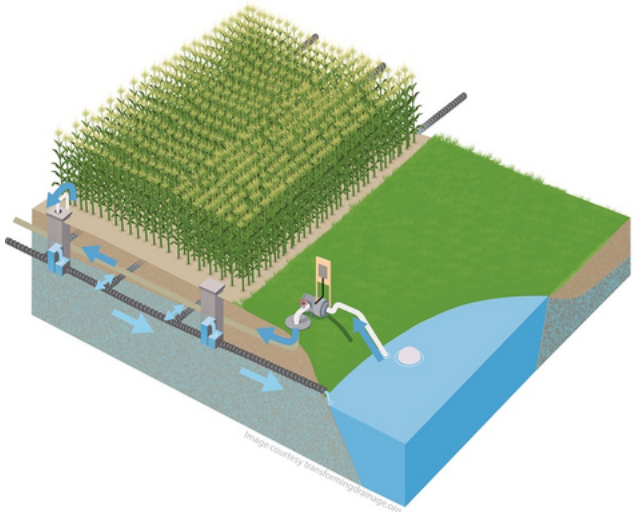
ADMC Agricultural Drainage Management Coalition

FACT SHEET

Drainage Water Recycling

ABOUT

Drainage Water Recycling captures drainage water in a reservoir or pond, and then uses the stored water to irrigate crops at a time of high water demand. The practice helps balance excessive wet and excessive dry cycles that happen within a crop growing season. Much of the Midwest crops would benefit with 4 - 6 inches of supplemental irrigation.



Drainage Water Recycling Schematic

BASICS

Site requirements

- Most effective on flat fields
- Dedicated space for reservoir
- Access to power for pumps
- Water may need to be filtered prior to irrigation
- Pivot or subiirragation can be used

Footprint

A reservoir that can capture at least 4 inches of irrigation water and upto 6 inches of irrigation water is currently recommended.
Example: 4 inches (0.33 ft) needed for 60 acres is about 20 acre-feet

- 20 acres with 1 foot depth
- 4 acres with 5 foot depth
- 1 acre with 20 foot depth

Performance

- Increases yields
  - 19% increase for corn
  - 12% increase for soybean
  - Higher increases in dry years
- Nutrient reductions
  - 24 - 37% nitrate reduction
  - 21 - 38% phosphorus reduction

- 19% corn yield increase
- 12% soybean yield increase

$1,000 - $3,000 per acre foot for the water storage

- Water storage
- Reduces variability
- Nutrient reduction
- Habitat

INTERACT WITH ADMC

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[NRCS CPS 447 Irrigation and Drainage Tailwater Recovery]