

GOAL

The project's goal was to develop and utilize versatile educational material appropriate for cross-platform delivery (in-person or virtual) that is educational, interesting, applicable to their businesses, relatively new to Louisiana contractors, and meets the regulatory requirements of recertification.

TARGET AUDIENCE

Landscape Irrigation Contractors are licensed project managers that specialize in irrigation systems. Anyone who profits from landscape irrigation activities must be licensed in Louisiana. Their responsibilities include designing irrigation systems, specifying pumps or other equipment, improving distribution or application efficiencies, and managing water resources. Once licensed by the state, they can manage teams of technicians and field labor on contracted irrigation projects.

STATE LICENSE RULES

The *Landscape Irrigation Contractor* License authorizes the holder to construct, install, connect, repair, maintain, improve or alter any portion of a landscape irrigation system, including the required wiring for that system. It is enforced by the Louisiana Department of Agriculture and Forestry (LDAF).

To become and remain licensed as a *Landscape Irrigation Contractor*, you must meet the following requirements:

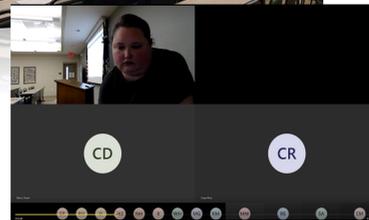
- Pass a 60-question exam covering 11 topics with a score of 80% or higher
- Show proof of liability insurance and pay the state renewal fee annually
- **Take an approved IN-PERSON six-hour recertification course every three years**

CLASS DEVELOPMENT AND STRUCTURE

Four irrigation topics and one safety topic were selected for these classes for a total of six hours of education per class.

Covered Topic	Concept Level	Time (h)
Soil, Water, and Plant Relations – Part 1	Foundational	1.5
Soil, Water, and Plant Relations – Part 2	Practical	1.5
Louisiana One Call	Safety	1
Smart Irrigation Technologies	Advanced	1
Two-wire Technologies	Advanced	1

Historically, all classes were held in-person by the Louisiana Irrigation Association (LIA) under a Memorandum of Understanding with LDAF. If contractors remained visually attentive to presentations for most of the day, they received credit for taking the course. However, this method was not possible for virtual delivery.



Instead, a hybrid version was conducted initially. Contractors chose to attend in-person or via MS TEAMS. Virtual attendees were required to answer technical questions to assess participation (*see Technical Results, right*). Two questions were asked after each irrigation-specific module to ensure continued attendance throughout the day.

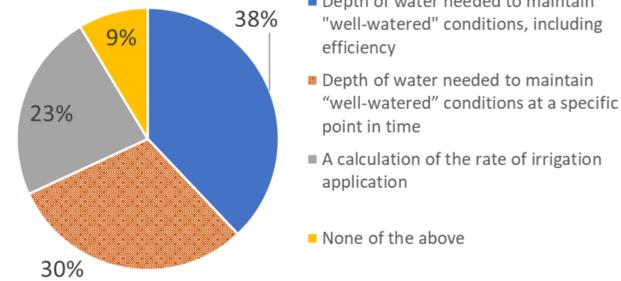
At the day's end, attendees were required to fill out a survey to assess their experience (*see Experiential Results, below*) and serve as proof of recertification. It became clear that most preferred virtual options.

Class Dates	Type of Delivery	Attendees
10/22/2020	Cross-Platform	14
12/3/2020	Cross-Platform	11
1/15/2021	Virtual	32
4/8/2021	Virtual	13
1/21/2022	Virtual	45

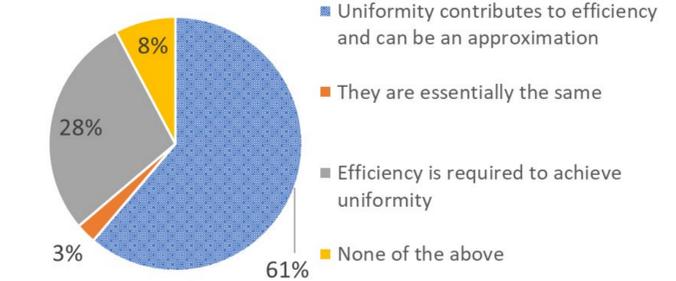
Thus, recordings from the first cross-platform class were turned into video modules used on all remaining virtual opportunities.

TECHNICAL RESULTS

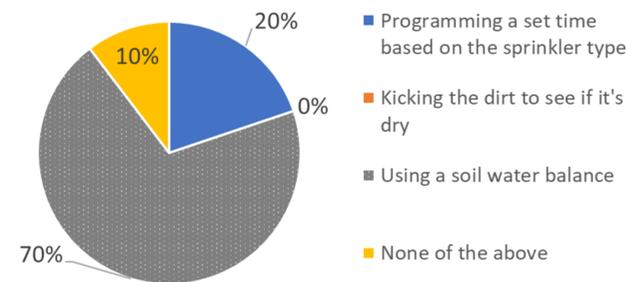
What is the net irrigation requirement?



