# ON-FARM WATER MANAGEMENT PROGRAM



The **On-Farm Water Management Program (OFWM)** provides funding for Land-Grant and Regional Universities, Non-Profits and Kentucky farm families to financially incentivize better water management practices across the Commonwealth.

The Kentucky Agricultural Development Fund and the Kentucky Water Resource Board are dedicated to helping Kentucky agriculture become more sustainable and profitable for generations to come by supporting this program.

Direct questions concerning these guidelines to the Kentucky Office of Agricultural Policy at (502) 564-4627 or KOAP@ky.gov.

## I. Program Areas

A. Research, Development and Demonstration (RDD) - See page 4 for full RDD Guidelines.

#### 1. Who should apply?

Not for profit entities that emphasize agricultural research and education.

#### 2. Requirements

- a. Projects must include a least two (2) Best Management Practices (BMPs) with direct water quantity benefit.
- b. Must have a formal research and outreach plan
- c. The Technical Advisory Group (TAG) must conduct a site visit before an applicant submits an application.
- d. The Applicant must present to the Kentucky Agricultural Development Board (KADB) On-Farm Water Management Committee at its quarterly meeting to answer any questions regarding the application.

#### 3. Funding

■ The maximum grant award is 50% of the total project cost up to \$250,000.

#### B. Producer Implemented Project (PIP) - See page 6 for full PIP Guidelines.

#### 1. Who should apply?

Individuals or private business entities engaged in farming for profit.

#### 2. Requirements

- a. Projects must include at least one (1) Best Management Practice (BMP) with a direct water quantity benefit.
- b. The Technical Advisory Group (TAG) must conduct a site visit before an applicant submits an application.
- c. The Applicant must present to the Kentucky Agricultural Development Board (KADB) On-Farm Water Management Committee at its quarterly meeting to answer questions regarding the application.

#### 3. Funding

- The maximum grant award is 50% of the total project cost up to \$100,000.
- C. Small Scale Grant (SSG) See page 8 for full SSG Guidelines.
  - 1. Who should apply?

Individuals or private business entities engaged in farming for profit.

#### 2. Requirements

- Projects must include at least one (1) Best Management Practice (BMP) with a direct water quantity benefit.
- The Applicant must have an established water source.

#### 3. Funding

- a. The maximum grant award is 50% of the total project cost up to \$10,000.
- b. Reimbursement will be made at completion of the project and a satisfactory site visit by the Kentucky Office of Agricultural Policy

\*Note to Applicants: The SSG application process is intended to be a simpler less time consuming option for smaller scale water management projects across Kentucky. Applicants are not asked to present to the OFWM Committee or KADB Board. Applicants must be available for KOAP follow-up and community education and outreach regarding the project.

## **II. Standard On-Farm Water Guidelines (All Program Areas)**

#### A. Application Submission

- 1. All applications must be submitted to the Kentucky Office of Agricultural Policy no later than close of business on one of the following dates:
  - April 28
  - August 25
  - December 15
- 2. Submit the original & one (1) copy to the Kentucky Office of Agricultural Policy, 404 Ann Street, Frankfort, KY 40601 ATTN: OFWM Program.
  - Please do not submit application in any type of binding. Faxed or emailed copies will not be accepted.

#### B. Funding Limitations

- Annual Maximum: Applicants shall be limited to 50% reimbursement for eligible project expenses not to exceed the following specific program maximum within program year:
   RDD \$250,000
   PIP \$100,000
   Small Scale Grant \$10,000
- 2. No more than 50% of the funds for this project may come from Kentucky Agricultural Development Fund (KADF) grants, including county cost-share funds and Kentucky Agricultural Finance Corporation (KAFC) loan programs.
- 3. Applicants previously approved for an On-Farm Water Management Program grant shall complete the prior project before submitting a new application for consideration.
- 4. Unless otherwise provided by the KADB, the reimbursement rate for expenses shall be fifty cents (\$0.50) of reimbursement for each dollar (\$1.00) of budgeted, approved, documented and verified expenses.

