PROTOTYPE PROGRAMMATIC AGREEMENT
BETWEEN THE
US DEPARTMENT OF AGRICULTURE,
TENNESSEE NATURAL RESOURCES CONSERVATION SERVICE, STATE OFFICE
AND THE
TENNESSEE STATE HISTORIC PRESERVATION OFFICER,
REGARDING CONSERVATION ASSISTANCE

WHEREAS, the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) administers numerous voluntary assistance programs, special initiatives, and grant and emergency response programs for soil, water, and related resource conservation activities available to eligible private producers, States, commonwealths, Federally Recognized Tribal governments, other government entities, and other applicants for conservation assistance, pursuant to the Agricultural Act of 2014 (2014 Farm Bill, Public Law 113-79); Soil Conservation and Domestic Allotment Act of 1935 (Public Law 74-46, 16 U.S.C. 590 a-f, as amended); the Flood Control Act of 1944 (Public Law 78-534, as amended); the Watershed Protection and Flood Prevention Act (Public Law 83-566, as amended, 16 U.S.C. 1001-1012); the Agricultural and Food Act of 1981 (Public Law 97-98, 95 Stat. 1213); the Agricultural Credit Act (Public Law 95-3341, Title IV, Section 403); Food, Agriculture, Conservation and Trade Act of 1990 (Public Law 101-624); the Flood Control Act of 1936 (Public Law 74-738); the Food Security Act of 1 *985* (Public Law 99-198, as amended); the Federal Agricultural Improvement and Reform Act of 1996 (Public Law 104-127); and executive and secretarial orders, implementing regulations and related authorities; and

WHEREAS, NRCS through its conservation assistance programs and initiatives, provides assistance for activities with the potential to affect historic properties eligible for or listed in the National Register of Historic Places (NRHP), including National Historic Landmarks (NHLs) and therefore constitute undertakings subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. 470f, and its implementing regulations, 36 CFR Part 800, including the provisions of these regulations addressing NHLs at 36 CFR Part800.10; and

WHEREAS, NRCS has determined that the requirement to take into account the effects to historic properties of its undertakings may be more effectively and efficiently fulfilled through the use of a Prototype Programmatic Agreement (Prototype Agreement); and

WHEREAS, the NRCS Tennessee State Office has consulted with the Tennessee State Historic Preservation Officer (SHPO) and followed the instructions in the ACHP letter that accompanied the Prototype Agreement, dated November 21, 2014; and followed instructions in the ACHP letter that accompanied the Prototype Agreement, dated November 21, 2014

WHEREAS, NRCS also is responsible for fulfilling the requirements of the National Environmental Policy Act (NEPA), including the use of categorical exclusions, and coordinating NEPA and Section 106 reviews, as appropriate; and

WHEREAS, NRCS developed this Prototype Agreement in consultation with the National

Conference of State Historic Preservation Officers (NCSHPO) and its members, interested Indian tribes, Native Hawaiian organizations, interested historic preservation organizations, (such as the National Trust for Historic Preservation), and the Advisory Council on Historic Preservation (ACHP); and

WHEREAS, in accordance with 36 CFR Part 800.14(b)(4), the ACHP has designated this agreement as a Prototype Agreement, which allows for the development and execution of subsequent prototype agreements by individual NRCS State office(s) (State-based Prototype Agreements) to evidence compliance with Section 106; and

WHEREAS, this State-based Prototype Agreement conforms to the NRCS Prototype Agreement as designated by the ACHP on November 21, 2014, and therefore, does not require the participation or signature of the ACHP when the NRCS State Office and the SHPO agree to the terms of the State-based Prototype Agreement; and

WHEREAS, this Prototype Agreement replaces the 2002 nationwide "Programmatic Agreement among the United States Department of Agriculture Natural Resources Conservation Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers relative to Conservation Assistance," as amended in 2011 and 2012, which expired on November 20, 2014; and

WHEREAS, the NRCS State Conservationist is the responsible federal agency official within the state for all provisions of Section 106, including consultation with the SHPO, NHOs, and government-to-government consultation with Indian tribes to negotiate the Prototype Agreement; and

WHEREAS, the State-based Prototype Agreement does not apply to undertakings occurring on or affecting historic properties on Tribal lands, as defined by Section 301(14) of the NHPA, without prior agreement execution of a State-based Prototype Agreement with the concerned Indian tribe; and

WHEREAS, the NRCS has consulted with Indian Tribe(s) and NHOs during the development of the national Prototype Agreement; and

WHEREAS, this Prototype Agreement does not modify the NRCS' responsibilities to consult with Indian tribes and NHOs on all undertakings that might affect historic properties and properties of religious and cultural significance to them, regardless of where the undertaking is located, without prior agreement by the concerned Indian tribe or NHO, and recognizes that historic properties of religious and cultural significance to an Indian tribe or NHO may be located on ancestral homelands or on officially ceded lands near or far from current settlements; and

WHEREAS, when NRCS conducts individual Section 106 reviews for undertakings under this State-based Prototype Agreement, it shall identify and invite other agencies, organizations, and individuals to participate as consulting parties; and

NOW, THEREFORE, the NRCS Tennessee State Office and the Tennessee SHPO agree

that undertakings in Tennessee shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

NRCS Tennessee shall ensure that the following stipulations are met and carried out:

I. Applicability.

a. Once executed by the NRCS Tennessee and the Tennessee SHPO, this Prototype Agreement sets forth the review process for all NRCS undertakings subject to Section 106 in the State of Tennessee.
b. Execution of this Prototype Agreement supersedes any existing State Level Agreement with Tennessee SHPO and/or consultation protocols executed under the previous NRCS nationwide Programmatic Agreement, but does not replace any existing project-specific Section 106 agreements (Memoranda of Agreement or Programmatic Agreements).
c. This Prototype Agreement applies only when there is a Federal Preservation Officer (FPO) in the NRCS National Headquarters (NHQ) who meets the Secretary of the Interior's Professional Qualification Standards (48 FR 44716).
d. This Prototype Agreement applies only where there is staffing or access to staffing (through contracted services or agreements with other agencies) who meet the Secretary of Interior's Professional Qualification Standards as accepted by the Tennessee NRCS State Office (48 FR 44716).

