



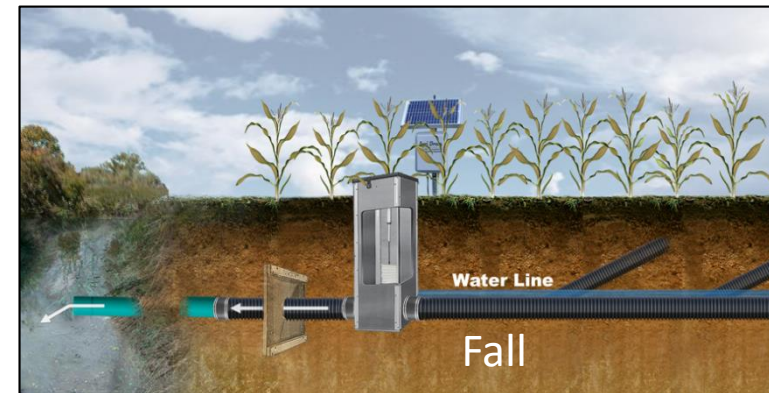
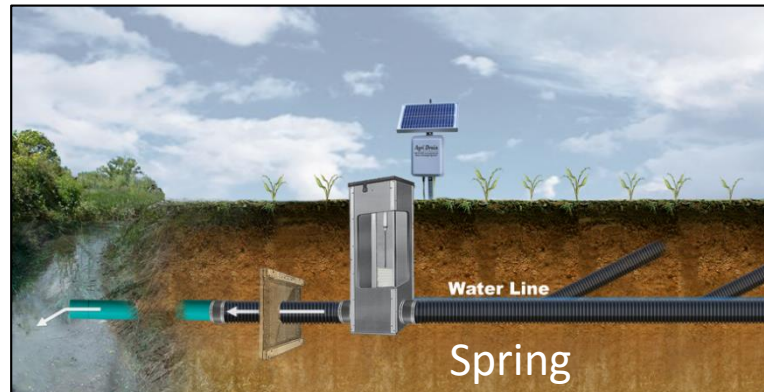
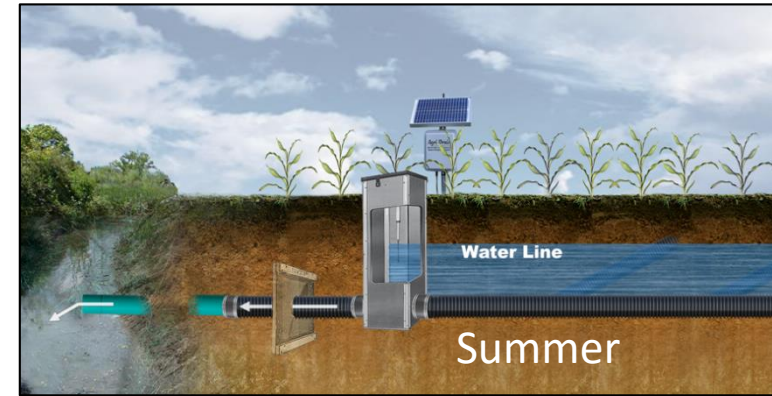
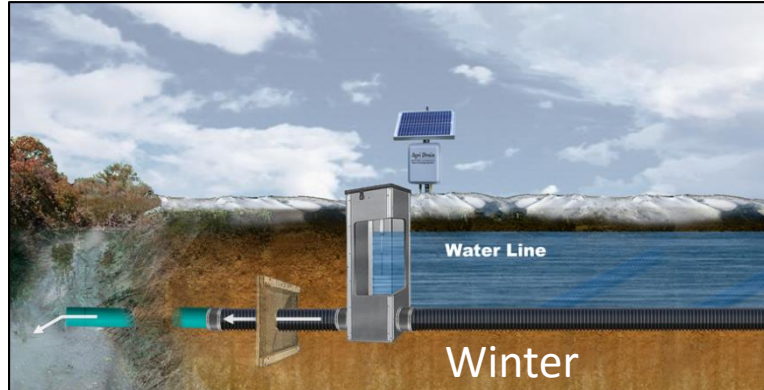
## Water Quality Practices



