

Clay Scott
Family Farm and Ranch -- Ulysses, Ks
Raising irrigated/dryland corn and hard white wheat, cattle and boys

Testimony Before the United States Senate Committee
On Agriculture, Nutrition, and Forestry
McCain Auditorium at Kansas State University
Feb 23, 2017

“Hearing from the Heartland: Perspectives on the 2018 Farm Bill from Kansas.”

Written Testimony

INTRODUCTION

Welcome to Kansas. Chairman Roberts –welcome home-, Ranking Member Stabenow and members of the committee. Thank You for the opportunity to speak about production agriculture and those issues concerning the development of the 2018 farm bill. My farm is located in far southwest Kansas-about 90 miles west of Dodge City- near where my great grandfather homesteaded years ago. We are home to several large beef feedlots, dairies and swine facilities. Including a group of dairymen near Sumner Michigan who have recently started a large expansion of their existing heifer facilities – north and west of Ulysses.

In addition to farming I am actively involved in water. I am a delegate to the Kansas Water Congress, a member of the National Water Resources Association (NWRA), and a board member and past president of the Southwest Kansas Groundwater Management District. Together members of the NWRA and Kansas Water Congress provide water to millions of individuals, families, and agricultural producers in a manner that supports communities, the economy and the environment. This connection between agriculture and water is clear and of growing importance. In the U.S. we are fortunate to spend less than ten percent of household spending on food, this is far less than many other developed countries. A key input to keeping food affordable is ensuring a reliable supply of water.

INFRASTRUCTURE:

As Congress and the Administration discuss a potential infrastructure package it is important that it considers the vital importance of water infrastructure. Water and food are both strategically important resources and without a strong commitment to water infrastructure our nation’s ability to produce food will be hindered. Water infrastructure is key not only to food production. It is also vital for power generation, manufacturing, and human health and safety. Water infrastructure is one of the most important components of our nations infrastructure system. This importance needs to be recognized.

TECHNOLOGY:

Technology in agriculture is changing our world at a rapid pace. Advancements in breeding and biotechnology are bringing improvement to our fields and when combined with new techniques and practices these stronger plant genetics are pushing our yields results higher while our inputs are being reduced. Mobile drip irrigation, soil moisture probes, and conservation tillage are practices that are delivering solid results and producing improved soil health and increasing sustainability.

I would like to note that proper environmental stewardship is critical to bringing this technology to the market at an affordable cost to the farmers. Streamlined review of technology guided by sound science and combined with a proper market acceptable release is absolutely imperative. USDA and congress have helped this immensely in last few years. Market disruptions from non-approved traits to the export supply are not acceptable. These non-approved traits create huge expenses for exporters, disrupt supply channels due to segregation, weaken farm revenue and feed the notions of those opposed to production agriculture. I would urge this committee to continue improvements upon these concerns.

Attached are the first year study results from a Natural Resources Conservation Service (NRCS) Conservation Innovation Grant (CIG). **Attachment 1 –Mobile Drip Irrigation**

CROP INSURANCE:

The current crop insurance program is our most crucial risk management tool. It is the basis for our ag lending industry and farm credit. Improvements are needed. During the 2016 crop year, Kansas saw record production in many areas of the state. This exceptional production forced cash prices much lower. While futures prices did decline most of the losses occurred via the increased basis adjustments. Yet, farmers who rely on the revenue policy of their multi-peril insurance for price loss coverage were disappointed to see no losses paid because the pricing was done on the futures only side of the contract. None of Kansas grain elevators, coops, or farmers were able to deliver against the Kansas City Board of Trade wheat contracts due to logistics. Thus the cash price fell while the “hedged bushel” leveled off. I suggest that MPCI products have a method of correction to represent equivalent cash prices paid vs the Futures Contract of Record. If the price of Kansas City Futures contract doesn't represent the price of wheat, what is it really worth?

Limited water irrigation coverage. My farms and region suffer from limited well yields. For several years we have incorporated water technology systems such as soil moisture probes to accurately access the root profile in our soils. Together with selected hybrids with the drought technologies, we are changing our production practices to produce very strong yields. One difficulty is we cannot report these fields as irrigated due to yield goal limitations/definitions nor do they fit a true dryland field. As a result, we are reporting on Farm Service Agency (FSA) and Multi Peril Crop Insurance (MPCI) reports as dryland with water applied. A third definition of coverage would be useful to areas where intensive water management are called for and do

not force additional irrigation in challenged areas. RMA will be offering this needed policy for 2017 by written agreement only. Its inclusion into the next farm bill is needed for areas of intensive or expanded water management.

