



## Detailed Implementation Plan Fiscal Year 2025

July 23, 2024

### AGRICULTURE COST SHARE PROGRAM SUMMARY

The North Carolina Agriculture Cost Share Program (ACSP) was authorized by the General Assembly in 1983 to improve water quality associated with agriculture in three nutrient sensitive watersheds covering 16 counties. In 1990, the program was expanded to include 96 soil and water conservation districts (districts) covering all 100 counties across the state. In FY2025, there are 66 approved best management practices (BMPs) in the ACSP. BMPs include both short-term and long-term practices.

ACSP is administered by the North Carolina Soil and Water Conservation Commission and implemented through local soil and water conservation districts. The commission meets with stakeholders to gather input on ACSP's development and administration through the Technical Review Committee. ACSP currently receives a recurring state appropriation of \$4,016,998 for BMP allocation. The Commission annually earmarks a portion of state appropriated ACSP funds for BMP allocation through the Impaired and Impacted Streams Initiative (IISI) to eligible districts. A separate recurring appropriation in the amount of \$2,448,778 is used to support technical assistance funding for districts.

### FISCAL YEAR 2025 ANNUAL GOALS

- (1) Allocate general funds to soil and water conservation districts for all ACSP BMPs.
  - a. Award general funds to all districts requesting an allocation following 02 NCAC 59D .0103.
- (2) Allocate IISI earmarked ACSP funds to eligible soil and water conservation districts for all ACSP BMPs.
  - a. Award IISI earmarked funds to all eligible districts requesting an allocation following 02 NCAC 59D .0103.
- (3) Support implementation of a Job Approval Authority process for ACSP BMPs.
  - a. Review job approval category requirements to ensure technical competency.
- (4) Conduct training for districts.
  - a. Continue to train districts on the program.
  - b. Provide technical training for the required skills to plan and implement approved ACSP BMPs.
  - c. Maintain the [ACSP website](#) and Cost Share Contracting System with all relevant information.

**DISTRICT ALLOCATIONS**

- (1) Allocations for ACSP funds will be made to all districts requesting funds.
- a. All districts must request ACSP funds in their FY2025 Strategic Plan. A mid-year voluntary return and re-allocation process for general ACSP funds will be available to all districts. The ACSP Spring Supplemental Allocation will follow the [Supplemental Allocations of Cost Share Financial Assistance](#) policy.
  - b. To be eligible for an IISI allocation, districts must complete the FY2025 IISI survey and request IISI funds in their FY2025 Strategic Plan. Districts’ utilization of allocations (encumbrance by fiscal year end and voluntary return of funding for mid-year supplemental allocations) will be tracked starting in FY2025 and used to determine future eligibility for IISI funds. Districts may participate in a mid-year voluntary return and re-allocation process that runs in conjunction with the ACSP Spring Supplemental Allocation.
  - c. CREP allocations are distributed to districts for qualifying projects on an as-needed basis. Districts must send a written request for funds to the ACSP and CREP program managers.
- (2) Allocation parameters are described 02 NCAC 59D .0103 Agriculture Cost Share Program Financial Assistance Allocation Guidelines and Procedures (Effective January 1, 2020).

**Table 1.** Allocation parameters

<b>PARAMETER</b>	<b>PERCENT</b>
Percentage of total acres of agricultural land in North Carolina that are in the respective district as reported in the most recent edition of the North Carolina Census of Agriculture.	20%
Percentage of total number of animal units in North Carolina that are in the respective district as reported in the most recent edition of the North Carolina Census of Agriculture and converted to animal units.	20%
Relative rank of the percentage of the county outside of municipal boundaries draining to waters identified as impaired or impacted on the most recent Integrated Report produced by the North Carolina Division Water Resources.	20%
Relative rank of the percentage of the county draining to waters classified as Primary Nursery Areas, Outstanding Resource Waters, High Quality Waters, and Trout Waters on the current schedule of Water Quality Standards and Classifications, Shellfish Harvesting Areas (open) as determined by the Division of Marine Fisheries, and North Carolina Drinking Water Assessment Areas as determined by the Division of Water Resources.	10%

Percentage of program funds allocated to a district that are expended for installed BMPs in the highest three of the most recent seven-year period as reported in the NC Cost Share Contracting System.	20%
Relative rank of the number of acres of highly erodible land in the county as reported by the United States Department of Agriculture Farm Service Agency.	10%

**TECHNICAL ASSISTANCE ALLOCATIONS**

- (1) Allocations for technical assistance shall be based on the recommendation of the Division, the funding requested in the district’s strategic plan, and the need to install BMPs in the district.
- (2) Each district shall provide at least 50% matching funds for technical assistance.
- (3) The allocation is made based on the implementation of conservation practices for which district employees provided technical assistance:
  - a. Commission Cost Share Programs funded practices: 100%
  - b. Local, State, Federal and grant funded practices that meet the purpose requirements of Commission Cost Share Programs: 25%
  - c. Allocations are calculated using the highest three of the most recent seven years. This calculation was approved at the February 24, 2021, Commission meeting and is effective this fiscal year.
  - d. Allocations are calculated once every three years, unless there is a change in technical assistance State appropriations.
- (4) Technical assistance funds may be used for any expense of the district in implementing Commission Cost Share Programs.
- (5) The minimum allocation for districts with the required match is \$20,000. The maximum allocation per district is \$30,000.
- (6) If a district is not spending more financial assistance funds on Commission Cost Share Programs than they receive for technical assistance, the district will appeal to the Commission to receive technical assistance funding.
- (7) All technical district employees shall obtain Job Approval Authority for two BMPs from the Commission or United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) within three years of being hired or by January 1, 2025, whichever is later.
  - a. One BMP must be a design practice as described in Commission Program Detailed Implementation Plans, such as this document, or as defined as an engineering practice by USDA-NRCS.
  - b. Boards of Supervisors may request a one-year extension for their employees in meeting this requirement for extenuating circumstances outside the employees’ control.

**BEST MANAGEMENT PRACTICES ELIGIBLE FOR COST SHARE PAYMENTS**

- (1) The best management practices eligible for cost sharing include the practices listed in Table 2 and any approved District BMPs.
  - District BMPs shall be reviewed by the Division for technical merit in achieving the goals of this program. Upon approval by the Division, the District BMPs will be eligible to receive cost share funding as described in 02 NCAC 59D .0106.
- (2) The minimum life expectancy of the BMPs is listed in Table 2. Practices designated by a District shall meet the life expectancy requirement established by the Division for that District BMP.
- (3) The list of BMPs eligible for cost sharing may be revised by the Soil and Water Conservation Commission as deemed appropriate to meet program purpose and goals. Additional practices may be adopted and introduced during the program year.

## ATTACHMENT 9B TRACK CHANGES

**Table 2.** Best management practices eligible for cost sharing, the minimum life expectancy of each practice and the practice type.

<b>PRACTICE</b>	<b>MINIMUM LIFE EXPECTANCY (years)</b>	<b>PRACTICE TYPE</b>
Abandoned Tree Removal	10	AGRONOMIC
Abandoned Well Closure	1	DESIGN
Agrichemical Containment and Mixing Facility	10	DESIGN
Agrichemical Handling Facility	10	DESIGN
Agricultural Pond Repair/Retrofit	10	DESIGN
Agricultural Pond Sediment Removal	1	DESIGN
Agricultural Road Repair/Stabilization	10	DESIGN
Agricultural Water Collection System	10	DESIGN
All-Season Agricultural Access	10	DESIGN
Backflow Prevention System (Chemigation or Fertigation)	10	DESIGN
<del>Closure of Abandoned Waste Impoundment</del>	<del>10</del>	<del>DESIGN</del>
Concentrated Nutrient Source Management System	10	DESIGN
Conservation Cover	6	AGRONOMIC
Constructed Wetland for Land Application	10	DESIGN
Cover Crops	1	AGRONOMIC
Critical Area Planting	10	AGRONOMIC
Cropland Conversion	10	AGRONOMIC
Diversion	10	DESIGN
Drystack	10	DESIGN
Feeding/Waste Storage Structure	10	DESIGN
Field Border	10	AGRONOMIC
Filter Strip	10	AGRONOMIC
Grade Stabilization Structure	10	DESIGN
Grassed Waterway	10	DESIGN
Heavy Use Area Protection	10	DESIGN
Insect Control System	5	DESIGN
Lagoon Biosolids Removal Practice	1	DESIGN
Livestock Exclusion Fence	10	AGRONOMIC
Livestock Feeding Area	10	DESIGN
Livestock Mortality Management System - Incinerator	5	DESIGN
Livestock Mortality Management System - Other Systems	10	DESIGN
Manure Composting Facility	10	DESIGN

**ATTACHMENT 9B  
TRACK CHANGES**

<b>PRACTICE</b>	<b>MINIMUM LIFE EXPECTANCY (years)</b>	<b>PRACTICE TYPE</b>
Manure/Litter Transportation Incentive	1	DESIGN
Micro-Irrigation System	10	DESIGN
Nutrient Management	3	AGRONOMIC
Odor Management System	1 to 10	AGRONOMIC
Pasture Renovation	5	AGRONOMIC
Pastureland Conversion	10	AGRONOMIC
Portable Agrichemical Mixing Station	5	DESIGN
Precision Agrichemical Application	5	AGRONOMIC
Precision Land Forming and Smoothing	5	DESIGN
Precision Nutrient Management	3	AGRONOMIC
Prescribed Grazing	3	AGRONOMIC
Residue and Tillage Management	1 to 3	AGRONOMIC
Retrofit of On-going Animal Operations	10	DESIGN
Riparian Buffer	10	AGRONOMIC
Rock-lined Waterway or Outlet	10	DESIGN
Rooftop Runoff Management System	10	DESIGN
Sediment Control Basin	10	DESIGN
Sod-based Rotation	3, 4 or 5	AGRONOMIC
Solids Separation from Tank-Based Aquaculture Production	10	DESIGN
Spring Development	10	DESIGN
Stock Trail and Walkway	10	DESIGN
Storm Water Management System	10	DESIGN
Stream Crossing	10	DESIGN
Stream Debris Removal	1	DESIGN
Stream Protection Well	10	DESIGN
Stream Restoration	10	DESIGN
Streambank and Shoreline Protection	10	DESIGN
Strip cropping	5	AGRONOMIC
Terrace	10	DESIGN
Trough or Tank	10	DESIGN
Waste Application System	10	DESIGN
<u>Waste Impoundment Closure</u>	<u>1 or 10</u>	<u>DESIGN</u>
Waste Treatment Lagoon/Storage Pond	10	DESIGN
Water Control Structure	10	DESIGN
Wetlands Restoration System	10	DESIGN

## BEST MANAGEMENT PRACTICE DEFINITIONS

### Agrichemical Pollution Prevention Practices

- (1) **Abandoned tree removal:** Remove Christmas and/or apple tree fields for integrated pest management and for reducing sedimentation. An abandoned tree field can be of any size or age trees where standard management practices (e.g., maintaining groundcover, insect and disease control, fertilizer applications and annual shearing practices) for the production of the trees are discontinued or abandoned. The field must have been abandoned for at least 5 years. Abandonment leads to adverse soil erosion formations such as gullies and to production of disease inoculums and increased pest population. Conversion to perennial vegetation on abandoned fields further protects soil loss by preventing runoff on steep slopes due to a better groundcover thereby providing additional water quality protection. Benefits include water quality protection, prevention of soil erosion, and wildlife habitat establishment.
- (2) **Agrichemical containment and mixing facility:** A system of components that provide containment and a barrier to the movement of agrichemicals. The purpose of the system is to provide secondary containment to prevent degradation of surface water, groundwater, and soil from unintentional release of pesticides or fertilizers.
- (3) **Agrichemical handling facility:** A permanent structure that provides an environmentally safe means of mixing agrichemicals and filling tanks with agrichemicals for application and storage to improve water quality. Benefits may include prevention of accidental degradation of surface and ground water.
- (4) **Chemigation or Fertigation backflow prevention:** A combination of devices (valves, gauges, injectors, drains, etc.) to safeguard water sources from contamination by fertilizers used during the irrigation of agricultural crops. The practice is intended to modify or improve fertilizer injection systems with components necessary to prevent backflow or siphoning of contaminants into the water supply thereby improving and protecting the state's waters.
- (5) **Portable agrichemical mixing station:** A portable device to be used in the field to prevent the unintentional release of agrichemicals to the environment during mixing and transferring of agrichemicals. Benefits may include prevention of accidental degradation of surface and ground water.
- (6) **Precision agrichemical application:** A system of components that enable reduction and greater control of fertilizer or pesticide application. This is accomplished through avoidance of excessive overlapping, unnecessary application to end/turn rows, and more precise control of application rates.