*"Valuing Conservation"*

# Drainage Water Management

# Drainage Water Management: How it works

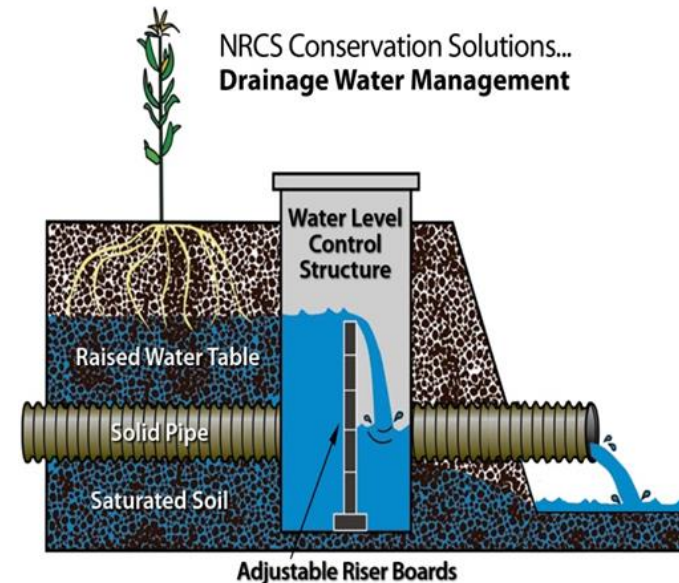


Only drain what you need, when you need it!

# What is Drainage Water Management (DWM)?

**DWM is the process of managing the timing and amount of water discharges from agricultural drainage systems. The DWM plan provides the target water table level settings needed at specific dates or seasons. Season long control is the goal.**

See Dr. Norman Fausey, ARS Scientist, handout on managing DWM



## **The Golden Rule of Drainage Water Mgt.:**

**Only release the amount of water necessary to ensure you have proper conditions for field operations and to provide an aerated crop root zone.**

**Any drainage in excess of this rule likely carries away nutrients and water that is no longer available for crop uptake.**