ARC/PLC PROGRAM:

The current crop support plan is difficult to understand. Counties suffer from reporting errors that distort program payments. Some of these reporting errors may be self inflicted. The Risk Management Agency (RMA) requires acres where limited irrigation water is applied to fields yet have a yield goal below current Average Production History (APH) to be called dryland. The majority of the wet acres on my corn fields meet this definition. However, Farm Service Agency (FSA) declares acres with any water applied to be called irrigated. Thus, a confusing set of data that corrupts accurate results. The coordination of terms and practices between RMA and FSA must be revisited in the next farm bill.

WATER CONSERVATION:

The greatest resource in western Kansas is water. Like all states in the west, we strive to increase efficiencies and improve on new technologies to extend and preserve this resource. The new mobile drip irrigation systems (a new technology and practice) are helping take these efficiencies to a maximum extent. Ultra low drops with mobile drip lines place the irrigation just inches above the root zone to provide the exact amount water needed and eliminate most evaporation and runoff possibilities.

Water conservation programs – like those found in the EQIP program- must reward those working towards conservation. Using historic usage only encourages maximizing usage prior to enrollment. Those who are already working to conserve have a larger burden to achieve the same gains. Conservation is a key to sustaining this resources and one which a robust partnership where Farm bill programs and Farmers and Ranchers can succeed.

CONSERVATION RESERVE PROGRAM:

The conservation reserve program is probably the best practice for environmental stewardship in the farm bill. Approving quality lands to meet quotas over environmental needs in others is not serving the interest of it intended goal. As with all programming in the next farm bill, please look to the environmental return of enrollment and not to retirement. It is also important to ensure that USDA adheres to contract agreements when implementing CRP and CREP.

GRASSLAND and FOREST HEALTH:

Forest and grassland health are keys to protecting the water supply of many western states. The Committee took steps to improve forest health in the 2014 Farm bill and Chairman Roberts introduced the Emergency Wildfire and Forest Management Act in the last session of Congress. We greatly appreciate Chairman Robert's and the Committee's attention to this important issue. As the Congress works to address forest health issues NWRA believes it is critical that both forest management reforms and resolution of the "fire borrowing" issue are

addressed in comprehensive legislation focused on improving the health and resiliency of our forests.

DUPLICATIVE PERMITTING:

NWRA also encourages the Committee to clarify that a National Pollutant Discharge Elimination System (NPDES) permit is not required for pesticides already approved under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The judicious use of pesticides plays an important role in the United States economy and the livelihoods of countless individuals. Pesticides help grow the food that feeds the world's growing population. They can also help improve the efficiency of water delivery and carbon free hydropower generation by keeping infrastructure free from invasive weeds that can reduce water delivery and impede power generation. It is unnecessary to require a NPDES permit in addition to FIFRA licensing. It creates an additional layer of unnecessary red tape.

THANKS:

I have three sons, two enrolled this last fall at Fort Hays State University with an eye to returning to the farm. It is a difficult and expensive transition. Support for the beginning farmer and rancher programs is a helpful resource and a great investment in sustaining new blood of our industry. I would encourage continued support that your committee has shown for these projects.

I appreciate the opportunity to provide testimony to your committee today. I would like to thank you for your diligence and honest effort to attend the Kansas segment of the 2018 Farm Bill Hearings and I thank you for hearing our prospective of agriculture

Thanks again.

Respectfully submitted,

Clay Scott

Attachment 1

**NRCS CONSERVATION INNOVATION GRANT
2016 Annual Progress Report**

Grantee: Southwest Kansas Groundwater Management District No. 3

Project Title: A Demonstration and Evaluation of the Potential for Mobile Drip Irrigation (MDI) Technologies to Reduce Water Use and Extend the Usable Life of Groundwater Supplies

Agreement Number: 69-6215-15-0002

Project Directors: Trevor Ahring
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Period Covered by Report: 09/18/2015 – 12/31/2016

Project End Date: 09/30/2018

Project Status

There are 10 fields that have been equipped with mobile drip tape on the inner 3 spans or evaluation in the CIG project. These fields are located in the following sections, all within Stanton and Grant Counties, Kansas:

Sec 21-28-38

Sec 8-28-38

Sec 18-28-38

Sec 3-29-39

Sec 4-29-39

Sec 31-27-39

Sec 14-27-39

Sec 21-27-39

Sec 16-27-39



Attachment 1

See Fig. 1 for a complete project map, including land with fully-irrigated corn, limited-irrigation corn, and irrigated wheat.