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#### C. Eligible Investments & Exclusions

 Eligible items shall be restricted to components and investments used to enhance water management, through approved best management practices, for the benefit of farming operations located in Kentucky.

See **Appendix B** for a list of eligible best management practices.

- 2. Improvements to personal residences, non-farm commercial property, and any other non-farm structures are not eligible.
- 3. Tractors, motorized vehicles, and other mobile equipment with an internal combustion engine are excluded from this program (unless specifically approved by KADB).
- 4. Eligible items will be funded once per project area. Application for a previously funded expense will be seen as recurring and will not be eligible.
- 5. Applicants with one or more active "Notices of Violation" from the Energy and Environment Cabinet Divisions of Waste, Water or Air Quality <u>are not eligible</u> for funding.
- 6. Land purchases or associated fees are not eligible match or project expense.

#### D. Post Approval Requirements & Deadlines

 Completion Deadline: Projects approved for funding must be completed and all required documentation for reimbursement submitted to the Kentucky Office of Agricultural Policy no later than one year from the effective date of the legal agreement.

#### Submit documentation to:

Kentucky Office of Agricultural Policy :: 404 Ann Street :: Frankfort, KY 40601 ATTN: OFWM Program

- 2. An Applicant must comply with all reporting requirements imposed by the KADB.
- 3. An Applicant must provide proof of insurance for investments within the project budget above \$2,500.
- 4. An Applicant must maintain the best management practices funded with KADF funds for a minimum of 5 years after the completion of the project.

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## III. Research, Development and Demonstration (RDD) Projects

The On-Farm Water Management Program provides funding to promote water resilience on farms. A Research, Development and Demonstration (RDD) project is a proving ground for water management practices on public regional farms.

#### A. Eligibility Requirements

- 1. Applicant must be a not for profit entity with emphasis on agricultural research and education.
- 2. Project must include a minimum of two (2) Best Management Practices with a direct water quantity benefit (See Appendix B).
- 3. Applicants must be able to complete and implement a formal education and outreach plan to quantify and substantiate the benefit to Kentucky farmers for five (5) years.
- Applicant must schedule a site visit with a member of the Technical Advisory Group (TAG). To
  determine if your project qualifies for funding, schedule a site visit and program application
  assistance, please contact KOAP 502-564-4627.
- 5. If a project involves land not owned by the applicant, the applicant must submit a written document detailing the rights, responsibilities and future plans of the parties as it relates to the project and the land.

#### B. Application Submission

Applicants must complete and submit the following by Quarterly Submission Deadline to be eligible for review by On-Farm Water Management Committee:.

- 1. KADF Project Application
- 2. All required additional documents: Map of proposed project location, Ag Water Quality Plan (AWQA) Plan, Project Timeline, Education/Outreach Plan, etc.
- 3. TAG Site Visit Sign-Off Sheet
- 4. Documentation of matching funds for project (in-kind or true match).

#### C. Application Consideration

- 1. The Applicant shall be notified of the date, time and location of the On-Farm Water Management Committee (OFWM) Quarterly Meeting at which the application will be considered.
  - The applicant shall attend the meeting to present the application and answer questions about the submitted application.
- 2. The OFWM Committee may make a recommendation to the KADB for a final action the following month.

For example, an application submitted in January will be reviewed by the OFWM Committee in February with a possible final decision by the KADB in March.

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#### D. Eligible Expenses

Eligible expenses are those related to installation of water resource best management practices listed in Appendix B or any innovative designs for water resource management approved by the Board, generally including:

- 1. Expenses related to the construction of a facility or expansion/renovation of an existing facility
- 2. Expenses to purchase project-related equipment; and
- 3. Expenses for documented, contracted labor associated with the project.

See II.C. for specified exclusions.