II. Roles and Professional Qualifications.

a. The NRCS Tennessee State Conservationist is responsible for oversight of its performance under this Prototype Agreement.
b. NRCS Tennessee shall ensure all NRCS staff or individuals carrying out Section 106 historic preservation compliance work on its behalf, including the NRCS Tennessee State senior historic preservation professional staff member (the Cultural Resources Specialist (CRS), or Archaeologist, or Historian), are appropriately qualified to coordinate the reviews of resources and historic properties as applicable to the resources and historic properties being addressed (site, building, structure, landscape, resources of significance to Indian tribes, and other concerned communities). Thus, these staff and consultants must meet the Secretary of the Interior's Professional Qualification Standards and have the knowledge to assess the resources within an undertaking's area of potential effects (APE).
c. The Tennessee State Conservationist is responsible for consultation with the Tennessee SHPO, and government to government consultation with federally-recognized tribes to develop consultation protocols. There are no Tribal lands or federally designated Tribes in Tennessee. However, it is recognized in Tennessee that there are tribes with religious, cultural, or aboriginal interests in Tennessee. These tribes are contacted by NRCS. Consultation responsibilities may not be delegated to any other staff, nor carried out on behalf of NRCS by another federal agency, or third party consultant.

d. The NRCS Tennessee CRS and/or professional consultants shall provide technical historic property and resource information to the State Conservationist for use in Section 106 findings and determinations, after appropriate consultations with the SHPO, Indian tribes, and discussions with the affected landowner. The CRS shall monitor and oversee the work and reporting of all NRCS field office personnel and professional service consultants. The CRS shall also assist the State Conservationist in determining whether an undertaking has the potential to affect historic properties, triggering Section 106 review, pursuant to 36 CFR Part 800.3(a).
e. NRCS field office personnel involved in implementing this Prototype Agreement, after completion of NRCS' web, classroom, and field awareness training acquired through USDA's AgLearn training site, shall work with the CRS, as feasible, in completing historic preservation compliance (Section 106) field records for the agricultural producer's (NRCS' client or voluntary applicant for assistance) files and for use in producing initial historic property identification records (as set forth and outlined in NRCS' operational guidance, the National Cultural Resources Procedures Handbook, Title 190, Part 601).
f. The CRS in Tennessee shall oversee development of the scopes of work for investigation of the APEs for identified undertakings (see 36 CFR Part 800.4). The NRCS may use professional service contractors or consultants or partners to assist with cultural resources compliance studies. NRCS shall ensure these contractors meet the Secretary of Interior's Professional Qualifications Standards.
g. NRCS remains responsible for all consultation with the SHPO, Tribal Representatives, and all determinations of NRHP eligibility and effect. NRCS may not delegate consultation for findings and determinations to professional services consultants or producers/applicants for conservation assistance.
h. Tennessee SHPO, if provided sufficient data on a proposed undertaking and APE for the proposed undertaking by NRCS Tennessee State Office shall consult and provide a response to NRCS within 30 calendar days. The definition of sufficient data is provided in 36 CFR Part 800.11.
i. The ACHP shall provide technical guidance, participate in dispute resolution, and monitor the effectiveness of this agreement, as appropriate.

III. Training.

a. NRCS shall require personnel conducting cultural resources identification and evaluation work to complete, at a minimum, the NRCS Web-based (in USDA AgLearn) and field Cultural Resources Training in modules and the ACHP's Section 106 *Essentials* course.
b. NRCS shall require CRS and/or other NRCS personnel overseeing cultural resource work to take the NRCS Cultural Resources Training Modules (awareness training) and the ACHP's Section 106 *Essentials* course, or a course with similar content, if approved by the NRCS FPO. Training must be completed within the first calendar year after execution of this Prototype Agreement. NRCS personnel shall review and update training completion with their supervisors and include their training in their Individual Development Plans.
c. NRCS may invite the SHPO, Indian tribe or staff to participate in presentations at agency classroom or field trainings.

d. NRCS shall encourage all personnel conducting or overseeing cultural resources work to take additional appropriate specialized training as provided by the SHPO, the ACHP, National Park Service, or other agencies, as feasible.

IV. Lead Federal agency.

a. For any undertaking for which the NRCS is the lead federal agency for Section 106 purposes per 36 CFR Part 800.2(a)(2), NRCS staff shall follow the terms of this Prototype Agreement. NRCS shall notify the SHPO of its involvement in the undertaking and the involvement of the other federal agencies.
b. For any undertaking for which the NRCS is not the lead federal agency for Section 106 purposes, including those undertakings for which the NRCS provides technical assistance to other USDA or other federal agencies, the terms of this Prototype Agreement shall not apply to that undertaking. If the lead federal agency agrees, NRCS may follow the approved alternative procedures in place for that agency.

V. Review Procedures.

a. In consultation with the Tennessee SHPO, NRCS Tennessee identified classes of undertakings with little to no potential to affect historic properties and listed those undertakings in Appendix A. Upon the determination by the CRS that a proposed undertaking is included in Appendix A, the NRCS is not required to consult further with the SHPO for that undertaking.
b. The list of undertakings provided in the Appendix A may be modified through consultation and written agreement between the NRCS State Conservationist and the SHPO without requiring an amendment to this Prototype Agreement. The NRCS State office will maintain the master list and will provide an updated list to all consulting parties with an explanation of the rationale (metadata) for classifying the practices accordingly.
c. Classes of Undertakings not identified in Appendix A shall require further review as outlined in Stipulation V.c. The NRCS Tennessee shall consult with the SHPO to define the undertaking's APE, identify and evaluate historic properties that may be affected by the undertaking, assess potential effects, and identify strategies for resolving adverse effects prior to approving the financial assistance for the undertaking.
    1. NRCS Tennessee may provide its proposed APE, identification of historic properties and/or scope of identification efforts, and assessment of effects in a single transmittal to the SHPO, provided this documentation meets the substantive standards in 36 CFR Part 800.4-5 and 800.11.
    2. The NRCS Tennessee shall attempt to avoid adverse effects to historic properties whenever possible. Where historic properties are located in the APE, NRCS Tennessee shall describe how it proposes to avoid adverse effects to historic properties. Where a proposed undertaking may adversely affect historic properties, NRCS shall describe proposed measures to avoid and minimize the adverse effects. If consultation between NRCS Tennessee and the SHPO concurs that the adverse effect cannot be avoided or minimized, then follow the process in 36 CFR Part 800.6, including consultation with other consulting parties and notification to the ACHP.
    3. Where the NRCS Tennessee proposes a finding of "no historic properties affected"

or "no adverse effect" to historic properties, the SHPO shall have 30 calendar days from receipt of this documented description and information to review it and provide comments. The NRCS shall take into account all timely comments.

i. If the SHPO, or another consulting party, disagrees with NRCS Tennessee findings and/or determination, it shall notify the NRCS within the 30 calendar day time period. The NRCS shall consult with the SHPO or other consulting party to attempt to resolve the disagreement. If the disagreement cannot be resolved through this consultation, NRCS shall follow the dispute resolution process in Stipulation VIII below.

ii. If the SHPO does not respond to NRCS Tennessee within the 30 calendar day period and/or NRCS receives no objections from other consulting parties, or if the SHPO concurs with NRCS Tennessee determination and proposed actions to avoid adverse effects, NRCS shall document the concurrence or lack of response within the review time noted above, and may move forward with the undertaking.

