Entity	County	Street Address	City	State	Zip Code	Date Original Survey Mailed	Date Follow Up Survey #1 Mailed	Date Follow Up Survey #2 Mailed	Response Received (Y/N)
1	Hunter A. Kari	Mayor Pro-Tem	City of La Ward	Jackson	PO Box 66	La Ward	TX 77970	1/18/02	-	-	2/4/02
2	Patricia Hertz *	Treasurer	La Salle Landing WSC	Jackson	2541 FM 234 S	Edna	TX 77957	1/18/02	-	-	1/24/02
3	Michael Slobojan	City Administrator	City of Moulton	Lavaca	102 S. Main	Moulton	TX 77975	1/18/02	-	-	1/24/02
4	Norma Goetz	City Secretary	City of Shiner	Lavaca	810 N. Avenue E	Shiner	TX 77984	1/18/02	-	-	1/24/02
5	Calvin Cook	Dir., Public Works	City of Yoakum	Lavaca	900 Irvine Street	Yoakum	TX 77995	1/18/02	2/18/02	-	3/4/02
6	Eula MacCrowell	Secretary	Wharton Cty. WCID # 1	Wharton	PO Box 395	Louise	TX 77455	1/18/02	2/18/02	-	2/19/02
7	Madeline Shimek	President	Isaacson Mun. Util. Dist.	Wharton	PO Box 83	El Campo	TX 77437	1/18/02	2/18/02	-	3/5/02
8	Tom Donnelly	City Administrator	City of Hallettsville	Lavaca	101 N. Main St.	Hallettsville	TX 77964	1/18/02	2/18/02	3/18/02	4/15/02
9	Bill Haack	Vice President	Jackson Cty. WCID # 1	Jackson	PO Box 407	Lolita	TX 77971	1/18/02	2/18/02	3/18/02	4/18/02
10	Mary Baker	System Sect.	Jackson Cty. WCID # 2	Jackson	PO Box 574	Vanderbilt	TX 77991	1/18/02	2/18/02	3/18/02	3/20/02
11	James Killough	Utilities Director	City of Edna	Jackson	126 W. Main St.	Edna	TX 77957	1/18/02	2/18/02	3/18/02	-
12	Terry Ramey	Dir., Public Works	City of Ganado	Jackson	112 E. Putman	Ganado	TX 77962	1/18/02	2/18/02	3/18/02	-
13	-	Office Manager	Cape Carancahua WSC	Jackson	HC 2-Box 214	Palacios	TX 77465	1/18/02	2/18/02	3/18/02	-
14	John Steeman	Dir., Public Works	City of El Campo	Wharton	315 E. Jackson St.	El Campo	TX 77437	1/18/02	2/18/02	3/18/02	-





**APPENDIX D**  
**SURVEY RESULTS TABLES**  
**(AND TWDB-FORMATTED DATA TABLE)**

### Municipal IFR Survey Results Table

Political Subdivision (Pol/Sub)	Water User Type	Response from Pol/Sub (Y/N)	Strategy Name	Strategy Date	Total Capital Cost (\$)	Does Utility have infrastructure needs?	Q1 (\$) Can Pay	Q2 (\$) Can Pay W/State Participation	Q3 (\$) Cannot Pay
1	La Salle Landing WSC	Municipal	Y	Drilling new well and re-piping subdivision (61 lots)	?	?	Y	~ 50%	
2	City of Moulton	Municipal	Y	1.) Rebuild main pumphouse; 2.) Upgrade 5,000ft of mains; 3.) Water tower replacement; 4.) New well.	1.) Feb 2002; 2.) Aug 2002; 3.) 2006; 4.) 2010	-	N	-	-
3	City of Shiner	Municipal	Y	-	-	-	N	-	-
4	City of La Ward	Municipal	Y	-	-	-	N	-	-
5	Wharton Cty, WCID #1	Municipal	Y	Water line improvements; possibly adding another well (there are 2 existing wells)	-	-	Y	50%	-
6	Jackson Cty., WCID #2	Municipal	Y	1.) Need a new water well & necessary lines to connect into existing WTP & distribution system; 2.) Need to expand existing distribution system to accommodate 600 resident population and 1,200 transient population.	-	-	Y	unknown	-
7	City of Yoakum	Municipal	Y	water mains = \$15,280,624; GST & EST = \$2,190,000; booster stations = \$240,000; controls = \$240,000; wells = \$1,680,000; total = \$19,630,624. TWDB projected 2050 population is 9,836	-	\$ 19,631,000	Y	50%	-
8	Isaacson MUD	Municipal	Y	1.) water & sewer mainline extensions for new customers (small #, maybe 6); 2.) replace original 2nd grade material (was supposed to be copper on original blueprints) for 200+ customer lines, each 10feet long.	-	-	Y	unknown	-
9	Jackson Cty., WCID #1	Municipal	Y	Need: Aeration tank, pumps, and related materials. Population 800; 212 household connections	-	-	N	\$ 25,000	-
10	City of Hallettsville	Municipal	Y	wells, lines, elevated & above ground storage tanks, booster station. Residential/Commercial/Industrial projected use in 2051 will be 433 MG/year. If drastic conservation measures are implemented this decade, normal growth & conservation will yield a 600 MG/year usage.	-	-	Y	unknown	-

