

Ohio Agriculture Conversation Initiative (OACI)

The Ohio Agriculture Conservation Initiative (OACI) is an innovative, collaborative effort of the agricultural, conservation, environmental and research communities to improve water quality by establishing a baseline understanding of current conservation and nutrient management efforts while building farmer participation in a new certification program. OACI supports Governor Mike DeWine's H2Ohio plan and has outlined initial steps to address the complexities of Ohio's water quality.

Another objective was to recognize farmers for their dedication to advancing methods that improve water quality in Ohio and increasing the number of best management practices being implemented on farms.

For the first time, the partners of OACI have come together to gather critical information, identify best management practices and propose technical solutions to address water quality challenges in Ohio and the Western Lake Erie Basin.

Challenge:

To accomplish the objectives set for by the partners of OACI, collecting baseline data and engaging with farmers would be a critical place to start. They needed a simple and intuitive software tool to collect data from participating farmers, that provided feedback and recommendations on possible areas of improvement, and ultimately managed a voluntary certification program for the farmers as well. The intent was to use the data to assess farm practices in Ohio, understand current on-farm conservation and nutrient management efforts, measure impact, and recognize those farmers having successful outcomes through best practices.

Solution:

The MAPSYS Development Team designed a Cloud based, cross platform, mobile and web application to collect and manage the data for the customer. The application provides secure access to users and is available on both Android and iOS (Apple) mobile devices or through a browser. To achieve success, the application had to be intuitive, simple and ensure all required fields were completed. Furthermore, our Team implemented a scoring algorithm based on the definitions and rules provided by the OACI team. This scoring system will quantify how well a farm follows best practices, and highlight areas of improvement based on the information provided by the farmer.

Results:

In the first 9 months of going live 500 farmers, across 39 Counties, 25 Watersheds, and representing over 400,000 acres of farm land that have logged in and provided information about their farm and fertilization practices.



Quote:

"As someone who does not have programming experience, working with MAPSYS has been an incredible experience as they do a great job transferring information from their technical world to my layman's side of the project. Their customer service is also a bonus as they provide clear step-by-step expectations and are experienced enough to accomplish any project you want."

- Jordan Hoewischer – Dir. Water Quality and Research, Ohio Farm Bureau Federation

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Looking Forward:

The software had to be easy to use, so even a computer novice could easily navigate through the questions. We are happy to report, that participating farmers and data collectors have been complimentary on how easy it is to get a log in ID and complete the certification questionnaire.

For OACI, having reliably accurate data has always been the driving force behind this project. The goal was to use the data collected through this tool to understand, monitor and measure the impact of farming on our water quality. Through the use of Power BI, standard reports can now be created and data can be viewed in near real time. OACI can also easily create custom ad hoc reports as well. The interactive dashboard also helps organize outstanding tasks and scheduled reviews for the Data Collectors that are managing the program.

OACI has been very pleased with the early results, and have begun to engage MAPSYS in a new phases of the project as they see opportunities to add new functionality and capabilities.