VI. Emergency and Disaster Management Procedures (Response to Emergencies)

a. NRCS Tennessee shall notify the SHPO immediately or within 48 hours of the \ emergency determination, following the NRCS' Emergency Watershed Program (EWP) final rule (see Section 216, P.L. 81-516 Final Rule, 7 CFR Part 624 (April 2005).

b. The NRCS State office shall prepare procedures for exigency (following the rules for NRCS' (EWP) regarding immediate threat to life and property requiring response within 5 days) in consultation with the SHPO. Reference to these procedures are provided in Appendix B. The full document can be provided electronically.

c. If the NRCS State office has not developed specific procedures for responding to exigencies, the NRCS shall follow the recently approved guidelines for Unified Federal Review issued by the Department of Homeland Security, Federal Emergency Management Service (DHS, FEMA), the Council on Environmental Quality (CEQ), and the ACHP in July 2014, or the procedures in 36 CFR Part 800.12(b).

VII. Post-review discoveries of cultural resources or historic properties and unanticipated effects to historic properties.

a. Where NRCS-funded construction has not yet begun and a cultural resource eligible for listing in the National Register of Historic Places (Historic Property) is discovered and evaluated within the activity's APE after Section106 review is complete, NRCS Tennessee shall seek avoidance or minimization strategies in consultation with the SHPO to resolve adverse effects in accordance with 36 CFR Part 800.6.

b. The NRCS Tennessee shall ensure that every contract for assistance includes provisions for halting work/construction in the area when potential historic properties are discovered or unanticipated effects to historic properties are found after implementation, installation, or construction has begun. When such a discovery occurs, the producer who is receiving financial assistance or producer's contractor shall immediately notify the NRCS State Conservationist's Office, CRS, supervisory NRCS personnel for the area, and the landowner/applicant.

1. The NRCS Tennessee CRS shall inspect the discovery within 24 hours, if weather permits, and in consultation with the local NRCS official (field office supervisor or District or Area Conservationist), concerned Indian tribes, the SHPO, the NRCS State engineering or program supervisor, as appropriate), the landowner/producer (whomever NRCS is assisting). The CRS shall establish a protective buffer zone surrounding the discovery. This action may require inspection by SHPO, tribal, or cultural resources experts in addition to the CRS.
2. All NRCS contact with media shall occur only under the direction of the NRCS Tennessee Public Affairs Officer, as appropriate, and the State Conservationist.
3. Security shall be established to protect the resources/historic properties, workers, and private property. Local law enforcement authorities will be notified in accordance with applicable State law and NRCS policy in order to protect the resources. Construction and/or work may resume outside the buffer only when the State Conservationist determines it is appropriate and safe for the resources and workers.
4. NRCS CRS shall notify the SHPO and the ACHP no later than 48 hours after the discovery and describe NRCS' assessment of the National Register eligibility of the property, as feasible and proposed actions to resolve any adverse effects to historic properties. The eligibility determination may require the assessment and advice of concerned Indian tribes, the SHPO, and technical experts (such as historic landscape architects) not employed by NRCS.
5. The SHPO, and ACHP shall respond within 48 hours from receipt of the notification with any comments on the discovery and proposed actions.
6. NRCS shall take any comments provided into account and carry out appropriate actions to resolve any adverse effects.
7. NRCS Tennessee shall provide a report to the SHPO and the ACHP of the actions when they are completed.

c. When human remains are discovered, the NRCS Tennessee shall follow all applicable federal and Tennessee state burial laws and ordinances, including the Native American Graves Protection and Repatriation Act, and implementing regulations, when on federal lands, and related human rights and health statutes, where appropriate. NRCS shall also refer to the ACHP's Policy Statement regarding *Treatment of Burial Sites, Human Remains and Funerary Objects* and the ACHP's Section 106 Archaeology Guidance. NRCS shall also follow USDA and NRCS policy on treatment of human remains and consultation.

VIII. Dispute resolution.

a. Should any consulting party to this Agreement object to any actions proposed or the manner in which the terms of the agreement are implemented, the NRCS State Conservationist and CRS shall consult with such party to resolve the objection. If the State Conservationist determines that such objection cannot be resolved, he or she will:
   1. Forward all documentation relevant to the dispute, including the State Conservationist's proposed resolution, to the NRCS FPO and Senior Policy Official (SPO Deputy Chief for Science and Technology) and the ACHP. The ACHP shall provide the FPO, SPO, and State Conservationist with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, NRCS shall prepare a written response that

takes into account any timely advice or comments regarding the dispute from the ACHP and any signatory or consulting parties, and provide them with a copy of this written response. NRCS will then proceed according to its final decision.

2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, NRCS may make a final decision on the dispute and proceed. Prior to reaching such a final decision, NRCS shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and consulting parties, and provide them and the ACHP with a copy of the written response.

b. The NRCS Tennessee State Office responsibility to carry out all other actions subject to the terms of this agreement that are not the subject of the dispute remains unchanged.

c. Any consulting party to this Agreement may request the ACHP provide its advisory opinion regarding the substance of any finding, determination, or decision regarding compliance with its terms.

d. At any time during the implementation of this Prototype Agreement, a member of the public may submit an objection pertaining to this agreement to the NRCS State Conservationist, in writing. Upon receiving such an objection, the State Conservationist shall notify the NRCS SPO and FPO, the SHPO and concerned Indian tribe take the objection into account, and consult with other consulting parties as appropriate to resolve the objection. The NRCS State Conservationist shall notify the SPO, FPO, SHPO, concerned Indian tribe of the outcome of this process.

IX. Public Involvement

The NRCS State Conservationist will ensure the public and other parties are invited to comment on this Prototype Agreement and participate in Section 106 review as set forth above in Section V, through the State's public website, State Technical Advisory Committee, and Tennessee Permitting Agencies workgroup.

