

Wildlife Watering Facility Job Sheet

**Natural Resources Conservation Service (NRCS)
 Missouri Department of Conservation (MDC)
 University of Missouri Extension – The School of Natural Resources**

For:	County:
Field(s):	Farm #:
Date:	Tract #:
Designed By:	Contact Information:

PURPOSE: Wildlife Watering Facilities (WWFs) are small constructed ponds used to provide supplementary water sources for wildlife and shallow water habitat for amphibians and reptiles. They are built with a shallow depth and are not intended to support fish and fish should not be stocked. Woodland amphibians such as salamanders, frogs, and toads usually cannot reproduce in ponds stocked with fish. Other species of wildlife need water from a surface source daily. A lack of water may decrease habitat use in areas that otherwise have good habitat. Wildlife watering facilities should be placed one-quarter mile apart or no closer than one-quarter mile to a dependable quality water supply. This will ensure that drinking water is not a limiting habitat factor on your land. Anecdotal accounts indicate that in the Ozarks especially, many historical sources of water such as springs, seeps, and small streams have dried up or disappeared over the last century. WWFs can help to restore water sources to an otherwise dry landscape.



**Wildlife Watering Facility
in forest opening**



**Wildlife Watering Facility
along field edge**

SPECIFICATIONS:

WWFs have an optimum drainage area of 1 to 3 acres, with a maximum drainage area of 5 acres. Large drainage areas increase the risk of earthen spillway erosion. Typical WWF pools are 0.2 acres in size or less. The minimum surface area will be 150 square feet. WWFs will have a minimum depth of 3' over half the pool, and a maximum depth of 6'. WWFs will have a minimum dam top width of 6', minimum side slopes of 3:1, and pool area side slopes of 4:1 or flatter. One slope must be 6:1 or flatter to permit easy wildlife access. Core trenches are not required but the use of high-clay fill is encouraged for the embankment and bottom. Pipe spillways are not required or encouraged, and are an unnecessary expense. However, if the pond is designed for herps, drawdown capability is required as annual late summer drawdowns are used to eliminate unwanted bullfrog populations. The drawdown pipe is typically a 1.5" water line and valve, according to the NRCS design 29-L-51 Rev. 7-84. Construct a 10' wide grassed spillway area at one end of the dam. The top of the dam will be 1.5' above the grassed spillway. Immediately after the WWF is built, fertilize the area with a minimum of 500 pounds of 12-12-12

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fertilizer per acre (or equivalent). Lime is not required, but liming with 3 to 4 tons of bulk lime per acre is strongly encouraged if the site is accessible by lime truck (or small enough to make the use of pelletized lime feasible).

Seed the disturbed areas with the following revegetation mix (per acre).

Spring (3/1 to 5/15) Mix
20 lbs winter wheat or rye
2.5 lbs orchardgrass
1.0 lbs redtop grass
1.4 lbs ladino clover
0.9 lbs red clover

Fall (8/15 to 10/15) Mix
25 pounds oats
2.2 lbs orchardgrass
0.9 lbs redtop grass
1.4 lbs ladino clover
0.9 lbs red clover

Mow oats, wheat, or rye when 8 to 12 inches tall or before heading out. WWFs built in soils known for leakage will be designed on north or east facing slopes and will be constructed in February, March, or April. Past experience indicates that the most successful sites in leaky soils have been where the WWFs are placed 50' to 150' off of a ridge. These placements have shown far less leakage tendency than sites located further down slope. The additional drainage area captured by moving down slope is more than offset by the higher average leakage rates. Late winter construction has been shown to be best for constructing sideslope ponds in leaky soils due to basin sealing that occurs during construction in wet soils. Do not allow sideslope ponds to be constructed from June through October on soils that have leakage problems.

MAINTENANCE:

- ❑ Exclude livestock from wildlife habitat and WWFs.
- ❑ Maintain vegetation so dam and spillway are not subject to erosion.
- ❑ Annual late summer drawdowns can be used to remove bullfrog populations.

PRIMARY HABITAT CONSIDERATIONS:

- Provide water sources for targeted wildlife species or shallow water fishless pools for amphibians.

Consult with NRCS or MDC wildlife biologists and private land conservationists for additional recommendations. Contact University Extension for additional information on wildlife management.

Comment:



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