Note: the TWDB did not provide an IFR Data Table Template for the Region P Municipal Survey.

Below is a summary of results from the responses to the Agricultural Infrastructure Survey:

(1) <b>Total # surveyed:</b>	71	100%	of surveys sent out
(2) <b># responses to date:</b> (5 respondents, 7%, do not irrigate; an additional 4 farms could not be contacted, 5.6%)	35	49%	of surveys sent out
(3) <b># respondents that have already incorporated some water conservation practices:</b>	23	66%	of those responding
<b>of these 23 respondents:</b>			
(3a.) laser level / multiple inlets	19	83%	of these respondents
(3b.) canal lining	0	0%	of these respondents
(3c.) canal replacement w/ pipes	12	52%	of these respondents
(3d.) improved seed varieties	5	22%	of these respondents
(4) <b>Total acreage already laser leveled</b>	12,891	<i>not all respondents specified a value</i>	
<b>Total acreage still needing laser leveling</b>	14,060	<i>not all respondents specified a value</i>	
Cost estimate to maintain existing laser leveling & creating new laser leveling:	\$2,937,659		
(Laser leveling needs to be re-done about every third use, which would be ~ every 9 years)			
(5) <b>Total acreage already replaced with pipes</b>	7,474	<i>not all respondents specified a value</i>	
<b>Total acreage still needing pipe replacement</b>	6,600	<i>not all respondents specified a value</i>	
<b>Total canal feet still needing pipe replacement</b>	423,110	<i>not all respondents specified a value</i>	
Cost estimate to replace canals w/ new underground piping:	\$3,604,897		
(6) <b># respondents with unlined canals:</b>	24	69%	of those responding
(7) <b># feet of existing unlined canals:</b>	423,110 feet		
Of those with unlined canals, 20 respondents specified a length, for which the sum is shown above. Note: Wharton Co. NRCS estimated there was probably a total of 400,000 feet of unlined canals in Region P, which is significantly less than the farmers are indicating.			
(8) <b># respondents interested in water conservation:</b>	20	83%	% based on the 24 respondents
(9) <b># respondents lacking funding for conservation:</b>	22	92%	indicating need
(10) <b># respondents that gave an estimate of the money they could afford to pay for water conservation efforts, which include laser leveling, multiple inlets, canal lining or pipeline replacement, and/or improved seed varieties:</b>			
(10a.) gave answer as actual dollar amount	8	33%	% based on the 24 respondents
(10b.) gave answer as % of the total cost	7	29%	indicating need

Based on information from the 2001 Adopted Region P Water Plan (rice acreages and cost data), below are estimations of the funding needed for agricultural infrastructure:

Region P County	* 5-Year Average Planted Rice Acreage (1994-1998)	Laser Level Costs	Pipeline Replacement of Canals Costs**
Lavaca Co	3,290	\$358,610	\$560,616
Jackson Co	24,873	\$2,711,157	\$4,238,359
Wharton Co (partial)	23,553	\$2,567,277	\$4,013,431
<b>Total</b>	<b>51,716</b>	<b>\$5,637,044</b>	<b>\$8,812,406</b>

\* Estimate that 1/3 of a farmer's land is planted per year for rice; and planted acreage is rotated every year.

\*\* Cost based on estimate of an average of 20 feet of canal per acre.