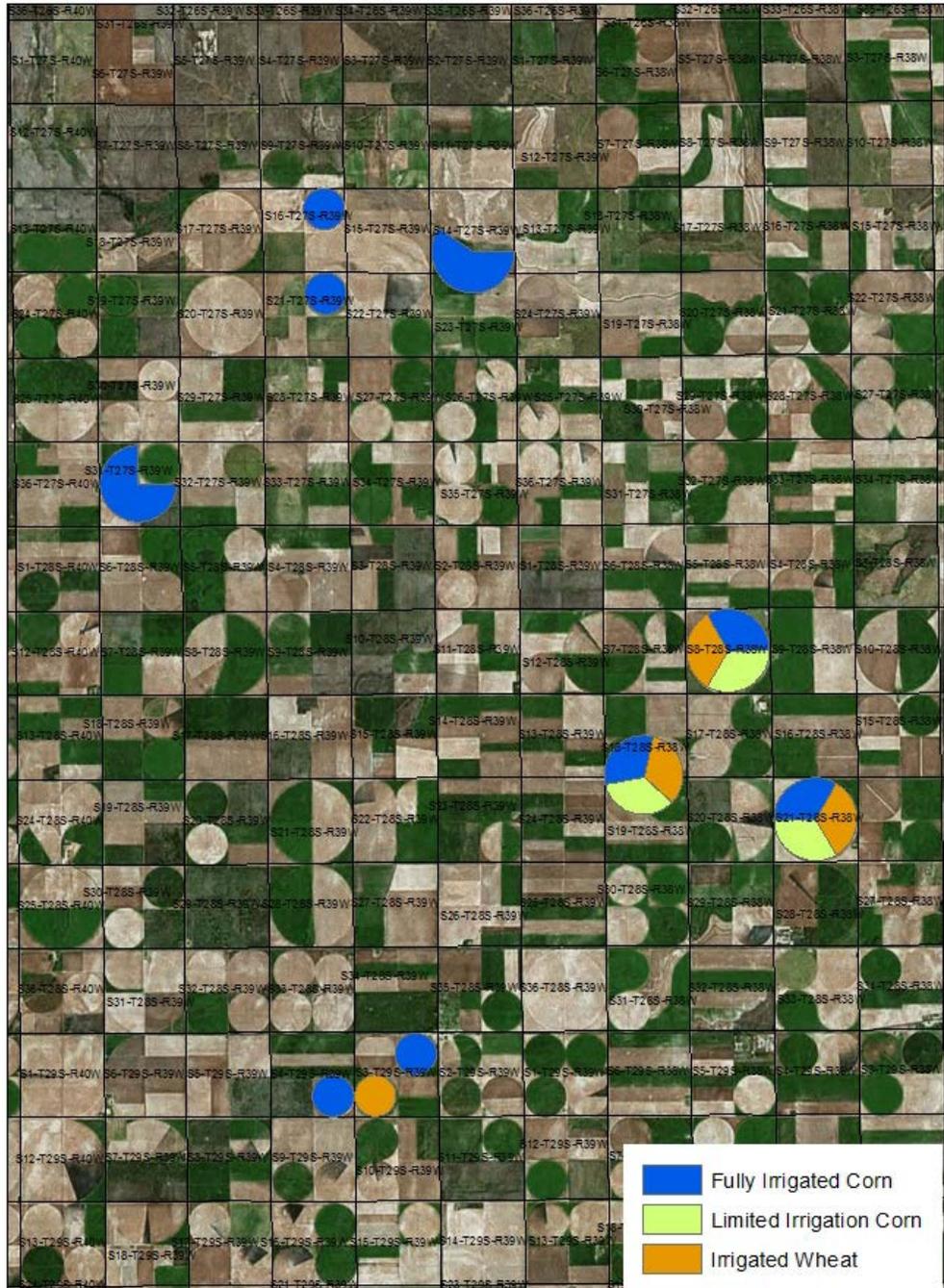


Figure 1. Project map. All fields located in Grant and Stanton Counties.

Attachment 1

Each project field has been equipped with Dragon-Line® mobile drip irrigation technology on the inner three spans of a center pivot system. Irrigation was scheduled using soil moisture probes to maximize yield and minimize water use.

