



## **SOUTH CAROLINA TECHNICAL GUIDE**

**File Code:** TCH 450

### **NOTICE 345**

**Subject.** Release of an updated version for the South Carolina Technical Guide Notice.

**Purpose.** This notice transmits information regarding updates to the South Carolina Field Office Technical Guide (FOTG). In addition, notes are included to highlight key changes made to conservation practice standards.

**Effective Date.** This notice is effective when received.

**Explanation.** Conservation practices are periodically reviewed and revised in compliance with NRCS policy. Design tools are continually evaluated and revised in order to achieve designs in accordance with accepted design principles.

**Filing Instructions.** The updated standards and operation and maintenance templates have been loaded into Section I, III, and, IV of the Field Office Technical Guide. A copy of this notice can be found in Section I under the folder "FOTG Notices and Updates". All updated conservation practice standards have been archived in the FOTG archive system.

**Important:** Toolkit users must "Reload Domain Data" which is located under "file" on the main Toolkit user Customer Service Toolkit, on all computers. Reloading Domain data will insure the Toolkit user has updated practices and narratives from Conservation Practice Standards.

### **Section I- General References**

***Located in the Conservation Programs folder under CRP:***

- 2015 CRP Cost List
- 2\_CRP\_Rev\_5\_SC\_Amend\_3\_FY2016

### **Section III- Conservation Management Systems**

*Located in the Legislated Programs, Food Security Act folder:*

- FY 2016 Routine Minimal Effects Determination
- CWD Mapping Standard October\_2012
- 7cfr614 Appeal Procedure
- Atlantic and Gulf Coastal Plain Regional Supplement
- COE 1987 Wetland Delineation Manual
- Food Security Act of 1985
- Options for Participant Wetland Violation
- FY 2015 SC Agency Expert List
- Onsite Inspection Unnecessary Data Sheet
- Wetland and HEL Determination Step by Step Procedure (4/27/2015)
- NFSAM\_Circular\_1
- NFSAM\_Circular\_2
- NFSAM\_Circular\_3
- NFSAM\_Circular\_4
- NFSAM\_Circular\_5
- NFSAM\_Circular\_6
- USFWS Do I need a Permit Guidance
- Northern Long-eared bat SC Guidance
- SC Documented Locations Northern Long-eared Bat

### **Section IV-Practice Standards and Specifications**

These standards were updated to match current National standards. No State changes were made.

- **316 Animal Mortality Facility**  
Criteria for catastrophic animal mortality has been removed and placed in new standard Emergency Animal Mortality Management (368). The information provided on composting has been expanded. There is a format change to reflect the new national protocol.
- **310 Bedding**  
Revised Criteria to remove regulatory compliance statement and revised Considerations to streamline text.
- **314 Brush Management**  
**Added the following statements to the purpose of the conservation practice:**  
Pervasive plant species are controlled to a desired level of treatment that will ultimately contribute to creation or maintenance of an ecological site description "steady state," addressing the need for forage, wildlife habitat, and/or water quality.

**Added the following statement to the practice criteria:**

Additional treatments are planned and will be applied to achieve effective control of pervasive plant species through reapplication.

- **584 Channel Bed Stabilization**

The changes provide additional clarification regarding the conditions where the practice applies, general criteria, considerations, and technical references. There is a format change to reflect the new national protocol.

- **327 Conservation Cover**

**Conservation Cover Job Sheet Monarch Habitat, October 2015**

- **340 Cover Crop**

The “SC Cover Crop Recommendations” sheet has been updated, January 2016

- **368 Emergency Animal Mortality Management**

This is a new conservation practice standard defined as a means or method for the management of animal carcasses from catastrophic mortality events. There is a format change to reflect the new national protocol.

- **386 Field Border**

**Jobsheet for Wildlife and or Pollinators** – detailed information for the establishment of a field border specifically to benefit wildlife and or pollinators

- **315 Herbaceous Weed Control**

**Added the following statements to the purpose of the conservation practice:**

Pervasive plant species are controlled to a desired level of treatment that will ultimately contribute to creation or maintenance of an ecological site description "steady state," addressing the need for forage, wildlife habitat, and/or water quality.

