

Keith Olander Testimony:

Thank you, Madam, Mr. Chair, member of the committee, for the opportunity share my passion for agriculture and a few of the practices we are employing to support workforce development and employee retention.

For context, I grew up on a farm and continue to farm to this day. I am an agriculture education educator of 28 years with experience in high school teaching, as a community college faculty, and as a program administrator. I live my life in and around agriculture and have developed a passion of workforce development to make our youth aware of the opportunities that await them in Agriculture, Food, and Natural Resources (AFNR) careers. Furthermore, the work continues in connecting our secondary, post-secondary, and industry partners. Our work focuses around streamlining a career pathway that minimizes the barriers for our youth to gain a successful career in AFNR.

Specific practices we are deploying to meet workforce challenges are threefold:

1. We are enhancing community college curriculum to better align natural resources outcomes with NRCS employee employment qualifications, i.e. – farm production knowledge. This coursework focuses on partnering concepts in natural resource management with agronomic practices on the farm in a way to develop students skillset who can assist farmers in problem solving challenges for farmers who desire to improve environmental impacts and maintain economically viability.
2. Second, we provide an internship program that is a direct hire approach of community college students directly into NRCS experiences that include exposure to an array of NRCS employee opportunities collaborating with college faculty to assure a superior educational experience.
3. Our third practice provides professional development for early career NRCS employees that is immersive in design. This supports employees' success in connecting to farmers and job retention. Early results indicate many have a low confidence level in communicating with farmers about their particular

operations due to lack of farm literacy. All of these trainings take place on a 2,000-acre complex, the Central Lakes College Ag & Energy Research Center.

a. Employees experience over 30 hours of on-farm experiences that include:

- i. Tillage practices, tools, equipment, and technology.
 1. Driving tillage machines with current technology to learn farmer view of carbon sequestration/reduced tillage concepts.
- ii. Planting operations and technology.
 1. Describing, setting, and operating planters that are employed with GIS guidance, precision seed placement, and variable rate technology to better align farmer profitability with environmental enhancements.
- iii. Crop Harvest operations and data output.
 1. Operating harvest equipment to view and understand the yield mapping technologies that produce yield maps, which supports the NRCS employee's ability to match field production capacity with environmental outcomes to find precision site-based solutions to enhance the farms profitability and improving soil health and water quality.
- iv. Soil Health, Cover Crops, and Livestock grazing
 1. A final component to this professional development is the education of cover crop varieties through ID, and potential adoption of species.
 2. Additionally, walking through plots where cover crops have been planted within row crops, variable row width scenarios, and different planting times to ascertain best outcomes for agronomic crop outcomes and cover crop success.
 3. Finally, we demonstrate grazing of cover crops and have created initial data on the economic outcomes of paring row crop production with cover crops and livestock grazing into that system.

All three of these practices: curriculum changes, internships, and professional development have had a positive impact based on pre/post surveys. This includes feedback for students in the course, on internship, and the employees that participate in the trainings.

Our goal is to expand this program with NRCS and we hope to see option for their staff to learn and grow in their professional setting them to strengthen the agency.

I am also aware that through our partnerships with other community colleges in other states that there is interest in replicating elements of our work in their regions to serve students better and support NRCS in its mission. Currently this type of partnership across the country is in its infancy.

Mr./Madam Chair: I thank you for your time and I am open to any questions that the members may have.