

ISSUE: Heavy Use Area Protection (PA)

PA – Address the issue of Heavy Use Area Protection (HUAP) not being credited. It should be a synonymous BMP to Loafing Lot Management, yet is not identified. According to NEIEN reports, HUAP is not a permissible BMP.

Per Sept 8 ad hoc discussion:

- *A great deal of ground stabilization is happening in feed space areas that is not accounted for [in CAST]*
- *Move “Barnyard” BMPs to Animal Waste Management Systems*

BACKGROUND:

Loafing Lot Management

(Approved CBP Nutrient Subcommittee, 2003)

[BMP Quick Guide](#) → Animal Waste Management System, Barnyard Runoff Control & Loafing Lot Management

Animal Waste Management System

Approved by WQGIT (2016)

[Recommendations from the BMP Expert Panel for Animal Waste Management Systems in the Phase 6 Watershed Model](#)

Definitions:

Loafing lot management: stabilization of areas frequently and intensively used by people, animals or vehicles by establishing vegetative cover, surfacing with suitable materials, and/or installing needed structures. This does not include poultry pad installation.

Barnyard runoff control: includes the installation of practices to control runoff from barnyard areas. This includes practices such as roof runoff control, diversion of clean water from entering the barnyard and control of runoff from barnyard areas.

Animal Waste Management System: Any structure designed for collection, transfer and storage of manures and associated wastes generated from the confined portion of animal operations and complies with NRCS 313 (Waste Storage Facility) or NRCS 359 (Waste Treatment Lagoon) practice standards. Manure conserved through reduced storage and handling losses associated with AWMS implementation are available for land application or export from the farm.

The panel acknowledges that animal waste management is a general system that includes many different practices. **Confusion about the Chesapeake Bay Program’s definition of “AWMS” is thus possible, since some BMPs that practitioners would consider part of the wider “animal waste management system” are captured through other CBP practices (e.g. barnyard runoff controls, loafing lot management) while the AWMS BMP defined herein is more reflective of storage and the ability to effectively collect and store – or recover – manure for subsequent field application, transport, or use in association with other “barnyard” BMPs.** This panel’s recommendations for the AWMS BMP are for purposes of the Phase 6 CBWM and **only apply to manure deposited during confinement** as described in the more detailed model farm concept as summarized in this report. Thus, specifically for annual BMP progress reporting in Phase 6, an **Animal Waste Management System is any structure designed for collection, transfer, and storage of wastes generated from the confined portion of animal operations and complies with NRCS 313 (Waste Storage Facility) or NRCS 359 (Waste Treatment Lagoon) practice standards.** Reduced storage

and handling loss is conserved in the manure and available for land application or export from the farm. (p 106)

NRCS CPS 561 Heavy Use Area Protection: The stabilization of areas frequently and intensively used by people, animals or vehicles by establishing vegetative cover, surfacing with suitable materials, and/or installing needed structures.

Heavy Use Area (HUA) Protection - (NRCS code 561). A hard pad typically at the entrance/exit of a confinement house (Figure 5). HUA protections are usually made of concrete and are designed to protect the ground from rutting as equipment enters and exists the confinement houses. HUA protections also facilitate the recovery of manure and bedding that is inadvertently removed from the house by the equipment used to harvest the birds for transport to a processing plant, or by the equipment used to manage or recover litter from the production houses. (p.26 as defined by AWMS EP- referring specifically to poultry production because the EP was charge only with reviewing Heavy Use Area Concrete Pads for poultry)

These Code 561 practices are not reportable as an AWMS BMP for CBP purposes, but are a part of the overall animal waste management system on animal operations and are part of the “2016 model farm” described for poultry. (p.110, EP response to partner feedback)

