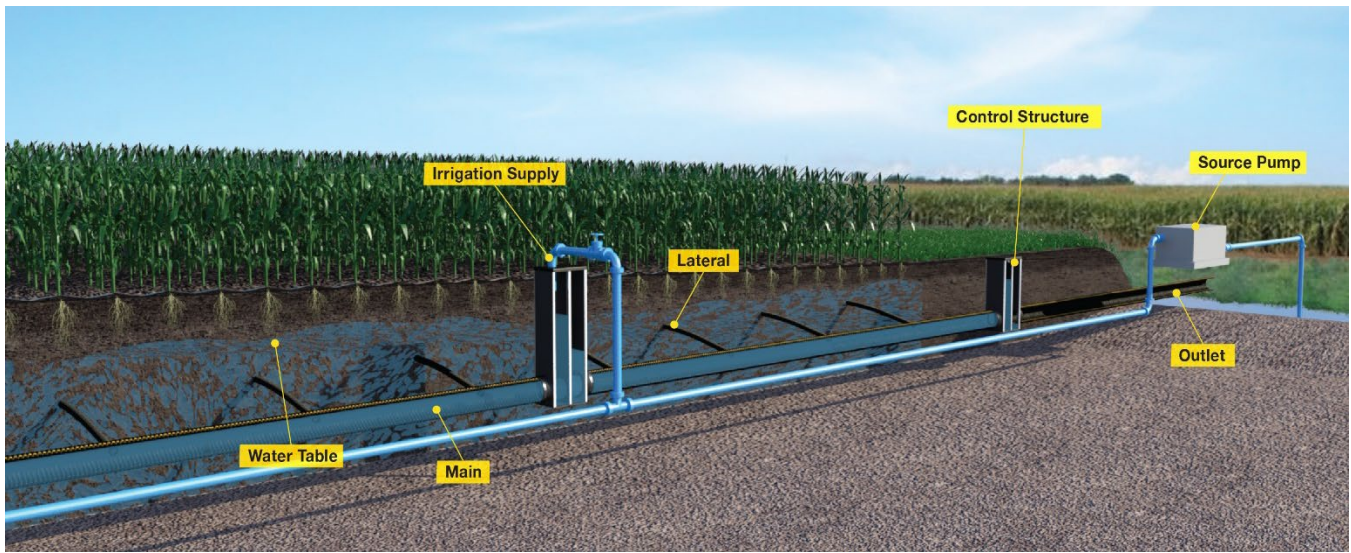


### Practice Overview

Similar to a controlled drainage system, control structures manage the water table through the field. However, water can be supplied to the system from a ditch or storage pond to ensure the water table is always at an ideal level. Excess water from rainfall can still be drained through the system.

### Benefits

- Reduced nutrient loss
- Higher, consistent yields (+30% to 50%)
- Less evaporation loss
- Less energy and water needed to irrigate compared to other irrigation systems



### How it Works

Water is supplied to an otherwise controlled drainage system to ensure that the water table is always at an ideal level. Water can be pumped from a nearby well, ditch, or storage pond (“Drainage Water Recycling”) to each control structure, or to an upstream mainline/manifold and allow the water to work with gravity to fill the water table to desired WCS height. A combination of floats, pumps, and automatic valves can be used to automate and optimize the system.

### Installation Considerations

- Most effective on flat fields
- Soil must have high water holding capacity
- Soil profile must have an impermeable layer to prevent deep infiltration .
- Lateral spacing about 65% closer than traditional drainage

### Costs

- Varies depending on water source, field topography, crop water needs, etc.

### Studies, Resources, Funding

- [NRCS Codes \(443\)](#)
- [Transforming Drainage – Drainage Water Recycling](#)
- [Transforming Drainage – Subirrigation Suitability Tool](#)
- [Transforming Drainage – Pond Sizing Tool](#)