



Natural Resources Conservation Service  
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April 9, 2014

## TECHNICAL GUIDE NOTICE ND-147

This notice transmits updates and additions to the Field Office Technical Guide (FOTG) as follows:

### Section I

- A **Technical Notes** folder has been added to FOTG – Section I.
- FOTG – Section I – Technical Notes – Wetlands subfolder contains the following;
  - **Technical Note No.1** - Procedure for Problematic Hydric Soils Determination Seasonally Ponded Soils
  - **Technical Note No. 2** - Procedure for Problematic Hydric Soil Determination Moderately to Very Strongly Alkaline Soils
- **Herbaceous Vegetation Establishment Guide** - The variety “Rush” intermediate wheatgrass has been added to Table 2, along with the following footnote:

<sup>4</sup>Limited ND production trials indicate Rush is less productive than other approved intermediate varieties; therefore, Rush will be used for conservation cover plantings only. In addition, Rush intermediate is a Protected Plant Variety (PPV) and should only be available as commercially certified seed as designated by blue seed tags.

### Section II

- **Expected 20-Year Tree Heights By Conservation Tree and Shrub Groups** contains the following changes:
  - Corrections were made in Conservation Tree and Shrub Group 10. In the tables, electrical conductivity was changed from >16 to >8.
  - The listing of CTSG 10 soils on slopes greater than 15% was changed from 9N to 9 to reflect what is found in the National Forestry Handbook and to be consistent with salinity ratings at other locations throughout this document.

### Section IV

**NOTE: The following North Dakota Standards have been updated to reflect updates/changes to the National Standards per National Handbook of Conservation Practices (450-NHCP) Notices 158 and 159. Notable changes are listed below.**

- **ND 314 - Brush Management** Revised National standard refines practice standard *DEFINITION* and *PURPOSE*, incorporates Ecological Site Description and Transition model concepts, safety plan information, and provides list of *REFERENCES*.



- **PLEASE NOTE: The Agency changed the practice name from Residue and Tillage Management – No Till/Strip Till/Direct Seed – 329 to Residue and Tillage Management, No-Till - 329.**

**ND 329 - Residue and Tillage Management, No Till** The Residue and Tillage Management – No Till is inclusive of direct seed and strip till. In addition, added *ADDITIONAL CRITERIA* clarification to not allow any full width tillage for this practice, reduced the maximum soil tillage intensity rating value for no-till from 30 to 20, added implementation requirements to the *PLANS AND SPECIFICATIONS*, and changed the *PURPOSE* “Reduce wind erosion and particulate matter less than 10 micrometers in diameter – PM 10” to “Reduce tillage-induced particulate emissions” to address all sizes of tillage particulate emissions.

- **ND 340 - Cover Crop**
- **ND 342 - Critical Area Planting** Revised national standard **significantly changed** from previous standard. *PURPOSE* has been revised to address specific resource concerns. *CONDITIONS* section has been broadened. *CRITERIA* section specifies “a site visit investigation shall be conducted”, additional changes included expanded sections on general criteria, criteria to stabilize stream channel banks, pond and other shorelines. *CONSIDERATIONS* section includes pollinators and other wildlife. *PLANS AND SPECIFICATIONS* section has a number of added elements to address. *OPERATION AND MAINTENANCE* includes new verbiage concerning grazing, protection and monitoring.
- **PLEASE NOTE: The Agency changed the practice name from Residue and Tillage Management, Mulch Till - 345 to Residue and Tillage Management, Reduced Till - 345. Residue Management Seasonal – 344 and Residue and Tillage Management, Ridge Till - 346 have been removed and/or incorporated into Residue and Tillage Management, Reduced Till - 345**

**ND 345 - Residue and Tillage Management, Reduced Till** Added *CRITERIA* to establish a maximum soil tillage intensity value of 80; clarified the air quality purpose to reduce tillage-induced particulate emissions vs. only PM-10 emissions; revised the *CRITERIA* for energy savings to a 25-percent reduction from the current baseline; and added implementation requirement to the *PLANS AND SPECIFICATIONS*.

- **ND 380 Windbreak/Shelterbelt - Establishment** Revised national standard adds *CRITERIA* for Air Quality and Carbon Storage, and removes criteria for irrigation efficiency. *CONSIDERATIONS* now include pollinator needs, and use of native species, windbreaks for odor and chemical control, and travel corridors for wildlife. *REFERENCES* have been added to the standard.
- **ND 382 - Fence** Revised standard includes animal safety and enhanced visibility for human safety in the *CONSIDERATIONS*. Additional *REFERENCES* added.
- **ND 386 - Field Border** Revised standard include updated *PURPOSES* specific to resource concern being addressed. Added *CRITERIA* to address carbon storage and air quality, other criteria are more specific than previous version. *CONSIDERATIONS* section expanded and includes more information concerning organic producers, wildlife and pollinator habitat. *OPERATION AND MAINTENANCE* section has substantial added detail. *REFERENCES* added to end of standard.

