

# Mobile Irrigation Lab Pilot

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# Mobile Irrigation Lab

- Auditing service for irrigation systems
- Identifies areas of over/underwatering due to malfunction or misuse
- Suggests energy savings opportunities
- Recommends upgrades or operational changes

# Mobile Irrigation Lab

- Performed 3 to 5 years after installed or upon a new landowner
- Meant to test overall ability of system to evenly distribute water and measure percentage of application loss
  - Gives potential and actual water savings based on the crops being grown
  - Lists obvious clogs, leaks, and performance issues
  - Suggests efficient end-gun use to reduce overlap or eliminate irrigation of non-crop sections

# Project Initiation

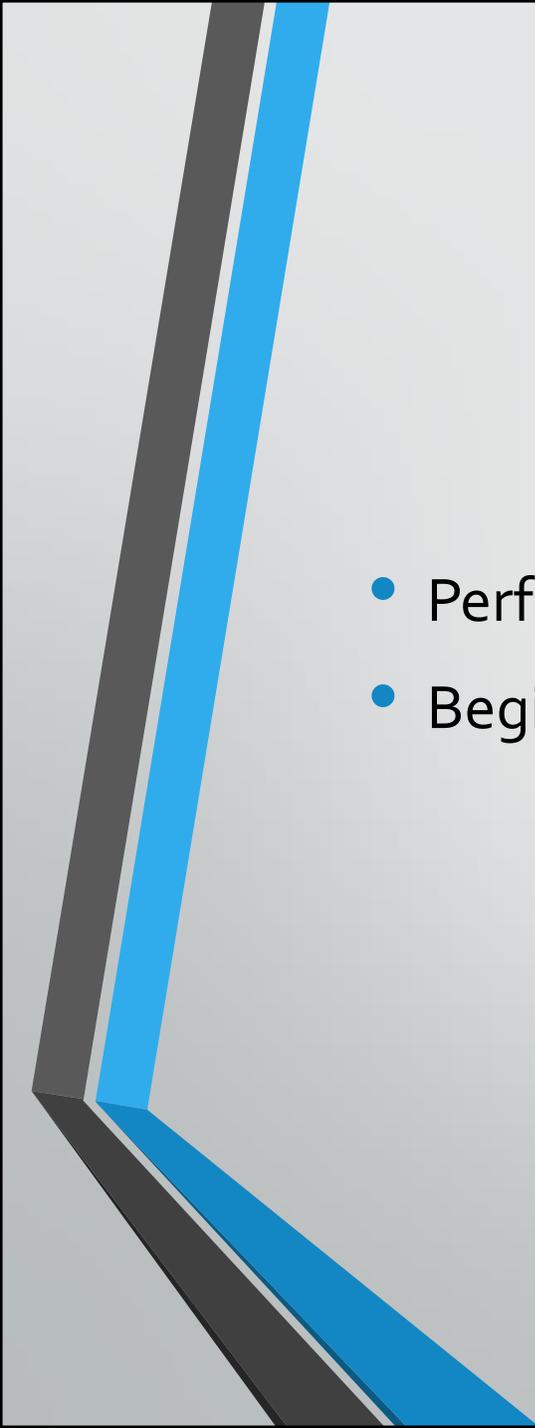
- Realized it was a lacking conservation opportunity in the state
- Educational presentations at partnership events
- Stakeholder and partner meetings
- Getting close to taking off!

# Project Purpose

- Proactive approach to water conservation
- Assess potential water and energy savings of a Mobile Irrigation Lab Service
- Educate public and partners on the program potential
- Develop a plan for a permanent, funded Mobile Irrigation Lab Service

# Project Plan – Year 1

- Host 2 educational outreach programs for landowners
- Identify pilot study participants (24)
  - EQIP and non-EQIP retrofit funded
- Perform pre-audits, retrofits, and post-audits



# Project Plan – Year 2

- Perform remaining pre-audits, retrofits, and post-audits
- Begin analyzing pre- and post-audit data

# Project Plan – Year 3

- Finish data analysis
- Host 2 meetings to share results to the public and partners
- Promote a state funded Mobile Irrigation Lab Service
- Develop a plan to approach state legislators to support service

# Expected Results and Benefits

- Conserve
  - Billions of gallons of water
  - Energy
- Reduce
  - Chemical input
  - Leaching of nutrients
  - Soil erosion
- Increase
  - Crop yields
  - Growers bottom line

# Project Partners

- Aiken Soil and Water Conservation District
- USDA Natural Resources Conservation Service
- SC Department of Natural Resources
- Resource Conservation Partners
- Clemson University
- Local Soil and Water Conservation Districts
- SC Department of Agriculture
- SC Farm Bureau
- Ag South

# Questions?!



Photo taken by Taylor Main, SCDNR

- Does your state have a similar program?
- Have you been involved with getting a similar program off the ground?
- Does your state's program have an energy savings component? How is it measured?