

Another Conservation Success Story...

Lee County, Georgia

September 2011

AWEP Helps Farmer During Drought

All farmers know that water conservation is a major concern. This year's drought situation stressed that importance even more. Many irrigation wells in the South Georgia went dry at a time when crops were in need of water the most, leading to yield loss if not total crop destruction.

Zac Thaggard, a farmer in the Leesburg community, knows and understands the importance of water conservation. Because of the drought he had concerns. "I had a need to increase water efficiency in order to conserve water and increase profits by matching crop needs with the correct amount of water at the correct timing," said Thaggard. He went on to say, "As a third generation farmer both my father and grandfather have worked with the NRCS (Natural Resources Conservation Service) so to me it was a partnership that I grew up knowing about."

"Through the Agricultural Water Enhancement Program (AWEP) he has installed irrigation retrofits and remote soil moisture monitors to help with water conservation on his family farm. AWEP is a pro-



gram that focuses on irrigation water efficiency within the Flint River Basin Area" said Richard (Rich) Hosmer, district conservationist in Dawson.

Hosmer, explained how the system works. "Irrigation retrofits are used to make a center pivot irrigation system more efficient. Through the installation of an irrigation retrofit, an irrigation system is converted from a high water pressure system to a low water pressure system. We convert the old style spray nozzles to new rotator or wobblier style spray nozzles on drop hoses allowing for a greater amount of water to be distributed onto the crop area with less chance of drift from the wind."

Melissa Golden, soil conservation technician for the NRCS in Leesburg said, "A relatively new practice that farmers are starting to utilize is the use of remote soil moisture monitors (RSMM)."

"To me it was a partnership that I grew up knowing about," Zac Thaggard.

RSMM are soil moisture probes that are inserted into soil within the crop field. Probes read soil moisture at multiple levels within the root zone of the crop. They also record irrigation data and rainfall data through an electronic rain gauge. This information is transmitted to a computer to allow the farmer to read the moisture data at the root zone to determine when the crop needs to be irrigated. This data allows a farmer to irrigate at the proper time in order to achieve maximum yields, maximum profit and maximum water efficiency.

Thaggard believes the new system is the key to maximizing irrigation. "The AWEP program has allowed us to apply conservation practices like irrigation retrofits and remote soil moisture monitoring to our farm in order to conserve water and increase profits. The remote soil moisture monitors are new technology that we have to learn to use - but we believe they are a key to maximizing irrigation efficiency for our crops," said Thaggard.

He likes AWEP because the program is conserving his water. "The AWEP program helps me conserve water and increase yields through proper irrigation application. With our operation, we are able to irrigate our crops more efficiently through the irrigation retrofits and remote soil moisture monitors that we have installed with the help of the NRCS."

Thaggard's conservation philosophy is all about the farm. "I would like future generations to know that it is important to utilize the programs, like AWEP, in order to partner with the NRCS to promote the application of conservation practices on your farm."



Zac Thaggard (left) and Melissa Golden, soil conservation technician for the NRCS in Leesburg pose at the Service Center sign.



Bottom is the retrofitted irrigation system with the new rotator or wobblier style spray nozzles on drop hoses being monitored by the new remote soil moisture monitor system above.

 **NRCS** Natural Resources Conservation Service

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**Lower Chattahoochee
Soil And Water
Conservation District**

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