### Erosion and Nutrient Management Practices

- (1) **Conservation cover:** Establish and maintain a conservation cover of grass, legumes, or other approved plantings on fields previously with no groundcover established, to reduce soil erosion

and improve water quality. Other benefits may include reduced offsite sedimentation and pollution from dissolved and sediment-attached substances. Eligible land includes that planted to Christmas Trees, orchards, ornamentals, vineyards and other cropland needing protective cover.

- (2) **Cover crop:** A crop of grasses, legumes, small grain or brassicas grown primarily for seasonal vegetative protection, erosion control and soil improvement. Cover crops are typically grown for one year or less. The practice can be implemented to support one or more of the following purposes: reduce erosion from wind and water; reduce water quality degradation by utilizing excessive soil nutrients; improve infiltration of rainfall; maintain or increase soil health and organic matter content; suppress excessive weed pressures and break pest cycles; improve soil moisture use efficiency and/or minimize soil compaction.
- (3) **Critical area planting:** An area of highly erodible land that cannot be stabilized by ordinary conservation treatment on which permanent perennial vegetative cover is established and protected to improve water quality. Benefits may include reduced soil erosion and sedimentation.
- (4) **Cropland conversion:** To establish and maintain a conservation cover of grasses, trees, or wildlife plantings on fields previously used for crop production to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (5) **Diversion:** A channel constructed across a slope with a supporting ridge on the lower side to control drainage by diverting excess water from an area to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (6) **Micro-irrigation:** An environmentally safe system for the conveyance and distribution of water, chemicals, and fertilizer to agricultural fields for crop production. A micro-irrigation system is for frequent application of small quantities of water on or below the soil surface as drops, tiny streams, or miniature spray through emitters or applicators placed along a water delivery line. This practice may be applied as part of a conservation management system to support one or more of the following purposes: to efficiently and uniformly apply irrigation water and maintain soil moisture for plant growth; to efficiently and uniformly apply plant nutrients in a manner that protects water quality; to prevent contamination of ground and surface water by efficiently and uniformly applying chemicals and fertilizers and/or to establish desired vegetation.
- (7) **Pasture-land conversion:** Establishing trees or perennial wildlife plantings on excessively eroding land with a visible sediment delivery problem to the waters of the state used for pasture that is too steep to mow or maintain with conventional equipment to improve water quality. Benefits may include reduced soil erosion and sedimentation.
- (8) **Pasture renovation:** Establish and maintain a conservation cover of forage, where existing pasture vegetation is inadequate. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (9) **Precision land forming and smoothing:** Reshaping the surface of agricultural land to planned grades for the purpose of improving water quality. Precision land forming is reshaping crop fields to planned grades to improve surface drainage and control erosion. Land smoothing is used for



removing irregularities within a field, including depressions, mounds, old terraces or diversions, turn-rows, or other surface irregularities. Improvements to water quality include reduction in nutrient loss, reduction in concentrated flow of water from an agricultural field and improved infiltration.

- (10) **Prescribed grazing:** Managing the intensity, frequency, duration, timing, and number of grazing animals on pastureland in accordance with site production limitations, rate of plant growth, physiological needs of forage plants for production and persistence, and nutritional needs of the grazing animals. The goal of this practice is to reduce accelerated soil erosion and compaction, to improve or maintain riparian and watershed function, to maintain surface and/or subsurface water quality and quantity, to improve nutrient distribution, and to improve or maintain desired species composition and vigor of plant communities. Productive pastures maintain wildlife habitat and permeable green space.
- (11) **Residue and tillage management:** Maintaining crop and other plant residue on the soil surface year-round and limiting soil disturbing activities to protect water quality. Residue and tillage management also provides seasonal soil protection from wind and rain erosion, adds organic matter to the soil, conserves soil moisture, and improves infiltration, aeration, and tilth. Benefits may include reduction in soil erosion, sedimentation and pollution from sediment-attached substances.
- (12) **Rooftop runoff management:** A system of collection and stabilization practices (dripline stabilization, guttering, collection boxes, etc.) to prevent rainfall runoff from agricultural rooftops from causing erosion where vegetative practices are insufficient to address erosion concerns and protect water quality.
- (13) **Sod-based rotation:** An adapted sequence of crops, grasses and legumes or a mixture thereof established and maintained for a definite number of years as part of a conservation cropping system which is designed to provide adequate organic residue for maintenance or improvement of soil tilth to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (14) **Strip cropping:** A strip cropping practice means to grow planned alternating strips of erosion resistant and erosion susceptible crops or fallow in a systematic arrangement across a field to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (15) **Terraces:** An earth embankment, a channel, or a combination ridge and channel constructed across the slope to improve water quality. Benefits may include reduced soil erosion, sedimentation, and pollution from dissolved and sediment-attached substances.
- (16) **Wetland restoration system:** A system of practices designed to restore the natural hydrology of an area that had been drained and cropped.

Sediment and Nutrient Management Practices

- (1) **Abandoned well closure:** The sealing and permanent closure of a supply well no longer in use. This practice serves to prevent entry of contaminated surface water, animals, debris, or other foreign substances into the well. It also serves to eliminate the physical hazards of an open hole to people, animals, and farm machinery.
- (2) **Agricultural pond repair/retrofit:** To restore or repair existing failing agricultural pond systems. Benefits may include erosion control, flood control, and sediment and nutrient reductions from farm fields for better water quality.
- (3) **Agricultural pond sediment removal:** Remove sediment from existing agricultural ponds to increase water storage capacity. Benefits may include water supply, erosion control, flood control, and sediment and nutrient reductions from farm fields.
- (4) **Agricultural road repair/stabilization:** Repair or stabilization of existing access roads utilized for agricultural operations, including roads to existing crop fields, pastures, and barns.
- (5) **Agricultural Water Collection System:** Construct an agricultural water collection system for water reuse or irrigation to improve water quality. These systems may include construction of new ponds, utilizing existing ponds, water storage tanks and pumps in order to intercept sediment, nutrients, manage chlorophyll a. These systems may have the added benefit of reducing the demand on the water supply and decreasing withdrawal from aquifers, but these benefits shall not be the justification for this practice.
- (6) **All-season Agricultural Access:** An accompanying best management practice (BMP) to provide stabilized access to agriculture BMPs to reduce erosion and improve water quality. This accompanying BMP is not intended to be used to construct new roads.
- (7) **Field border:** A strip of perennial vegetation established at the edge of the field that provides a stabilized outlet for row water to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (8) **Filter strip:** An area of permanent perennial vegetation for removing sediment, organic matter, and other pollutants from runoff and wastewater to improve water quality. Benefits may include reduced soil erosion, sedimentation, pathogen contamination and pollution from dissolved, particulate, and sediment-attached substances.
- (9) **Grade stabilization structure:** A structure (earth embankment, mechanical spillway, detention-type, etc.) used to control the grade and head cutting in natural or artificial channels to improve water quality. Benefits may include reduced soil erosion and sedimentation.
- (10) **Grassed waterway:** A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.

- (11) **Nutrient management:** A definitive plan to manage the amount, form, placement, and timing of applications of nutrients to minimize entry of nutrients to surface and groundwater and improve water quality.
- (12) **Precision nutrient management:** Applying nitrogen; phosphorus and lime in a site-specific manner (with specialized application equipment or multiple application events) based on the site-specific recommendations for each GPS-referenced sampling point to minimize entry of nutrients to surface and groundwater and improve water quality.
- (13) **Riparian buffer:** A permanent, long-lived vegetative cover (grass, shrubs, trees, or a combination of vegetation types) established adjacent to and up-gradient from watercourses or water bodies to improve water quality. Benefits may include reduced soil erosion and nutrient delivery, sedimentation, pathogen contamination and pollution from dissolved, particulate and sediment-attached substances.
- (14) **Rock-lined outlet:** A waterway having an erosion-resistant lining of concrete, stone or other permanent material where an unlined or grassed waterway would be inadequate to improve water quality. Benefits may include safe disposal of runoff, reduced erosion and sedimentation.
- (15) **Sediment basin:** A basin constructed to trap and store waterborne sediment where physical conditions or land ownership preclude treatment of a sediment source by the installation of other erosion control measures to improve water quality.
- (16) **Stream restoration:** The use of bioengineering practices, native material revetments, channel stability structures, and/or the restoration or management of riparian corridors in order to protect upland BMPs, restore the natural function of the stream corridor and improve water quality by reducing sedimentation to streams from streambank. *All FY 2025 Stream Restoration BMPs will require designs to be completed by third party engineers.*
- (17) **Streambank and shoreline protection:** The use of vegetation to stabilize and protect banks of streams, lakes, estuaries, or excavated channels against scour and erosion. This practice should be used to prevent the loss of land or damage to utilities, roads, buildings, or other facilities adjacent to the banks, to maintain the capacity of the channel, to control channel meander that would adversely affect downstream facilities, to reduce sediment load causing downstream damages and pollution, or to improve the stream for recreation or fish and wildlife habitat.
- (18) **Stream debris removal:** The removal of vegetation along the bank (clearing) and/or selective removal of snags, drifts, or other obstructions (snagging) from natural or improved channels and streams. This practice may be implemented to reduce risks to agricultural resources by removing obstructions that hinder channel flow or sediment transport, reduce excessive bank erosion by eddies or redirection of flow caused by obstructions, restore flow capacity and direction, or minimize blockages by debris.
- (19) **Water control structure:** A permanent structure placed in a farm canal, ditch, or subsurface drainage conduit (drain tile or tube), which provides control of the stage or discharge of surface and/or subsurface drainage. The management mechanism of the structure may be flashboards, gates, valves, risers, or pipes. The primary purpose of the water control structure is to improve water quality by elevating the water table and reducing drainage outflow. A secondary purpose is

to restore hydrology in riparian buffers to the extent practical. Elevating the water table promotes denitrification and lower nitrate levels in drainage water from cropping systems and minimizes the effects of short-circuiting of drainage systems passing through riparian buffers. Other benefits may include reduced pollution from other dissolved and sediment-attached substances, reduced downstream sedimentation and reduced stormwater surges of fresh water into estuarine areas. This practice is not intended to be used to control water inflow from tidal influence (i.e., no tide gates).