Field Inputs

Seeding Rate: All fully-irrigated corn ground was seeded at a rate of 27,500 spa. Limited irrigation corn ground was seeded at a rate of 19,600 spa. Irrigated wheat was seeded at a rate of 90 lb/ac.

Fertilizer: Fully-irrigated corn was fertilized with 225 lb N. Limited irrigation corn was fertilized with 160 lb N. Wheat was fertilized with 100 lb N.

Water: The summer of 2016 was wetter than normal, producing 19" rain. This high rainfall, combined with good management, allowed for project wells to be shut off for 33 days in July and August. Fully-irrigated corn ground received 14.7" of irrigation water. Limited irrigation corn received 9.8" of irrigation water. Wheat received 8" of irrigation water.

Yields

Yields for each project field were as follows (no hail loss unless indicated otherwise):

Section 31-27-39: 241 bsh/ac (fully-irrigated corn)

Section 14-27-39: 229 bsh/ac (fully-irrigated corn)

Section 21-27-39: 202 bsh/ac (w/29% hail damage) (fully-irrigated corn)

Section 16-27-39: 203 bsh/ac (w/19% hail damage, 11% grain snap) (fully-irrigated corn)

SW ¼ Section 3-29-39: 222 bsh/ac (fully-irrigated corn)

NE ¼ Section 3-29-39: 98 bsh/ac (irrigated wheat)

SE ¼ Section 4-29-39: 227 bsh/ac (fully-irrigated corn)

Section 18-28-38: 231 bsh/ac (4% hail loss) (fully-irrigated corn)
220 bsh/ac (limited irrigation corn)
100 bsh/ac (irrigated wheat)

Section 8-28-38: 233 bsh/ac (fully-irrigated corn)
215 bsh/ac (limited irrigation corn)
80 bsh/ac (irrigated wheat)

Section 21-28-38: 228 bsh/ac (fully-irrigated corn)
226 bsh/ac (limited irrigation corn)
48 bsh/ac (wheat streak mosaic virus) (irrigated wheat)

Attachment 1

There were no significant yield differences on the acreage covered by mobile drip irrigation compared to the acreage covered by drop nozzles. This may have been because of the higher than average rainfall, or it might have been because the technology does not significantly affect yield.

Water Savings

For each of the project fields, nozzles on the inner 3 spans were replaced with mobile drip irrigation, covering 196.4 project acres. Of these acres, 133.4 acres were fully irrigated corn, with 14.7” irrigation water applied. 42 acres were irrigated wheat, with 8” irrigation water applied. 21 acres were limited irrigation corn with 9.8” irrigation water applied. The total water applied with mobile drip technology was 208.6 AF. All project wells are replacing nozzles in the inner towers that apply water at a rate 0.204 ac-in/hr with mobile drip irrigation that applies water at a rate of 0.126 ac-in/hr. The water use on those acres with the old drop nozzle packages would have been 337.5 AF. **The total water savings for the 2016 project year were 128.9 AF.**

Other Benefits

Replacing inefficient nozzles in the inner 3 spans improved the overall uniformity of pressure in the center pivot system, allowing nozzle size to be increased in the outer spans. This improved the rate of application without increasing the overall pumping rate, allowing the systems to be shut off for more days than they otherwise would have. This reduces operational cost and saves energy.

Budget

The overall project budget is \$57,800, including \$25,200 federal funds and \$32,600 non-federal funds. To date, \$15,076.65 of federal funds have been spent. This funding was used to help purchase mobile drip irrigation systems and soil moisture monitoring equipment. \$12,564.35 of non-federal funding has been spent. This includes \$9,064.35 cash for purchase of mobile drip irrigation systems and soil moisture monitoring equipment. It also includes \$3,500 in-kind contribution for reporting and creation of an informational video (can be seen at <https://www.youtube.com/watch?v=3yT9yiyjB-4>).

This leaves a remaining budget of \$30,159. This includes \$10,123.35 federal funding and \$20,035.65 non-federal funding. Equipment costs to date have been less than anticipated, so it is likely that the project will be concluded without exhausting the remaining federal and non-federal budget.

Work to be Completed

There are still two years remaining for evaluation. Each project field will continue to be evaluated and GMD3 will create a final report, including cost-benefit analysis, as well as a recommendation to NRCS whether or not they should incorporate this practice into EQIP.