



Natural Resources Conservation Service
1606 Santa Rosa Road, Suite 209
Richmond, VA 23229
Telephone: 804/287-1691
Fax: 804/287-1737

TECH DEV APPL 450-15-ISSUE- 399

October 2011

**SUBJECT: VIRGINIA FIELD OFFICE TECHNICAL GUIDE – SECTION IV –
Virginia Conservation Practice Standards**

Purpose: To transmit the following Virginia Conservation Practice Standards:

Herbaceous Weed Control (315)
Conservation Cover, (327)
Conservation Crop Rotation (328)
Residue and Tillage Mgmt, No Till/Strip Till/Direct Seed (329)
Prescribed Burning (338)
Cover Crop (340)
Critical Area Planting (342)
Residue Management Seasonal (344)
Residue and Tillage Mgmt, Mulch Till (345)
Residue Management, Ridge Till (346)
Silvopasture Establishment (381)
Fence (382)
Woody Residue Treatment (384)
Field Border (386)
Riparian Herbaceous Cover (390)
Riparian Forest Buffer (391)
Filter Strip (393)
Firebreak (394)
Stream Habitat Improvement & Management (395)
Bivalve Aquaculture Gear and Befouling Control (400)
Hedgerow Planting (422)
Access Control (472)
Mulching (484)
Forage Harvest Management (511)
Integrated Pest Mgmt (595)
Tree/Shrub Establishment (612)
Restoration and Mgmt of Declining Habitats (643)
Wetland Wildlife Habitat Management (644)
Upland Wildlife Habitat Management (645)
Shallow Water Development and Management (646)
Early Successional Habitat (647)
Wetland Restoration (657)
Wetland Creation (658)

Wetland Enhancement (659)
Forest Stand Improvement (666)

Effective Date: Upon receipt.

Filing Instructions: These standards can be accessed electronically in Section IV of the Virginia Electronic Field Office Technical Guide at:
<http://efotg.nrcs.usda.gov/treemenuFS.aspx>.

If your office maintains a hard copy of the Field Office Technical Guide, please replace the old standards with these updated ones.

Current Job Sheets and Statements of Work for each of these Practice Standards are located in Section IV of the Virginia Electronic Field Office Technical Guide.

The outdated standards will be archived in the archive folder in Section IV of the Virginia Electronic Field Office Technical Guide.

Explanation:

Herbaceous Weed Control: This is a new standard to provide for herbaceous weed control on lands not actively in crop production. Requirements are included for biological, chemical and mechanical control.

Conservation Cover: Purpose to produce supplemental forage was removed. A Purpose and accompanying Criteria were added to promote biological nitrogen fixation and "Reduce Energy Use" by using legume cover crops. Additional Operation and Maintenance criteria were added to evaluate the onsite application of the practice to ensure the planned purposes are achieved.

Conservation Crop Rotation: Two new purposes were added: (1) Supply nitrogen through biological fixation to reduce energy use; (2) Provide annual crops for bioenergy feedstocks. The purposes related to reducing sheet & rill and wind erosion were combined into a single purpose. Overall, very few substantive changes were made to key General or Additional Criteria since publication of the previous Virginia version. Additional detail was added to Plans and Specifications section.

Residue and Tillage Mgmt, No Till/Strip, Till/Direct Seed: One new purpose was added: Reduce energy use. Three former purposes with criteria of marginal relevance in Virginia were removed. No substantive changes were made to General Criteria since publication of previous Virginia version. Additional Criteria were significantly changed, as follows: 30% residue is now specified as the generally accepted minimum cover for purposes of erosion reduction and energy conservation; 60% residue is specified as the generally accepted minimum cover for purposes of improving soil organic matter and reducing carbon loss from soils (see Standard for details). Elements were added to Plans & Specifications and Operation & Maintenance sections.

Prescribed Burning: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The "Considerations" section added pollinators.

Cover Crop: The purpose “Provide supplemental forage” was removed. The purpose “Minimize and reduce soil compaction” was added. The purpose related to recycling and redistribution of nutrients in the soil profile was renamed. Since publication of the previous Virginia version, the General Criteria were significantly shortened, but not substantively changed. Few substantive changes were made to Additional Criteria. Plans & Specifications and Operation & Maintenance sections were modified, but not dramatically.

