

Chesapeake Bay Program Quick Reference Guide for BMPs

A-19. Off-stream watering without fencing

General Information

When livestock have access to the stream as a water source, they degrade the areas along the streambank, increasing erosion while also depositing manure directly into the stream. Alternatively, when livestock have water sources away from the stream, there is less erosion and their manure is less likely to wash into the stream.

CBP Definition(s)

Off-stream watering without fencing: This BMP requires the use of alternative drinking water sources, such as permanent or portable livestock water troughs placed away from the stream corridor. Implementing off-stream shade for livestock is encouraged where applicable. The water supplied to the facilities can be from any source, including pipelines, spring developments, water wells and ponds. In-stream watering facilities, such as stream crossings or access points, are not considered in this definition. The modeled benefits of alternative watering facilities can be applied to pasture acres in association with improved pasture management systems such as rotational grazing.

Watering trough (CBP Resource Improvement Practice, RI-18): A permanent or portable device to provide an adequate amount and quality of drinking water for livestock.

Specifications or Key Qualifying Conditions

This BMP is only applicable for livestock pastures that do not have stream exclusion practices, as pastures that exclude livestock from streams already provide alternative water sources as part of those practices. See buffers with exclusion fencing (A-13) as an example. Otherwise, there are no specific conditions for CBP purposes. It is expected that reported cost-share practices conform to state or federal practice standards, and that any non-cost-shared practices conform to the criteria described in the *Resource Improvement (RI) Practice Definitions and Verification Visual Indicators Report* (linked under Additional Information below).

Nitrogen, Phosphorus and Sediment Reductions

Table A-19-1. Supplemental Nitrogen and Phosphorus Percent Reductions to Land Use Runoff

	Nitrogen (%)	Phosphorus (%)	Sediment (%)
Off-stream watering without fencing	5	8	10



Figure A-19-1. Alternative water sources away from the stream keep livestock in pasture or heavy use areas, reducing erosion and manure deposition to the stream. Photos: USDA NRCS

Specific Reporting and Modeling Information

Applicable Land Use Types (or other load sources) Treated by the BMP:

- Pasture

Brief Description of BMP Simulation in the Model

The off-stream watering without fencing BMP is an *Efficiency Value BMP*. Each acre of pasture reported under the BMP will have its nitrogen, phosphorus and sediment loads reduced using the values in Table A-19-1.

Annual or Cumulative? Cumulative (10-year credit duration; 5-year credit duration for RI-18)

Can this practice be combined with other BMPs? Yes.

Key Elements for State BMP Reporting through NEIEN

- **BMP Name:**
 - Off-stream watering without fencing
 - Watering trough RI
- **Measurement unit:** Acres; if only the number of systems is known, this can be reported and NEIEN will convert to acres
- **Land Use:** Pasture
- **Geographic location:** Approved NEIEN geographies: County; County (CBW only); Hydrologic Unit Code (HUC12, HUC10, HUC8, HUC6, HUC4); State (CBW only)
- **Date of implementation:** Year watering system was implemented.

Table A-19-2. Synonymous BMP names for Watershed Model, NEIEN and other sources

CBP or Expert Panel term	NEIEN BMP name	Other common BMP names
Off stream watering without fencing; Alternative water source;	Alternative water system; extension of CREP watering system; watering facility; watering trough RI (RI-18)	Watering facility (NRCS 614);

Additional Information

Chesapeake Bay Program Resource Improvement (RI) Practice Definitions and Verification Visual Indicators Report: Ensor, R., Absher, D., Moore, G., Garber, L., McGee, B., Albrecht, G., Weibley, E., Wootton, C., & J. Hill. 2014. Chesapeake Bay Program Resource Improvement Practice Definitions and Verification Visual Indicators Report. Approved by CBP Water Quality Goal Implementation Team, August 2014.

https://www.chesapeakebay.net/documents/RI_Report_5_8-8-14.pdf

Version and History Statement

This info sheet was first published on August 10, 2018 and reflects the BMP definitions and reductions approved by the WQGIT in May 2010.

All BMP effectiveness estimates are subject to potential future reviews according to the availability of new scientific information and CBP partnership needs, as defined in the [BMP Review Protocol](#).