



OHIO SMART AGRICULTURE

SOLUTIONS FROM THE LAND

PROGRESS IN THE PROCESS

The initial rough draft of the *Ohio Smart Agriculture: Solutions from the Land* report has been completed! Although it has seemed a long process, we have thoroughly diverged delved into and dissected the proposed recommendations. The next step is to review the document with the steering committee and disseminate it among collaborating partners. We will carefully consider each suggestion. Our goal is to release the final report in early 2019.

The next Steering Committee meeting on December 11 and 12 will not only go through the current report, but will also:

- Review the project timeline and status
- Evaluate the public-release plan
- Prepare funding strategy and implementation

The Steering Committee meeting will include a special presentation by Dr. Rattan Lal, Professor of Soil Science at The Ohio State University and Director of the Carbon Management and Sequestration Center. The discussion will be about the impact of climate change on agriculture. We are eager to continue our progress and invite stakeholders to stay engaged and others to join the discussion. We hope to share some meeting highlights on our [Facebook page](#) and encourage you to follow us.

What is OSA:SFL?

“Ohio Smart Agriculture: Solutions from the Land is an initiative to place farming at the forefront of resolving challenges like hunger relief, health and sustainability. Led by farmers as well as agribusiness owners, anti-hunger advocates, conservationists and public health researchers, we are working together to identify shared solutions to some of Ohio’s most pressing issues – by leveraging the deep knowledge and vast resources of our state’s agriculture community and by learning from each other.

Our purpose is to explore 21st century strategies to retain a strong, vibrant farm economy and workforce; to assure a healthy population with access to nutritious food; and to preserve the land, air and water in our state for future generations.

We will succeed when the direction we set forth engages the broader community in a joint response to these issues and promotes collaboration among Ohioans.

In times of changing climate, markets, and preferences, OSA:SfL’s goal is to create and implement an action plan that will:

- *Help farmers adjust to new weather patterns, nurture the land, clean our air and waters, and provide a healthy ecosystem for future generations.*
- *Reconnect consumers with agriculture, improve health, food access and nutrition for Ohioans, and celebrate the importance of strong, vibrant farm communities and farmland.*
- *Build new opportunities and infrastructure for a more diverse and prosperous farm economy in which Ohioans feed Ohioans and the world.*

Please join us and share your thoughts on how Ohio agriculture can become more sustainable and relevant, creating solutions to 21st century challenges!”

ALIGNED INNOVATION

A Sneak "Peak" at a Sustainable Future

Attendees at an environmental conference in Columbus on October 25 got a special preview of a vision for the future of Ohio farming. Fred Yoder and Lisa Hamler-Fugitt, Steering Committee co-chairs for *Ohio Smart Agriculture: Solutions from the Land*, shared the vision at the Mid-Ohio Regional Planning Commission's annual Summit on Sustainability.

Yoder and Hamler-Fugitt showed how farmers can sustain the environment by nurturing the soil and providing other "ecosystems services," while also sustaining profitable farms and communities and ensuring that Ohioans of all income levels can have plenty of healthy food to sustain themselves. Ohio is the 13th leading state in agricultural production, and in the top 10 in many commodities, but it is ranked third in the nation in families that don't know where their next meal is coming from. This has stirred the hearts of many involved with this project, especially the two co-chairs.

Yoder, a fourth-generation farmer near Plain City, Ohio, said he and other farmers have been surprised to learn that about 20 percent of Ohio children live in "food insecure" households that don't always know where the next meal is coming from. He envisions a greater connection and understanding between farmers and the general public.

Hamler-Fugitt, head of the Ohio Association of Foodbanks and a tireless advocate for people of limited means, has become a defender of farmers. She agrees that agriculture can do more to prevent erosion and ensure clean waterways, but also insists that government initiatives need to use the carrot as well as the stick.

"I have worked in hunger relief for nearly three decades, in partnership with Ohio's farm community, and I have served on numerous government committees with farmers," she said. "It is my experience that Ohio's farmers will collaborate with lawmakers to find answers to any issue at hand. I have seen firsthand steps farmers take to ensure they are protecting the land, air and water on their farms. After all, their families live there and drink the same water, too."

The Summit theme, "Planning for an Equitable Region," added social equity to the broad definition of "sustainability." About 30 people attended the breakout session at the Summit, and the session went over its allotted time to accommodate audience questions – many of which focused on nutrient runoff into Ohio's rivers and lakes. Yoder, a former president of the National Corn Growers Association, has become more vocal in recent years about the need for farmers to more to reduce nutrient runoff. These events are spreading the word of the initiative and giving a life to the issues at hand. We are grateful to have had Yoder and Hamler-Fugitt participant and continue the conversation.



NEW DEVELOPMENT

4th National Climate Assessment Release creates a cold front for Ohio agriculture and forestry

In November, the Trump Administration released the Fourth National Climate Assessment Report, Volume II ([nca2018.globalchange.gov](https://www.globalchange.gov)). This latest report, which was produced by the U.S. Global Change Research Program under the guidance of a 60-member federal advisory committee, focuses on impacts, risks and adaptation in the United States.

There is no way to sugar coat or downplay the outlook which the report forecasts. Climate has an

immense impact on agriculture. OSA:SfL's Climate Smart Agriculture Work Group member Aaron Wilson, senior research associate with Byrd Polar & Climate Research Center at The Ohio State University, shared some insights on the report and its impact with the agriculture audience.