**Added the following statement to the practice criteria:**

Additional treatments are planned and will be applied to achieve effective control of pervasive plant species through reapplication

- **441 Irrigation System, Microirrigation**

The purpose of reduced energy use has been removed. It would not be the primary purpose of planning a microirrigation system. There is a format change to reflect the new national protocol.

- **582 Open Channel**

The agency refined the entire standard including definition, modified criteria, added considerations, updated requirements for plans and specifications, and updated requirements for operation and maintenance. There is a format change to reflect the new national protocol.

- **378 Pond**

The agency refined the entire standard including definition, modified criteria, updated considerations, updated requirements for plans and specifications, and updated requirements for operation and maintenance. There is a format change to reflect the new national protocol.
- **533 Pumping Plant**

Added pump performance curve documentation in plans and specifications section.
- **367 Roofs and Covers**

The definition for the Roofs and Covers practice added agrichemical handling facilities to the waste management facilities specified. Criteria was added to include treated wood products and the type of associated fasteners and a table for geomembrane materials specified by cover purpose. Criteria was also added for appurtenant equipment associated with a cover over liquid manure storage facilities for the safe collection, conveyance, treatment or utilization of biogases. There is a format change to reflect the new national protocol.
- **574 Spring Development**

The new Purpose statement no longer includes the wording “other agricultural uses.” Readability and flow of material is enhanced by using multiple section with headings.
- **590 Nutrient Management SOW Rev. November 2015**

Checkout requirements were revised to make requirements easier to understand. The link to the Clemson University Nutrient recommendations was updated and a statement was added that nutrient recommendations that differ from Clemson University Recommendations Must be approved by NRCS State Agronomist or Clemson University State Soil Fertility Specialist. A Practice Certification sheet has also been added.
- **442 Sprinkler System**

Added in Pressure Regulator section “in absence of manufacturer’s recommendations for pressure regulator operation, ensure line pressure upstream of regulators is at least 5 psi above rated regulator pressure”. There is a format change to reflect the new national protocol.
- **580 Streambank and Shoreline Protection**

The reference to 322 was removed and replaced with a reference to 342.
- **587 Structure for Water Control**

This standard was updated to match the current national standard. No State changes were made.

- **606 Subsurface Drain**  
Revised Purposes; expanded Conditions Where Practice Applies; revised Criteria; expanded Considerations; added Operation and Maintenance; and added References.
- **607 Surface Drain, Field Ditch**  
Changed the definition for clarity, along with a purpose and criteria added to allow use of this practice to collect irrigation tailwater for reuse. There is a format change to reflect the new national protocol.
- **608 Surface Drain, Main or Lateral**  
Removed the reference to the ambiguous phrase ‘water management system’ in the purpose to improve clarity. Criteria was added allowing the use of this practice as a component to collect irrigation tailwater, for use in a Tailwater Recovery System, (Code 447) along with a reference to the two-stage channel design process in NRCS National Engineering Handbook, Part 654.1005 in areas where increased channel stability is required. There is a format change to reflect the new national protocol.
- **620 Underground Outlet**  
The Criteria section was expanded and the Consideration section was revised. Minor format change to three pages.
- **635 Vegetated Treatment Area**  
This standard was edited to improve clarity. Additionally criteria was added to address pretreatment and erosion control measures and remove minimum flow length which affected design of small facilities. There is a format change to reflect the new national protocol.
- **313 Waste Storage Facility**  
This standard was updated to match the current national standard. No State changes were made.

#### Tools:

- **SC Seed Calculator Spreadsheet May 2015**
- **Native PLS Seeding Specification Example Spreadsheet FY 2016**  
17 example seeding mixtures for various site conditions such as Critical Area Planting, Monarch butterfly planting, pollinator habitat planting, and CP 36 understory.
- **SC Seed Calculator Planting Jobsheet FY 2016**  
Revised version of the seed calculator Jobsheet .
- **Conservation Practice Minimum Documentation Requirements December 2015**  
A list of commonly reported conservation practices applied in South Carolina and reported as applied annually. This document lists the minimum documentation required

to meet the conservation practice standard.

- **“Fillable” (pdf) cover sheet**

To assist with completion of construction drawing and specification packet with five (5) pages or more. The document is located on South Carolina eFOTG at Section IV/Tools/Engineering Tools/Drawings folder.

