Table 1: DEQ Loan Eligible Agricultural BMPs

Practice #	Practice Name	Practice Description	Practice Purpose
EM-1AT	Small Scale Manure Composting for Equine Operations – Aerated Systems	A small-scale manure composting practice is a system designed to manage solid waste from areas where horses and other small barn-lot animals are concentrated. This practice is designed to provide for the storage and composting of livestock waste so as to control surface runoff from facilities and permit the safe recycling of animal waste onto the land.	Improve water quality through the proper storing, composting and spreading of waste on small-scale livestock operations.
EM-1T	Small Scale Manure Composting for Equine Operations – Static Systems	A small-scale manure composting practice is a system designed to manage solid waste from areas where horses and other small barn-lot animals are concentrated. This practice is designed to provide for the storage and composting of livestock waste so as to control surface runoff from facilities and permit the safe recycling of animal waste onto the land.	Improve water quality through the proper storing, composting and spreading of waste on small-scale livestock operations.
FR-3	Woodland Buffer Filter Area	Creates a woodland buffer filter area to protect waterways or water bodies by reducing erosion, sedimentation, and the pollution of water from agricultural nonpoint sources.	Change land use and establish a forest buffer to provide stream bank protection and to control soil erosion, sedimentation, and nutrient loss from surface runoff to improve water quality. This practice will also provide forest areas for the benefit of wildlife and aquatic environments.
LE-1T	Livestock exclusion with riparian buffers	A structural and/or management practice that will restrict access to surface waters to reduce sediment, nutrient, and bacteria loadings to streams and reduce NPS pollution associated with grazing livestock on pastures within identified TMDL Implementation Areas only.	Provide livestock watering systems and fencing that will improve water quality by eliminating direct access to surface waters, establishing riparian buffers, and by improving pasture management by establishing rotational grazing to control erosion. Stream exclusion fencing is a required component of this practice. When rotational grazing is established, participants must implement a rotational grazing plan.
LE-2T	Livestock exclusion with reduced setback	This practice will promote structural and/or management practice(s) that will enhance or protect vegetative cover to reduce runoff of nutrients, sediment, and bacteria from existing pastureland within TMDL implementation areas and therefore reduce NPS pollution associated with grazing livestock.	Provide alternative livestock watering systems and fencing that will improve water quality by eliminating direct access to surface waters and by improving pasture management by establishing rotational grazing to control erosion. When rotational grazing is established, participants must implement a rotational grazing plan. Stream exclusion fencing is a required component of this practice.
SE-2	Shoreline Stabilization	Structures and/or vegetative measures will be designed and implemented to stabilize shoreline areas of estuaries, bays and the ocean.	Improve water quality by stabilizing shoreline areas that are being eroded because of waves, boat wake or overland flow.
SL-4	Terrace System	Earth embankment, channel, or a combination ridge and channel constructed across the slope.	Improve water quality by reducing slope and slope length to one that will slow the movement of sediment and nutrients from cropland.
SL-5	Diversion	Channel with a supporting ridge on the lower side constructed across the general land slope.	Improve water quality by directing nutrient and sediment laden water from large areas to sites where in can be used or disposed of safely.
SL-6A	Small acreage grazing system	This practice is designed to reduce soil erosion in pastures and to prevent those areas exposed to heavy alternative livestock traffic from experiencing excessive manure and soil losses due to the destruction of ground cover and eliminate direct access to or a direct runoff input to live streams.	Prevent manure and sediment runoff from a heavy use area and pastures from entering watercourses and to capture a portion of the manure as a resource for other uses such as fertilizer. This is accomplished by dividing the pasture into grazing paddocks. Livestock is rotated from paddock to paddock as is necessary to maintain a permanent vegetative cover. One lot is stabilized and designated as a heavy use area for use in periods of wet weather and when the grass in the grazing paddocks needs to rest in order to re-grow to the appropriate grazing height.