#### E. Funding Limitations

- 1. Applicants are eligible for 50% of total project cost up to \$250,000 in KADF State and County funds
- 2. Funds will be distributed in the form of either a cost-reimbursement grant or cost-reimbursement forgivable loan over a two (2) year period.
- 3. True financial match or in-kind contributions may be eligible as matching funds, as outlined in Appendix A.
- 4. Only expenditures incurred after the date the application is received by the KOAP are eligible for reimbursement.
- 5. KADB funds may be used to reimburse for administrative expenses for RDD projects; however, the reimbursement amount for administrative expenses shall not exceed 10% of the total KADF funds contributed to the project.
- 6. All construction projects requiring outside labor shall submit two (2) separate bids with the application. Applicants must follow all applicable procurement laws and regulations.
- 7. Reimbursement for project expenses shall not be made unless the Recipient's project is approved by the KADB and a Legal Agreement signed by the KOAP Executive Director is in effect.
  - a. Recipients shall provide a detailed itemization and verification of all expenditures related to the project. Verification shall be made by submitting itemized receipts/invoices and either cancelled checks or copies of relevant credit card statements as proof of payment.
  - b. Cash receipts are not eligible for reimbursement.
  - c. Recipients shall report to KOAP for five (5) years on the progress and continued outreach efforts of the project.

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## IV. Producer Implemented Project (PIP) Guidelines

The On-Farm Water Management Program provides funding to promote water resilience on farms. A Producer Implemented Project (PIP) is for private farms who wish to implement best management practices for water management on their farm.

#### A. Eligibility Requirements

- 1. Only one individual per household may apply for the On-Farm Water Management Program funds within a program year.
  - A household is comprised of an individual, his or her spouse, and his or her dependents for federal income tax purposes. A business entity shall be considered in the same household as a principal of such business entity and the individual are related under 26 U.S.C 267(b) and applying 26 U.S.C 267(c)
- Applicants must receive either at least \$25,000 in Gross Farm Income (GFI) or 20% of gross income from farming for the previous two years, <u>calculated by dividing the GFI amount found on the Schedule F by the Adjusted Gross Income amount found on the Form 1040</u>. Applicants who do not file Schedule F may submit alternative documentation to establish that they meet the thresholds.
- 3. Project must include a minimum of one (1) Best Management Practice with a direct water quantity benefit (See Appendix B).
- 4. Applicants must be able to complete and implement a formal education and outreach plan to quantify and substantiate the benefit to Kentucky farmers for five (5) years.
- Applicants must schedule a site visit with a member of the Technical Advisory Group (TAG). To
  determine if your project qualifies for funding, schedule a site visit and program application
  assistance, please contact KOAP 502-564-4627.
- 6. If a project involves land not owned by the applicant, the applicant must submit a written document detailing the rights, responsibilities and future plans of the parties as it relates to the project and the land.

#### **B.** Application Submission

Applicants must complete and submit the following by Quarterly Submission Deadline to be eligible for review by On-Farm Water Management Committee:.

- 1. KADF Project Application
- 2. All required additional documents: Map of proposed project location, Ag Water Quality Plan (AWQA) Plan, Project Timeline, Education/Outreach Plan, etc.
- 3. TAG Site Visit Sign-Off Sheet; and
- 4. Documentation of matching funds for project.

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#### C. Application Consideration

- 1. The Applicant shall be notified of the date, time and location of the On-Farm Water Management Committee (OFWM) Quarterly Meeting at which the application will be considered.
  - The applicant shall attend the meeting to present the application and answer questions about the submitted application.
- 2. The OFWM Committee may make a recommendation to the KADB for a final action the following month.

For example, an application submitted in January will be reviewed by the OFWM Committee in February with a possible final decision by the KADB in March.

#### D. Eligible Expenses

Eligible expenses are those related to installation of water resource best management practices listed in Appendix B or any innovative designs for water resource management approved by the Board, generally including:

- 1. Expenses related to the construction of a facility or expansion/renovation of an existing facility
- 2. Expenses to purchase project-related equipment; and
- 3. Expenses for documented, third-party contracted labor associated with the project. *An applicants own labor is NOT eligible.*

See II.C. for other specified exclusions.