Critical Area Planting: The following two purposes were added that significantly broaden the scope of this Standard: (1) Stabilize stream and channel banks, and shorelines; (2) Stabilize coastal areas, such as sand dunes and riparian areas. This was in response to elimination of another standard which previously covered those purposes. As a result of addition of these purposes, Conditions Where Practice Applies changed and new Additional Criteria for these new purposes were added. General Criteria were shortened but not substantively modified since publication of the previous version of this Standard. Plan & Specifications were modified, in particular to emphasize that acceptable long-term performance targets for plant establishment are 80% cover for herbaceous species and 60% survival for trees and shrubs. Operation & Maintenance requirements were also modified.

Residue Management Seasonal: The scope of this Standard was significantly changed to eliminate exclusive applicability to situations involving full-width clean tillage. Definition and Conditions Where Practice Applies were changed accordingly. The purpose “Harvest and utilize renewable bioenergy feedstocks” was added. The purpose “Improve soil condition” was removed, as required due to modifications to the National version. Additional Criteria previously associated with the eliminated purpose were moved to Considerations. General Criteria were amended to clarify that 30% residue is the generally accepted minimum cover for all purposes (see Standard for details).

Residue and Tillage Mgmt, Mulch Till: “Reduce energy use” was added and Additional Criteria were added for this purpose. Three former purposes with criteria of marginal relevance in Virginia were removed. No substantive changes were made to General Criteria since publication of previous Virginia version. Additional Criteria were changed for the purpose “Maintain or improve soil quality” by specifying that 60% residue is the generally accepted minimum cover (see Standard for details). Elements were added to Plans & Specifications and Operation & Maintenance sections.

Residue Management, Ridge Till: The new purpose “Reduce Energy Use” and accompanying Additional Criteria were added. Elements were added to the Operation & Maintenance section related to evaluating the effectiveness of the practice for achieving planned purpose(s).

Silvopasture Management: This standard is newly adopted for application in Virginia. The practice can be applied on any area that is suitable for the desired combined management of trees/shrubs and forage plants.

Fence: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The revision includes removing the fence selection criteria table from the standard and creating a Material and Construction Specification document that includes all the criteria for planning and constructing a fence system to meet the standard. The information is organized in text and tables and supplemented by the updated job sheets and improved fence drawings. Other changes include fence post spacing, types of brace assemblies and spacing, expanded options for fence post material, and changes in the number and types of wires recommended for controlling livestock.

Woody Residue Treatment: The title was changed from “Forest Slash Treatment” to “Woody Residue Treatment.” A new Purpose of “Develop Renewable Energy Systems” and accompanying additional Criteria was added.

Field Border: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. Pollinator habitat was added to

the wildlife habitat purpose and to the criteria, and other considerations were added to address pollinator habitat.

Riparian Herbaceous Cover: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The public comments lacked technical merit. The date of the standard was changed.

Riparian Forest Buffer: The term “pollinator” was added to additional criteria to create or improve riparian habitat, and additional considerations discuss species diversity and species tolerance to herbicide leakage. Links to the Virginia eFOTG Section II – Plant Establishment Guide and the Virginia Cooperative Extension Service “2011 Pest Management Guide” and subsequent revisions were added. Virginia Conservation Practice Standard Herbaceous Weed Control, (Code 315) is referenced within the standard for utilization when needed. The Virginia Department of Forestry (VDOP) will prepare a Planting Plan using the specifications for applying this upon request.

Filter Strip: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. Considerations were added to address opportunities to include plant species and additional filter strip width to support pollinator habitat.

Firebreak: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The term “pollinator” was added to the planning consideration that discusses wildlife. A vegetated firebreak is an approved technique.

Stream Habitat Improvement and Mgmt: Changes were made to all sections of the standard. The conditions where practice applies section was broadened to include a statement that captures additional components of stream habitats and identifies the “Stream Visual Assessment Protocol” as an evaluation tool to assess conditions. Considerations were expanded to include fish barriers, fish screens, and geomorphic features of streams. This standard will no longer be required in WHIP stream projects. It can be used in a contract/conservation plan (non-cost shared) to document (using the Job sheet) the management of stream habitat over time.

Bivalve Aquaculture Gear and Biofouling Control: This is a new conservation practice standard, replacing the interim standard Shellfish Aquaculture Management Plan (Code 706). Sufficient documentation on the job sheet regarding existing operation and proposed changes are required.