**APPENDIX E**  
**ACTUAL SURVEY RESPONSES RECEIVED**  
(Xerox copies of completed survey forms)

### Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: City of Meadton

Contact Person: Michael J. Slobojan Title: City Administrator

Telephone: (361) 596-4671 E-mail: \_\_\_\_\_

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes  No

If Yes - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

① Rebuild MAIN pumphouse Feb-2002 1,200 pop served

② Upgrade 5,000ft MAINS Aug 2002

③ New well 2010-2012

④ Water Tower replacement 2006

2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes  No

If No - How much of the necessary capital costs could your utility pay? \$ \_\_\_\_\_

If No - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes  No

If No - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

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# Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: CITY OF LAWARD

Contact Person: HUNTER A. KARL Title: MAYOR PRO-TEM

Telephone: (361) 872-2468 E-mail: \_\_\_\_\_

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes  No \_\_\_\_\_

If Yes - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

Water utility really doesn't need improvements, but we will be looking into expanding our wastewater facility in the future.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes \_\_\_\_\_ No \_\_\_\_\_ *in process of making rate changes?*

If No - How much of the necessary capital costs could your utility pay? \$ 0

If No - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes \_\_\_\_\_ No

If No - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

Have not had any problems as of this date.

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### Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: LeSalle Landing WSC

Contact Person: Patricia Hertz Title: Pres.

Telephone: (361) 78-26931 E-mail: patricia.hertz@aol.com

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes  No

If Yes - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

Drilling new well  
and re-piping sub-division (61 lots)

2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes  No

If No - How much of the necessary capital costs could your utility pay? \$ possibly half.

If No - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes  No

If No - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

Open for suggestions as to  
how program works and what  
requirements are to be  
met ???  
F.P.S. Am on the regional water for Region P  
would this make our group eligible?

Note: need address  
and contact person (Patricia Hertz)

### Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: Wharton County Water Control Improvement District #1

Contact Person: Eula Mae Crowell Title: Secretary

Telephone: (979) 648 2615 E-mail: \_\_\_\_\_

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes  No

If Yes - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

Improve water lines  
Possibility of adding another well to the  
2 existing wells

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2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes  No

If No - How much of the necessary capital costs could your utility pay? \$ 5070

If No - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes  No

If No - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

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### Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: Isaacson Municipal Utility District

Contact Person: Laurie Jahn Title: Manager

Telephone: (979) 543-6844 E-mail: \_\_\_\_\_

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes  No

If Yes - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

1) Water & Sewer Main Line extensions for new customers. (Small) Maybe 6 new customers.

2) Replace original second grade material, which was suppose to be copper on original Blueprints. (Large) 200+ customer lines each 10ft. long.

2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes  No

If No - How much of the necessary capital costs could your utility pay? \$ not sure

If No - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes  No

If No - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

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# Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: City of Yoakum

Contact Person: Calvin Cook Title: City Manager

Telephone: ( 361 ) 293-6321 E-mail: —

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes x No —

If **Yes** - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

Water Mains	\$15,280,624
Elevated & Ground Storage	2,190,000
Booster Stations	240,000
Controls	240,000
Wells	1,680,000
<b>Total</b>	<b>\$19,630,624</b>
TWDB Pop..Projection 2050 =	9,836

2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes — No x

If **No** - How much of the necessary capital costs could your utility pay? \$ 50%

If **No** - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes x No —

If **No** - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

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# Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: JACKSON COUNTY - WATER CONTROL & IMP. DIST. #2

Contact Person: MARY BAKER Title: SYSTEM SECT.

Telephone: (361) 284-3577 E-mail: \_\_\_\_\_

- 1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes  No

If Yes - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

NEED A NEW WATER WELL AND NECESSARY LINES TO CONNECT  
INTO EXISTING FROM WATER TREATMENT PLANT & DISTRIBUTION  
SYSTEM. ALSO NEED TO EXPAND EXISTING DISTRIBUTION  
SYSTEM TO ACCOMMODATE OUR REGIONAL POPULATION  
AND 1200 TRANSIENT POPULATION.

- 2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes  No

If No - How much of the necessary capital costs could your utility pay? \$ NOT KNOWN

\* If No - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes  No

If No - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

WE WOULD CONSIDER ANY SOURCES OF FUNDING THAT  
ARE AVAILABLE.

