



USDA-CSREES 2007 National Water Quality Conference

The Climate of Insecurity for Colorado's Agricultural Water – Management Responses and Coordination

This presentation will review a series of efforts begun in 1998 to apply climate information to agricultural water management, studying rural Colorado. Population growth and new demands create insecurity similar to drought, and responses may be similar. First, we inquired into what kinds of information were wanted, following the water management hierarchy from irrigators up to the state and federal water project managers. We refined that with inquiry into optimal timing of the information, and desired forms. Second, because legal forms of water transfer are a major impediment to climate-responsive water management by the agricultural sector, we worked with irrigators and agency staff to help design, observe, and then dissect the Water Bank Pilot Program. We learned the hard way that the Extension and demonstration model for agricultural innovation may be obligatory for new institutions as well as technologies. Third, we worked to identify beneficial conditions for water transfers from irrigators, but events and the market overtook that. The Colorado Statewide Water Supply Initiative (SWSI), was begun, now partly superseded by another statewide process. The legal reforms wanted were distilled into 3 more or less new forms, and Colorado authorized the second one, rotating crop management (sometimes called "rotating fallow") in 2006; the first was the water bank. The three forms and their uses will be described in the presentation. The current research concerns the old wisdom, "be careful what you wish for..." We are trying to identify potential problems from changed water management and avoid pitfalls, by identification of research needed to support climate-responsive management. The author hopes to increase small and medium sized agricultural adaptability, reducing water insecurity, and to stimulate discussion of how adaptation is fostered by the USDA programs which are critical determinants of resource management.

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