#### E. Funding Limitations

- 1. Applicants are eligible for 50% of total project cost up to \$100,000 in KADF State and County funds.
- 2. Funds will be distributed in the form of either a cost-reimbursement grant or cost-reimbursement forgivable loan over a 1-year period.
- 3. True financial match may be eligible as matching funds, as outlined in Appendix A.1.
- 4. Only expenditures incurred after the date the application is received by the KOAP are eligible for reimbursement.
- 5. All construction projects requiring outside labor shall submit two (2) separate bids with the application. Applicants must follow all applicable procurement laws and regulations.
- 6. Reimbursement for project expenses shall not be made unless the Recipient's project is approved by the KADB and a Legal Agreement is signed by the KOAP Executive Director.
  - a. Recipients shall provide a detailed itemization and verification of all expenditures related to the project. Verification shall be made by submitting itemized receipts/invoices and either cancelled checks or copies of relevant credit card statements as proof of payment.
  - b. Cash receipts are not eligible for reimbursement.
  - c. Recipients shall report to KOAP for 5 years on the progress and continued outreach efforts of the project.

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# V. Small Scale Grant (SSG) Program Guidelines

The On-Farm Water Management Program provides funding to promote water resilience on farms. The Small Scale Grant (SSG) is for a private farm that wishes to implement best management practices for water management on the farm in a simple application format.

#### A. Eligibility Requirements

- 1. Only one individual per household may apply for the On-Farm Water Management Program funds within a program year.
  - A household is comprised of an individual, his or her spouse, and his or her dependents for federal income tax purposes. A business entity shall be considered in the same household as a principal of such business entity and the individual are related under 26 U.S.C 267(b) and applying 26 U.S.C 267(c).
- 2. Applicants must receive either at least \$25,000 in Gross Farm Income (GFI) or 20% of gross income from farming for the previous two years, <u>calculated by dividing the GFI amount found on the Schedule F by the Adjusted Gross Income amount found on the Form 1040</u>. Applicants who do not file Schedule F may submit alternative documentation to establish that they meet the thresholds.
- 3. Project must include a minimum of one (1) Best Management Practice with a direct water quantity benefit (See Appendix B).
- 4. Project must have an established water source (municipal, pond, well, etc) that SSG will enhance, increase efficiency or better utilize.
- Applicants must be willing to work with community partners (UK Cooperative Extension, Local Conservation District, etc.) to promote and share water management practices utilized in the project.
- 6. If a project involves land not owned by the applicant, the applicant must submit a written document detailing the rights, responsibilities and future plans of the parties as it relates to the project and the land.

#### B. Application Submission

Applicants must complete and submit the following by Quarterly Submission Deadline to be eligible for review by On-Farm Water Management Committee:.

- 1. KADF OFWM Small Scale Grant (SSG) Application
- 2. All required additional documents: Map of proposed project location, Ag Water Quality Plan (AWQA) Plan, Project Timeline, Schedule F, Narrative, etc.; and
- 3. Documentation of matching funds for project.

#### C. Application Consideration

- The Applicant shall be notified of the SSG Application score, as well as the date, time and location of the On-Farm Water Management Committee (OFWM) Quarterly Meeting at which the application will be considered.
- 2. The OFWM Committee may make a recommendation to the KADB for a final action the following month.

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For example, an application submitted in January will be reviewed by the OFWM Committee in February with a possible final decision by the KADB in March.

- 3. This is a competitive program. All complete applications received by each deadline will be scored, ranked and presented 60 days after the deadline. Incomplete applications will be held for consideration during the next funding cycle, provided the application is complete and funding is available
- 4. Grants are dependent on the availability of funds. If more applications are eligible for funding than there are funds available, then awards will be made according to application scores in descending order, until all funds are expended.