\* NEED MORE INFORMATION ABOUT THE STATE PARTICIPATION  
PROGRAM



# Region P Municipal Water Infrastructure Financing Survey

Name of Municipality: Jackson County Water Control and Improvement District No. 1

Contact Person: Bill Haick Title: V-President

Telephone: (361) 874-4369 E-mail: bah@ykc.com

1. Does your water utility have any current or projected infrastructure improvement needs during the 50-year planning period? Yes X No     

If Yes - Please list what these needs are and for what size population and/or size of commercial/industrial water use(s) (use additional sheets, if necessary):

1) Aeration tank, pumps, and related materials  
population - 800  
212 household connections

2. Does your water utility have sufficient revenue sources, including implementing necessary rate and tax increases, to cover the capital costs associated with the needed infrastructure improvements listed in question 1? Yes      No X

If No - How much of the necessary capital costs could your utility pay? \$ 25,000

If No - Would you be interested in accessing in the State Participation Program to help fund these utility improvements? Yes X No     

If No - For the costs your utility cannot pay, what funding option(s) would you propose? What, if any, state funding sources would you consider? (use additional sheets, if necessary)

low interest loan or Grant

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Schmidt Brothers J/V  
 Contact Person: Craig Schmidt Title: Partner  
 Telephone: ( ) \_\_\_\_\_ E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• <u>Laser leveling + multiple inlets</u> – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

Laser leveling 1,551 acres  
replacing canals with pipes 4,950 feet

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 26,190 feet

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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 \_\_\_\_\_  
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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: BORCHERS SOUTHERN Y RANCHES L.P.  
 Contact Person: CHARLES L. BORCHERS MD Title: MANAGING PARTNER  
 Telephone: (361) 575-1297 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	\$8.52 per foot	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No ✓

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

NONE

NONE IN USE

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No ✓

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes \_\_\_\_\_ No ✓

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

No

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Mustang Exploration Co., Ltd.

Contact Person: John H. Roades Title: President

Telephone: ( 979 ) 648-2641 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes x No \_\_\_\_\_

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

1-300 acres

3- 1,500 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

Have an additional 2,000 acres needing underground irrigation pipe and leveling.

2. Do you currently have any unlined canals? Yes x No \_\_\_\_\_

If Yes - How many thousands of feet? 11,000'

If Yes - Would you be interested in canal lining or pipe conversion? Yes x No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes x No \_\_\_\_\_

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 30%

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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 \_\_\_\_\_  
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# Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Gabrysch Farms

Contact Person: Wayne, Kent, Glenn Title: Partners

Telephone: (361) 982-2311 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

~~DO NOT Irrigate Dry Land~~

~~2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No \_\_\_\_\_~~

~~If Yes - How many thousands of feet? \_\_\_\_\_~~

~~If Yes - Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_~~

~~3. Is lack of funds a primary reason for not incorporating water conservation farming practices?~~

~~Yes \_\_\_\_\_ No \_\_\_\_\_~~

~~If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_~~

~~4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_~~

\_\_\_\_\_  
\_\_\_\_\_  
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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: WIGGINTON FAMILY JOINT VENTURE  
 Contact Person: GAYNARD WIGGINTON Title: PARTNER  
 Telephone: (979) 543 5580 E-mail: — NONE

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated: & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining – assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? 1200

ACRES IRRIGATED LAND ACRES NOW IN RICE  
ROTATION OF 1 YEAR IN & ONE YEAR OUT - 600 ACRE  
PER YEAR - FLOOD IRRIGATION

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? BUNCH

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 2590 POSSIBLE

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: STW FARMS  
 Contact Person: GARY SKALICKY Title: PARTNER  
 Telephone: (361) 771-2680 E-mail: -

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

We have presently laser leveled 800 Acres of land that are farmed in rice at this time.

~~How~~ - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

We also have about 1600 acres ~~that~~ more that we are farming that need laser leveling, but cost won't allow us to at today's profits on rice.

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 37,000 ft

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? We could only contribute about 1/4 of actual cost of installation of conservation measures at today's farm profits that you

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: have listed above.

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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Schmidt Bros  
 Contact Person: Bill Schmidt Title: Partner  
 Telephone: (979) - 543-7259 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

Leveling 200 ac

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

300 ac could benefit

2. Do you currently have any unlined canals? Yes  No

If Yes – How many thousands of feet? 3000

If Yes – Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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Ch. Eric Dir. FSA Jackson Co. (No. filled out for his own farm)

### Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Triple K Farms

Contact Person: Johnny J. Kallus Title: Manager

Telephone: (361) 782-2795 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: Laser leveling - 1000 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 15,000

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 40,000

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Assessing tail water

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Lyndell Freeman & Freeman Family TRUST  
 Contact Person: Wayne Freeman Title: \_\_\_\_\_  
 Telephone: (281) 391-1122 E-mail: freefam@fhcc.com

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: #1  
Strategy on 60% of 1400 acres approximately

If No - How many acres could benefit from each of the recommended strategies? The balance could benefit.