X. Annual reporting and monitoring.

a. Every year following the execution of this Prototype Agreement, until it expires or is terminated, the NRCS Tennessee State Conservationist shall provide TN SHPO and the FPO a summary report detailing work undertaken pursuant to its terms, including a list of undertakings falling under Appendix A as well as undertakings that required further review; a summary of the nature and content of meetings held with SHPO; and an assessment of the overall effectiveness of this Agreement per Section V. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in NRCS' efforts to carry out the terms of this Agreement.

1. The NRCS FPO shall use the state reports to provide, through the NRCS Senior Policy Officer (SPO) i.e. the Deputy Chief for Science and Technology, an annual report to the ACHP.
2. The State Conservationist shall use the state report to assess the need for annual meetings with the SHPO each fiscal year.

b. The State Conservationist will participate in an annual review with the NRCS

Regional Conservationist regarding the effectiveness of the Prototype Agreement and submit a written (email) report following this review to the SPO.

c. The NRCS State Conservationist or SHPO may request that the ACHP participate in any annual meeting or agreement review.

XI. Compliance with applicable State law and Tribal law (when on Tribal lands).

NRCS shall comply with relevant and applicable state law, including permit requirements on state land.

XII. Duration of Prototype Agreement.

This Agreement will be in effect for 10 years from the date of execution unless amended or terminated pursuant to Stipulation XIII below.

XIII. Amendment and termination.

a. This Agreement may be amended if agreed to in writing by all signatories. The amendment will be effective on the date a copy, signed by all of the signatories, and filed with the NRCS FPO, SPO, and the ACHP.
b. If any signatory to this Agreement, or the ACHP, determines that its provisions will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation XII.A. If within 30 calendar days, or other time period agreed upon by the signatories, an amendment cannot be agreed upon, any signatory or the ACHP may terminate the agreement upon written notification to the other signatories.
c. If this Agreement is terminated, or expires without being extended via the amendment process described above, and prior to continuing work on any undertaking, NRCS Tennessee shall comply with 36 CFR Part 800 for all individual undertakings in Tennessee.
d. NRCS will consider requests from other USDA agencies to become a signatory to this Agreement following formal written requests and appropriate discussion with and approval by the NRCS FPO and SPO, and joint USDA Agency -NRCS State Office consultation with the ACHP, NCSHPO, and Indian tribes/THPOs or NHOs, and other consulting parties, as appropriate. Such inclusion of the USDA agency may require amendment to this Agreement.

Execution of this Prototype Agreement by the Tennessee NRCS and SHPO and implementation of its terms evidence that NRCS has taken into account the effects of its undertakings in Tennessee on historic properties and afforded the ACHP a reasonable opportunity to comment.

Signatories	**Date**
[signature], acting J. Kevin Brown, State Conservationist Tennessee Natural Resources Conservation Service	10-9-15
[signature] E. Patrick McIntyre, Jr. Tennessee State Historic Preservation Officer	10-14-15

APPENDIX A

LIST OF UNDERTAKINGS REQUIRING NO FURTHER SECTION 106 REVIEW IN NRCS TENNESSEE

Pursuant to Stipulation V.a. above, in consultation with the Tennessee SHPO, the TN NRCS, through the qualified CRS as described in Stipulation II.b., has determined that the following undertakings have little or no potential to affect historic properties. The TN NRCS is not required to consult further with the SHPO under Section 106 for any undertaking that is included in this appendix, except in cases of unanticipated discovery of historic properties, as outlined in Section VII.

List of Undertakings Determinations
Tennessee NRCS Conservation Practices

Practice Name, Code, and Description	Practice Extent	Disturbance Potential Classification	NRCS Review Level
Access Control (472) –Temporary or permanent barriers to prevent intrusion by livestock, vehicles, or people.	Barriers may include fences, logs, boulders, earth fill, gates, or signs. Support practices will be individually reviewed per classification in this table	G	CRS
Access Road (Ft.) (560) – A fixed route for vehicular travel to move livestock, produce, equipment and supplies	Earth shaping and grading, vegetation removal, placement of gravel culverts, berms, etc.	G	CRS
Agrichemical Handling Facility (No.) (309) – A permanent structure with an impervious surface to provide an environmentally safe area for the handling of on-farm agrichemicals, such as pesticides and fertilizers, which are used in spraying operations of orchards, vineyards, and cropland.	Removal of vegetation, site grading, placement of concrete and/or building	G	CRS
Alley Cropping (Ac) (311) –Gr**o**wing field, forage, or horticulture crops between rows of trees or shrubs with annual or periodic harvesting from both the woody plants and crops Practice not used in TN	Normal planting of crops using farm equipment that does not excavate deeper than previous farming activities	NG	FO
Amendments for Treatment of Ag Waste ((No.) (591) – chemical or biological additives to alter characteristics of waste stream. Practice not used in TN	Treatment of manure, process wastewater, stormwater runoff from lots and other high intensity areas	NG	FO
Anaerobic Digester, Ambient Temperature (No.) (365) – An unheated waste treatment impoundment.	To biologically treat waste (manure) as a component of the farm waste management system	G	CRS
Animal Mortality Facility (No.) (316) – An on-farm facility for the treatment or disposal of livestock and poultry carcasses as part of normal and catastrophic mortality events.	Practice includes composters, freezers, incinerators, and burial pits	G	CRS
Animal Trails and Walkways (Ft.) (575) - A travel lane for livestock and/or wildlife to provide movement through difficult or ecologically sensitive areas such as wetlands, streambanks, T&E species, cultural resources, floodways, scenic areas.	Shaping of earth to generally follows natural contours and may include fencing (to confine animals to trail) and broad-based dips or water breaks for erosion control. Surface may be vegetated, reinforced concrete, or rock/gravel on geotextile	PG	CRS
Aquatic Organism Passage (Mi) (396) –Modification or removal of barriers that restrict or impede movement of aquatic organisms	Practice is generally associated with stream channels. May include use of bottomless arches/culverts, or barrier removal such as dams, roads crossings, culverts and may affect wetlands, flooding potential existing infrastructure, or cultural resources	PG	CRS
Aquaculture Pond (Ac.) (397) – A water impoundment constructed and managed for commercial fish and other aquatic animal production.	Dug ponds or embankment structures	G	CRS

