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**THE WATER MANAGEMENT AND CONSERVATION
INSTRUCTIONAL NEEDS OF TEXAS AGRICULTURE SCIENCE TEACHERS**

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ABSTRACT: The purpose of this study was to determine the instructional needs of Texas agriculture science teachers as it pertains to the teaching of agricultural water management and conservation. Through gaining perspective from the agriscience teachers on their needs for instructional material, there will be a greater ability to understand what will benefit them in terms of instructional resources and professional development. An earlier needs assessment was conducted in 2006 of these teachers in a portion of West Texas. Teachers in that study indicated that a shortage of water would impact their quality of life (88.4%) and would do what they could to conserve water if it was in short supply (96.9%). Responding teachers also felt that water should not just be viewed as a resource to consume (76.1%), that we are in danger of running out of water (83.6%) and that we should restrict consumption now to save water for future generations. However, these teachers believed that their knowledge on water quantity-related topics was average and that their confidence level in their knowledge was slightly lower than the ratings of their knowledge on each item. Two teacher workshops were conducted and eight lessons were created since this needs assessment with mixed results being achieved. However, recent changes in state and local water policy, state instructional requirements, as well as advances in agricultural irrigation technologies have questioned the current relevance of the 2006 needs assessment findings. The population of the 2011 study will consist of agricultural science teachers in arid to semi-arid regions. Data from these teachers will be collected during their annual conference in July 2011. The teachers participating in the study will be asked to complete the questionnaire that consists of questions dealing with their knowledge of water management and conservation. The questionnaire is composed of multiple sections to include current instructional practices, attitudes relating to water management/quantity, their ability to teach the subject of water management, and open ended questions to obtain their personal opinions related to the teaching of water management. Results will be used to shape water management-related instructional support efforts for secondary agricultural science teachers in Texas.

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