#### Stream Protection Management Practices

- (1) **Heavy use area protection:** An area used frequently and intensively by animals, which must be stabilized by surfacing with suitable materials to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved, particulate, and sediment-attached substances.
- (2) **Livestock exclusion fencing:** A system of permanent fencing (board, barbed, high tensile or electric wire) installed to exclude livestock from streams and critical areas not intended for grazing to improve water quality. Benefits may include reduced soil erosion, sedimentation, pathogen contamination and pollution from dissolved, particulate, and sediment-attached substances.
- (3) **Livestock feeding area:** A sized concrete pad where feeders are located, surrounded by a heavy use area. The livestock feeding area is designed for the purpose of improving the lifespan of the heavy use area and to reduce the runoff of nutrients and fecal coliform to adjacent water bodies. The practice is to be used to address water quality concerns where livestock feeding areas are in close proximity to streams and where relocation or rotation of feeding areas is infeasible due to physical limitations (e.g., slope) and where other stream protection measures are insufficient to protect water quality.
- (4) **Spring development:** Improving springs and seeps by excavating, cleaning, capping or providing collection and storage facilities.
- (5) **Stocktrails and walkways:** Provide a stable area used frequently and intensively for livestock movement by surfacing with suitable material to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved, particulate, and sediment-attached substances.
- (6) **Stream crossing:** A trail constructed across a stream to allow livestock to cross without disturbing the bottom or causing soil erosion on the banks.
- (7) **Stream Protection Well:** Constructing a drilled, driven or dug well to supply water from an underground source.
- (8) **Trough or tank:** Devices installed to provide drinking water for livestock at a stabilized location.

Waste Management Practices

~~(1) **Closure of waste impoundments:** The safe removal of existing waste and wastewater and the application of this waste on land in an environmentally safe manner. This practice is only applicable to waste storage ponds and lagoons.~~

~~(2)~~(1) **Concentrated nutrient source management system:** A system of vegetative and structural measures used to manage the collection, storage, and/or treatment of areas where agricultural products may cause an area of concentrated nutrients. Examples could include sweet potato culls and silage leachate.

~~(3)~~(2) **Constructed wetlands:** An artificial wetland area into which liquid animal waste from a waste storage pond or lagoon is dispersed over time to lower the nutrient content of the liquid animal waste.

~~(4)~~(3) **Dry stack:** A fabricated structure for temporary storage of animal waste.

~~(5)~~(4) **Feeding/waste storage structure:** A structure designed for improving the collection/storage of animal waste and to reduce runoff of nutrients and fecal coliform to adjacent water bodies. The practice is intended to be used where livestock feeding areas are in close proximity to streams and where relocation or rotation of feeding areas is infeasible due to physical limitations (e.g., slope) and where other stream protection measures are insufficient to address water quality concerns.

~~(6)~~(5) **Heavy use area protection:** An area used frequently and intensively by animals, which must be stabilized by surfacing with suitable materials to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved, particulate, and sediment-attached substances.

~~(7)~~(6) **Insect control practice:** A practice or combination of practices (planting windbreaks, pre-charging structures, incorporation of waste into soil, etc.) which manages or controls insects from confined animal operations, waste treatment and storage structures, and waste applied to agricultural land.

~~(8)~~(7) **Lagoon biosolids removal practice:** Removing accumulated biosolids from active anerobic lagoons. The biosolids will be properly utilized on farmland or forestland or processed to a value-added product, including energy production, to reduce nutrient impacts from nitrogen-only based planning and impacts of phosphorus accumulation on application land.

~~(9)~~(8) **Livestock mortality management system:** A facility for managing livestock mortalities such as to minimize water quality impacts or to produce a material that can be recycled as a soil amendment and fertilizer substitute. Cost shareable mortality management system components include composter, rotary drum composter, forced aeration static pile composter, mortality freezer/refrigeration unit and mortality incinerator system.

~~(10)~~(9) **Manure composting facility:** A facility for the biological treatment, stabilization and environmentally safe storage of organic waste material (such as manure from poultry and

livestock) to minimize water quality impacts and to produce a material that can be recycled as a soil amendment and fertilizer substitute.

~~(11)~~(10) **Manure/litter transportation incentive:** Transporting ~~dry~~-litter and ~~dry~~-manure from poultry and livestock ~~and poultry~~-farms that lack sufficient land to effectively utilize the animal-derived nutrients. The litter/manure will be properly utilized on alternative land or processed to a value-added product, including energy production, to reduce nutrient impacts.

~~(12)~~(11) **Odor control management system:** A practice or combination of practices (planting windbreaks, pre-charging structures, incorporation of waste into soil, etc.) which manages or controls odors from confined animal operations, waste treatment and storage structures and waste applied to agricultural land.

~~(13)~~(12) **Retrofit of on-going animal operations:** Modification of structures to increase storage or to correct design flaws to meet current standards. This practice may also be used to close waste impoundments on on-going operations, including the safe removal of existing waste and wastewater and the application of this waste on land in an environmentally safe manner.

~~(14)~~(13) **Solids separation from tank/raceway-based aquaculture production:** A system for the removal, storage and dewatering of solid waste from the effluent of tank or raceway-based aquaculture production systems. The system is used to capture organic solids from the effluent stream of fish production systems. These solids come from uneaten feed and waste generated by fish within the aquaculture production systems.

~~(15)~~(14) **Storm water management system:** A system of collection and diversion practices (guttering, collection boxes, diversions, etc.) to prevent unpolluted storm water from flowing across concentrated waste areas on animal operations.

~~(16)~~(15) **Waste application systems:** An environmentally safe system (such as mobile irrigation equipment, solid set, dry hydrant, ~~mobile irrigation equipment~~, etc.) for the conveyance and distribution of animal wastes from waste treatment and storage structures to agricultural fields as part of an irrigation and waste utilization-management plan.

(16) **Waste impoundment closure:** A Waste Impoundment Closure means the safe removal of existing waste and waste water and the application of this waste on land utilization in an environmentally safe manner. This practice is only applicable to animal waste storage ponds and lagoons.

(17) **Waste treatment lagoon/storage pond:** An impoundment made by excavation or earth fill for biological treatment and storage of animal waste.



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- (2) Allocate IISI earmarked ACSP funds to eligible soil and water conservation districts for all ACSP BMPs.
  - a. Award IISI earmarked funds to all eligible districts requesting an allocation following 02 NCAC 59D .0103.
- (3) Support implementation of a Job Approval Authority process for ACSP BMPs.
  - a. Review job approval category requirements to ensure technical competency.
- (4) Conduct training for districts.
  - a. Continue to train districts on the program.
  - b. Provide technical training for the required skills to plan and implement approved ACSP BMPs.
  - c. Maintain the [ACSP website](#) and Cost Share Contracting System with all relevant information.

**DISTRICT ALLOCATIONS**

- (1) Allocations for ACSP funds will be made to all districts requesting funds.
- a. All districts must request ACSP funds in their FY2025 Strategic Plan. A mid-year voluntary return and re-allocation process for general ACSP funds will be available to all districts. The ACSP Spring Supplemental Allocation will follow the [Supplemental Allocations of Cost Share Financial Assistance](#) policy.
  - b. To be eligible for an IISI allocation, districts must complete the FY2025 IISI survey and request IISI funds in their FY2025 Strategic Plan. Districts’ utilization of allocations (encumbrance by fiscal year end and voluntary return of funding for mid-year supplemental allocations) will be tracked starting in FY2025 and used to determine future eligibility for IISI funds. Districts may participate in a mid-year voluntary return and re-allocation process that runs in conjunction with the ACSP Spring Supplemental Allocation.
  - c. CREP allocations are distributed to districts for qualifying projects on an as-needed basis. Districts must send a written request for funds to the ACSP and CREP program managers.
- (2) Allocation parameters are described 02 NCAC 59D .0103 Agriculture Cost Share Program Financial Assistance Allocation Guidelines and Procedures (Effective January 1, 2020).

**Table 1.** Allocation parameters

<b>PARAMETER</b>	<b>PERCENT</b>
Percentage of total acres of agricultural land in North Carolina that are in the respective district as reported in the most recent edition of the North Carolina Census of Agriculture.	20%
Percentage of total number of animal units in North Carolina that are in the respective district as reported in the most recent edition of the North Carolina Census of Agriculture and converted to animal units.	20%
Relative rank of the percentage of the county outside of municipal boundaries draining to waters identified as impaired or impacted on the most recent Integrated Report produced by the North Carolina Division Water Resources.	20%
Relative rank of the percentage of the county draining to waters classified as Primary Nursery Areas, Outstanding Resource Waters, High Quality Waters, and Trout Waters on the current schedule of Water Quality Standards and Classifications, Shellfish Harvesting Areas (open) as determined by the Division of Marine Fisheries, and North Carolina Drinking Water Assessment Areas as determined by the Division of Water Resources.	10%



Percentage of program funds allocated to a district that are expended for installed BMPs in the highest three of the most recent seven-year period as reported in the NC Cost Share Contracting System.	20%
Relative rank of the number of acres of highly erodible land in the county as reported by the United States Department of Agriculture Farm Service Agency.	10%

**TECHNICAL ASSISTANCE ALLOCATIONS**

- (1) Allocations for technical assistance shall be based on the recommendation of the Division, the funding requested in the district’s strategic plan, and the need to install BMPs in the district.
- (2) Each district shall provide at least 50% matching funds for technical assistance.
- (3) The allocation is made based on the implementation of conservation practices for which district employees provided technical assistance:
  - a. Commission Cost Share Programs funded practices: 100%
  - b. Local, State, Federal and grant funded practices that meet the purpose requirements of Commission Cost Share Programs: 25%
  - c. Allocations are calculated using the highest three of the most recent seven years. This calculation was approved at the February 24, 2021, Commission meeting and is effective this fiscal year.
  - d. Allocations are calculated once every three years, unless there is a change in technical assistance State appropriations.
- (4) Technical assistance funds may be used for any expense of the district in implementing Commission Cost Share Programs.
- (5) The minimum allocation for districts with the required match is \$20,000. The maximum allocation per district is \$30,000.
- (6) If a district is not spending more financial assistance funds on Commission Cost Share Programs than they receive for technical assistance, the district will appeal to the Commission to receive technical assistance funding.
- (7) All technical district employees shall obtain Job Approval Authority for two BMPs from the Commission or United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) within three years of being hired or by January 1, 2025, whichever is later.
  - a. One BMP must be a design practice as described in Commission Program Detailed Implementation Plans, such as this document, or as defined as an engineering practice by USDA-NRCS.
  - b. Boards of Supervisors may request a one-year extension for their employees in meeting this requirement for extenuating circumstances outside the employees’ control.

**BEST MANAGEMENT PRACTICES ELIGIBLE FOR COST SHARE PAYMENTS**

- (1) The best management practices eligible for cost sharing include the practices listed in Table 2 and any approved District BMPs.
  - District BMPs shall be reviewed by the Division for technical merit in achieving the goals of this program. Upon approval by the Division, the District BMPs will be eligible to receive cost share funding as described in 02 NCAC 59D .0106.
- (2) The minimum life expectancy of the BMPs is listed in Table 2. Practices designated by a District shall meet the life expectancy requirement established by the Division for that District BMP.
- (3) The list of BMPs eligible for cost sharing may be revised by the Soil and Water Conservation Commission as deemed appropriate to meet program purpose and goals. Additional practices may be adopted and introduced during the program year.

