

IIC announces \$1 million for new research to advance irrigation management

FORT COLLINS (July 15, 2022) — [Irrigation Innovation Consortium](#) (IIC), a public-private collaboration dedicated to the promotion and enhancement of water and energy efficiency in irrigation, has selected four new research projects to begin this summer. Through its annual competitive research calls, IIC encourages private and public entities to combine their expertise to accelerate the development and application of new knowledge and technologies to benefit the irrigation sector and society. Funds and partner match committed to new research in this competitive project cycle total \$1.05 million. IIC administers this research grant program by leveraging a \$5 million award from the [Foundation for Food & Agriculture Research](#) (FFAR) that is matched with non-federal contributions from industry and other partners.

These projects closely fit combinations of IIC research priorities established based on interviews and a survey the Consortium conducted in 2021 with irrigation sector stakeholders:

- Evaluating and improving irrigation technologies and recommendations
- Improving integration of irrigation tools and strategies
- Data synthesis to inform irrigation decision making
- Clarifying water use benchmarks, targets and protocols
- Quantifying potential benefits (biophysical, practical, economic) of advanced irrigation management

“This year’s projects are each highly applied and have effective outreach plans to encourage adoption of tools and research insights,” said Dr. Tim Martin, IIC’s Executive Director. “As a result, we are looking forward to meaningful research results for irrigators, water managers, and industry partners that will encourage broader adoption of advanced irrigation tools and strategies.”

“These projects encompass a wide range of important research that will be highly beneficial to stakeholders,” said [Dr. Kathy Boomer](#), FFAR scientific program director. “We are excited about the diverse collaborations and their potential for pioneering breakthroughs that will go far in advancing sustainable irrigation and water management.”

Read more about these selected projects:

Using the Irrigation-Energy Linkage to Estimate Irrigation Water Delivery

Principal Investigator: Amy Harsch, Nebraska Water Balance Alliance

Industry Partner: Grower Information Services Coop

Budget, including match: \$195,852

This project, which expands on [work previously funded by the IIC](#), is focused on using electrical runtime data to accurately estimate water pumped for irrigation in real time. In addition to providing real-time field-level data on water use to farmers via a user-friendly dashboard tool, the team provides aggregated data to support local groundwater district and state government agency work on water resource modeling, water budgeting, and policy development. The team aims to encourage shifts in awareness and practice related to irrigation management and to scale their impact by engaging with producers and district managers in two Nebraska water management districts.

Developing a data assimilation and integration tool for irrigation management technologies used by California Almond Growers

Principal Investigator: Nicholas Bambach, University of California Davis

Industry Partner: Almond Board of California

Budget, including match: \$291,380

This team will develop a dashboard interface for almond growers that will integrate information from various irrigation management tools producers are using to support critical irrigation decisions, with a strong focus on making remote sensing data actionable.

The team will engage with multiple industry partners whose tools will be able to plug into this interface, and will train Extension agents, farm advisors, government field staff, and other irrigation stakeholders on how to use this dashboard.

Organizing and analyzing Testing Ag Performance Solutions program data, quantifying productivity and GHG outcomes for corn, grain sorghum, and cotton

Principal Investigator: Daran Rudnick, University of Nebraska-Lincoln

Budget, including match: \$250,580

The Testing Ag Performance Solutions program (TAPS, www.TAPS.unl.edu), which is designed to reflect real-world on-farm conditions and circumstances, engages producers in annual competitions to demonstrate and expand their proficiency at managing and marketing commodity crops as efficiently and profitably as possible. The team will capitalize on the extensive data gathered over the last five years of the program, including on how growers' use of decision support technologies affects production outcomes, to synthesize and distill a broad range of management implications and inform future research priorities.

Extension Outreach Tools to Improve Adoption of Irrigation Management Technologies in the Texas Panhandle

Principal Investigator: David Parker, West Texas A&M University and Texas A&M AgriLife Extension Service

Industry Partners: Better Harvest Co., Providence Farm

Budget, including match: \$303,384

This team will develop a user-friendly tool to guide producers in the Texas Panhandle distribute acres dedicated to irrigated and dryland crops as a strategy for managing declining groundwater resources more effectively and profitably. The team will work closely with crop consultants and producers to support their use of this tool in conjunction with using soil moisture sensors effectively.

To learn more about the Irrigation Innovation Consortium, visit: <https://irrigationinnovation.org/>.

###

The Foundation for Food & Agriculture Research (FFAR) builds public-private partnerships to fund bold research addressing big food and agriculture challenges. FFAR was established in the 2014 Farm Bill to increase public agriculture research investments, fill knowledge gaps, and complement USDA's research agenda. FFAR's model matches federal funding from Congress with private funding, delivering a powerful return on taxpayer investment. Through collaboration and partnerships, FFAR advances actionable science benefiting farmers, consumers, and the environment.