SL-6AT	Small acreage grazing system	This practice is designed to reduce soil erosion in pastures and to prevent those areas exposed to heavy alternative livestock (non-bovine) traffic from experiencing excessive manure and soil losses due to the destruction of ground cover and eliminate direct access to or a direct runoff input to live streams. Alternative livestock are addressed as pollutant sources in TMDLs.	Prevent manure and sediment runoff from heavy use areas and pastures from entering watercourses and to capture a portion of the manure as a resource for other uses such as fertilizer. This is accomplished by dividing the pasture into grazing paddocks. Livestock is rotated from paddock to paddock as is necessary to maintain a permanent vegetative cover. One lot is stabilized and designated as a heavy-use area for use in periods of wet weather and when the grass in the grazing paddocks needs to rest and re-grow to the appropriate grazing height.
SL-6B	Alternative Water System	Structural practice that will provide an alternative water source for livestock to discourage animal access to streams.	Provide watering facilities for livestock to reduce or eliminate the need for livestock to access streams, which reduces erosion and livestock waste reaching the stream.
SL-6N	Stream Exclusion with Narrow (<35 ft) Width Buffer and Grazing Land Management	Structural and/or management practice that will enhance or protect vegetative cover to reduce runoff of sediment and nutrients from existing pastureland and reduce NPS pollution associated with grazing livestock.	Provide livestock water systems and/or fencing that will improve water quality by establishing rotation grazing to control erosion and eliminate direct access to live streams where there is a defined water quality problem.
SL-6W	Stream Exclusion with Wide (>35 ft) Width Buffer and Grazing Land Management	Structural and/or management practice that will enhance or protect vegetative cover to reduce runoff of sediment and nutrients from existing pastureland and reduce NPS pollution associated with grazing livestock.	Provide livestock water systems and/or fencing that will improve water quality by establishing rotation grazing to control erosion and eliminate direct access to live streams where there is a defined water quality problem.
SL-7	Support for Extension of CREP Watering Systems	This practice is designed to provide additional funding to Conservation Reserve Enhancement Program (CREP) projects to encourage full enrollment in all of Virginia's CREP areas. This practice must be planned, in conjunction with a new CREP CP-22 contract. This practice cannot be used with a CREP CP-21, CP-23 or CP-29.	Implement rotational grazing on those fields receiving watering facilities to increase forage cover through the proper grazing and forage management techniques that will allow a pasture to rest and re-grow its cover. The system receiving cost-share should reflect the least costly, most technically feasible, environmentally effective approach to resolve the existing water quality problem.
SL-11B	Animal Travel Lane Stabilization	Structural and/or management practice that will protect surface water from pollution from travelways of farm equipment and livestock.	Protect or maintain water quality by stabilizing travelways used by farm equipment and/or livestock.
WP-1	Sediment Retention, Erosion or Water Control Structures	Structures that will collect and store debris or control the grade of drainageways.	Improve water quality by reducing the movement of sediment and materials from agricultural land to receiving streams.
WP-2A	Streambank Stabilization	Protection methods along steams to reduce erosion, sedimentation and the pollution of water from agricultural Nonpoint sources.	Offer an incentive that will change landuse, provide vegetative stabilization or improve management techniques to more effectively control soil erosion, sedimentation and nutrient loss from surface runoff to improve water quality.
WP-2B	Stream Crossing & Hardened Access	A stabilized area to provide access to and/or across a stream for livestock and/or farm machinery.	Improve water quality by controlling bank and streambed erosion and reducing sediment by providing a controlled crossing and/or access to streams.
WP-2C	Stream Channel Stabilization	Stabilizing the stream channel with the use of non erodible material and/or structures that will prevent the stream channel from eroding.	Improve water quality by reducing erosion by stabilizing stream channels.