Brush Management (Ac) (314) –Removal or reduction of undesirable woody (non-herbaceous or succulent) plants including those that are invasive or noxious on woodland, pastureland, or abandoned cropland	Accomplished through mechanical, chemical, biological, burning, or combination of these techniques. Note: does *NOT* include prescribed burning or removal of woody vegetation to facilitate land use change/clearing	PG	CRS
Channel Stabilization (Ft.) (584) – Structural measures used to stabilize stream bed or bottom in unstable situations.	Heavy construction equipment is generally used and concrete or metal structures are placed into the natural channel bottom and/or sidewalls to control grade and/or flow. Disposal of spoil material not to interfere with function of channel, floodplain, floodways, and avoid adverse effects to T&E species and cultural, archaeological, historic properties	G	CRS
Clearing and Snagging (Ft.) (326) – Removing snags, drifts, or other obstructions from a channel or banks.	Construction equipment is used to pull fallen or leaning trees from streams, creeks and drainage ditches. Sand bars and debris piles are removed with heavy equipment such as an excavator.	PG	CRS
Composting Facility (No.) (317) – An aerobic, biological process to stabilize waste organic matter to a humus-like material	Three types of facilities used: aerated windrows, static piles, in-vessel structures. Removal of vegetation and grading of site is possible for structural elements such as bins, concrete slabs, and roofs	G	CRS
Conservation Cover (Ac.) (327) – Establishing and maintaining perennial vegetative cover to protect soil and water resources on land retired from agricultural production.	Planting improved or native grasses, forbs, or other permanent vegetative other than trees on previously established cropland using normal farm equipment that does not excavate deeper than previous farming activities	NG	FO
Conservation Crop Rotation (Ac.) (328) – Growing various crops in a planned sequence on the same ground over a period of time (rotation)	Normal planting of annual crops using farm equipment that does not excavate deeper than previous farming activities	NG	FO
Constructed Wetland (No.) (656) – An artificial ecosystem with hydrophytic vegetation for treatment of wastewater and contaminated runoff from agricultural facilities.	A shallow basin with hydrophytic vegetation. May include embankments, auxiliary spillway, outlet control structure, fencing	G	CRS
Contour Buffer Strip (Ac.) (332) – Narrow strips of permanent, herbaceous vegetative cover established across the slope contour and alternated down slope with parallel, wider cropped strips.	Normal planting of strips of permanent vegetation using farm equipment that does not excavate deeper than previous farming activities	NG	FO
Contour Farming (Ac.) (330) – Farming sloping land in such a way that preparing land, planting, and cultivating are done on the contour. This includes following established grades or terraces or diversions.	Normal planting of annual crops using farm equipment that does not excavate deeper than previous farming activities	NG	FO
Contour Orchard and Other Fruit Area (Ac.) (331) - Planting orchards, vineyards or small fruit so that all cultural operations are done on the contour. Practice not available in TN	Tree planting using hand or mechanical tree planting equipment	PG	CRS
Cover Crop (Ac.) (340) – Grasses, legumes, and forbs planted for seasonal vegetative cover.	Normal planting of annual crops using farm equipment that does not excavate deeper than previous farming activities	NG	FO
Critical Area Planting (Ac.) (342) – Establishing permanent vegetation on sites that have or expected to have high erosion rates and sites that have physical , chemical, or biological conditions that prevent establishment of	These areas are highly disturbed, eroded areas e.g. active or abandoned mine land, urban and road construction areas, eroded streambanks. Farm or heavy equipment is used to shape the area	G	CRS

vegetation with normal practices	before planting vegetation.		
Dam (No./Ac. Ft.) (402) – Artificial barrier to impound water for one or more beneficial purposes e.g. flood control, livestock, wildlife, irrigation use, etc.	Extensive earthwork conducted to remove trees, construct dam embankment and clear associated pool area. Permanent water is impounded behind dam. All borrow areas will be reviewed.	G	CRS
Dam, Diversion (No.) (348) – A structure built to divert all or part of the water from a waterway or a stream into another water course, irrigation canal, or water-spreading system.	Practice may include placement of fill, clearing of trees, construction of ditches or subsurface drainage pipes. All borrow areas will be reviewed.	G	CRS
Dike (Ft.) (356) – An embankment constructed of earth or other suitable materials to protect land against overflow or to control water levels	Heavy farm or construction equipment used to place soil into a berm. Soil may be excavated from a nearby source or adjacent to dike. All borrow areas will be reviewed	G	CRS
Diversion (Ft.) (362) – A channel constructed across the slope with a supporting ridge (berm) on the lower side to collect, divert, or direct water away from farmsteads or agricultural waste systems.	Heavy farm or construction equipment is used to excavate a channel and push soil up into a berm.	G	CRS
Drainage Water Management (Ac.) (554) – Control of surface and subsurface water in agricultural drainage systems	Installation of structures or pumps designed to remove water for adequate drainage. Rate of outflow and level of water table controlled by the structures or pumps.	G	CRS
Dry Hydrant (Ea.) (432) – A non-pressurized permanent pipe assembly system installed into water source that permits the withdrawal of water by suction.	Excavating for and installing a pipe assembly into a water source	G	CRS
Early Successional Habitat Development/Management (Ac.) (647) – Manage plant succession to develop and maintain successional habitat that benefit desired wildlife or natural communities.	Management of ground cover to maintain an early successional plant community through prescribed burning, brush management, prescribed grazing, shrub planting, disking and strip-disking (2"-4" deep), or combination	NG	FO
Emergency Animal Mortality Management (No.) (368)	Burial or in-house composting of animals resulting from large-scale disease or natural disaster	PG	CRS
Farmstead Energy Improvement (No.) (374) – Implementation of improvements to reduce or improve energy efficiency of on-farm energy use	Applies to non-residential structures and energy systems e.g. heating/ventilation systems	NG	FO
Feed Management (No. and AUs Affected) (592) – Managing the quantity of available nutrients fed to livestock and poultry for their intended purpose.	Managing the quantity of available nutrients fed to livestock and poultry for their intended purpose	NG	FO
Fence (Ft.) (382) – Constructed barrier to animals or people.	Fence materials shall be of high quality and durability with life expectancy of 20+ years. Posts shall be minimum 6" and driven or set (drilled) 36" in ground. Fences may be tens of feet to several thousand feet in length.	PG	CRS
Field Border (Ft.) (386) – A strip of perennial vegetation established at the edge or perimeter of a crop field	Borders shall be established in permanent grass, legumes, or shrubs	PG	CRS
Filter Strip (Ac.) (393) – An area of vegetation established for removing sediment, organic matter, and other pollutants from runoff and wastewater.	Generally located at lower edge of a crop field may be planted to grass or trees along a crop field may be removed and planted to grass	PG	CRS