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 30-35

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ maybe 10 or 15<sup>th</sup>0

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: Large lake

on East End of Property to store Large Quantity of water and pipe back to Top of property for irrigation. The natural slope of this area would make a great almost Natural retention-area but cost is reason never done. Have considered this for 20 years. IF implemented, could dramatically cut ground water use;



## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: DRS + Martha Kubecka Farms  
 Contact Person: Bill Kubecka Title: agent  
 Telephone: (361) 977-2668 E-mail: -

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• <u>Laser leveling + multiple inlets</u> - assumes 1.4 ac-ft water saved per acre irrigated: & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

#1 - 100 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 10,000'

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 5,000

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Sprinkler system.

### Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: USDA - Natural Resources Conservation Service

Contact Person: Dennis A. Mueck Title: Natural Resource Mgr.

Telephone: (979) 532-0077 Ext. 3 E-mail: dennis.mueck@tx.usda.gov

*This is based on Wharton County area in Region P.*

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: 30,000

Laser leveling, Underground Pipeline, Multiple inlets

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 400,000

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: Tail water

recovery systems, Pest mgmt. on Existing Canal systems, Inline flow meters

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: ARTHUR A. PRIESMEYER & SONS  
 Contact Person: ARTHUR A. PRIESMEYER Title: PARTNER  
 Telephone: (979) 543-4293 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

1 - 1000 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No  - Could use some assistance

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: H&S Farms  
 Contact Person: Stephen Heard Title: Partner / Landowner  
 Telephone: (979) 479-5501 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1.	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2.	Canal lining	\$0.51 per foot	
3.	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4.	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

3,200

2. Do you currently have any unlined canals? Yes  No \_\_\_\_\_

If Yes - How many thousands of feet? 10 1/2 - 12 1/2 miles

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No \_\_\_\_\_

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 10,000.00 + per year (canal lining or pipe)

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Presently constructing facilities to catch run off, and tailwater from rice fields and reuse in irrigation system

→ Could match an additional \$15,000 per year for Laser Level

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Tamcat J.V.

Contact Person: Thomas Turner Title: Partner

Telephone: (979) 543-7831 E-mail: tj7476@wcnet.net

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

multiple inlets on all fields (about 550 acres/year)

Improved seed varieties early or very early maturing on every acre

Laser leveling to fill in ponds with highs (about 10% of acreage)

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 10,000

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ Depends on new farm bill

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
I would like to learn about canal lining.

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: LAVACA COUNTY FARM BUREAU  
 Contact Person: DAVID WAGNER Title: PRESIDENT  
 Telephone: (361) 544-3011 E-mail: dewagner@prodigy.net

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

IMPROVED SEED VARIETIES - I ASSUME YOU ARE TALKING GRASS.

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No 7 WE DON'T USE CANALS

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes \_\_\_\_\_ No there is very little irrigation done in Lavaca County and its from direct groundwater

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Terracing, building stock ponds.

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Pin Oak Farms II

Contact Person: Jon L. Richards Title: Partner

Telephone: (713) 208-9060 E-mail: jrichards@dodi.com

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

- (1) Laser leveling - approximately 220 acres leveled to date  
 (3) Approximately 200 acres can be watered without use of canals.

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

I have approximately 1000 acres that could benefit from laser leveling and irrigation pipe.

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? ~~250~~ 12,500 ft.

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 150,000 over time

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

No. Laser leveling and underground irrigation (pipe)  
is all I am really interested in. I am unaware  
of canal lining and its conservation level.

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: K+L Farms  
 Contact Person: Lance Bann Title: general partner  
 Telephone: (979) 543-4245 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1.	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2.	Canal lining	\$0.51 per foot	
3.	Replacing canals with pipes	<u>600</u> - per foot	
4.	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

Laser Leveling - multiple inlets

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes – How many thousands of feet? 60K-80,000 ft

If Yes – Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating <sup>MORE</sup> water conservation farming practices? Yes  No

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ I can't answer this until we have a farm program.

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

I have started placing drop boxes at the outlets in place of backhoe cuts on the levee. These are about \$400 each. I have placed new pipes and bulkheads to require less water in the canals to water specific fields.