**Table 2.** Best management practices eligible for cost sharing, the minimum life expectancy of each practice and the practice type.

<b>PRACTICE</b>	<b>MINIMUM LIFE EXPECTANCY (years)</b>	<b>PRACTICE TYPE</b>
Abandoned Tree Removal	10	AGRONOMIC
Abandoned Well Closure	1	DESIGN
Agrichemical Containment and Mixing Facility	10	DESIGN
Agrichemical Handling Facility	10	DESIGN
Agricultural Pond Repair/Retrofit	10	DESIGN
Agricultural Pond Sediment Removal	1	DESIGN
Agricultural Road Repair/Stabilization	10	DESIGN
Agricultural Water Collection System	10	DESIGN
All-Season Agricultural Access	10	DESIGN
Backflow Prevention System (Chemigation or Fertigation)	10	DESIGN
Concentrated Nutrient Source Management System	10	DESIGN
Conservation Cover	6	AGRONOMIC
Constructed Wetland for Land Application	10	DESIGN
Cover Crops	1	AGRONOMIC
Critical Area Planting	10	AGRONOMIC
Cropland Conversion	10	AGRONOMIC
Diversion	10	DESIGN
Drystack	10	DESIGN
Feeding/Waste Storage Structure	10	DESIGN
Field Border	10	AGRONOMIC
Filter Strip	10	AGRONOMIC
Grade Stabilization Structure	10	DESIGN
Grassed Waterway	10	DESIGN
Heavy Use Area Protection	10	DESIGN
Insect Control System	5	DESIGN
Lagoon Biosolids Removal Practice	1	DESIGN
Livestock Exclusion Fence	10	AGRONOMIC
Livestock Feeding Area	10	DESIGN
Livestock Mortality Management System - Incinerator	5	DESIGN
Livestock Mortality Management System - Other Systems	10	DESIGN
Manure Composting Facility	10	DESIGN
Manure/Litter Transportation Incentive	1	DESIGN

**ATTACHMENT 9B  
CLEAN VERSION**

<b>PRACTICE</b>	<b>MINIMUM LIFE EXPECTANCY (years)</b>	<b>PRACTICE TYPE</b>
Micro-Irrigation System	10	DESIGN
Nutrient Management	3	AGRONOMIC
Odor Management System	1 to 10	AGRONOMIC
Pasture Renovation	5	AGRONOMIC
Pastureland Conversion	10	AGRONOMIC
Portable Agrichemical Mixing Station	5	DESIGN
Precision Agrichemical Application	5	AGRONOMIC
Precision Land Forming and Smoothing	5	DESIGN
Precision Nutrient Management	3	AGRONOMIC
Prescribed Grazing	3	AGRONOMIC
Residue and Tillage Management	1 to 3	AGRONOMIC
Retrofit of On-going Animal Operations	10	DESIGN
Riparian Buffer	10	AGRONOMIC
Rock-lined Waterway or Outlet	10	DESIGN
Rooftop Runoff Management System	10	DESIGN
Sediment Control Basin	10	DESIGN
Sod-based Rotation	3, 4 or 5	AGRONOMIC
Solids Separation from Tank-Based Aquaculture Production	10	DESIGN
Spring Development	10	DESIGN
Stock Trail and Walkway	10	DESIGN
Storm Water Management System	10	DESIGN
Stream Crossing	10	DESIGN
Stream Debris Removal	1	DESIGN
Stream Protection Well	10	DESIGN
Stream Restoration	10	DESIGN
Streambank and Shoreline Protection	10	DESIGN
Strip cropping	5	AGRONOMIC
Terrace	10	DESIGN
Trough or Tank	10	DESIGN
Waste Application System	10	DESIGN
Waste Impoundment Closure	1 or 10	DESIGN
Waste Treatment Lagoon/Storage Pond	10	DESIGN
Water Control Structure	10	DESIGN
Wetlands Restoration System	10	DESIGN

## BEST MANAGEMENT PRACTICE DEFINITIONS

### Agrichemical Pollution Prevention Practices

- (1) **Abandoned tree removal:** Remove Christmas and/or apple tree fields for integrated pest management and for reducing sedimentation. An abandoned tree field can be of any size or age trees where standard management practices (e.g., maintaining groundcover, insect and disease control, fertilizer applications and annual shearing practices) for the production of the trees are discontinued or abandoned. The field must have been abandoned for at least 5 years. Abandonment leads to adverse soil erosion formations such as gullies and to production of disease inoculums and increased pest population. Conversion to perennial vegetation on abandoned fields further protects soil loss by preventing runoff on steep slopes due to a better groundcover thereby providing additional water quality protection. Benefits include water quality protection, prevention of soil erosion, and wildlife habitat establishment.
- (2) **Agrichemical containment and mixing facility:** A system of components that provide containment and a barrier to the movement of agrichemicals. The purpose of the system is to provide secondary containment to prevent degradation of surface water, groundwater, and soil from unintentional release of pesticides or fertilizers.
- (3) **Agrichemical handling facility:** A permanent structure that provides an environmentally safe means of mixing agrichemicals and filling tanks with agrichemicals for application and storage to improve water quality. Benefits may include prevention of accidental degradation of surface and ground water.
- (4) **Chemigation or Fertigation backflow prevention:** A combination of devices (valves, gauges, injectors, drains, etc.) to safeguard water sources from contamination by fertilizers used during the irrigation of agricultural crops. The practice is intended to modify or improve fertilizer injection systems with components necessary to prevent backflow or siphoning of contaminants into the water supply thereby improving and protecting the state's waters.
- (5) **Portable agrichemical mixing station:** A portable device to be used in the field to prevent the unintentional release of agrichemicals to the environment during mixing and transferring of agrichemicals. Benefits may include prevention of accidental degradation of surface and ground water.
- (6) **Precision agrichemical application:** A system of components that enable reduction and greater control of fertilizer or pesticide application. This is accomplished through avoidance of excessive overlapping, unnecessary application to end/turn rows, and more precise control of application rates.

### Erosion and Nutrient Management Practices

- (1) **Conservation cover:** Establish and maintain a conservation cover of grass, legumes, or other approved plantings on fields previously with no groundcover established, to reduce soil erosion and improve water quality. Other benefits may include reduced offsite sedimentation and

pollution from dissolved and sediment-attached substances. Eligible land includes that planted to Christmas Trees, orchards, ornamentals, vineyards and other cropland needing protective cover.

- (2) **Cover crop:** A crop of grasses, legumes, small grain or brassicas grown primarily for seasonal vegetative protection, erosion control and soil improvement. Cover crops are typically grown for one year or less. The practice can be implemented to support one or more of the following purposes: reduce erosion from wind and water; reduce water quality degradation by utilizing excessive soil nutrients; improve infiltration of rainfall; maintain or increase soil health and organic matter content; suppress excessive weed pressures and break pest cycles; improve soil moisture use efficiency and/or minimize soil compaction.
- (3) **Critical area planting:** An area of highly erodible land that cannot be stabilized by ordinary conservation treatment on which permanent perennial vegetative cover is established and protected to improve water quality. Benefits may include reduced soil erosion and sedimentation.
- (4) **Cropland conversion:** To establish and maintain a conservation cover of grasses, trees, or wildlife plantings on fields previously used for crop production to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (5) **Diversion:** A channel constructed across a slope with a supporting ridge on the lower side to control drainage by diverting excess water from an area to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (6) **Micro-irrigation:** An environmentally safe system for the conveyance and distribution of water, chemicals, and fertilizer to agricultural fields for crop production. A micro-irrigation system is for frequent application of small quantities of water on or below the soil surface as drops, tiny streams, or miniature spray through emitters or applicators placed along a water delivery line. This practice may be applied as part of a conservation management system to support one or more of the following purposes: to efficiently and uniformly apply irrigation water and maintain soil moisture for plant growth; to efficiently and uniformly apply plant nutrients in a manner that protects water quality; to prevent contamination of ground and surface water by efficiently and uniformly applying chemicals and fertilizers and/or to establish desired vegetation.
- (7) **Pasture-land conversion:** Establishing trees or perennial wildlife plantings on excessively eroding land with a visible sediment delivery problem to the waters of the state used for pasture that is too steep to mow or maintain with conventional equipment to improve water quality. Benefits may include reduced soil erosion and sedimentation.
- (8) **Pasture renovation:** Establish and maintain a conservation cover of forage, where existing pasture vegetation is inadequate. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (9) **Precision land forming and smoothing:** Reshaping the surface of agricultural land to planned grades for the purpose of improving water quality. Precision land forming is reshaping crop fields to planned grades to improve surface drainage and control erosion. Land smoothing is used for removing irregularities within a field, including depressions, mounds, old terraces or diversions,

turn-rows, or other surface irregularities. Improvements to water quality include reduction in nutrient loss, reduction in concentrated flow of water from an agricultural field and improved infiltration.

- (10) **Prescribed grazing:** Managing the intensity, frequency, duration, timing, and number of grazing animals on pastureland in accordance with site production limitations, rate of plant growth, physiological needs of forage plants for production and persistence, and nutritional needs of the grazing animals. The goal of this practice is to reduce accelerated soil erosion and compaction, to improve or maintain riparian and watershed function, to maintain surface and/or subsurface water quality and quantity, to improve nutrient distribution, and to improve or maintain desired species composition and vigor of plant communities. Productive pastures maintain wildlife habitat and permeable green space.
- (11) **Residue and tillage management:** Maintaining crop and other plant residue on the soil surface year-round and limiting soil disturbing activities to protect water quality. Residue and tillage management also provides seasonal soil protection from wind and rain erosion, adds organic matter to the soil, conserves soil moisture, and improves infiltration, aeration, and tilth. Benefits may include reduction in soil erosion, sedimentation and pollution from sediment-attached substances.
- (12) **Rooftop runoff management:** A system of collection and stabilization practices (dripline stabilization, guttering, collection boxes, etc.) to prevent rainfall runoff from agricultural rooftops from causing erosion where vegetative practices are insufficient to address erosion concerns and protect water quality.
- (13) **Sod-based rotation:** An adapted sequence of crops, grasses and legumes or a mixture thereof established and maintained for a definite number of years as part of a conservation cropping system which is designed to provide adequate organic residue for maintenance or improvement of soil tilth to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (14) **Strip cropping:** A strip cropping practice means to grow planned alternating strips of erosion resistant and erosion susceptible crops or fallow in a systematic arrangement across a field to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (15) **Terraces:** An earth embankment, a channel, or a combination ridge and channel constructed across the slope to improve water quality. Benefits may include reduced soil erosion, sedimentation, and pollution from dissolved and sediment-attached substances.
- (16) **Wetland restoration system:** A system of practices designed to restore the natural hydrology of an area that had been drained and cropped.

