AG. WATER QUALITY ACT



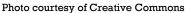




Photo courtesy of USDA ARS

TECHNICAL ASSISTANCE

Photo courtesy of USDA ARS

FUNDING ASSISTANCE

IMPORTANT CONSIDERATIONS

WATER HARVESTING

FARMSTEAD BMP #5

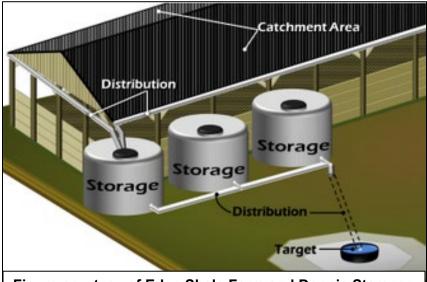


Figure courtesy of Eden Shale Farm and Donnie Stamper

Description:

Water collection from farmland or farm buildings to benefit livestock or crops and minimize stormwater erosion.

AWQA Minimum Requirements:

Construct water harvesting structure and manage harvested water using practices that do not cause erosion. Ensure that practices continue to divert stormwater away from animals, feedlots, and animal waste storage facilities in order to minimize the volume of wastewater and maximize harvested water. Maintain grassed waterways and filter strips that may receive concentrated flows. Direct concentrated flows away from areas where erosion may occur. In some cases, diversions, berms, and sheet flow systems may be needed to prevent erosion and reduce the speed of overflows. Install backflow prevention or air gap system to prevent contaminated water from entering municipal water supply lines.

Recommendations:

Water harvesting structures should be sized appropriately for rainfall amount and usage needs. Screens and other guards should be installed to minimize the leaf debris that can reach the storage structure. Guards should also prevent mosquito breeding. Water harvesting for above ground tanks should begin in March and continue through the middle of October, unless there is an unexpected risk of freezing prior. Water harvested from asphalt shingles should not be used to water livestock. Backflow preventers should be installed to prevent contamination of the municipal water supply. Use dark or shaded tanks to prevent algal growth and cooler water temperatures for the plants and animals. Solar panels and wind energy can be used to pump water to tanks, however gravity flow is the most efficient.

Technical References

University Publications

- AEN-103 Stormwater BMPs
- AEN-135 Rainwater Harvesting
- HO-120 Irrigation and Rainwater

USDA/NRCS Publications

- Practice Code 636 Water Harvesting
- Practice Code 362 Diversion
- Practice Code 558 Roof Runoff
- Practice Code 350 Sediment Basin
- Practice Code 356 Dike
- Practice Code 410 Grade Stabilization
- Practice Code 468 Lined Waterway
- Practice Code 620 Underground Outlet
- Practice Code 638 Water & Sediment Control Basin
- Practice Code 554 Drainage Water Management
- Practice Code 516 Livestock Pipeline
- Practice Code 614 Watering Facility

Funding Assistance Options

State Cost Share

 See your local Conservation District to <u>apply.</u>

<u>Kentucky Ag. Development Fund</u> (KADB/KAFC)

Select from available program options <u>here.</u>

NRCS Environmental Quality Incentives Program (EQIP)

• Select from available program options <u>here.</u>

Important Considerations

Water Quality Benefit (- - - -): (KEY: -good, -best: see STEPL Model)