# Region P Agricultural Water Infrastructure Financing Survey

address change  
9076 STATE  
HWY 35

Name of Agricultural Organization: STUHLBERG FARMS

Contact Person: PAUL, STEVE, OR MARVIN Title: PARTNERS

Telephone: (361) 472-5212 E-mail: SFARMS@YKC.COM

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

3 - PIPE LINED 224 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 30,000 100,000/yr

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: HARRY MAURITZ FARMS  
 Contact Person: M. H. BROCK Title: TRUSTEE  
 Telephone: (361) 771-3321 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

# 1 250 ACRES  
 # 4 250 ACRES

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 32,000 +

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: FAIR-E DAIRY, Inc  
 Contact Person: Elyse Chatalupka Title: Sec. Treas  
 Telephone: (361) 596-7292 E-mail: faire@teahisp.com

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_  
 \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_  
WE DO NO IRRIGATION FROM UNDERGROUND WATER SUPPLY

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No

If Yes – How many thousands of feet? \_\_\_\_\_  
 If Yes – Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: TEXAS COOPERATIVE EXTENSION  
 Contact Person: MARVIN LESIKAR Title: CEA-AG  
 Telephone: (361) 782-3312 E-mail: m-lesikar@TAMU.edu

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

response to questions we on county Basis

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1.	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
2.	Canal lining	\$0.51 per foot	
3.	Replacing canals with pipes	-	
4.	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

LASER Leveling - 80% of Acreage  
Underground pipeline - 1000 ac  
Improved varieties - all

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? ALL

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 50%

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Possible ones include - sprinkler irrigation  
conservation tillage to germinate seed  
without additional flooding

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Smith Farms  
 Contact Person: Billy Ray Smith Title: \_\_\_\_\_  
 Telephone: (361) 771-3705 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

My four water wells caved in, are beyond repair.  
Have not farmed since 1996.

# Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Anthony & Amy Delite JV  
 Contact Person: Anthony Delite Title: OWNER  
 Telephone: (919) 759-3069 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit cost:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

1 - 800 acres, 2 - 1 1/2 miles 3 - 1 1/2 miles

2. Do you currently have any unlined canals? Yes  No \_\_\_\_\_

If Yes - How many thousands of feet? 1 1/2 miles

If Yes - Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes  No \_\_\_\_\_

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ ~~2000~~ ~~5000~~ 50%

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: 471-S Farms

Contact Person: Robert Schmidt Title: Partner

Telephone: (979) 648-2441 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

1 - 800

3 - 750

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes – How many thousands of feet? 2500 ft.

If Yes – Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ 60% of total

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Pete Farms  
 Contact Person: Frankie Peter Title: Partner  
 Telephone: (979) 543 5036 E-mail: None

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

Land Leveling - 250 acres  
Underground irrigation pipe - 400 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 2500

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 4,000

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: ISDA - NRCS  
 Contact Person: Leroy Mikeka Title: Natural Resource Manager  
 Telephone: (361) 576-7229 Ext. 3 E-mail: leroy.mikeka@tx.usda.gov

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Have no farming interests.

## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Steven Goetsch Farms  
 Contact Person: Steven Goetsch Title: Partner  
 Telephone: (979) 543-5038 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

500 ACRES 1-3-4

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 4,000 FT.

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 10,000.00

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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### Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: HOWELL FARMS, Wolf Run Farms  
 Contact Person: L.G. Rawn Title: owner/manager  
 Telephone: (979) 543 3166 E-mail: lgrawn@sbcglobal.net

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

#1 - 2,000 acres  
#3 - 700 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

#1 - 500 acres multiple inlets  
#2 - 1500 acres  
#3 - 1500 acres

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 44,000

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ 20,000

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: ARROE JOINT VENTURE  
 Contact Person: LAYTON BAUN Title: VENTURER  
 Telephone: (979) 543-9841 E-mail: lytn@swbell.net

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

Laser leveled 3000 acres, multiple inlets 1500 acres  
Replace canals with pipes 2400 acres

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? 18000 18

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Appling Farms

Contact Person: W. H. Appling Title: Manager

Telephone: (979 ) 543-4301 E-mail: Applngfrm@wcnet.net

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• <u>Laser leveling + multiple inlets</u> – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• <u>Canal lining</u> – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes X No \_\_\_\_\_

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

Replaced canals with underground pipe and land leveled.