Sediment and Nutrient Management Practices

- (1) **Abandoned well closure:** The sealing and permanent closure of a supply well no longer in use. This practice serves to prevent entry of contaminated surface water, animals, debris, or other foreign substances into the well. It also serves to eliminate the physical hazards of an open hole to people, animals, and farm machinery.
- (2) **Agricultural pond repair/retrofit:** To restore or repair existing failing agricultural pond systems. Benefits may include erosion control, flood control, and sediment and nutrient reductions from farm fields for better water quality.
- (3) **Agricultural pond sediment removal:** Remove sediment from existing agricultural ponds to increase water storage capacity. Benefits may include water supply, erosion control, flood control, and sediment and nutrient reductions from farm fields.
- (4) **Agricultural road repair/stabilization:** Repair or stabilization of existing access roads utilized for agricultural operations, including roads to existing crop fields, pastures, and barns.
- (5) **Agricultural Water Collection System:** Construct an agricultural water collection system for water reuse or irrigation to improve water quality. These systems may include construction of new ponds, utilizing existing ponds, water storage tanks and pumps in order to intercept sediment, nutrients, manage chlorophyll a. These systems may have the added benefit of reducing the demand on the water supply and decreasing withdrawal from aquifers, but these benefits shall not be the justification for this practice.
- (6) **All-season Agricultural Access:** An accompanying best management practice (BMP) to provide stabilized access to agriculture BMPs to reduce erosion and improve water quality. This accompanying BMP is not intended to be used to construct new roads.
- (7) **Field border:** A strip of perennial vegetation established at the edge of the field that provides a stabilized outlet for row water to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.
- (8) **Filter strip:** An area of permanent perennial vegetation for removing sediment, organic matter, and other pollutants from runoff and wastewater to improve water quality. Benefits may include reduced soil erosion, sedimentation, pathogen contamination and pollution from dissolved, particulate, and sediment-attached substances.
- (9) **Grade stabilization structure:** A structure (earth embankment, mechanical spillway, detention-type, etc.) used to control the grade and head cutting in natural or artificial channels to improve water quality. Benefits may include reduced soil erosion and sedimentation.
- (10) **Grassed waterway:** A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.



- (11) **Nutrient management:** A definitive plan to manage the amount, form, placement, and timing of applications of nutrients to minimize entry of nutrients to surface and groundwater and improve water quality.
- (12) **Precision nutrient management:** Applying nitrogen; phosphorus and lime in a site-specific manner (with specialized application equipment or multiple application events) based on the site-specific recommendations for each GPS-referenced sampling point to minimize entry of nutrients to surface and groundwater and improve water quality.
- (13) **Riparian buffer:** A permanent, long-lived vegetative cover (grass, shrubs, trees, or a combination of vegetation types) established adjacent to and up-gradient from watercourses or water bodies to improve water quality. Benefits may include reduced soil erosion and nutrient delivery, sedimentation, pathogen contamination and pollution from dissolved, particulate and sediment-attached substances.
- (14) **Rock-lined outlet:** A waterway having an erosion-resistant lining of concrete, stone or other permanent material where an unlined or grassed waterway would be inadequate to improve water quality. Benefits may include safe disposal of runoff, reduced erosion and sedimentation.
- (15) **Sediment basin:** A basin constructed to trap and store waterborne sediment where physical conditions or land ownership preclude treatment of a sediment source by the installation of other erosion control measures to improve water quality.
- (16) **Stream restoration:** The use of bioengineering practices, native material revetments, channel stability structures, and/or the restoration or management of riparian corridors in order to protect upland BMPs, restore the natural function of the stream corridor and improve water quality by reducing sedimentation to streams from streambank. *All FY 2025 Stream Restoration BMPs will require designs to be completed by third party engineers.*
- (17) **Streambank and shoreline protection:** The use of vegetation to stabilize and protect banks of streams, lakes, estuaries, or excavated channels against scour and erosion. This practice should be used to prevent the loss of land or damage to utilities, roads, buildings, or other facilities adjacent to the banks, to maintain the capacity of the channel, to control channel meander that would adversely affect downstream facilities, to reduce sediment load causing downstream damages and pollution, or to improve the stream for recreation or fish and wildlife habitat.
- (18) **Stream debris removal:** The removal of vegetation along the bank (clearing) and/or selective removal of snags, drifts, or other obstructions (snagging) from natural or improved channels and streams. This practice may be implemented to reduce risks to agricultural resources by removing obstructions that hinder channel flow or sediment transport, reduce excessive bank erosion by eddies or redirection of flow caused by obstructions, restore flow capacity and direction, or minimize blockages by debris.
- (19) **Water control structure:** A permanent structure placed in a farm canal, ditch, or subsurface drainage conduit (drain tile or tube), which provides control of the stage or discharge of surface and/or subsurface drainage. The management mechanism of the structure may be flashboards, gates, valves, risers, or pipes. The primary purpose of the water control structure is to improve water quality by elevating the water table and reducing drainage outflow. A secondary purpose is

to restore hydrology in riparian buffers to the extent practical. Elevating the water table promotes denitrification and lower nitrate levels in drainage water from cropping systems and minimizes the effects of short-circuiting of drainage systems passing through riparian buffers. Other benefits may include reduced pollution from other dissolved and sediment-attached substances, reduced downstream sedimentation and reduced stormwater surges of fresh water into estuarine areas. This practice is not intended to be used to control water inflow from tidal influence (i.e., no tide gates).

#### Stream Protection Management Practices

- (1) **Heavy use area protection:** An area used frequently and intensively by animals, which must be stabilized by surfacing with suitable materials to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved, particulate, and sediment-attached substances.
- (2) **Livestock exclusion fencing:** A system of permanent fencing (board, barbed, high tensile or electric wire) installed to exclude livestock from streams and critical areas not intended for grazing to improve water quality. Benefits may include reduced soil erosion, sedimentation, pathogen contamination and pollution from dissolved, particulate, and sediment-attached substances.
- (3) **Livestock feeding area:** A sized concrete pad where feeders are located, surrounded by a heavy use area. The livestock feeding area is designed for the purpose of improving the lifespan of the heavy use area and to reduce the runoff of nutrients and fecal coliform to adjacent water bodies. The practice is to be used to address water quality concerns where livestock feeding areas are in close proximity to streams and where relocation or rotation of feeding areas is infeasible due to physical limitations (e.g., slope) and where other stream protection measures are insufficient to protect water quality.
- (4) **Spring development:** Improving springs and seeps by excavating, cleaning, capping or providing collection and storage facilities.
- (5) **Stocktrails and walkways:** Provide a stable area used frequently and intensively for livestock movement by surfacing with suitable material to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved, particulate, and sediment-attached substances.
- (6) **Stream crossing:** A trail constructed across a stream to allow livestock to cross without disturbing the bottom or causing soil erosion on the banks.
- (7) **Stream Protection Well:** Constructing a drilled, driven or dug well to supply water from an underground source.
- (8) **Trough or tank:** Devices installed to provide drinking water for livestock at a stabilized location.

Waste Management Practices

- (1) **Concentrated nutrient source management system:** A system of vegetative and structural measures used to manage the collection, storage, and/or treatment of areas where agricultural products may cause an area of concentrated nutrients. Examples could include sweet potato culls and silage leachate.
- (2) **Constructed wetlands:** An artificial wetland area into which liquid animal waste from a waste storage pond or lagoon is dispersed over time to lower the nutrient content of the liquid animal waste.
- (3) **Dry stack:** A fabricated structure for temporary storage of animal waste.
- (4) **Feeding/waste storage structure:** A structure designed for improving the collection/storage of animal waste and to reduce runoff of nutrients and fecal coliform to adjacent water bodies. The practice is intended to be used where livestock feeding areas are in close proximity to streams and where relocation or rotation of feeding areas is infeasible due to physical limitations (e.g., slope) and where other stream protection measures are insufficient to address water quality concerns.
- (5) **Heavy use area protection:** An area used frequently and intensively by animals, which must be stabilized by surfacing with suitable materials to improve water quality. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved, particulate, and sediment-attached substances.
- (6) **Insect control practice:** A practice or combination of practices (planting windbreaks, pre-charging structures, incorporation of waste into soil, etc.) which manages or controls insects from confined animal operations, waste treatment and storage structures, and waste applied to agricultural land.
- (7) **Lagoon biosolids removal practice:** Removing accumulated biosolids from active anaerobic lagoons. The biosolids will be properly utilized on farmland or forestland or processed to a value-added product, including energy production, to reduce nutrient impacts from nitrogen-only based planning and impacts of phosphorus accumulation on application land.
- (8) **Livestock mortality management system:** A facility for managing livestock mortalities such as to minimize water quality impacts or to produce a material that can be recycled as a soil amendment and fertilizer substitute. Cost shareable mortality management system components include composter, rotary drum composter, forced aeration static pile composter, mortality freezer/refrigeration unit and mortality incinerator system.
- (9) **Manure composting facility:** A facility for the biological treatment, stabilization and environmentally safe storage of organic waste material (such as manure from poultry and livestock) to minimize water quality impacts and to produce a material that can be recycled as a soil amendment and fertilizer substitute.
- (10) **Manure/litter transportation incentive:** Transporting litter and manure from poultry and livestock farms that lack sufficient land to effectively utilize the animal-derived nutrients. The

litter/manure will be properly utilized on alternative land or processed to a value-added product, including energy production, to reduce nutrient impacts.

- (11) **Odor control management system:** A practice or combination of practices (planting windbreaks, pre-charging structures, incorporation of waste into soil, etc.) which manages or controls odors from confined animal operations, waste treatment and storage structures and waste applied to agricultural land.
- (12) **Retrofit of on-going animal operations:** Modification of structures to increase storage or to correct design flaws to meet current standards. This practice may also be used to close waste impoundments on on-going operations, including the safe removal of existing waste and wastewater and the application of this waste on land in an environmentally safe manner.
- (13) **Solids separation from tank/raceway-based aquaculture production:** A system for the removal, storage and dewatering of solid waste from the effluent of tank or raceway-based aquaculture production systems. The system is used to capture organic solids from the effluent stream of fish production systems. These solids come from uneaten feed and waste generated by fish within the aquaculture production systems.
- (14) **Storm water management system:** A system of collection and diversion practices (guttering, collection boxes, diversions, etc.) to prevent unpolluted storm water from flowing across concentrated waste areas on animal operations.
- (15) **Waste application systems:** An environmentally safe system (such as mobile irrigation equipment, solid set, dry hydrant, etc.) for the conveyance and distribution of animal wastes from waste treatment and storage structures to agricultural fields as part of an irrigation and waste management plan.
- (16) **Waste impoundment closure:** A Waste Impoundment Closure means the safe removal of existing waste and waste water and utilization in an environmentally safe manner. This practice is only applicable to animal waste storage ponds and lagoons.
- (17) **Waste treatment lagoon/storage pond:** An impoundment made by excavation or earth fill for biological treatment and storage of animal waste.