#### D. Eligible Expenses

Eligible expenses are those related to installation of water resource best management practices (BMPs) listed in Appendix B or any innovative designs for water resource management approved by the Board, generally including:

- 1. Expenses related to the construction of a facility or expansion/renovation of an existing facility;
- 2. Expenses to project-related equipment; and
- 3. Expenses for documented, third-party contracted labor associated with the project. *An applicants own labor is NOT eligible.*
- 4. For projects where construction is being done on property not owned by the applicant, the applicant must submit a written document detailing the rights, responsibilities and future plans of the parties as it relates to the project.
- 5. Expenditures related to excavation, renovation, or construction of ponds are **NOT** eligible for funding.
  - See II.C. for other specified exclusions.

#### E. Funding Limitations

- 1. Applicants are eligible for 50% of total project cost up to \$10,000 in KADF State and County funds.
- 2. Funds will be distributed in the form of a cost-reimbursement grant over a 1-year period, upon completion of the project and a KOAP site visit.
- 3. True financial match may be eligible as matching funds, as outlined in Appendix A.1.
- 4. Only expenditures incurred after the date the application is received by the KOAP are eligible for reimbursement.
- 5. Reimbursement for project expenses shall not be made unless the Recipient's project is approved by the KADB and a Legal Agreement signed by the KOAP Executive Director is in effect.
  - a. Recipients shall provide a detailed itemization and verification of all expenditures related to the project. Verification shall be made by submitting itemized receipts/invoices and either cancelled checks or copies of relevant credit card statements as proof of payment.
  - b. Cash receipts are not eligible for reimbursement.
  - c. Recipients shall report to KOAP for five (5) years on the progress, impact and continued use of the project.

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## **APPENDIX A: Matching Funds Definitions**

#### 1. True Financial Match

Budgeted expenses incurred for the first time as part of the project are eligible as true financial match.

- a. Land is not an eligible match.
- b. Examples: loans, grants (federal or non-Tobacco Settlement Funds state), monetary donations, etc.

#### 2. In-Kind Match This term only applies to projects applying under RDD.

In-Kind funds are those that are budgeted and utilized for the project that are not direct new funds but are essential in the success of the project. Examples are below:

- Documented third-party donated materials and equipment utilized in installation of approved BMPs as part of the KADF project.
- b. Personnel salaries of individuals working on the project (i.e. watershed coordinators, volunteers, etc.), also fringe can be included in this category.
- c. Supplies any donated supplies towards the project.
- d. Equipment any costs associated with the use of equipment for the project or fair market value of equipment donated towards use of the project.
- e. Travel any costs associated with traveling for the project whether it's to the site of a BMP, meeting, training, etc.
- f. Contractual any firm or person hired to do a specific task in the project such as sampling, design of BMPs, etc.
- g. Other other eligible costs associated with carrying out the project. An example may be homeowner contribution on an onsite wastewater project, etc.

\*Operating Costs (rent, electricity, etc.) and land (purchasing or owned) are NOT eligible as in-kind match for RDD Projects.