Firebreak (Ft.) (394) – A permanent or temporary strip of bare or vegetative ground to retard fires	Ground disturbance is confined within the plow layer.	PG	CRS
Fish Raceway or Tank (Ft.) (398) – A channel or tank with a continuous flow of water constructed or used for high-density fish production.	Installation of a structure or tank to provide a facility containing flowing water of a suitable temperature and quality for dependable production of fish	G	CRS
Fishpond Management (No.) (399) – Managing (existing) impounded water for the production of fish.	Regulating water flow, feed, and forage in a pond. Does not include new ponds	NG	FO
Forage and Biomass Planting (Ac.) (512) –Establishing herbaceous species suitable for pasture, hay or biomass production (formerly called Pasture and Hay Planting)	Practice applies to all lands suitable to establish herbaceous species for forage or biomass production using normal farm equipment. Planting could be done on previously cropped land or cleared land converted from forest or native vegetation.	PG	CRS
Forage Harvest Management (Ac.) (511) – The timely cutting and removal of forages from the field as hay, green- chop, or ensilage.	Management of forage by the timely cutting and removal of forages from the field as hay, green-chop, or ensilage	NG	FO
Forest Site Preparation (Ac.) (490) – Treating areas to encourage natural seeding of desirable trees or to permit reforestation by planting or direct seeding.	Pushing and piling, chopping, or burning timber trash left over from timber harvest	PG	CRS
Forest Stand Improvement (Ac.) (666) – Manipulation of forest species composition, stand structure, and stocking by cutting or killing selected trees and understory vegetation to improve stands of desired tree species.	Undesirables may be cut with chain saw and left on ground, injected with poison and left standing, or cut and removed with forest harvest equipment	PG	CRS
Forest Trails and Landings (Ft.) (655) - Creation or management of temporary or infrequently used route, path or cleared areas for access to manage forest stands, pruning, fire suppression, or harvesting of trees. Practice not currently listed in TN	Installation of water bars, dips, other drainage measures, and/or seeding trails and landings for erosion control	PG	CRS
Grade Stabilization Structure (No.) (410) – A structure used to control the grade and head cutting in natural or artificial channels.	Brush, trees, stumps, roots, sod, boulders, debris, fence rows, and other objectionable materials shall be cleared and grubbed from the areas on which earth fill will be placed or borrow material obtained.	G	CRS
Grassed Waterway (Ac.) (412) – A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff.	A channel is cut from 12-30 inches deep and 8 to 30 or more feet wide and from 10 to 400 feet or more long on slopes <10%. Spoil is placed and spread on nearby crop field.	G	CRS
Heavy Use Area Protection (Ac.) (561) – Stabilization of areas frequently and intensively used by people, animals, or vehicles by establishing vegetative cover, surfacing with suitable materials, or installing needed structures.	These areas are usually worn, disturbed and eroded from animal or vehicle traffic. Area is graded and shaped, and hardened material such as rock crushed rock or concrete is usually placed.	PG	CRS
Hedgerow Planting (Ft.) (422) – Establishing a dense (usually woody) vegetation in a linear design	Small trees/shrubs are usually hand planted using shovel or dibble, in two or more rows. Fencing may be used to protect from livestock grazing.	PG	CRS
Herbaceous Weed Control (Ac.) (315) - Control of herbaceous plants that are invasive and noxious in non-cropland areas	Prescribed grazing used as biological control. NRCS will not recommend herbicides	NG	CRS

Integrated Pest Management (Ac.) (595) – Combination of pest prevention, avoidance, monitoring, and suppression strategies for diseases, weeds, insects, invertebrates, and wildlife on plant or animal growth, crop production, or farm profitability	Suppression techniques may include cultural (timing of tilling or seeding with normal farm equipment), mechanical, biological, and chemical methods. Part of normal farming operation and seldom, if ever, disturbs soil below normal plow layer on cropland or other land	NG	FO
Irrigation Land Leveling (Ac) (464) - Reshaping the surface of the land to be irrigated to planned grades. Practice no longer listed in TN	Earth moving using leveling blade or heavy equipment.	G	CRS
Irrigation Storage Reservoir (No./Ac. Ft.) (436) – An irrigation water storage structure made by constructing a dam. Practice not currently listed in TN	Extensive earthwork is conducted to remove trees, and construct dam and associated pool area. Permanent water is impounded behind dam. All borrow areas will be reviewed	G	CRS
Irrigation Pipeline (Ft.) (430) – A pipeline and appurtenances in an irrigation system.	Practice applies to water conveyance and distribution pipelines installed above or below the ground. Pipe diameters range < 2 and > 6 inches that may be buried at least 24 inches below ground in a trench at least 6 inches wide. Excavation is sometimes by backhoe.	G	CRS
Irrigation System, Micro-irrigation (No. and Ac.) (441) – An irrigation system for distribution of water directly to plant zone by means of surface and subsurface applicators.	Main pipeline installed 18 - 30 inches deep into a 4-6" wide trench using a trenching machine. Lateral lines usually placed above ground in the rows.	PG	CRS
Irrigation System, Sprinkler (No. and Ac.) (442) – An irrigation system for applying water by means of nozzles operated under pressure.	Pipeline is usually placed 18-30 inches into the ground using a trencher. Riser pipes deliver water above ground. A pivot irrigation system installed completely above ground with 12 inch wheel tracks spaced 60 or more feet apart.	PG	CRS
Irrigation Water Management (Ac.) (449) – Determining and controlling the rate, amount, and timing of irrigation water in a planned and efficient manner.	For most systems, placement of water mimics a rainfall event that provides one inch of water. The surface/subsurface system saturates the soil for 24 hours.	NG	FO
Karst Sinkhole treatment (No.) (527)-Treatment of sinkholes to reduce contamination of ground water resources or improve farm safety	Use of vegetative buffers, fencing, surface water controls, filtering influent waters, or plugging the sinkhole (not allowed if sinkhole opens to a cave)	PG	CRS
Land Clearing (Ac.) (460) – Removing trees, stumps, and other vegetation for planned conservation improvements. Practice not funded in TN	Applies to wooded areas where removal of trees, stumps, brush, and other vegetation needed establish, re-establish, or maintain land for desired wildlife habitat	G	CRS
Land Reclamation, Landslide Treatment (Ac.) (453) – Treating in place material, mine spoil (excavated overburden), mine waste, or overburden to reduce downslope movement. Practice not funded in TN	Shaping, grading and drainage will be used to retard movement of in place material	G	CRS
Land Reclamation, Toxic Discharge Control (No.) (455) – Control of acid or otherwise toxic aqueous discharges from abandoned mines or mine waste. Practice not funded in TN	Could involve an elaborate system of detention ponds and limestone percolation beds, or the titration of stabilizing chemicals in to water run-off	G	CRS
Land Reconstruction, Abandoned Mined Land (Ac.) (543) Restoring land and water areas that are adversely affected by past mining practices and increasing the productivity of the areas for a	These areas are highly disturbed from past (pre- 1977) coal extraction activity. Site may be grown up with vegetation and/or	G	CRS