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Practice #	Practice Name	Practice Description	Practice Purpose
WP-2N	Stream Protection - Fencing with Narrow (<35 ft) Width Buffer	Protection methods along streams to reduce erosion, sedimentation, and the pollution of water from agricultural Nonpoint sources.	Offer an incentive that will change landuse, provide vegetative stabilization, or improve management techniques to more effectively control soil erosion, sedimentation, and nutrient loss from surface runoff to improve water quality.
WP-2W	Stream Protection - Fencing with Wide (>35 ft) Width Buffer	Protection methods along streams to reduce erosion, sedimentation, and the pollution of water from agricultural Nonpoint sources.	Offer an incentive that will change landuse, provide vegetative stabilization, or improve management techniques to more effectively control soil erosion, sedimentation, and nutrient loss from surface runoff to improve water quality.
WP-2T	Stream protection (fencing)	Protection by fencing along all waterbodies and streams in a field to reduce erosion, sedimentation, and the pollution of water from agricultural nonpoint sources in TMDL implementation areas.	Change land use or improve management techniques to more effectively control soil erosion, sedimentation, and nutrient loss from surface runoff to improve water quality.
WP-4	Animal Waste Control Facility	A planned system designed to manage liquid and solid waste from areas where livestock and poultry are concentrated.	Improve water quality by storing and spreading waste at the proper time, rate and location.
WP-4B	Dairy Loafing Lot Management System	Prevent areas which are exposed to heavy livestock traffic from experiencing excessive manure and soil losses due to the destruction of ground cover.	Prevent manure and sediment runoff from entering water courses and to capture a portion of the manure as a resource for other uses such as crop fertilizer. Accomplished by dividing the area into lots. Cattle are rotated from lot to lot as necessary to maintain vegetative cover. One lot is designated as a sacrifice area for use in wet weather. Loose housing may be installed in lieu of a typical sacrifice lot.
WP-4C	Composter Facilities	Planned system designed to manage treatment and disposal of poultry/livestock carcasses resulting from normal mortality.	Facilities for composting normal mortality poultry/livestock carcasses, storage of raw materials necessary for composting, storage of the composted end product, and the recycling of composted carcasses by land applying the end product in a manner that will abate pollution that would otherwise result from existing disposal methods.
WP-4E	Animal Waste Structure Pumping Equipment	Mechanism used to agitate and/or pump liquid and/or simi-liquid animal waste for the purpose of land application.	Insure that animal wastes are land applied at optimum times so water quality is not adversely effected.
WP-4F	Animal Mortality Incinerator Facilities	A planned mortality incineration system.	Dispose of poultry and livestock carcasses resulting from normal mortality.
WP-5	Stormwater Retention Pond	Structure that collects and retains stormwater in order to release the water at a rate that will reduce the amount of downstream erosion due to storm flow.	Improve water quality by reducing the amount of channel erosion during storm events.
WP-6	Agricultural Chemical & Fertilizer Handling Facility	Facility to adequately store, mix and contain agricultural chemicals and fertilizers.	Improve water quality by properly handling chemicals and fertilizers during mixing and cleaning equipment.
WP-7	Surface Water Runoff Impoundment for Water Quality	Structure that will impound surface water runoff and allow sediment and nutrients to settle out.	Improve water quality by impounding surface water and allowing sediments and nutrients to settle out.
WP-8	Relocation of Confined Feeding Operations	Relocation of confined feeding facilities from areas that have an increased chance of contaminated runoff entering the state's streams, rivers and estuaries.	Improve water quality by relocating confined feeding operations away from environmentally sensitive areas such as sink holes, streams and rivers to prevent pollution laden runoff from reaching these areas.
WQ-5	Water Table Control Structure	Water control structure for the management of drainage water.	Regulate and manage drainage water to improve water quality by trapping sediment and managing dissolved or suspended nutrients.
WQ-6	Constructed Wetlands	Construction of a wetland for the treatment of animal waste runoff or stormwater runoff.	Improve water quality by using a constructed wetlands to remove nutrients from animal waste or sediments and nutrients from stormwater runoff.
WQ-6B	Wetland Restoration	Activities which restore land to the hydraulic condition that existed prior to 1985 and the installation of drainage and conversion to cropland.	Improve water quality by returning environmental sensitive land back to its original wetland condition before it was converted to cropland.
WQ-7	Irrigation Water Recycling System	A system of practices designed to distribute, collect and reuse irrigation water and surface runoff from agricultural fields involved in the production of vegetable and horticultural crops.	Improve water quality by collecting and reusing irrigation and surface runoff that may be high in nutrients, sediments, or pesticides from a variety of vegetable and horticultural crops grown using plastic or synthetic fiber mulches and impervious surfaces.
WQ-8	Fuel Storage Treatment	Excavation of farm underground fuel storage tanks and the construction of an above ground farm storage facility with proper containment system.	Improve water quality by removing leaky or possibly leaking fuel storage tanks and contaminated soil and replacing the tank with an above ground storage tank with the proper spill and rupture containment facility.
WQ-11	Agricultural Sinkhole Protection	This practice will provide a protection method to improve groundwater quality from surface contamination.	Improve water quality by removing sources of pollution from sinkholes and providing an adequate buffer to trap and filter sediments and nutrients from surface flows that enter the groundwater through sinkholes.
WQ-12	Roof Runoff Management System	A planned system designed to manage roof runoff from agricultural structures in areas where concentrated runoff creates a water quality concern. This practice is designed to collect, control and convey precipitation runoff from a roof to an appropriate discharge area in a way that will protect water quality.	Protect water quality by capturing roof runoff and routing it away from contaminated and/or sensitive areas to control erosion and nutrient input.
NTD	No-Till Planter/Drill	Purchase of no-till planters or no-till drills that are not replacements or upgrades of a no-till planter or drill that is currently owned by the applicant.	Improve water quality by encouraging the use of continuous no-till planting and cover crops. Reduce the acres which are under conventional tillage.

Additional detail on the listed practices can be found here:

DCR's Virginia Agricultural Cost-Share (VACS) BMP Manual
http://consapps.dcr.virginia.gov/htdocs/agbmpman/csmanual.pdf

DEQ's Virginia Non-Point Source Implementation BMP Guidelines
https://www.deq.virginia.gov/Portals/0/DEQ/Water/NonpointSource/ImplementationProjects/DEQ-NPSBMPGuidelines__FY19.pdf