"Climate change and how it relates to our weather can be summarized under two broad categories: temperature changes and precipitation changes," Wilson said. He said these areas are detailed in the report and Ohio can find some congruent trends in the information.



Overall, we can expect annual temperatures to be 4-6°F warmer by for 2036-2065 relative to 1986-2015. The growing season will lengthen, but flood risks will increase. Water quality will be negatively affected. Adaptation will be crucial to prevent additional soil erosion, and overall, more diversity will become necessary for planting, pollination, chemical use, crop and cultivar selection and livestock farming.

The findings identify these four primary impact areas:

- Reduced Agricultural Productivity
- Degradation of Soil and Water Resources
- Health Challenges to Rural Populations and Livestock
- Vulnerability and Adaptive Capacity of Rural Communities

Reduced Agricultural Productivity

Food and forage production will decline in regions experiencing increased frequency and duration of drought. Shifting precipitation patterns, when associated with high temperatures, will intensify wildfires that reduce forage on rangelands, accelerate the depletion of water supplies for irrigation, and expand the distribution and incidence of pests and diseases for crops and livestock. Modern breeding approaches and the use of novel genes from wild relatives of commercial crops are being employed to develop higher-yielding, stress-tolerant varieties.

Degradation of Soil and Water Resources

The degradation of critical soil and water resources will expand as extreme precipitation events increase across our agricultural landscape. Sustainable crop production will be threatened by excessive runoff, leaching, and flooding, which results in soil erosion, degraded water quality in lakes and streams, and damage to rural community infrastructure. Management practices to restore soil structure and the hydrologic function of landscapes are essential for improving resilience to these challenges.

Health Challenges to Rural Populations and Livestock

Challenges to human and livestock health are growing due to the increased frequency and intensity of high temperature extremes – which contribute to heat exhaustion, heatstroke, and heart attacks in humans. Heat stress in livestock results in large economic losses for producers. Expanded health services in rural areas, heat-tolerant livestock, and improved design of confined animal housing are needed to minimize these challenges.

Vulnerability and Adaptive Capacity of Rural Communities

Residents in rural communities often have limited capacity to respond to climate change impacts, due to poverty and limitations in community resources. Communication, transportation, water, and sanitary infrastructure are vulnerable to disruption from climate stressors. Achieving social resilience to these challenges would require increases in local capacity to make adaptive improvements in shared community resources.

"Climate change is a threat multiplier to what we do," Wilson said. "This increases the risks associated with farming and other endeavors, and makes reaching profitability and sustainability

LEADER SPOTLIGHT

Kris Swartz - Supervisor, Wood County Soil and Water Conservation District

OSA's leadership team is comprised of many active, prominent Ohioans involved in agriculture, nutrition and healthcare, the environment, academia, and the food and fiber value chain. Each month in this space we recognize a different leader and share a bit about their passion for OSA.

Kris Swartz (pictured on left) is a 5th generation farmer from Wood County that grows corn, soybeans, and wheat on a family farm in the Western Lake Erie Basin. He holds a degree in Agricultural Engineering from The Ohio State University from The Ohio State University. Kris has served as a Supervisor for the Wood County Soil and Water Conservation District for over 25 years and was selected Ohio's Outstanding Conservation District Board Member in 2017. He was awarded the ASA/DuPont Young Leader Award in 1994 and the Olin Sims National Conservation Leadership Award in 2018 for promoting conservation on private and public lands.

Kris currently serves as Past-President of the Ohio Federation of Conservation Districts and is the NACD Board delegate. He is on the steering committee of Ohio Smart Ag, a Solutions From the Land project funded by the Kellogg Foundation. Kris has served as a member of the Ohio Soil and Water Conservation Commission and as a member of watershed in distress task force.



Why you are a part of OSA?

Kris: First of all I was very impressed by the people already involved and the wide range of interests they represented. When you have widely respected people like Fred Yoder and Bobby Moser involved from the ag industry, along with Lisa from the food arena, joining was the only option. Also I was very interested in how food and public health communities viewed ag in Ohio, and how they could interact with ag and influence ag policy. I have been very pleased with how much understanding and empathy those leaders have for ag issues and obstacles.

What segment of the initiative are you most passionate about, and why?

Kris: I have been mainly involved in the eco-systems services part of OSA. It's been a hard concept to define at times, but it revolves around what things ag provides to the population of Ohio. It's not just food and fiber but includes environmental things like clean water and healthy soils. Currently in Ohio, most of the discussions around eco-systems services are dominated by water quality issues especially in the Western Lake Erie Basin (WLEB). I farm in the heart of the WLEB and have been involved with programming for water quality improvements since before the Toledo water crisis of 2014. I think this is an exciting time for water quality programs in Ohio, there is more collaboration and communication between all the involved communities (ag, state and federal agencies legislative, environmental) than ever before. I think the result will be positive steps in water quality not only in the WLEB, but also all of Ohio. I think OSA can be part of those steps by also bringing the food and public health communities into the discussion.

Ohio Ag: Did You Know?

Christmas Tree Farms can be found across Ohio, which ranks 10th in national production.

Across the U.S., there are close to 350 million "real" Christmas trees grown on local farms. Some tree farms will bring in cut trees from North Carolina, which typically supplies the eastern states.

Take a look around your local area and you can



10th largest Christmas tree producing state

www.ohiosmartag.net

find some regionally grown trees. If a real tree is your fancy, be sure to support these local farms!

Merry Christmas and Happy Holidays!

Ohio Smart Agriculture: Solutions from the Land | info@sfdialogue.net

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