TECHNICAL COMPETENCY REQUIREMENTS

ABANDONED TREE REMOVAL

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
327-ATR	Abandoned Tree Removal	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Systems used in NC.</p> <p>5. Knowledge of Wildlife Management and Adaptive Plant Species.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

# ATTACHMENT 9B

## TECHNICAL COMPETENCY REQUIREMENTS

### AGRICULTURAL ROAD REPAIR / STABILIZATION

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
560	Agricultural Road Repair / Stabilization	Maximum Grade	Percent	1	5	10	15	>15 = PE Only
		Culvert Pipe; Inside Diameter	Inches	18	36	>36 = PE Only		
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</p> <p>5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</p>				<p>1. Knowledge of NRCS Construction Specification 7 - Construction Surveys, 21 - Excavation, and 23 - Earthfill, 42 - Concrete Pipe Conduits and Drains, 45 - Plastic Pipe, 51 - Corrugated Metal Pipe, 61 - Rock Riprap, and 95 - Geotextile.</p> <p>2. Development of related computations and analyses to develop plans and specifications including but not limited to soil mechanics, hydrology, hydraulics, and structural design.</p> <p>3. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation.</p> <p>4. Installation inspection of actual materials used (NEM Part 512 - Construction, Subpart C – Evaluation of Construction Materials, 512.20 through 512.23; Subpart D - Quality Assurance Activities, 512.33).</p> <p>5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</p> <p>6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

ALL-SEASON AGRICULTURAL ACCESS

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
561-ASAA	All-Season Agricultural Access	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.				1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill. 2. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation. 3. Installation inspection of actual materials used (NEM Part 512 - Construction, Subpart C – Evaluation of Construction Materials, 512.20 through 512.23; Subpart D - Quality Assurance Activities, 512.33). 4. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52). 5. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client’s objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

TECHNICAL COMPETENCY REQUIREMENTS

BASEFLOW INTERCEPTOR (STREAMSIDE PICKUP)

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
574-BI-AW	Baseflow Interceptor (streamside pickup)	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<ol style="list-style-type: none"> <li>Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</li> <li>Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</li> <li>Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</li> <li>Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</li> <li>Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</li> </ol>				<ol style="list-style-type: none"> <li>Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill.</li> <li>Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation.</li> <li>Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).</li> <li>Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</li> <li>Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</li> </ol>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<ol style="list-style-type: none"> <li>Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</li> <li>Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</li> <li>Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see eFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</li> </ol>			<ol style="list-style-type: none"> <li>Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</li> <li>Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</li> <li>Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</li> </ol>			<ol style="list-style-type: none"> <li>Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</li> <li>Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</li> <li>Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</li> </ol>		



Closure of Abandoned Waste Impoundment **TECHNICAL COMPETENCY REQUIREMENTS**

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
360	Closure Impoundment	Storage After Closure *	Gallons	0				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employees must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for the highest level of complexity for which they wish to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Working Knowledge of Web Soil Survey, Suitabilities and Limitations Ratings</p> <p>4. Working knowledge in the analysis and interpretation of soil test and waste analysis results.</p> <p>5. NCSU Nutrient Management in NC Course which includes: (1) the online prerequisite; (2) 5-days of nutrient management-related course work, including PLAT, RUSLE2 and software trainings; and (3) NC Rules and Regulations Governing Animal Waste Management in NC training, along with a passing score on the exams given at the conclusion of each section.</p> <p>6. Working knowledge in the Agricultural Waste Management Field Handbook (Title 210, Part 651).</p> <p>7. JAA for Code 590, Nutrient Management.</p> <p>8. Waste Utilization Planning/Nutrient Management (WUP/NM) Technical Specialist Designation.</p> <p>9. Working knowledge of practices needed to control erosion on disturbed areas (Standard 342).</p> <p>* If storage of fresh water is to be maintained after verification of waste removal, a PE must be involved with spillway design and 360 JAA is not applicable.</p>				<p>1. Ability to perform a sludge survey to determine volume estimates of waste removal.</p> <p>2. Ability to collect soil samples and interpret soil test reports for recommendations.</p> <p>3. Knowledge of NC’s crops and cropping systems.</p> <p>4. Knowledge of tillage systems used in NC.</p> <p>5. Knowledge to assess the risk of nitrogen leaching loss, the nitrogen Leaching Index, obtained through use of current Soil Hydrologic Group (SHG)-based LI index maps in Section II of the NC FOTG OR RUSLE 2 field specific soil loss calculations.</p> <p>6. Ability to perform Nitrogen and Phosphorus Risk Assessments using NCANAT (NLEW+PLAT) in the NC Nutrient Management Planning Software.</p> <p>7. Ability to assess site soil conditions and prescribe treatment and the appropriate vegetation.</p> <p>8. Knowledge of manure characteristics and nutrient values.</p> <p>9. Ability to read, interpret, and use waste impoundment as-built designs to develop a closure plan.</p> <p>10. Skill for development of related computations and analyses to develop closure plans and specifications including but not limited to geology, soil mechanics, hydraulics, structural design, vegetation, and soil bioengineering.</p> <p>11. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA -52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps of land application fields.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client’s objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Independently complete a minimum of two sludge surveys on separate Planning Land Units (PLU) to identify and document resource needs and concerns.</p> <p>4. Collect the appropriate Soil Samples and RUSLE field data on each land application field to receive animal waste to identify and document resource needs and concerns.</p> <p>5. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two waste impoundment closure nutrient management plans on separate Planning Land Units (PLU) in accordance with the most recent NRCS 360 Standard and SWCC Closure-Waste Impoundment BMP and Policies. Plans should include maps of application fields and associated setbacks, sludge survey information, soil samples, PLAT results, copper and zinc projections and narrative explaining closure methodology.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP policy and NRCS 360 standard.</p> <p>2. Independently fullfull/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice State of Work (SOW) or comparable SWCC forms(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or Comparable form.</p> <p>4. Independently complete a minimum of two NC DWR Animal Waste Storage Pond and Lagoon Closure Report forms on separate Planning Land Units (PLU) in accordance with NC DWR policies.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

CONSERVATION COVER

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
327	Conservation Cover	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Systems used in NC.</p> <p>5. Knowledge of Wildlife Management and Adaptive Plant Species.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

COVER CROP

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
340	Cover Crop	Species Planted (Species Mix)	Number	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Systems used in NC.</p> <p>5. Knowledge of Adaptive Species of Cover Crops for Planned Purposes in NC.</p> <p>6. Knowledge of Approved Planting Dates, Times and Methods of Termination for Cover Crops.</p> <p>7. Working knowledge of "Managing Cover Crops Profitability".</p> <p>8. Ability to select species based on the client objectives.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

**ATTACHMENT 9B**  
**TECHNICAL COMPETENCY REQUIREMENTS**

**CROPLAND CONVERSION**

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
512	Cropland Conversion	<b>Cover Type</b>	-	-	-	-	-	-
		Pasture and Hayland	Ac.	ALL				
		Tree/Shrub	Ac.	ALL				
		Wildlife Habitat	Ac.	ALL				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of adapted plants for the ecological sites/forage suitability groups in the area of service.</p> <p>2. Skill in planning the planting protocols and educating land users in the operation and maintenance for the practice/operation/site.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

DIVERSION

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
362	Diversion	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.				1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill. 2. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation. 3. Development of related computations and analyses to develop plans and specifications including but not limited to hydrology/hydraulics, vegetation, environmental considerations, and outlet capacity and stability. 4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06). 5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52). 6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

TECHNICAL COMPETENCY REQUIREMENTS

FIELD BORDER

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
386	Field Border	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of Vegetation Appropriate for Field Borders.</p> <p>2. Ability to Assess Site Conditions to Plan and Apply Field Borders.</p> <p>3. Knowledge of Species and Vegetation Management for Wildlife &amp; Pollinators.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

FILTER STRIP

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
393	Filter Strip	Area	Acres	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge using the Excel Filter Strip Lifespan Design Spreadsheet. 5. Working knowledge of the application of Agronomy Technical Note no. 2 Using RUSLE2 for the Design and Predicted Effectiveness of Vegetative Filter Strips (VFS) or Sediment.				1. Knowledge of Vegetation Appropriate for Filter Strips. 2. Ability to Assess Site Conditions to Plan and Apply Filter Strips. 3. Knowledge of Species and Vegetation Management for Wildlife & Pollinators. 4. Knowledge of the Management Needed to Attain the Purpose(s) of the Filter Strips. 5. Ability to Layout a Filter Strip to Meet its Intended Purpose(s).				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see eFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.  4. Plan specification must include use of the Excel Filter Strip Lifespan Design Spreadsheet.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.  4. Plan specification must include use of the Excel Filter Strip Lifespan Design Spreadsheet.		

GRADE STABILIZATION STRUCTURE TECHNICAL COMPETENCY REQUIREMENTS

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
410	Grade Stabilization Structure	Hazard Class		A	A	A	A	A
		Effective Height (EH)	feet	15	20	25	30	35
		Storage x EH	acre-feet <sup>2</sup>	500	1,000	2,000	2,500	3,000
		Drainage Area	acres	100	400	1,000	2,500	4,000
		Conduit Diameter	inches	12	24	36	42	48
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.				1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill. 2. Knowledge of structures including embankments, full-flow open type, island type, side inlet, open weir, and pipe drops. 3. Development of related computations and analyses to develop plans and specifications including but not limited to geology, soil mechanics, hydrology, hydraulics, structural design, vegetation, environmental and safety considerations. 4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06). 5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52). 6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		



**GRASSED WATERWAY**

**TECHNICAL COMPETENCY REQUIREMENTS**

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
412	Grassed Waterway	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.				1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill. 2. Ability to assess methods for conveying runoff from terraces, diversions, or other water concentrations without causing erosion or flooding. 3. Development of related computations and analyses to develop plans and specifications including but not limited to hydrology/hydraulics, vegetation, seedbed preparation, soil amendments, environmental considerations, and outlet capacity and stability. 4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06). 5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52). 6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

# ATTACHMENT 9B TECHNICAL COMPETENCY REQUIREMENTS

## HEAVY USE AREA PROTECTION

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
561	Heavy Use Area Protection	Material	Type	Stone	Concrete			
		Land Slope	%	< 5%	5-15%	>15% = PE Only		
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</p> <p>5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</p>				<p>1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill.</p> <p>2. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation.</p> <p>3. Practice standard criteria-related computations and analyses to develop plans and specifications including but not limited to standard drawing(s) or other approved site-specific drawing(s) and the NC approved spreadsheet 561_NC_GD_Heavy_Use_Area_ProtectionFeeding_Site_Assessment_Tool_v_7_2015.xlxs or equivalent.</p> <p>4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).</p> <p>5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</p> <p>6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
590-LBR	Biosolids Removal	Nutrient Source, Application Method and/or Special Conditions	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employees must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for the highest level of complexity for which they wish to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Working Knowledge of Web Soil Survey, Suitabilities and Limitations Ratings</p> <p>4. Working knowledge in the analysis and interpretation of soil test and waste analysis results.</p> <p>5. NCSU Nutrient Management in NC Course which includes: (1) the online prerequisite; (2) 5-days of nutrient management-related course work, including PLAT, RUSLE2 and software trainings; and (3) NC Rules and Regulations Governing Animal Waste Management in NC training, along with a passing score on the exams given at the conclusion of each section.</p> <p>6. Working knowledge in the Agricultural Waste Management Field Handbook (Title 210, Part 651).</p> <p>7. JAA for Code 590, Nutrient Management</p>				<p>1. Ability to perform a sludge survey to determine volume estimates of biosolids removal.</p> <p>2. Ability to collect soil samples and interpret soil test reports for recommendations.</p> <p>3. Knowledge of NC's crops and cropping systems.</p> <p>4. Knowledge of tillage systems used in NC.</p> <p>5. Knowledge to assess the risk of nitrogen leaching loss, the nitrogen Leaching Index, obtained through use of current Soil Hydrologic Group (SHG)-based LI index maps in Section II of the NC FOTG OR RUSLE 2 field specific soil loss calculations.</p> <p>6. Ability to perform Nitrogen and Phosphorus Risk Assessments using NCANAT (NLEW+PLAT) in the NC Nutrient Management Planning Software.</p> <p>7. Ability to assess site soil conditions and prescribe treatment and the appropriate vegetation.</p> <p>8. Knowledge of manure characteristics and nutrient values.</p> <p>9. Ability to read, interpret, and use waste impoundment as-built designs to develop a removal plan.</p> <p>10. Skill for development of related computations and analyses to develop a biosolids removal plan and specifications including but not limited to geology, soil mechanics, hydraulics, structural design, vegetation, and soil bioengineering.</p> <p>11. Certification the installation meets applicable standards and specifications and is in compliance with</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA -52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps of land application fields.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Independently complete a minimum of two sludge surveys on separate Planning Land Units (PLU) to identify and document resource needs and concerns.</p> <p>4. Collect the appropriate Soil Samples and RUSLE field data on each land application field to receive animal waste to identify and document resource needs and concerns.</p>			<p>1. Independently complete a minimum of two Biosolids removal nutrient management plans on separate Planning Land Units (PLU) in accordance with the most recent NRCS 590 Standard and SWCC Lagoon Biosolids Removal BMP and Policies. Plans should include maps of application fields and associated setbacks, sludge survey information, soil samples, PLAT results, copper and zinc projections and narrative explaining biosolids removal methodology.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP policy and NRCS 590 standard.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice State of Work (SOW) or comparable SWCC forms(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or Comparable form.</p>		