# Conventional Drainage Design

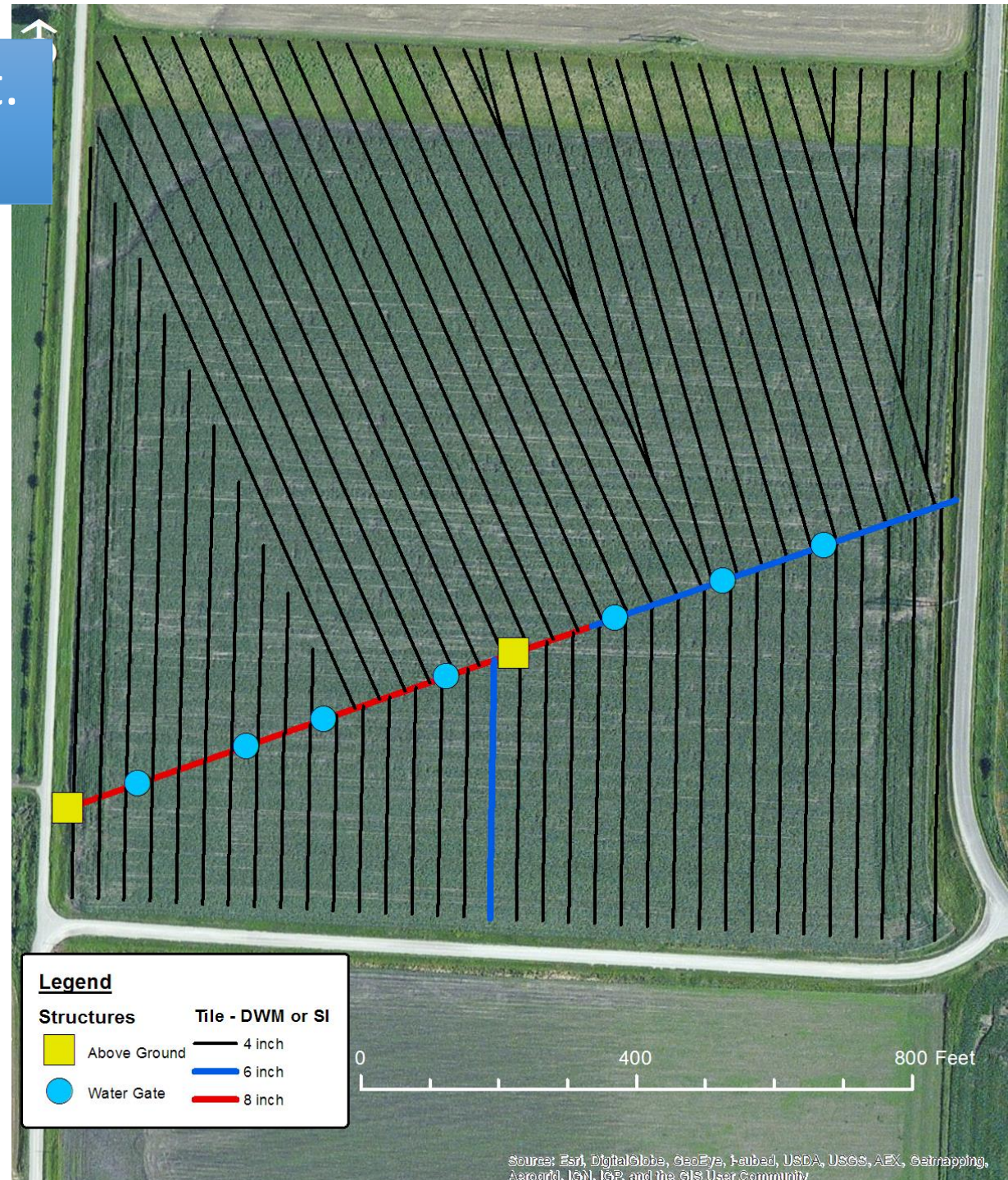
**50 foot spacing  
~ Cost \$806/acre**



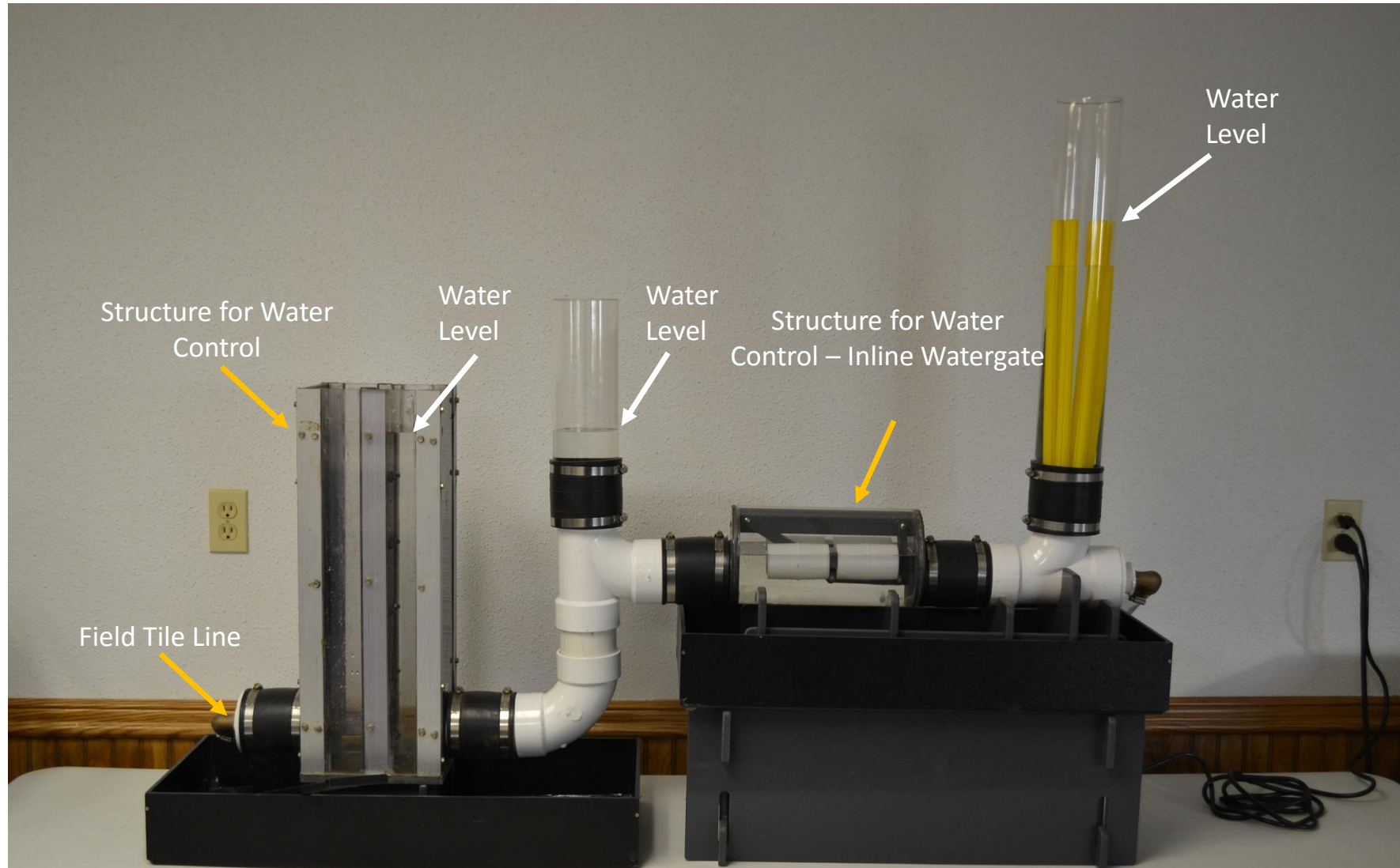
# Drainage Water Mgt. Design

NRCS FA available  
for:

- CAP 130
- Structures for Water Control
- Watergates
- Additional Submains necessary for DWM to function
- **~\$12,300 for this example**



# Drainage Water Management: How it works



# Managing the System: Automated Control

- Automated control structures for managing water levels
- Web access for remote monitoring and control