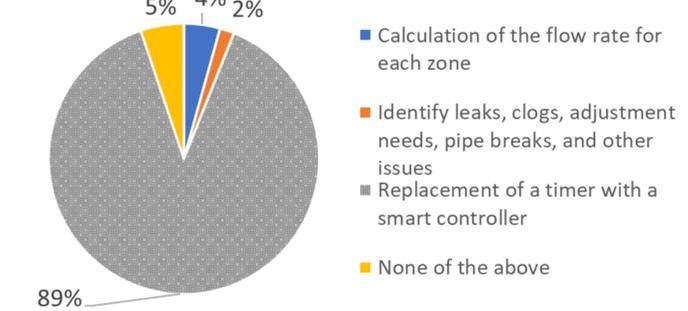
What is the relationship between efficiency and uniformity?



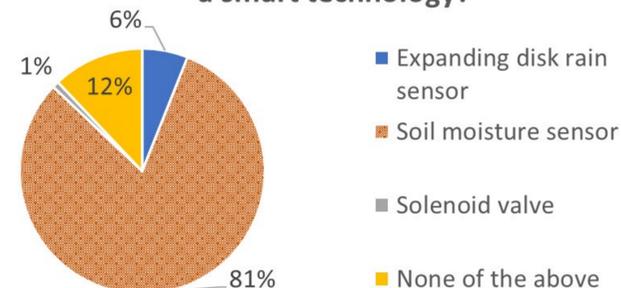
How is irrigation scheduled?



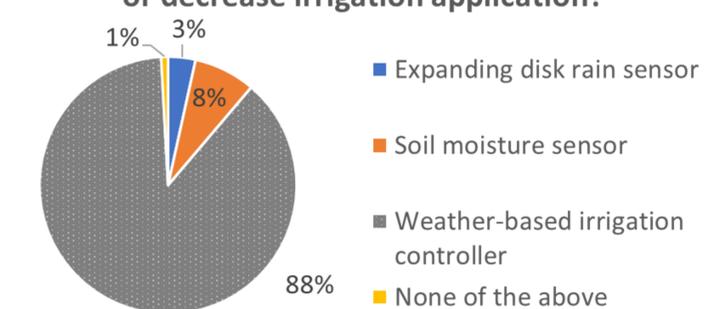
What is NOT included in a typical wet check?



Which of the following would be classified as a smart technology?

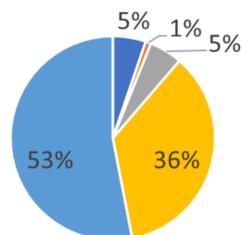


Which smart technology can BOTH increase or decrease irrigation application?

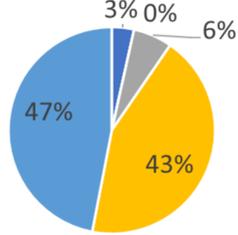


EXPERIENTIAL RESULTS

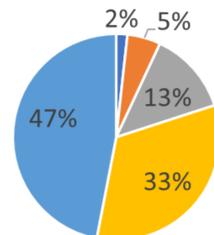
I could see and hear the class content as well as in-person attendees



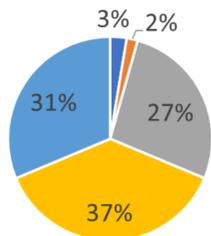
MS TEAMS was good for this type of class



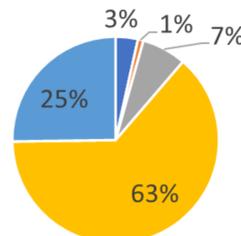
I prefer online classes in the future



The class was an improvement to previous classes I've attended

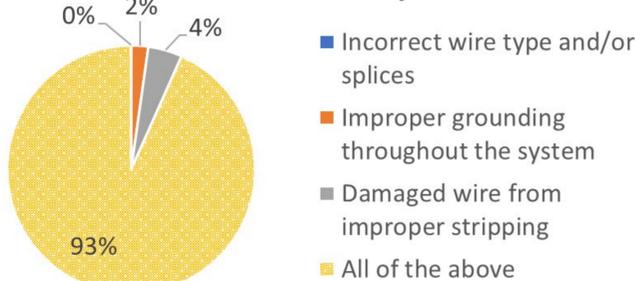


Educational content was interesting and informative

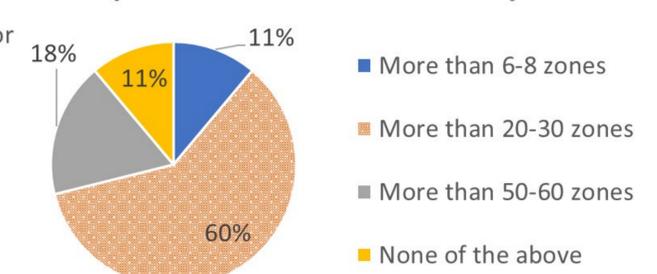


- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Which of the following are reasons for failure of a two-wire system?



When does a two-wire system become more profitable than a multi-wire system?



CONCLUSION

The contractors, totaling a third of those holding licenses, responded positively for being interesting and informative (89%), teleconferencing suitability (90%), audiovisual suitability (89%), maintained or improved from previous classes (69%) and preference for future virtual classes (80%).

The correct answer for each technical question was selected by most contractors (60%-93% correct response rate). Ideally, knowledge would directly translate to water, energy, and labor savings for all.

ACKNOWLEDGEMENTS

A very special thanks goes to the Louisiana Irrigation Association for their guidance, trust, and appreciation of the author through this process.

Additional thanks goes to Louisiana One Call and Louisiana Department of Agriculture and Forestry for their contributions to making these events possible.

