

Animal Enhancement Activity – ANM38 – Retrofit watering facility for wildlife escape and to enhance access for bats and bird species



Enhancement Description

Retrofit all existing watering facilities (troughs, tanks, etc.) to allow for the escape of wildlife that become trapped while trying to drink and to remove obstructions above the watering facility such as boards and wires.

Selection of this enhancement requires the activity to be planned concurrently on all eligible land use acres.

Land Use Applicability

Cropland, Pastureland, Rangeland, Forestland

Benefits

This activity provides wildlife with a definitive means of escape while utilizing a livestock water facility as a water source. Concurrently, livestock performance is improved by supplying a cleaner water supply. Dead wildlife in water facilities impair the water quality which results in decreased water consumption by livestock and reduced rates of weight gain. In addition, obstructions (e.g., boards and wires) located above the watering facility reduces the availability of water to wildlife that need open sources of water in order for them to swoop and drink while in flight. Removal of these obstructions will make many previously unavailable water sources available while reducing the injury or death potential to bats and birds as they fly in to scoop water from the watering facility. This enhancement will eliminate this threat.

Conditions Where Enhancement Applies

This enhancement applies to **all** open watering facilities in the crop, pasture, range, or forest land use area. This enhancement does not apply to earth stock ponds, ball type, energy-free waters or similar.

Criteria

This enhancement applies to ALL watering facilities located in the land use acres. Both criteria, A and B below must be met.

A. Wildlife escape structures for watering facilities must meet the following requirements:

1. Extend into the water and meet the inside wall of the watering facility,
2. Reach to the bottom of the watering facility or to the depth of the lowest possible water level,
3. Be firmly secured to the rim of the watering facility so as not to be displaced by livestock
4. Be built of graspable, long-lasting materials, such as painted or coated metal grating, roughened fiberglass, concrete, rock and mortar, or high-strength plastic composites,
5. Have a slope no steeper than 45 degrees,
6. Be located to cause minimal interference with livestock drinking, and
7. One structure for every 30 linear feet of watering facility edge.



- B. Obstruction removal above the watering facility's water surface.
1. All wire fencing material up to 36 inches above the water must be removed. Board and other echolocation material, at least one inch wide, may be installed at a height of at least 18 inches above the water, or
 2. Rearrange the fence line to create an adjustable pivot point thereby removing any obstructions above the water surface while allowing full access to a single trough from two different grazing areas.

Adoption Requirements

This enhancement is considered adopted when the watering facility has the wildlife escape structure installed and obstructions above the water surface, if present, meet either Criteria B(1) or B(2).

Documentation Requirements

Photograph showing a properly installed escape device for each watering facility. The photograph must also show that there are no obstructions suspended within 36" above the watering facility's water surface.

References

- Arizona Game and Fish Department. 2008. Wildlife Water Construction Standards. Arizona Game and Fish Department, Phoenix, Arizona. http://www.azgfd.gov/w_c/WaterDevelopments.shtml.
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- Kiryuchuk, B. 2000. Effect of Water Quality on Cattle Weight Gain. Canada-Saskatchewan Agri-Food Innovation Fund. AFIF Coagulation File: 6672-1-12-1-4.
- Krausman, P., R. Rosenstock, S. Steven and James W. Cain III. 2006. Developed Waters for Wildlife: Science, Perception, Values, and Controversy. Water and Wildlife Special Section. The Wildlife Society Bulletin 34:563-569.
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- Taylor, D.A.R. and M.D. Tuttle 2012. Water for Wildlife: A handbook for ranchers and ranch managers. Bat Conservation International, Austin, TX. <http://www.batcon.org/pdfs/water/bciwaterforwildlife.pdf>.
- Tuttle, S.R., C.L. Chambers and T.C. Theimer. 2006. Potential effects of livestock, water trough modifications on bats in northern Arizona. Wildlife Society Bulletin 34:602-608.