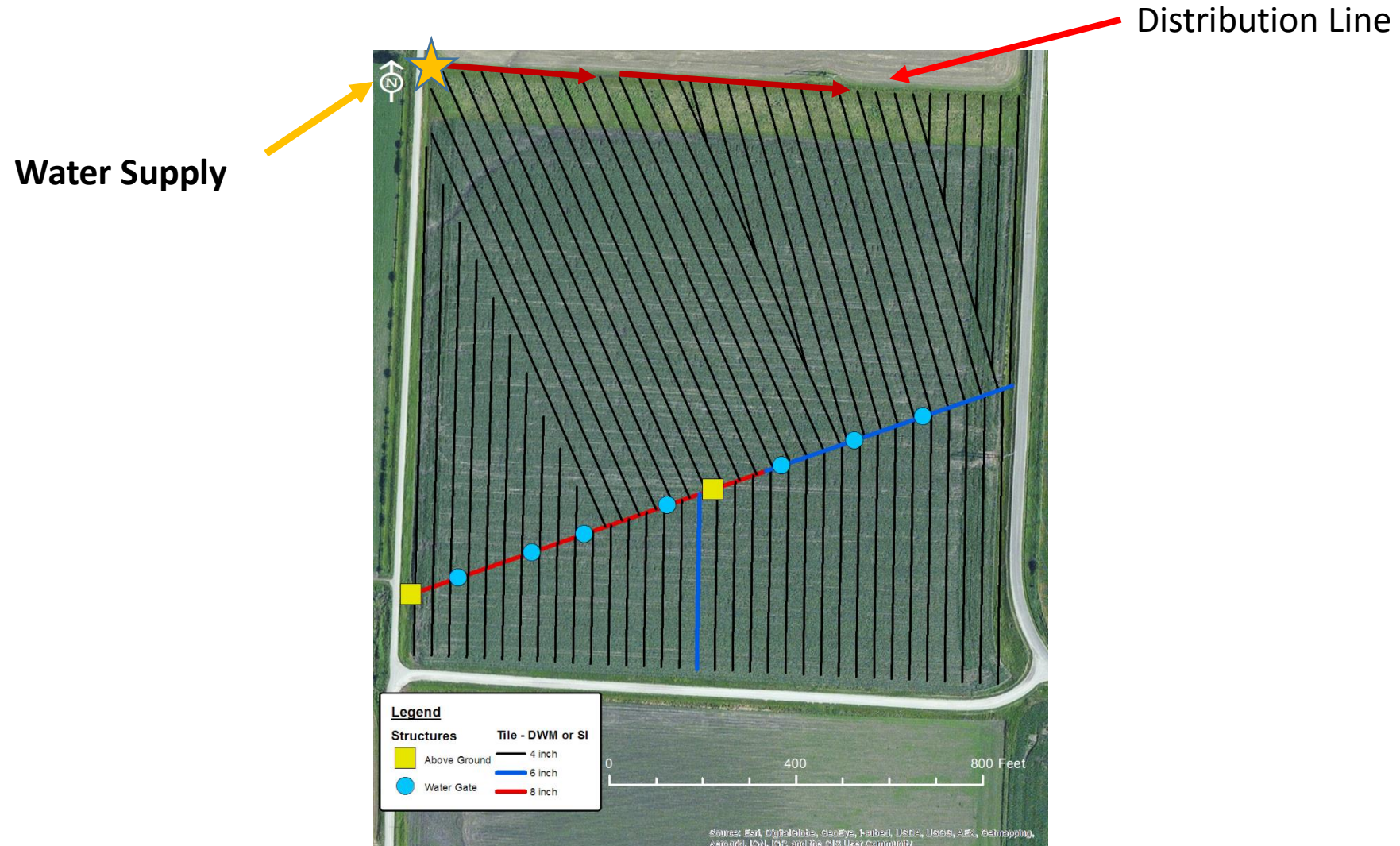


*"Valuing Conservation"*

## Sub-irrigation

# What does it look like?

Only need to add water supply above the last structure for water control



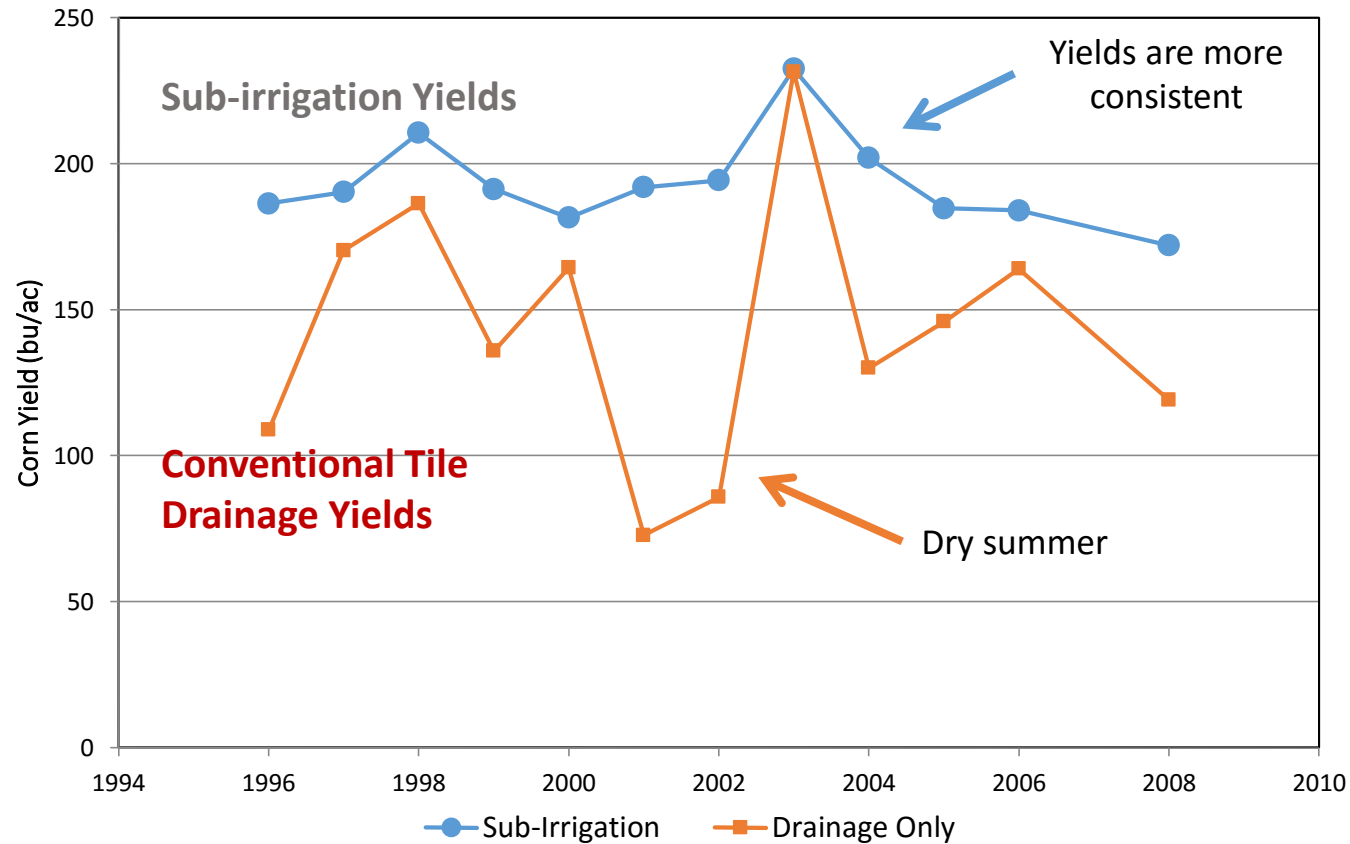
# Water Distribution System

Well, Pump, Supply Line and Manifold



# On-farm benefits:

## Yield impact from sub-irrigation



Fulton County, Ohio research site

# Managing the System: Automated Control vs Manual Control

- Automated control structures for managing water levels
- Web access for remote monitoring and control





# Products and Services

# Products and Services

## **Drainage Water Management Plan**

- NRCS CAP-130
- NRCS Certified TSP Entity
- NRCS Certified TSP Employees

## **Sub-Irrigation Plan**



# Products and Services

## Saturated Buffers

- Saturated Buffer Plan
- Site description
- Design
- Construction Docs
- Construction Inspection and Certification





# Products and Services

## Bioreactors

- Bioreactor Plan
- Site description
- Design
- Construction Docs
- Construction Inspection and Certification



Contact us to learn more about these water management practices and how ESE can help you help producers implement them.

Phone: 303-718-2889

Email: [Paul@Ecoexch.com](mailto:Paul@Ecoexch.com)

