TCPB Status Report December 19, 2014

Project: Adaptation of the Texas High Plains Profitability-Irrigation Analyzer to Irrigated Crop Production in South Texas

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<u>Task 1</u>. Determine the benchmark water use and irrigation costs by crop for the South Texas region from traditional crop production practices.

- An advisory committee of San Patricio County irrigated crop producers—Charles Ring, Bobby Reider, Erich Schneider, Nick Pinkston, and Stanley Joe Pinkston—was formed to provide input and oversight to the project. The advisory committee met with the project team (Mac Young, Levi Russell, and Bobby McCool) on May 14, 2014. At the meeting, dry land crop budgets for the Lower Coastal Bend were reviewed and adjustments made. Typical production inputs for irrigated crop budgets were determined for corn, cotton, grain sorghum and sesame. Average irrigation fuel, operating and equipment costs were determined for center pivot irrigation systems.
- A meeting with Dr. Juan Enciso, Associate Professor and Extension Agricultural Engineering Specialist in Irrigation and Water Management and project collaborator, was held May 19, 2014, to discuss water use efficiency and irrigation costs for center pivots in the Coastal Bend region. Dr. Enciso will develop an irrigation fuel calculator to include in the model for producers to use in evaluating crop enterprises.
- Nick Pinkston, advisory committee member, provided typical wheat production expenses for use in developing/revising budgets by May 28 email.
- A Lync conference meeting with Dr. Rob Hogan, District 10 Extension Economist and project collaborator, was held May 30, 2014. Changes to existing District 10 crop budgets were discussed.
- Contacted Texas AgriLife Research personnel July 15, 2014, to discuss incorporating Texas A&M crop weather station data into the model for the Coastal Bend and Lower Rio Grande Valley.

<u>Task 2.</u> Adapt and modify the Texas High Plains Profitability-Irrigation Analyzer decision aid to help irrigated producers in South Texas make management decisions on the optimal crop mix for their land.

- Existing crop budgets for the Lower and Upper Coastal Bend, Uvalde and the Lower Rio Grande Valley were loaded into the model.
- Due to the large number and diversity of all row crops in South Texas, three models—Uvalde/Winter Garden, Lower Rio Grande Valley and Coastal Bend/Upper Gulf Coast—

- were developed to simplify use by crop producers in each area. The initial conversion of the three decision aides to the three area models was completed by July 31, 2014.
- Testing of the three area models was completed in August 2014. Changes and modifications were initiated based on model testing. This included the inclusion of a link to the Texas A&M crop weather station system. The rainfall data will be manually entered into a table online and the spreadsheet model will automatically download updated monthly rainfall data for the region each time the spreadsheet is opened on a computer connected to the internet. The addition of an irrigation cost estimator was discussed and will be programmed during the month of September.

• Beta Testing:

- 1). LRGV crop analyzer distributed to Tommy Bradford at Weslaco (9/24/14)
- 2). LRGV crop analyzer distributed to Jimmy Pawlik at McAllen (10/1/14)
- 3). Coastal Bend crop analyzer distributed to Charles Ring, Bobby Nedbalek, and Erich Schneider in San Patricio County (10/1/14)
- 4). Scott Frazier at Chapman Ranch (10/2/14)
- 5). Darrell Lawhon at Bishop (10/28/14)
- 6). Dewey Lawhon at Bishop (11/5/14)
- Completed Outreach and Education To-Date:
 - 1). Presentation to the San Patricio County Crop Committee-12 attendees (10/1/14)
 - 2). Presentation at Nueces-San Patricio CEU Conference-97 attendees (10/23/14)
 - 3). Email to all District 10, District 11 and District 12 Ag-NR agents (10/29/14)
 - 4). Posted Winter Garden-Uvalde, Lower Rio Grande, and Coastal Bend models on Corpus Christi Extension web page (10/29/14). Total web hits to-date = 51 (10/14: 28; 11/14: 11; 12/14: 12 to-date)
 - 5). Presentation at Crop Seed Meeting at Vanderbilt-34 attendees (11/12/14)
 - 6). Presentation at Crop Marketing Workshop at Sinton-15 attendees (12/17)
- Scheduled Outreach and Education:
 - 1) Lower Rio Grande Valley meeting location to be announced (1/22).
 - 2) Bay City Feed Grain Conference (1/29)
 - 3) Nueces-San Patricio Field Crop Symposium (1/30)