Hedgerow Planting: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The purpose was broadened for aquatic organisms and expanded to add habitat for terrestrial species, specifically pollinators. Criteria were added for pollinator habitat. References were also added. The minimum width at planting was changed to 5’ unless specified in additional criteria for each purpose.

Access Control: This standard was formally reviewed and updated to include internal and public comments received through the *Federal Register* review process. The date of the standard was changed. The purpose statements were condensed and the practice is now applicable on all land uses. The criteria were revised requiring more specific documentation regarding the entity to be controlled, how it is to be controlled, and the expected outcome of the control. The plans and specifications section was expanded to include the elements needed in the plan to meet the intended purpose of the practice. A new job sheet was created.

Mulching: The new Purpose “Reduce energy use associated with irrigation” and accompanying Additional Criteria were added. Minor changes were made to the Operation & Maintenance section.

Forage Harvest Management: Revisions are minor in nature expanding upon the additional criteria to control disease, insect, weed and invasive plant infestations, and the additional criteria to improve wildlife habitat values. Minor changes were made to the considerations and operation and maintenance section and the references were expanded. The job sheet was revised accordingly.

Integrated Pest Management: The new National 595 Standard was adopted as the Virginia version without modification. A wide range of key changes have been made since publication of the previous Virginia version of this Standard, starting with the name of the Standard. Key substantive changes include:

- The Purposes emphasize current NRCS National Policy – NRCS' core role in pest management is not to recommend effective pest management techniques, but to assess and prevent/minimize risks to natural resources from pest management activities.
- Four out of five listed Purposes can't be implemented without referring to a new National Technical Note (a 14-page single-spaced document).
- Risk of pesticide off-site movement through leaching, runoff, or erosion must be evaluated using NRCS' computer program WIN-PST.

Trees/Shrub Establishment: The following purpose was added "Develop Renewable Energy Systems" and accompanying additional Criteria was added. The use of was added concerning seeds or plant stock: Only viable, high-quality and adapted planting stock or seed will be used. All plant materials should comply with minimum standards such as those established by Forest Service or VA Department of Forestry. Refer to the VA Department of Forestry guidelines and specifications of establishment were added.

Restoration and Management of Declining Habitats: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The purpose was clarified and control of invasive animal species was added to the criteria. The following considerations were added: landscape influence, disturbance regimes, climate change, project size, and an associated practice list; and made minor edits for clarity.

Wetland Wildlife Habitat Management: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The public comments lacked technical merit. The date of the standard was changed. This standard will no longer be required in WHIP wetland projects. It can be used in a contract/conservation plan (non-cost shared) to document (using the Job sheet) the management of wetland habitat over time.

Upland Wildlife Habitat Management: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The public comments lacked technical merit. The date of the standard was changed. This standard will no longer be required in WHIP upland projects. It can be used in a contract/conservation plan (non-cost shared) to document (using the Job sheet) the management of upland habitat over time.

Shallow Water Development and Management: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. The public comments lacked technical merit. The date of the standard was changed.

Early Successional Habitat: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. We clarified the definition and purpose to include providing habitat for all or part of a species' life cycle, added additional planting criteria, added a new requirement to use WinPST if using chemicals, added new criteria on the timing of management actions, and supplemented the references.

Wetland Restoration: This standard was formally reviewed and updated to

include public comments received through the *Federal Register* review process. We changed the definition of this practice standard to ensure its clear differentiation from the wetland enhancement practice; added functional assessments or equivalent in criteria; added hydrology considerations; reorganized considerations into topics (hydrology, vegetation, and soils) to make the practice easier to use and understand; and added references.

Wetland Creation: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. We had few changes to this practice. We reorganized considerations into topics (hydrology, vegetation, and soils) to make the practice easier to use and understand; we also added references.

Wetland Enhancement: This standard was formally reviewed and updated to include public comments received through the *Federal Register* review process. We changed the definition of this practice standard to ensure its clear differentiation from the wetland restoration practice; added hydrology considerations; reorganized considerations into topics (hydrology, vegetation, and soils) to make the practice easier to use and understand; and added references.

Forest Stand Improvement: The following purpose was added: "Development of Renewable Energy Systems". Links to the Virginia eFOTG Section II – Plant Establishment Guide was added.

/s/

JOHN A. BRICKER
State Conservationist

Distribution:

E