# **Appendix B: Eligible (Direct) On-Farm Water Management Program Practices**

Alternative Water Source: Developing	Definition	A University of Kentucky Cooperative Extension Publication to develop an existing spring, which occurs when groundwater running along an impervious rock layer hits a fracture and discharges on the surface.		
Springs for Livestock	Publication Link: <a href="http://www2.ca.uky.edu/agcomm/pubs/aen/aen98/aen98.pdf">http://www2.ca.uky.edu/agcomm/pubs/aen/aen98/aen98.pdf</a>			
Dam (402)	Definition	A cross channel barrier that is designed to detain or retain water for beneficial reuse on farm.		
	Project examples	Impounding small streams with low head crossings for temporary water storage; creation of ponds in pastures for livestock watering or adjacent to cropland for irrigation.		
	Publication Link: <a href="https://go.usa.gov/xeXHd">https://go.usa.gov/xeXHd</a>			
Dike (356)	Definition	An earthen barrier designed for protection from flood waters and/or the detention or retention of water.		
	Project examples	Building off-stream retention basins to harvest surplus flow; building elevated dikes (berms) to retain spring flow for livestock or irrigation.		
	Publication L	ink: https://go.usa.gov/xeXHv		
Irrigation Pipeline	Definition	A water pipeline and associated components for use in irrigation.		
(430)	Publication Link: <a href="https://go.usa.gov/xeXHG">https://go.usa.gov/xeXHG</a>			
Irrigation	Definition	A pond or small lake with the specific purpose of use as an irrigation water source.		
Reservoir (436)	Publication Link: <a href="https://go.usa.gov/xeXHt">https://go.usa.gov/xeXHt</a>			
Irrigation System, Microirrigation	Definition	An irrigation system that is designed for small, efficient applications of water to crops to improve the overall efficiency of irrigation.		
(441)	Publication Link: <a href="https://go.usa.gov/xeXHz">https://go.usa.gov/xeXHz</a>			
Irrigation System,	Definition	A comprehensive irrigation system designed to address above and below ground irrigation practices and improve efficiency.		
Surface and Subsurface (443)	Project examples	Center pivot, subsurface drip, drip tape, etc		
	Publication Link: <a href="https://go.usa.gov/xeX6C">https://go.usa.gov/xeX6C</a>			
Irrigation Water Management (449)	Definition	The process of fine tuning an irrigation system to optimize water use efficiency.		
	Project examples	Practices or technologies that increase irrigation efficiency / reduce runoff; variable rates of delivery facilitated by: soil moisture monitoring, GIS based irrigation applications, remote sensing (drones).		
	Publication Link: <a href="https://go.usa.gov/xeX6Y">https://go.usa.gov/xeX6Y</a>			
Pond (378)	Definition	An impoundment created for the storage and use of water that is harvested from the landscape.		
	Publication Link: <a href="https://go.usa.gov/xphxZ">https://go.usa.gov/xphxZ</a>			

# **Appendix B: Eligible (Direct) On-Farm Water Management Program Practices**

Pond Sealing and Lining (520)-	Definition	A compacted clay liner that is utilized to reduce seepage and volume loss from ponds.	
COMPACTED SOIL TREATMENT	Publication Link: <a href="https://go.usa.gov/xphxK">https://go.usa.gov/xphxK</a>		
Pond Sealing and Lining (521)- GEOMEMBRANE OR GEOSYNTHETIC CLAY LINER	Definition	A geomembrane or geosynthetic liner that is utilized to reduce seepage and volume loss from ponds.	
	Publication Link: <a href="https://go.usa.gov/xphxk">https://go.usa.gov/xphxk</a>		
Pond Sealing and Lining (522)-	Definition	A concrete liner that is utilized to reduce seepage and volume loss from ponds.	
CONCRETE	Publication Link: <a href="https://go.usa.gov/xphx9">https://go.usa.gov/xphx9</a>		
Providing water for Beef Cattle in Rotational Grazing Systems	Project Examples	Single-source (pond, spring or well) distribution throughout farm (pumps, lines and power for distribution from a pond, well, or runoff structure); Installing lines to link multiple sources for redundancy.	
	Publication Link: http://www2.ca.uky.edu/agcomm/pubs/ID/ID236/ID236.pdf		
Rainwater Harvesting for	Project Examples	Roof runoff and storage project; runoff diversions to ponds, tanks or other storage facilities.	
Livestock Production Systems	Publication Link: <a href="http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN135/AEN135.pdf">http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN135/AEN135.pdf</a>		
Spring Development	Definition	Harvesting water from a spring or other shallow groundwater source for beneficial use.	
(574)	Publication Link: <a href="https://go.usa.gov/xphxN">https://go.usa.gov/xphxN</a>		
	Definition	A water application system that consists of nozzles and pipeline operating under pressure.	
Sprinkler System (442)	Project examples	Small-scale water application by sprinkler for pasture or vegetable plot irrigation.	
	Publication Link: <a href="https://go.usa.gov/xphxQ">https://go.usa.gov/xphxQ</a>		
Stormwater Runoff Control (570)	Definition	The management of rainwater by means of gutters, pipes, and diversions to manage the quality and quantity of stormwater runoff.	
	Project examples	Detention basins to reduce runoff with dual purpose as a water supply for livestock or irrigation; diversion of surplus runoff to existing ponds or pastures to keep water on the farm.	
	Publication Link: <a href="https://go.usa.gov/xphxU">https://go.usa.gov/xphxU</a>		
Tire Tanks for Watering Livestock	Definition	A University of Kentucky Cooperative Extension Publication to build a water tank constructed using a heavy equipment tire may serve as a viable option for supplying livestock with an alternate source of water.	
	Publication Link: <a href="http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN133/AEN133.pdf">http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN133/AEN133.pdf</a>		