# ATTACHMENT 9B TECHNICAL COMPETENCY REQUIREMENTS

## LAND SMOOTHING

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
466	Land Smoothing	Area affected	Acres	0-10 acres	>10 acres			
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Systems used in NC.</p> <p>5. Knowledge of water budget, especially on volumes and rates of runoff, infiltration, and evaporation.</p> <p>6. Knowledge of wetland hydrology and/or wetland wildlife habitat.</p> <p>7. Compliance with NRCS national and state utility safety policy (NEM part 503-Safety, Section 503.00 through 503.22).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

LIVESTOCK EXCLUSION FENCE

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
382	Livestock Exclusion Fence	Fence type and land slope	Type, %	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<ol style="list-style-type: none"> <li>Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</li> <li>Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</li> <li>Working knowledge using the NC NRCS Fence Job Sheet Application.</li> <li>Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</li> </ol>				<ol style="list-style-type: none"> <li>Knowledge of conservation practice standard 382.</li> <li>Knowledge of livestock management for grazing lands of the locale.</li> <li>Knowledge of wildlife relationships with fence in the locale.</li> <li>Knowledge of grazing management issues in the locale.</li> </ol>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<ol style="list-style-type: none"> <li>Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</li> <li>Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</li> <li>Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</li> </ol>			<ol style="list-style-type: none"> <li>Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</li> <li>Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</li> <li>Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</li> </ol>			<ol style="list-style-type: none"> <li>Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</li> <li>Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</li> <li>Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</li> </ol>		

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
316	Livestock Mortality Management System	Animal Mortality	LBS. per Day	Freezer/ Refrigeration Unit	Incinerator			
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62. 6. Knowledge of the NC GS 106-403 "Disposition of dead domesticated animals". Administrative code 02 NCAC 52C .0102 "Disposal of Dead Animals"				1. Ability to assess soil suitability. 2. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06). 3. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52). 4. Ability to follow Practice standard criteria, related computations and analyses to develop plans and specifications for incinerators, including but not limited to type and number of livestock. 5. Knowledge of N.C. permitting requirements for Mortality Management. 6. Ability to Certify the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3 7. Ability to calculate normal maximum mortality of an operation.				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps. 2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU). 3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies. 2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s). 3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP policy and NRCS 316 standard. 2. Independently fullfull/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice State of Work (SOW) or comparable SWCC forms(s). 3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or Comparable form.		

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
590-MLTI	Manure/Litter Transportation	Nutrient Source, Application Method and/or Special Conditions	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employees must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for the highest level of complexity for which they wish to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Working Knowledge of Web Soil Survey, Suitabilities and Limitations Ratings</p> <p>4. Working knowledge in the analysis and interpretation of soil test and waste analysis results.</p> <p>5. NCSU Nutrient Management in NC Course which includes: (1) the online prerequisite; (2) 5-days of nutrient management-related course work, including PLAT, RUSLE2 and software trainings; and (3) NC Rules and Regulations Governing Animal Waste Management in NC training, along with a passing score on the exams given at the conclusion of each section.</p> <p>6. Working knowledge in the Agricultural Waste Management Field Handbook (Title 210, Part 651).</p> <p>7. Working knowledge of the 1217 Interagency Committee Guidance Document.</p> <p>8. JAA for Code 590, Nutrient Management.</p>				<p>1. Knowledge of Manure/Litter waste transportation methods and equipment.</p> <p>2. Ability to collect soil samples and interpret soil test reports for recommendations.</p> <p>3. Knowledge of NC's crops and cropping systems.</p> <p>4. Knowledge of tillage systems used in NC.</p> <p>5. Knowledge to assess the risk of nitrogen leaching loss, the nitrogen Leaching Index, obtained through use of current Soil Hydrologic Group (SHG)-based LI index maps in Section II of the NC FOTG OR RUSLE 2 field specific soil loss calculations.</p> <p>6. Ability to perform Nitrogen and Phosphorus Risk Assessments using NCANAT (NLEW+PLAT) in the NC Nutrient Management Planning Software.</p> <p>7. Ability to assess site soil conditions and prescribe treatment and the appropriate vegetation.</p> <p>8. Knowledge of manure characteristics and nutrient values.</p> <p>9. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA -52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps of land application fields.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Collect the appropriate Soil Samples and RUSLE field data on each land application field to receive animal waste to identify and document resource needs and concerns.</p> <p>4. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two nutrient management plans on separate Planning Land Units (PLU) in accordance with the most recent NRCS 590 Standard and SWCC Manure/Litter Transportation BMP and Policies. Plans should include maps of application fields and associated setbacks, waste production information, soil samples, PLAT results, and narrative explaining the livestock or poultry operation.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP policy and NRCS 590 standard.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice State of Work (SOW) or comparable SWCC forms(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or Comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
590-NM	Nutrient Management	Nutrient source, application method and/or special condition	Type	All				

TECHNICAL COMPETENCY REQUIREMENTS

Prerequisites	Practice Knowledge, Skills, Abilities (KSAs)
<ol style="list-style-type: none"> <li>Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</li> <li>Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</li> <li>Working knowledge in the analysis and interpretation of soil test and waste analysis results.</li> <li>Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</li> <li>NCSU Nutrient Management in NC Course which includes: (1) the online prerequisite; (2) 5-days of nutrient management-related course work; and (3) a passing score on the exam given at the conclusion of the course; Working knowledge in the Agricultural Waste Management Field Handbook (Title 210, Part 651).</li> <li>Appropriate JAA for practices needed to control erosion to a sustainable level (T) on land application sites (If applicable Practice Codes: 342, 329, 328, 340, 386,...).</li> </ol>	<ol style="list-style-type: none"> <li>Knowledge of NC's Crops and Cropping Systems.</li> <li>Knowledge of Soil Health and Management.</li> <li>Ability to use Current Wind and Water Erosion Prediction Tools.</li> <li>Knowledge of Tillage Systems used in NC.</li> <li>Knowledge of Synthetic Fertilizers and Analysis.</li> <li>Knowledge of Manure Characteristics and Nutrient Values.</li> <li>Completion of the NCSU Nutrient Management Planning Course.</li> <li>Ability to Perform Nitrogen and Phosphorus Risk Assessments using NCANAT (NLEW+PLAT) and/or latest web-based NC Nutrient Management Software.</li> </ol>

PRACTICE PHASES

INVENTORY AND EVALUATION (I&E)	DESIGN (D)	CONSTRUCTION & CERTIFICATION (C&C)
<ol style="list-style-type: none"> <li>Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</li> <li>Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</li> <li>Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</li> </ol>	<ol style="list-style-type: none"> <li>Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</li> <li>Independently fulfill/complete two Nutrient Management Plans in accordance with the most recent SWCC BMP standard. (Note- plan should include use of PLAT, erosion prediction result for planned fields, and latest NC CNMP checklist.)</li> <li>Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</li> </ol>	<ol style="list-style-type: none"> <li>Independently complete a minimum of two construction/certification "check-outs" for two applied Nutrient Management Plans on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</li> <li>Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</li> <li>Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</li> </ol>



TECHNICAL COMPETENCY REQUIREMENTS

ODOR MANAGEMENT SYSTEM

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
380	Odor Management System	Purpose(s)	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. When applicable, appropriate JAA for supporting practices (i.e. Tree/Shrub Site Preparation (PC490) and Tree/Shrub Establishment (PC612)).</p>				<p>1. Knowledge of windbreak/shelterbelt design and function, including snow management if applicable.</p> <p>2. Knowledge of forest ecology and management for the local area.</p> <p>3. Knowledge of crops protected by windbreaks and shelterbelts.</p> <p>4. Knowledge of silvics of tree species to be established.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

**TECHNICAL COMPETENCY REQUIREMENTS**

**PASTURE RENOVATION**

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
512-PR	Pasture Renovation	Forage species, class or mix	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of adapted forage plants for the ecological sites/forage suitability groups in the area of service.</p> <p>2. Skill in planning the planting protocols and educating land users in the operation and maintenance for the practice/operation/site.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

**TECHNICAL COMPETENCY REQUIREMENTS**

**PASTURELAND CONVERSION**

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
612	Pastureland Conversion	Site Sensitivity-Soil suitability rating for potential seedling mortality	WSS Rating	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.				1. Knowledge of forest ecology and management for the local area. 2. Knowledge of silvics of tree species to be established. 3. Knowledge of soil health and management. 4. Knowledge of resource impacts including water quality, wildlife effects, soil limitations (i.e. potential seedling mortality rating, and harvest equipment operability ratings), fuel volatility, etc. 5. Working knowledge of Forestry BMPs.				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps. 2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU). 3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies. 2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s). 3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies. 2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s). 3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

TECHNICAL COMPETENCY REQUIREMENTS

PRECISION AGRICHEMICAL APPLICATION

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
590-PAA	Precision Agrichemical Application	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Working knowledge in the analysis and interpretation of soil test and waste analysis results.</p> <p>4. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>5. NCSU Nutrient Management in NC Course which includes: (1) the online prerequisite; (2) 5-days of nutrient management-related course work; and (3) a passing score on the exam given at the conclusion of the course; Working knowledge in the Agricultural Waste Management Field Handbook (Title 210, Part 651).</p> <p>6. Appropriate JAA for practices needed to control erosion to a sustainable level (T) on land application sites (If applicable Practice Codes: 342, 329, 328, 340, 386,...).</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Systems used in NC.</p> <p>5. Knowledge of Synthetic Fertilizers and Analysis.</p> <p>6. Knowledge of Manure Characteristics and Nutrient Values.</p> <p>7. Completion of the NCSU Nutrient Management Planning Course.</p> <p>8. Ability to Perform Nitrogen and Phosphorus Risk Assessments using NCANAT (NLEW+PLAT) and/or latest web-based NC Nutrient Management Software.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete two Nutrient Management Plans in accordance with the most recent SWCC BMP standard. (Note- plan should include use of PLAT, erosion prediction result for planned fields, and latest NC CNMP checklist.)</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for two applied Nutrient Management Plans on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