- **Livestock Water System Tool:**

The spreadsheet for designing livestock water systems with a well as a water source was revised. The new spreadsheet has been placed in the Field Office Technical Guide (FOTG) in “Section IV/Tools/Engineering Tools/Livestock Water System/Water Well” folder with display name LWS – Design Tool v3.4.0. The actual file name is LWS\_SC\_Design\_Tool\_v3.4.0\_03012016. If you have already downloaded the file with 12182015 or 02192016 as the date, all files are identical except for an additional schematic on the Grazing Tab in file dated 03012016. Version 3.4.0 will replace previous versions. New systems should be designed using the updated tool.

It is recommended to maintain a copy of the Version 3.2 and 3.3 of the Livestock Water System design tool while systems are being implemented that were designed using those tools.

- **Construction Plan (CP) packet for LWS v3.4.0:**

The CP packet was revised to reflect the possible installation of a flow restrictor and a new input of the pressure tank switch setting. The new document has been placed in the Field Office Technical Guide (FOTG) in “Section IV/Tools/Engineering Tools/Livestock Water System folder with display name Construction Plan (CP) Packet for LWS v3.4.0 - 02192016. The actual file name is LWS\_CP\_packet\_with\_flow\_restrictor-fillable\_Feb2016.pdf. New construction should be installed using the updated document. Instructions for using the CP packet are also provided in the same folder location.

**Contact:** Questions or comments regarding either the LWS Design Tool v3.4.0 or (CP) packet may be addressed to Yasmin Bennett, State Water Management Engineer at (843) 549-1821 x 3 or [yasmin.bennett@sc.usda.gov](mailto:yasmin.bennett@sc.usda.gov).

### **Training / Workshop Material:**

- **Pumps and Pressure Tanks**

To provide statewide access to reference material presented at the Pump and Well Workshop held in February 2016. All presentations, handouts and class exercises are available for your review. The documents are located on South Carolina SharePoint at Technical Resources/Watershed Training/Water Mgt Topics/Training and Workshops/Pumps and Pressure tanks\_2016 folder folder.

- **LWS Design Tool v3.4.0**

Instructional videos have been provided covering each Tab in detail. The videos are

located on South Carolina SharePoint at Technical Resources/Watershed Training/ Water Mgt Topics/Training and Workshops/LWS Design Tools v3.4.0 folder. *Double click the "zip" folder in SharePoint and SAVE to your desktop. Goto your Desktop and "right" click on video – pick WinZip\_Extract to here and the actual video will appear on your Desktop. Open Desktop and double click the video you want to watch. Do Not watch from the SharePoint site because these are very large files and will take a long time to "open" over the internet.*

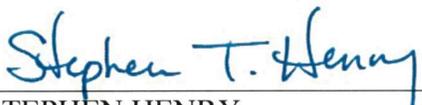
**Contact:** Questions or comments regarding the Workshop materials may be addressed to Yasmin Bennett, State Water Management Engineer at (843) 549-1821 x 3 or [yasmin.bennett@sc.usda.gov](mailto:yasmin.bennett@sc.usda.gov).

### **CONSERVATION PRACTICES TO BE REMOVED OR SUSPENDED:**

**Irrigation Regulation Reservoir (Code 552A)** – This practice was previously removed from the National Conservation practices. Pertinent information was incorporated into Irrigation Reservoir (Code 436)

**South Carolina Practice Standard Riparian Forest Buffer (Code 391A) Addendum for CRP** has been **suspended** for use in South Carolina. For all **new** CP 22 Riparian Buffer Contracts, the conservation practice **MUST** follow the NRCS 391 Riparian Forest Buffer Conservation Practice Standard. This means that the Riparian Forest Buffer **MUST** include 2 zones consisting of trees (zone 1) and shrubs (zone 2) and in certain situations a 3rd herbaceous zone in order to meet the conservation practice standard. CRP practices must be implemented according to NRCS Conservation Practice Standards. Participants who are not willing to implement the CP 22 Riparian Forest Buffer practice according to the NRCS Standard should not be signed up for this practice.

**Contact:** Questions or comments Stephen Henry, Assistant State Conservation Engineer, at (803) 765-5350, [stephen.henry@sc.usda.gov](mailto:stephen.henry@sc.usda.gov) or Jill Epley, Resource Conservationist, at (803)-253-3930, [jill.epley@sc.usda.gov](mailto:jill.epley@sc.usda.gov) .

  
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DIST: All FOTG Holders