# **Appendix B: Eligible (Direct) On-Farm Water Management Program Practices**

Variable Rate Nozzles	Definition	A spray system for applying agrochemicals or water that features an adjustable flow/application rate based on known or assumed parameters of the application environment.
	Definition	A collection and storage structure for harvested water.
Water Harvesting Catchment (636)	Project example	Special category creating an impervious surface to capture runoff (includes roof structures).
	Publication Link: <a href="https://go.usa.gov/xphaK">https://go.usa.gov/xphaK</a>	
Water Well (642)	Definition	A drilled, dug, driven, bored, or jetted hole that is installed into an aquifer to produce usable volumes of water.
	Publication Link: <a href="https://go.usa.gov/xphak">https://go.usa.gov/xphak</a>	
Watering Facility (614)	Definition	A developed area that provides livestock with an alternative water source to traditional surface water resources.
	Project examples	Artificial runoff surface to supply centralized water supply in a rotational grazing system; watering ramps for clean access to ponds or streams (as emergency source); emergency watering station within a rotational grazing system, supplied by PWS, where livestock can be temporarily watered during severe or extreme drought (must be in conjunction with projects developing non-PWS water supplies).
Publication Link:		

# **Appendix C: Complementary (Indirect)Water Management Practices**

Practice Title	Guidelines
Agricultural Water Quality Plan	https://www.uky.edu/bae/awqp
Appropriate All Weather Surfaces for Livestock	http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN115/AEN115.pdf
Building a Grade Stabilization Structure to Control Erosion	http://www2.ca.uky.edu/agcomm/pubs/aen/aen100/aen100.pdf
Conservation Plan	https://go.usa.gov/xpvW2
Farmstead Planning: Old Farm Buildings Repurposed for Better Farming	http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN131/AEN131.pdf
Forest Stewardship Plan	https://go.usa.gov/xpvWj
How to Develop a Farming Complex	http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN131/AEN131.pdf
Kentucky Nutrient Management Planning Guidelines (KyNMP)	http://www2.ca.uky.edu/agcomm/pubs/ID/ID211/ID211.pdf
Nutrient Management Concepts for Livestock Producers	http://www2.ca.uky.edu/agcomm/pubs/aen/aen113/aen113.pdf
On-Farm Composting of Animal Mortalities	http://www2.ca.uky.edu/agcomm/pubs/id/id166/id166.pdf
On-Farm Disposal of Animal Mortalities	http://www2.ca.uky.edu/agcomm/pubs/id/id167/id167.pdf
Riparian Buffers A Livestock BMP for Protecting Water Quality	http://www2.ca.uky.edu/agcomm/pubs/id/id175/id175.pdf
Stormwater BMPs for Confined Livestock Facilities	http://www2.ca.uky.edu/agcomm/pubs/aen/aen103/aen103.pdf
Vegetated Filter Strips for Livestock Facilities	http://www2.ca.uky.edu/agcomm/pubs/id/id189/id189.pdf
Aquaculture Pond (397)	https://go.usa.gov/xpvWD
Constructed Wetland (656)	https://go.usa.gov/xpvWZ
Contour Buffer Strips (332)	https://go.usa.gov/xpvWK
Controlled Traffic Farming (334)	https://go.usa.gov/xpvWk
Deep Tillage (324)	https://go.usa.gov/xpvW8
Denitrifying Bioreactor (605)	https://go.usa.gov/xpvWX
Drainage Water Management (554)	https://go.usa.gov/xpvWN
Dry Hydrant (432)	https://go.usa.gov/xpvWR
Hillside Ditch (423)	https://go.usa.gov/xpvWU
Irrigation Land Leveling (464)	https://go.usa.gov/xpvWE
Livestock Shelter Structure (576)	https://go.usa.gov/xpvWm
Residue and Tillage Management, reduced till (345)	https://go.usa.gov/xpvWV
Saturated Buffer (604)	https://go.usa.gov/xpvWw
Sediment Basin (350)	https://go.usa.gov/xpvWf