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

around 900

2. Do you currently have any unlined canals? Yes X No \_\_\_\_\_

If Yes – How many thousands of feet? 2000 about \_\_\_\_\_

If Yes – Would you be interested in canal lining or pipe conversion? Yes X No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes X No \_\_\_\_\_

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Yes, hold all waste water and could possibly reuse it if needed.

\_\_\_\_\_  
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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Morales Farms  
 Contact Person: Ronald Gates Title: owner  
 Telephone: (361) 782-3121 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	-	<ul style="list-style-type: none"> <li>Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

Laser Leveling + Multiple inlets  
Replacing canals w. tl pipe

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes – How many thousands of feet? 5

If Yes – Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ 0

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
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 \_\_\_\_\_  
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## Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: BMB Investments, Ltd.

Contact Person: William H. Borchers Title: Partner

Telephone: ( 830 ) 609-0918 E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> <li>• Canal lining – assumes 38 ac-ft water saved per canal mile.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	\$8.52 per foot	
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No X Not as far as known by the contact person  
 If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_  
 Unknown

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No X (Not in use)  
 If Yes – How many thousands of feet? \_\_\_\_\_  
 If Yes – Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No X

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?  
 Yes \_\_\_\_\_ No X  
 If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ Unknown

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

Preventing erosion  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Frank Zboril & Sons

Contact Person: Floyd Zboril & Frank Zboril III Title: Partners

Telephone: (979) 543-9372 E-mail: \_\_\_\_\_  
979 648-2525

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	<ul style="list-style-type: none"> <li>Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; &amp; assumes strategy applicable to 70% of irrigated acreage.</li> </ul>
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	\$8.52 per foot	<ul style="list-style-type: none"> <li>Canal lining - assumes 38 ac-ft water saved per canal mile.</li> </ul>
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes  No

If Yes - Please list which ones you are currently using and for how many acres: NA

laser leveling, Replacing canals with pipes  
Improved seed varieties

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes  No

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes  No

3. Is lack of funds a primary reason for not incorporating water conservation farming practices?

Yes  No

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ NA

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Region P Agricultural Water Infrastructure Financing Survey

RECEIVED

WHARTON CO. FARM SERVICE AGENCY  
225 HWY 59 LOOP SOUTH  
WHARTON, TEXAS 77488-3

MAR 20 2002

Name of Agricultural Organization: WHARTON CO. FARM SERVICE AGENCY **WHARTON FSA**  
 Contact Person: John W Williams Title: County Executive Director  
 Telephone: (979) 552-0567 #2 E-mail: John.Williams@tx.usda.gov

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets – assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	\$8.52 per foot	• Canal lining – assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_

N/A

If No – How many acres could benefit from each of the recommended strategies? \_\_\_\_\_

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes – How many thousands of feet? \_\_\_\_\_

N/A

If Yes – Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes – How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

N/A

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

N/A

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Region P Agricultural Water Infrastructure Financing Survey

Name of Agricultural Organization: Robert Bergstrom

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Telephone: ( ) I do NOT irrigate E-mail: \_\_\_\_\_

Please answer the following questions using the list below of recommended agricultural water conservation strategies and their projected unit costs that were used in developing the Lavaca Regional Water Plan.

	Water Conservation Strategy	Unit Cost (\$)	Assumptions for strategy unit costs:
1	Laser leveling + multiple inlets	\$109 per acre	• Laser leveling + multiple inlets - assumes 1.4 ac-ft water saved per acre irrigated; & assumes strategy applicable to 70% of irrigated acreage.
2	Canal lining	\$0.51 per foot	
3	Replacing canals with pipes	\$8.52 per foot	• Canal lining - assumes 38 ac-ft water saved per canal mile.
4	Improved seed varieties	-	

1. Have you already incorporated any of the recommended agricultural water conservation strategies into your farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - Please list which ones you are currently using and for how many acres: \_\_\_\_\_  
\_\_\_\_\_

If No - How many acres could benefit from each of the recommended strategies? \_\_\_\_\_  
\_\_\_\_\_

2. Do you currently have any unlined canals? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - How many thousands of feet? \_\_\_\_\_

If Yes - Would you be interested in canal lining or pipe conversion? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Is lack of funds a primary reason for not incorporating water conservation farming practices? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes - How much money could you contribute to making improvements, if some type of matching funds were available? \$ \_\_\_\_\_

4. Are there other water conservation measures that you have implemented or would like to implement into your farming practices that are not listed above? Please list: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
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