*Poultry heavy use area concrete pads or other heavy use area protection (NRCS Code 561): As stated in the report (page 24, bottom paragraph of revised report) these pads or protected areas facilitate recovery of manure that can inadvertently be removed by equipment used to harvest birds for transport, or by equipment used to manage or recover litter from the production house. **However, there is not sufficient information to estimate their specific impact to overall recoverability at this time, though they are quite common and are included as part of the model farm used to set the “after-AWMS” recoverability factor for poultry.** Thus, while these practices are part of the overall animal waste management system on many animal operations, especially for poultry, the panel does not recommend these as a reportable practice under the Phase 6 AWMS BMP definition (which has now been added to revised report). (p.118, EP response to partner feedback)*

Effectiveness Estimates

Barnyard Runoff Control + Loafing Lot Management

TN: 20%

TP: 20%

TSS: 40%

Land Use: Permitted Feed Operations, Non-permitted feed operations

Animal Waste Management System

AWMS practices are simulated as Animal BMPs. Specifically, the amount of manure that is lost from storage or handling is reduced according to the values listed in Table A-6-1, thus making the recovered manure available for transport or application to crops.

This practice is the only BMP that affects manure recoverability and any subsequent BMPs can also be applied.

Table A-6-1. Manure recoverability before and after AWMS

Animal Type	% Recoverable without AWMS	% Recoverable with AWMS
Beef	60	99
Dairy	75	95
Other Cattle	60	99
Hogs for Slaughter	90	99
Hogs for Breeding	90	99
Broilers	90	99
Layers	90	99
Turkeys	90	99
Pullets	90	99
Sheep	95	98
Horses	95	98
Goats	95	98

Land Use: N/A (treats manure)

SUGGESTED ACTION:

Continuing discussion on application of barnyard BMPs in relation to manure nutrient edge-of-stream. Schedule a review of how the Barnyard BMPs are related, applied, and if there is any way to split out NRCS CPS 561 as creditable with CBPO staff and AgWG.

CHALLENGE:

- State concerns overlap with CBP partnership-approved Expert Panel recommendations. Guidance needed from Water Quality GIT.
 - The question of where one practice stops and another begins for the CBP purposes was discussed among the AWMS Expert Panel (see above).
 - The AWMS EP chose not to provide an effectiveness benefit for poultry pads, citing lack of research available.
 - The AWMS did not consider HUAP for other livestock. Perhaps NRCS CPS 561 is comparable for other animal types as Loafing Lot Management
 - NRCS data privacy requirements may limit interpretation of actual projects.

LEAD:

TIMELINE:

CAST-21 (Sept 2021)

Discussion: Yes, AgWG review and WQGIT guidance

Change: Unlikely, due to CBP partnership-approved mechanics of the Phase 6 CBWM & need for thorough examination of impacts of such changes.

CAST-23 (Sept 2023)

Discussion: Yes, AgWG review and WQGIT guidance

Change: Unlikely/Possible, due to CBP partnership-approved mechanics of the Phase 6 CBWM & need for thorough examination of impacts of such changes.

Future Watershed Model?

Discussion: Yes, as part of full review of ag inputs & modeling approaches.

Change: Possible

TASK CLUSTER:

BMP Tracking & Reporting/Effectiveness

WIP III SNAPSHOT:

Barnyard Runoff Control + Loafing Lot Management

State	2019 Progress % Implementation	WIP 2025 % Implementation (ac)
DE	99.3	100 (1060)
MD	44.3	46.7 (904)
NY	5	6.2 (113)
PA	62.5	72.8 (4899)
VA	40.1	66.7 (2769)
WV	46.2	47.7 (340)

Livestock + Poultry Waste Management Systems

State	2019 Progress % Implementation	WIP 2025 % Implementation (AU)
DE	66.4	99.3 (2.1 mill)
MD	84.1	96.2 (1.8 mill)
NY	16.2	16.8 (81,915)
PA	38.1	75.2 (2.5 mill)
VA	34.8	88.5 (2.5 mill)
WV	61.5	70.1 (321,256)