

Trey Mann, along with his brother Clay, operates 2M Farms on 550 acres in Madison County, where they are witnessing the transformative power of modern irrigation. His system includes five pivots, all controlled through phone apps that allow him to adjust water delivery based on real-time crop needs. "With this technology, I can modify the speed of the pivot and give my crops exactly what they need," Mann explains. This smart irrigation system has significantly boosted his yields while conserving water, with half of his land now under irrigation thanks to the Alabama Irrigation Initiative.

This year's harvest illustrates the system's success. Mann reported that their irrigated soybeans produced 35 bushels per acre more than the non-irrigated crop and were of much higher quality, with less damage due to the optimal growing conditions.

Alabama agriculture faces a critical challenge: only 7% of the state's harvested cropland is irrigated, putting it 28% behind its closest neighbor, Georgia. The lack of widespread irrigation limits the ability of farmers to produce consistent yields, especially as unpredictable weather patterns become more common. To bridge this gap, the Alabama Irrigation

Mann showcases irrigated (left) and nonirrigated (right) soybean plants, highlighting the impact of irrigation on growth and yield. 2024 yield: irrigated soybeans produced 35 bushels more per acre than non-irrigated.

Initiative, launched by the Alabama Soil and Water Conservation Committee (ALSWCC) in partnership with USDA's NRCS, Auburn University and University of Alabama Huntsville, is helping farmers like Mann adopt water-efficient irrigation systems that conserve water and boost productivity.

Launched in 2019, the initiative initially focused on the Middle Tennessee River Basin and has since expanded to include the Choctawhatchee River and Pea River watersheds, as well as the Middle Alabama River Basin. The goal is to help farmers implement water-efficient systems such as drip, micro, and center pivot irrigation, which enhance water use efficiency and increase crop yields.

Lawrence County row crop farmers Bu and Jody
Letson are also seeing results from the Alabama
Irrigation Initiative. They've installed three irrigation
systems on their land, with dramatic results: for the
2024 crop year, their irrigated corn yielded 178 more
bushels per acre than the non-irrigated crops, and the
grain quality was substantially better.

"Installing these irrigation systems through the Alabama Irrigation Initiative has been a game-changer for our yields," Bu Letson said. "It's all about taking what you have and making it more productive. Working with the Lawrence County Soil and Water Conservation District and NRCS made the whole process seamless, and they've been great partners in getting conservation practices on the ground where it's needed most."

The Alabama Irrigation Initiative provides financial support to farmers like Mann and the Letsons, offering up to \$250,000 per producer to cover the cost of new irrigation systems. This includes drilling wells, installing infrastructure like pipe, pumps and pivots, and powering the systems. Additionally, the initiative emphasizes Irrigation Water Management, equipping farmers with tools such as weather stations, soil moisture sensors, and flow meters, along with a three-year vendor subscription to optimize their irrigation schedules.

By promoting sustainable irrigation practices, the Alabama Irrigation Initiative is not only increasing crop yields but also conserving water and protecting the environment. Farmers interested in participating can contact ALSWCC for more information on how to benefit from these cutting-edge irrigation technologies.

## Want More Info?

Contact Kathy Gotcher at kathy.gotcher@swcc.alabama.gov or Michael Helms at michael.helms@swcc.alabama.gov



Letson demonstrates how touchscreen irrigation controls on his center pivot system help him manage water usage and field operations. The digital interface allows farmers to monitor and adjust irrigation settings similar to using a tablet computer.