beneficial use. Practice not funded in TN	bare and eroding.		
Land Reconstruction, Currently Mined Land (Ac.) (544) – Restoring currently mined land to an acceptable form and for a planned use. Practice not funded in TN	These sites are already or will be highly disturbed from recent mining activity	G	CRS
Land Smoothing (Ac.) (466) – Removing irregularities on the land surface. Practice not funded in TN	Tractor or dozer used to smooth field surface to a uniform surface. Usually performed on existing cropland or previously disturbed areas.	G	CRS
Lighting System Improvement (No.) (670) – Replacement or retrofitting existing agricultural lighting system	Practice applied is part of energy conservation using sensors, controls, efficient ballasts and bulbs.	NG	CRS if possible visual effects on APE
Lined Waterway or Outlet (Ft.) (468) – A waterway or outlet with an erosion-resistant lining of concrete, stone, or other permanent material. The lined section extends up the side slopes to the designed depth of flow. The earth above the permanent lining may be vegetated.	Waterway channel is excavated from 12- over 30 inches deep and 2 to over 10 feet wide. Spoil is placed and spread in adjacent field.	G	CRS
Livestock Pipeline (Ft.) (516) – Pipeline installed to convey water to livestock.	Pipe is placed 18- 30 inches below ground into a 4-6 inch wide trench usually dug using a trenching machine	G	CRS
Livestock Shade Structure (No.) (717) – Permanent or temporary framed structure with mesh fabric to shade livestock. Practice not funded in TN	Practice is applied where animal wellbeing is affected by heat or where livestock are excluded from natural shading along streambanks or other water bodies.	PG	CRS
Mulching (Ac.) (484) – Applying plant residues or other suitable materials, not produced on the site, to the land surface.	Usually, composted material, plastic sheeting or other suitable material is placed my hand or machine over the top of a crop field or row bed for crop production	NG	FO
Nutrient Management (Ac.) (590) – Managing the amount, source, placement, and timing of plant nutrients and soil amendments.	Part of normal farming activity. Incorporation of fertilizer into the root zone is extent of soil disturbance.	NG	FO
Obstruction Removal (Ac.) (500) – Removal and disposal of unwanted, unsightly, or hazardous buildings, structures, vegetation, landscape features, trash, and debris.	This limited to man-made and natural obstructions; not intended for removal of obstructions from the aquatic environment	G	CRS
Open Channel (Ft.) (582) – Constructing or improving a channel, either natural or artificial, in which water flows with a free surface. Practice not funded in TN	Excavation of soil and shaping or grading of bottom and banks of channel using heavy equipment	G	CRS
Pond (No.) (378) – A water impoundment made by constructing a dam or an embankment, or by excavating a pit or dugout.	Earthwork is completed using heavy construction equipment to excavate soil and either spread nearby, or to construct a dam. Effective height (for dams) is 35 ft or less..	G	CRS
Pond Sealing or Lining – Bentonite Treatment (No.) (521) – Installing a fixed lining o impervious material or treating the soil in a pond mechanically or chemically to impede or prevent excessive water loss.	Site has already been disturbed for the pond construction. This liner is placed on top of the soil or soil amendments incorporated 6 inches or less.	NG	FO
Precision Land Forming (Ac.) (462) – Reshaping surface of land to planned grades to improve surface drainage and control erosion.	Earthmoving equipment such as a fixed blade, grader, or earth pan is pulled across a field in several directions	G	CRS
Prescribed Burning (Ac.) (338) – Applying controlled fire to a	Controlled fire applied to a predetermined area. Burn plans, permits,	PG	CRS

predetermined area of land to manage grasslands and understory vegetation in forestland.	fire barriers and fire breaks required		
Prescribed Forestry (Ac.) (409) – Conservation plan to maintain or improve forest health.	Includes an inventory of existing forest condition, description of desired condition, schedule of practices for 10-yr period	NG	FO
Prescribed Grazing (Ac.) (528) – A practice in which two or more grazing areas are alternately rested and grazed in a planned sequence; rest periods may be throughout the year or during the growing season of key forage plants.	The actual practice is management by moving livestock animals based on available forage, desired forage height (5" – 8") to avoid over-grazing	NG	FO
Pumping Plant (No.) (533) – A pumping facility installed to transfer water for a conservation need, including removing excess surface or ground water; filling ponds, ditches or wetlands; or pumping from wells, ponds, streams, and reservoirs.	Permanent structure consisting of pump, motor and water conveyance appurtenances. Facility may be housed in a shed or small building.	G	CRS
Residue and Tillage Management: No-Till (Ac.) (329) – Managing the amount and distribution of plant residues on the soil surface year-round, while growing crops in narrow slots or tilled strips in previously untilled soil and residue.	Part of normal farming operation allows for the tillage of strips within the crop field. Other areas are left in herbaceous vegetation or previous crop residue for the current growing season. Requires special equipment.	PG	CRS if tillage operations are more than 8" or first time application
Residue and Tillage Management: Reduced Till (Ac.) (345) – Managing the amount, orientation, and distribution of plant residue on the soil surface year-round, while limiting soil disturbing activities to grow and harvest crops	Part of normal farm operation using normal farming equipment	PG	CRS if tillage operations are more than 8"
Residue Management, Seasonal (Ac.) (344) – Using plant residues to protect cultivated fields during critical erosion periods. Practice not currently funded in TN	Practice attempts to retain crop residues on soil surface after crop harvest. Non-soil disturbing	NG	FO
Restoration and Management of Rare or Declining Habitats (Ac.) (643) – Restoring and managing rare and declining land or water habitats and associated wildlife species e.g. cedar glades, bogs, tall grass prairies, balds, savannas.	Developing shallow micro-topographic features with normal farming equipment, or practices such as brush managements, prescribed burning, conservation covers, animal trails/walkways	PG	CRS
Riparian Forest Buffer (Ac.) (391) – A riparian forest buffer is an area of trees and shrubs located adjacent to water bodies.	Generally, previously cleared land that has been cropped or pastured. Trees planted using a mechanical planter or hand equipment. Minimum width: 35 ft	PG	CRS
Riparian Herbaceous Cover (Ac.) (390) – Establishment of grasses, grass-like plants and forbs in the transition zone between terrestrial and aquatic habitats	Generally planted with normal farming equipment or seed drills. Minimum width: 2.5 times stream width or 35 ft	PG	CRS
Road/Trail/Landing Closure and Treatment (ft.) (654) – Decommissioning or abandoning roads, trails, and landings to prevent erosion or to restore land to productive state	Reshaping and/or excavation, ripping to improve infiltration, rolling (water bars) grade to disperse runoff, seed planting and/or mulching	G	CRS
Roofs and Covers (N0.) (367) – A rigid, semi-rigid, or flexible manufactured membrane or composite material placed over a waste management facility to exclude precipitation or to capture emissions	This practice applies to roof or covers. Actual waste facility construction (if new) would be ground disturbing and reviewed under that class of undertaking	NG	FO