PRACTICE DESCRIPTION				TECHNICAL COMPETENCY REQUIREMENTS				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
590-PNM	Precision Nutrient Management	Nutrient source, application method and/or special condition	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Working knowledge in the analysis and interpretation of soil test and waste analysis results. 4. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 5. NCSU Nutrient Management in NC Course which includes: (1) the online prerequisite; (2) 5-days of nutrient management-related course work; and (3) a passing score on the exam given at the conclusion of the course; Working knowledge in the Agricultural Waste Management Field Handbook (Title 210, Part 651). 6. Appropriate JAA for practices needed to control erosion to a sustainable level (T) on land application sites (If applicable Practice Codes: 342, 329, 328, 340, 386,...).				1. Knowledge of NC's Crops and Cropping Systems. 2. Knowledge of Soil Health and Management. 3. Ability to use Current Wind and Water Erosion Prediction Tools. 4. Knowledge of Tillage Systems used in NC. 5. Knowledge of Synthetic Fertilizers and Analysis. 6. Knowledge of Manure Characteristics and Nutrient Values. 7. Completion of the NCSU Nutrient Management Planning Course. 8. Ability to Perform Nitrogen and Phosphorus Risk Assessments using NCANAT (NLEW+PLAT) and/or latest web-based NC Nutrient Management Software.				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete two Nutrient Management Plans in accordance with the most recent SWCC BMP standard. (Note- plan should include use of PLAT, erosion prediction result for planned fields, and latest NC CNMP checklist.)  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for two applied Nutrient Management Plans on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

**TECHNICAL COMPETENCY REQUIREMENTS**

**PRESCRIBED GRAZING**

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
528	Prescribed Grazing	Pasture Only - Area	Acres	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of ecological processes and implications for specific grazing ecological sites, forage suitability groups, and/or forest ecological sites in the area of service.</p> <p>2. Skill in development of grazing management plans that are practical, address resource concerns, and meet manager's objectives.</p> <p>3. Ability to monitor landscapes and communicate needed adjustments.</p> <p>4. Ability to use appropriate assessment tools to complete forage balance calculations, Pasture Conditioning Score, C-Graze.</p> <p>5. Ability to teach landowners the usage of grazing stick to establish stop grazing onsite.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

RESIDUE AND TILLAGE MANAGEMENT

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
340-CRM	Residue and Tillage Management	Species Planted (Species Mix)	Number	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must <b>fulfill</b> ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Systems used in NC.</p> <p>5. Knowledge of Adaptive Species of Cover Crops for Planned Purposes in NC.</p> <p>6. Knowledge of Approved Planting Dates, Times and Methods of Termination for Cover Crops.</p> <p>7. Working knowledge of "Managing Cover Crops Profitability".</p> <p>8. Ability to select species based on the client objectives.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

ROOFTOP RUNOFF MANAGEMENT SYSTEMS

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
558	Rooftop Runoff Management System	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</p> <p>5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</p>				<p>1. Ability to develop plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.</p> <p>2. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation.</p> <p>3. Development of related computations and analyses to develop plans and specifications including but not limited to hydrology/hydraulics, vegetation, environmental considerations, and outlet capacity and stability.</p> <p>4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).</p> <p>5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</p> <p>6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		



PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
350	Sediment Control Basin	Hazard Class		A	A	A	A	A
		Effective Height (EH)	feet	15	20	25	30	35
		Storage x EH	acre-feet <sup>2</sup>	500	1,000	2,000	2,500	3,000
		Drainage Area	acres	100	400	1,000	2,500	4,000
		Conduit Diameter	inches	12	24	36	42	48
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</p> <p>5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</p>				<p>1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill.</p> <p>2. Ability to layout a sediment control basin to capture and detain sediment-laden runoff, or other debris for a sufficient length of time to allow it to settle out in the basin.</p> <p>3. Development of related computations and analyses to develop plans and specifications including but not limited to geology, soil mechanics, hydrology, hydraulics, structural design, and vegetation.</p> <p>4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).</p> <p>5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</p> <p>6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

**TECHNICAL COMPETENCY REQUIREMENTS**

**SOD-BASED ROTATION**

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
328	Sod-based Rotation	Crop, Production Method	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Systems used in NC.</p> <p>5. Knowledge of Adaptive Species of Cover.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

SPRING DEVELOPMENT

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
574	Spring Development	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.				1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill. 2. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation. 3. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06). 4. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52). 5. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

TECHNICAL COMPETENCY REQUIREMENTS

STOCK TRAILS AND WALKWAYS

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
575	Stock Trails and Walkways	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.				1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill. 2. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation. 3. Practice standard criteria-related computations and analyses to develop plans and specifications including but not limited to foundation, grades, widths, surfacing materials, surface drainage, erosion control, and environmental considerations. 4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06). 5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F - As-builts, 512.50 through 512.52). 6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 - Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

## STREAM CROSSING

## TECHNICAL COMPETENCY REQUIREMENTS

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
578	Stream Crossing	Bank Height	feet	4	6	8	10	All
		Culvert Diameter	inches	18	24	36	48	72
		Drainage Area	acres	250	500	1,000	2,500	All
<b>4</b>								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</p> <p>5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</p>				<p>1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill.</p> <p>2. Knowledge of crossing types (bridge, culvert, ford) as well as soils, geology, fluvial geomorphology, and topography that are suitable for construction of a stream crossing.</p> <p>3. Development of related computations and analyses to develop plans and specifications including but not limited to geology, soil mechanics, hydrology, hydraulics, structural design, vegetation, and soil bioengineering.</p> <p>4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).</p> <p>5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</p> <p>6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

STRIPCROPPING

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
585	Stripcropping	Slope	%	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p>				<p>1. Knowledge of NC's Crops and Cropping Systems.</p> <p>2. Knowledge of Soil Health and Management.</p> <p>3. Ability to use Current Wind and Water Erosion Prediction Tools.</p> <p>4. Knowledge of Tillage Equipment and Widths of Equipment and Systems used in NC.</p> <p>5. Knowledge of Planters and Drills and Common Widths Used in NC.</p> <p>6. Knowledge of Crop Residue Management.</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see eFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		

TECHNICAL COMPETENCY REQUIREMENTS

TERRACES

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
600	Terraces	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA. 2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies. 3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form. 4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings. 5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.				1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill. 2. Ability to Assess site soil conditions and prescribe treatment and the appropriate vegetation. 3. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06). 4. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52). 5. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
1. Independently complete a minimum of two I&E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.  2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).  3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS & SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see eFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.			1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).  3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.			1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.  2. Independently fulfill/complete the "Installation" & "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).  3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.		

TECHNICAL COMPETENCY REQUIREMENTS

TROUGH OR TANK

PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
614	Trough or Tank	Purpose	Type	All				
TECHNICAL COMPETENCY REQUIREMENTS								
Prerequisites				Practice Knowledge, Skills, Abilities (KSAs)				
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</p> <p>5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</p>				<p>1. Knowledge of watering facilities, water distribution appurtenances and locations, inlet/outlet details at water facility location(s), foundation and/or stabilization measures, protective measures for animals and humans, and special conditions for access (e.g. fences or ramps), if needed.</p> <p>2. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).</p> <p>3. Practice standard criteria related computations and analyses to develop plans and specifications of water resource and forage inventory including but not limited to type and number of livestock, daily water use, planned storage volume, and topographic survey for pipelines.</p> <p>4. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</p> <p>5. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>				
PRACTICE PHASES								
INVENTORY AND EVALUATION (I&E)			DESIGN (D)			CONSTRUCTION & CERTIFICATION (C&C)		
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>			<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>			<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>		



PRACTICE DESCRIPTION				JOB CLASSES				
Code	Practice	Controlling Factor	Units	Job Class I	Job Class II	Job Class III	Job Class IV	Job Class V
587	Water Control Structure	Hazard Class		A	A	A	A	A
		Effective Height (EH)	feet	15	20	25	30	35
		Storage x EH	acre-feet <sup>2</sup>	500	1000	2000	2500	3000
		Drainage Area	acres	100	400	1000	2500	4000
		Conduit Diameter	inches	12	24	36	42	48
		Flashboard Discharge	feet <sup>3</sup> /second	10	20	40	80	200
		Weir Discharge	feet <sup>3</sup> /second	50	150	250	350	500

TECHNICAL COMPETENCY REQUIREMENTS	
Prerequisites	Practice Knowledge, Skills, Abilities (KSAs)
<p>1. Employee must fulfill ALL the Technical Competency Requirements listed for this practice, and submit the specified number of plans for review for to receive JAA.</p> <p>2. Working knowledge of SWCC JAA Policy and Procedures, applicable conservation practice standard, and BMP policies.</p> <p>3. Capability to complete "The NRCS-CPA-52 Environmental Evaluation Worksheet" or comparable site assessment form.</p> <p>4. Working knowledge of Web Soil Survey, Suitabilities and Limitations Ratings.</p> <p>5. Capability to perform layout and construction checking following applicable procedures and Notekeeping format contained in Technical Release 62.</p>	<p>1. Knowledge of NRCS Construction Specification 21 - Excavation and 23 - Earthfill.</p> <p>2. Knowledge of the water management systems that conveys water, controls the direction or rate of flow, maintains a desired water surface elevation, or measures water.</p> <p>3. Development of related computations and analyses to develop plans and specifications including but not limited to geology, soil mechanics, hydrology, hydraulics, structural design, and vegetation.</p> <p>4. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).</p> <p>5. Development of as-built or "red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52).</p> <p>6. Certification the installation meets applicable standards and specifications and is in compliance with permits (NEM Part 505 – Non-NRCS Engineering Services, Subpart A - Introduction, 505.3).</p>

PRACTICE PHASES		
INVENTORY AND EVALUATION (I&E)	DESIGN (D)	CONSTRUCTION & CERTIFICATION (C&C)
<p>1. Independently complete a minimum of two I&amp;E packets on separate Planning Land Units (PLU) to identify and document resource concerns using the latest NRCS-CPA-52 Form (or equivalent) and GIS mapping tools (i.e. ArcMap, Toolkit, or Conservation Desktop) to develop Conservation Plan Maps.</p> <p>2. Use the latest NRCS-CPA-52 (Sections A thru P) or comparable site assessment form to independently recommend and document resource alternatives/alternative action(s) needed to meet the client's objective and achieve the intended purpose to mitigate associated resource concerns for two different Planning Land Units (PLU).</p> <p>3. Complete the appropriate "CONSERVATION PLANNING CRITERIA, RESOURCE CONCERNS &amp; SPECIAL ENVIRONMENTAL CONCERNS CHECKLIST (see EFOTG, Section II) or comparable form, and ALL applicable resource assessments tools, such as erosion prediction tools, calculations, surveys, and soils investigations necessary to document existing resource conditions, resource concerns, and short-term/long term effects of proposed alternatives.</p>	<p>1. Independently complete a minimum of two designs/specifications for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Design" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW), including O&amp;M guidance, and any applicable Job Sheet(s), Implementation Requirements, or comparable SWCC practice specification sheet(s).</p> <p>3. Completion of the latest NRCS-CPA-52 Worksheet, Sections A through P or comparable site assessment form.</p>	<p>1. Independently complete a minimum of two construction/certification "check-outs" for the desired practice on separate Planning Land Units (PLU) in accordance with the most recent SWCC BMP standard and policies.</p> <p>2. Independently fulfill/complete the "Installation" &amp; "Check Out" deliverables in accordance with the most recent eFOTG practice Statement of Work (SOW) or comparable SWCC form(s).</p> <p>3. Independently compile, record, and complete practice certification activities using the latest NC-CPA-09 Form ("Conservation Practice Certification Form") or comparable form.</p>