

# AG. WATER QUALITY ACT



Photo courtesy of USDA ARS



Photo courtesy of Creative Commons



Photo courtesy of USDA ARS

TECHNICAL ASSISTANCE

FUNDING ASSISTANCE

IMPORTANT CONSIDERATIONS

## WATER CONTROL STRUCTURE

### CROPS BMP #15



Photos courtesy of Creative Commons

**Description:** A device that is added to a new or existing tile drainage system that allows for regulation of the water table in tiled fields.

**AWQA Minimum Requirements:**

- Install water control structure and regulate flow in a manner that reduces nutrient, pathogen, and pesticide delivery to receiving water.
- Manipulate the water table to reduce oxidation of organic matter when fields are not in production.

**Recommendations:**

Install water control structures in new or existing tile drainage systems to reduce nutrient, pathogen, and pesticide pollution from agricultural fields. Install at the edge of fields to minimize impact to production. Regulate the water table in a manner that achieves desired management goals for soil organic matter conservation and wildlife habitat. Reduce crop water stress

during the growing season by raising the water table to the lower extent of the rooting zone. Consult with an extension agent regarding the suitability of your soils for achieving benefits from a water control structure.

#### **Technical References**

**University Publications**

- [University of Kentucky College of Agriculture Extension publications.](#)
- [Drainage Water Management for the Midwest, Fact Sheet WQ-44](#)
- [Agricultural Water Table Management Systems, Fact Sheet AEX 321-97](#)

**USDA/NRCS Publications**

- [Practice Code 554 Drainage Water Management](#)
- [Practice Code 587 Structure for Water Control](#)
- USDA, NRCS. 2001. [National Engineering Handbook, Part 624](#), Sec. 16, Drainage of agricultural land.
- USDA, NRCS. 2001. [National Engineering Handbook, Part 650](#), Engineering Field Handbook, Chapter 14, Water management (Drainage).

#### **Funding Assistance Options**

**State Cost Share**

- See your local Conservation District to [apply](#).

**Kentucky Ag. Development Fund (KADB/KAFC)**

- Select from available program options [here](#).

**NRCS Environmental Quality Incentives Program (EQIP)**

- Select from available program options [here](#).

#### **Important Considerations**

Water Quality Benefit (☹-☹☹☹☹): ☹☹☹☹☹  
(KEY: ☹=good, ☹☹☹☹☹=best: see [STEPL Model](#))

**Wildlife Benefits**

- Contact the Kentucky Department of Fish and Wildlife's [Habitat Improvement Program](#) on how to improve wildlife habitat with select BMPs (1-800-858-1549).