

MINUTES

WATER MANAGEMENT WORKING GROUP

KENTUCKY FARM BUREAU FEDERATION

June 17, 2017

The Kentucky Farm Bureau Water Management Working Group (WMWG) met at Imel's Greenhouse in Greenup, Kentucky on Wednesday, June 17, 2017.

Working Group members present were: Steve Coleman, Chair; Kenneth Imel; and Kevin Jeffries. Working Group members absent were: Warren Beeler; Todd Clark; Nancy Cox; Rusty Cress; Sharon Furches; Terry Gilbert; Pete Goodmann; Pat Henderson; Gary Larimore; Keith Rogers; David Rowlett; and Larry Thomas. Ex-officio members absent were: Tom Fern, State Director, USDA Rural Development; Michael Griffin, State Director, U.S. Geological Survey; Kim Richardson, Director, Kentucky Division of Conservation and Karen Woodrich, State Conservationist, NRCS. Others in attendance were: Bill Caldwell, KDOW; Biff Baker, GOAP; Steve Higgins, UK; Steve Bererich, UK; Seth Patton, Farm Credit Mid America; Brad Burke, Farm Credit Mid America; Jack Stickney, KY Rural Water Association; Rodney Bruce, Greenup Soil and Water County Conservation District; Sherri McCarty, Greenup County Soil and Water Conservation District; Tony Burnett, NRCS; Randy Smallwood, NRCS, James Stephens, Field Representative for U.S. Senator Rand Paul; Doug Collins, Greenup County Fiscal County Deputy Judge; and George Hieneman, Area 9 Program Director, Kentucky Farm Bureau Federation. This meeting was staffed by Joe Cain.

This meeting was called to order at 10:30 a.m., EDT by Chairman Steve Coleman, who welcomed and reviewed the purpose of the meeting. Introductions were made. Chairman Coleman thanked Kenny Imel for hosting the WMWG meeting.

Mr. Kenny Imel gave the group an overview of his greenhouse and field operations. He noted that he currently uses 10-15,000 gallons of water per day with all of that water transported from a lake on his farm because it was more cost effective than connecting to the municipal water line that runs adjacent to his greenhouses. He said it is important to have a reliable water source for greenhouse production that is disease-free and readily available because the plants need water on a regular basis. He showed the group the diversity of his inventory and explained how he expanded the operation over the years. He noted greenhouse structure do offer an opportunity to recycle water, but the challenge is being able to do so without spreading disease among susceptible plants would require treating

**Water Management Working Group
June 14, 2017**

the water. Mr. Imel discussed a project he was working with Dr. Steve Higgins to install that would capture rainwater from the greenhouse surface and store it in tanks or a cistern for later use. He said essentially the project would provide enough water to cover one day's use, if needed. Ideally he would like to have 3-4 days' worth of reserve water on hand to cover emergencies, but storage space would be the issue. The project they are looking to install would capture the water from the greenhouse roofs in their on-site cistern, and then pump the water to external holding tanks above the greenhouse.

Upon conclusion of the greenhouse tour, the WMWG moved to the First Baptist Church in Greenup to continue the meeting and have lunch.

After lunch, Chairman Coleman asked the Working Group to consider the minutes of the April 26, 2017 meeting. A motion was made by Mr. Kevin Jefferies, and seconded by Mr. Kenny Imel second that:

"We approve the minutes of the April 26, 2017 meeting."

Motion passed.

Chairman Coleman reminded the Working Group that a depository of meeting information (presentations, useful links, supporting literature and minutes) is located on Kentucky Farm Bureau's website at www.kyfb.com/water.

Dr. Steve Higgins reviewed a revised best management practices (BMP) list with the group. He noted he plans to categorize the list further by commodity and type of practice and will look to combine it with the NRCS BMP list and then coordinate it with the Kentucky Agriculture Water Quality Authority BMP list to provide a simple, but comprehensive listing of BMPs available for area farmers to utilize.

Mr. Steve Bererich, UK Horticulture, presented the group with a discussion on the challenges greenhouse operations face with water and irrigation issues. He noted most greenhouses fail to sample their water source to determine if it is suitable, or causing problems until problems arise. He suggested running a simple test on the source water could help greenhouse production avoid a lot of costly mistakes. Mr. Bererich said greenhouses needed a reliable source of consistent quality water to be productive and felt municipal water sources would be preferred. He showed examples of how well water is often extremely variable. He noted surface water resources have a higher risk of pathogens, and that municipal water, while generally more costly, does provide the most reliable source for consistency since it is treated. He also noted that source water for edible crops is becoming more of an issue under the Food Safety Modernization Act. However, he

**Water Management Working Group
June 14, 2017**

emphasized the importance of having water resources tested because even municipal water resources sometimes have problems with consistency such as a consistent pH that will affect potted plant development in a greenhouse.

Mr. Bill Caldwell, Kentucky Division of Water, reviewed pilot projects the Kentucky Water Resources Board (KWRB) was recommending. One recommendation involved voluntary well monitoring to track the health of aquifer systems. He noted USGS has an existing program in Indiana, and that in Kentucky we would need to have a minimum of 10 wells to start and be effective. Water harvesting and storage is another project being considered. He noted the KWRB also wants to update the KY Drought Mitigation Plan and incorporate agriculture more completely into the plan, but to do this effectively would require the development of a water budget for Kentucky.

The WMWG then had a general discussion on water development projects that might be applicable for various parts of Kentucky. Mr. Imel stressed to the group that there is a need for water-use education to be able to utilize any water resource efficiently and effectively. He urged that any project needs a clear educational component. Some of the BMP ideas discussed by the group included the following:

- Western Kentucky: well development, crop irrigation systems and system efficiencies
- South Central Kentucky: poultry water systems looking at water capture, water storage and water treatment systems
- Central Kentucky: livestock water systems with surface and spring water development for water use
- Eastern Kentucky: greenhouse and high tunnel water resource development looking at innovative water harvest, storage and efficiencies
- Northern Kentucky: livestock water systems focusing on feedlot water harvest and storage along with surface water development
- Southeast Kentucky: greenhouse and high tunnel water resources focusing on water harvest and storage along with surface water system development and treatment options; also looking at livestock water systems for poultry and beef feedlot
- Dairy systems statewide: looking at water harvest and storage technologies and water treatment concepts

Chairman Coleman opened the floor for additional discussion and comments. None were made.

Chairman Coleman announced the next Kentucky Farm Bureau Water Management Working Group meeting will be held Wednesday, September 27, 2017 at 10:00 a.m. at the Kentucky Farm Bureau State Office in Louisville.

**Water Management Working Group
June 14, 2017**

There being no further business to come before the committee, the meeting was adjourned.

**Recorded by: Katie Weatherholt
Administrative Assistant**

**Approved by: L. Joe Cain, Director
Commodity Division**