# **Appendix C: Complementary (Indirect)Water Management Practices**

Practice Title	Guidelines
Tailwater Recovery (447)	https://go.usa.gov/xpvWG
Access Control (472)	https://go.usa.gov/xpvWA
Access Road (560)	https://go.usa.gov/xpvWs
Animal Trails and Walkways (575)	https://go.usa.gov/xpvWH
Composting Facility (317)	https://go.usa.gov/xpvW6
Conservation Cover (327)	https://go.usa.gov/xpvWF
Conservation Crop Rotation (328)	https://go.usa.gov/xpvWe
Contour Farming (330)	https://go.usa.gov/xpvWt
Cover Crop (340)	https://go.usa.gov/xpvWz
Critical Area Planting (342)	
Diversion (362)	https://go.usa.gov/xpvWJ
Farmstead Energy Improvement (374)	https://go.usa.gov/xpvWS
Fenceline Feeder Systems for Beef Cattle Production and Resources Conservation	http://www2.ca.uky.edu/agcomm/pubs/AEN/AEN134/AEN134.pdf
Field Border (386)	https://go.usa.gov/xpvZq
Filter Strip (393)	https://go.usa.gov/xpvZ3
Grade Stabilization Structure (410)	https://go.usa.gov/xpvZx
Grassed Waterway (412)	https://go.usa.gov/xpvZC
Heavy Use Area Protection (561)	https://go.usa.gov/xpvZr
Lighting System Improvement (670)	https://go.usa.gov/xpvZY
Mulching (484)	https://go.usa.gov/xpvZg
Nutrient Management (590)	https://go.usa.gov/xpvZ2
Residue and Tillage Management, no-till (329)	https://go.usa.gov/xpvZj
Riparian Forest Buffer (391)	https://go.usa.gov/xpvZD
Roof Runoff Structure (558)	https://go.usa.gov/xpvZW
Roofs and Covers (367)	https://go.usa.gov/xpvZZ
Stripcropping (585)	https://go.usa.gov/xpvZB
Structure for Water Control (587)	https://go.usa.gov/xpvZK
Terrace (600)	https://go.usa.gov/xpvZk
Tree/Shrub Establishment (612)	https://go.usa.gov/xpvZ8
Vegetated Treatment Area (635)	https://go.usa.gov/xpvZ9
Water and Sediment Control Basin (638)	https://go.usa.gov/xpvZ5

## **APPENDIX D: Resource List**

#### **External Link Disclaimer Statement**

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#### **B.** Funding Agencies

#### **USDA Rural Development**

www.rurdev.usda.gov/ky

Scott Maas, (859) 224-7319 scott.maas@kv.usda.gov

#### **USDA Natural Resources Conservation Service (NRCS)**

www.ky.nrcs.usda.gov

Deena Wheby, (859) 224-7403 deena.wheby@ky.usda.gov

#### **Kentucky Highlands Investment Corporation**

www.khic.org

(606) 864-5175, (606) 864-5194