- **ND 390 - Riparian Herbaceous Cover** *DEFINITION* has been refined to the types of plants allowed. *PURPOSE* has been expanded to include a number of additional purposes including water storage and pollinators. *CRITERIA* include use of ecological site data if available and pollinator criteria. *ADDITIONAL CRITERIA* added to include increasing net carbon storage in biomass and soils, criteria for pollinator habitat, criteria for restoring desired plant community. Other applicable practices has been moved into the *CONSIDERATIONS* section and expanded greatly to include a number of facilitating practices. The *CONSIDERATIONS* section has been expanded substantially. *OPERATION AND MAINTENANCE* includes discussions of pest management, haying or grazing management, and riparian functions and values, and terrestrial wildlife habitat. A number of additional *REFERENCES* have been added.
- **ND 391 - Riparian Forest Buffer** Reducing scour erosion as a *PURPOSE* has been removed. The *CRITERIA* for zones have been removed from the new standard. *ADDITIONAL CRITERIA* are more specific concerning the creating or improving riparian habitat and providing a source of detritus and large woody debris, and criteria for increasing soil carbon storage in biomass and soils. *OPERATIONS AND MAINTENANCE* now includes a statement concerning control or exclusion of livestock and harmful wildlife associated with prescribed grazing and or access control. A *REFERENCES* section has been added to the standard.
- **ND 393 - Filter Strip** The *DEFINITION* has been changed. *PURPOSE* has been modified and reduced to address specific resource concerns. *CONDITIONS WHERE THE PRACTICE APPLIES* has been simplified. The wildlife and beneficial insects habitat component has been removed from the *ADDITIONAL CRITERIA*, as well as the watershed function and value criteria. The *CONSIDERATIONS* section has been significantly expanded for this practice. *PLANS AND SPECIFICATIONS* now include statements concerning planting dates and care of seed, seed viability, and site preparation. *OPERATION AND MAINTENANCE* includes a statement concerning organic producers. *REFERENCES* have been added to the standard.
- **ND 394 - Fire Break** *CONSIDERATIONS* section has an added a statement concerning consideration of wildlife and fisheries when using barriers. *OPERATION AND MAINTENANCE* has two added statements: treatment should be timed to reduce impact to nesting; and bare ground firebreaks which are no longer needed, will be stabilized.
- **ND 484 - Mulching** This standard has been extensively revised.
- **ND 511 - Forage Harvest Management**
- **ND 512 - Forage and Biomass Planting**
- **ND 528 - Prescribed Grazing**
- **ND 548 - Grazing Land Mechanical Treatment**
- **ND 550 - Range Planting**
- **ND 585 - Stripcropping** *GENERAL CRITERIA* changes have been made. The *ADDITIONAL CRITERIA* to protect growing crops from damage by wind-born soil particles and *ADDITIONAL CRITERIA* to reduce soil erosion from water and transport of sediment and other water-borne contaminants have been re-arranged and expanded. *ADDITIONAL CRITERIA* to reduce soil erosion

from wind has been deleted. *CONSIDERATIONS* section now includes discussion concerning wildlife benefits and consideration design and layout. *OPERATIONS AND MAINTENANCE* section has been streamlined. An *ADDITIONAL REFERENCES* has been added.

- **ND 610 - Salinity and Sodic Management** *PURPOSE* has changed to address soil health. *CRITERIA* have been expanded. The *CONSIDERATIONS* section has been significantly expanded. Specific tasks have been added to the *PLANS AND SPECIFICATIONS* section. *OPERATIONS* section has been removed. All *REFERENCES* for this practice have been removed except the National Engineering Handbook.
- **ND 612 - Tree/Shrub Establishment** *PURPOSE* has been modified and expanded. *CONDITIONS* section expanded to include a statement concerning the use of other practices for specialized situations. *GENERAL CRITERIA* have minor changes. *CRITERIA* sections added for improving or restoring natural diversity, storing carbon in biomass, developing renewable energy systems, and reducing energy use. Only minor changes to *CONSIDERATIONS*, *PLANS AND SPECIFICATIONS*, and *OPERATION AND MAINTENANCE* sections. *REFERENCES* added to new standard.
- **ND 644 - Wetland Wildlife Habitat Management** *CONSIDERATIONS* have been slightly changed. The *SPECIFICATIONS* have been re-formatted. *OPERATION AND MAINTENANCE* has been expanded to include a statement concerning haying and livestock grazing plans, biological control of undesirable species, and added water depth and duration for vegetative control
- **ND 645 - Upland Wildlife Habitat Management** *CRITERIA* added a statement concerning the use of Prescribed Grazing, if grazing is used. *OPERATION AND MAINTENANCE* was re-formatted.
- **ND 647 - Early Successional Habitat Development/Management**
- **ND 650 - Windbreak/Shelterbelt Renovation** *CONDITION WHERE PRACTICE APPLIES* now has a statement regarding extending the length and pruning. The *CRITERIA* have been re-formatted. *CONSIDERATIONS* section has been expanded. The *OPERATION AND MAINTENANCE* section has been condensed. *REFERENCES* have been added to the standard.
- **ND 666 - Forest Stand Improvement**

Questions should be directed as follows: **Technical Notes No. 1 and 2** to Steve Sieler, State Soil Liaison, at [steve.sieler@nd.usda.gov](mailto:steve.sieler@nd.usda.gov) or 701-530-2019; **Expected 20-Year Tree Heights** to Craig Stange, Forester, at [craig.stange@nd.usda.gov](mailto:craig.stange@nd.usda.gov) or 701-255-4330 Extension 2; **Herbaceous Vegetation Establishment Guide** to Jeff Printz, State Rangeland Management Specialist at [jeff.printz@nd.usda.gov](mailto:jeff.printz@nd.usda.gov) or 701-530-2080; and **ND Standards** to Todd Schwagler, State Resource Conservationist, at 701-530-2084 or [todd.schwagler@nd.usda.gov](mailto:todd.schwagler@nd.usda.gov).

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Distribution: All FOTG Holders