Roof Runoff Structure (No.) (558) – A facility for collecting, controlling, and disposing of runoff water from roofs i.e. gutters.	The placement of gutters on the roof eves and the disposal of the water across the land, away from the building or other nearby structure	NG	FO
Seasonal high tunnel (Ft^2) (798)-A seasonal polyethylene structure used to extend growing season of crops	Includes rotating structure at different locations to cleanse soil from disease buildup	PG	CRS
Sediment Basin (No.) (350) – A basin constructed to collect and store sediment and floatable debris.	Earthwork using heavy construction equipment to excavate and place fill to form a berm, dam or pit	G	CRS
Shallow Water Development and Management (Ac.) (646) – Inundation of lands to provide habitat for fish and/or wildlife. Practice not funded in TN	Use of structures to impound and manage shallow water areas	G	CRS
Silvopasture (Ac.) (381) – Agroforestry practice designed and managed for production of trees, tree products, forage, and livestock on same acreage	Associated practices may include forest stand improvement, tree/shrub establishment, prescribed grazing	PG	CRS
Spoil Spreading (Ac.) (572) – Disposal of excavated materials from a drainage ditch or irrigation canal by spreading the surplus over adjacent land. Practice not funded in TN	Disposal of excavated materials from a drainage ditch or irrigation canal by spreading the surplus over adjacent land	PG	FO
Spring Development (No.) (574) – Improving springs and seeps by excavating, cleaning, capping, or providing collection and storage facilities.	Earthwork generally completed using heavy construction equipment to excavate and place fill to form a berm, dam or pit	G	CRS
Stream Crossing (No.) (578) – A stabilized area or structure constructed across a stream to provide a travel way for people, livestock, equipment, or vehicles.	Installation of a stable sloped approaches to stream usually underlain with geotextile and topped with gravel area	G	CRS
Stream Habitat Improvement and Management (Ac.) (395) – Maintain, improve or restore the physical, chemical, and biological functions of a stream and associated riparian zone. Practice not funded in TN	May include in-stream structures and practices for adjoining riparian vegetation management e.g. plantings, brush management, etc.	PG	CRS
Streambank and Shoreline Protection (Ft.) (580) – Using vegetation or structures to stabilize and protect banks of streams, lakes, or excavated channels against scour and erosion.	Areas generally disturbed by high velocity water flows across the landscape or scoured banks. Area affected may be artificial or natural. Structures may include rock riprap, geotextiles, gabions, concrete blocks, and bio-engineering methods	G	CRS
Strip cropping (Ac.) (585) – Growing crops in a systematic arrangement of strips or bands on the contour to reduce water erosion. The crops are arranged so that a strip of grass or close- growing crop is alternated with a strip of clean-tilled crop or fallow or a strip of grass is alternated with a close-growing crop.	Normal farm activity using normal farming equipment that does not excavate deeper than previous farming activities	NG	FO
Structure for Water Control (No.) (587) – A structure in irrigation, drainage, or other water management systems that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation.	Usually consists of a pipe or weir with a movable gate. The structure is installed into an earthen embankment.	PG	CRS
Subsurface Drain (Ft.) (606) – A conduit, such as tile, pipe, or corrugated tubing installed beneath the ground surface to collect and	A pipe is installed 12 inches to five feet below the soil surface using a backhoe or trenching machine	G	CRS

convey drainage water.			
Surface Drainage, Field Ditch (Ft.) (607) – A graded ditch for collecting excess water in a field. Practice not available in TN	Can be constructed using a tractor-mounted grading blade or small dozer. Ditch can be 12 - 24 inches deep or more and 12 to 30 inches or more wide.	G	CRS
Surface Drainage, Main or Lateral (Ft.) (608) – An open drainage ditch constructed to a designed size and grade. Practice not funded in TN	Generally constructed using construction equipment such as a backhoe or excavator	G	CRS
Terrace (Ft.) (600) – An earth embankment or a combination ridge and channel constructed across the field slope.	Soil is pushed into a berm 18-30 inches high or more and 6-20 feet wide or more. A 6-12 inch channel is cut uphill of the terrace.	G	CRS
Tree and Shrub Establishment (Ac.) (612) – To set tree seedlings or cuttings in the soil.	Trees are planting on a 10 ft by 10 foot or lessor density, generally using tractor pulled mechanical planter that mimics normal farm tillage operation and does not excavate deeper than previous farming activities. Trees may also be hand planted.	PG	FO
Tree and Shrub Site Preparation (Ac.) (490) – Treatment of areas to improve site conditions for establishing trees and/or shrubs	Various types of equipment used for mechanical removal e.g. shearing large standing trees, root raking, chopping, disking, sub soiling and ripping	G	CRS
Underground Outlet (Ft.) (620) – A conduit installed beneath the surface of the ground to collect surface water and convey it to a suitable, stable outlet down gradient e.g. streams, ditches, wetlands	A pipe is installed 12 inches to five feet below the soil surface using a backhoe or trenching machine	G	CRS
Upland Wildlife Habitat Management (Ac.) (645) – Retaining, creating, or managing areas, other than wetland, for food and shelter for wildlife.	May entail the plating of food plots or placement of brush piles for habitat. Varies by site, but generally non-intrusive. Vegetation may be manipulated by prescribed burning, mechanical, chemical, biological or combination of methods	PG:	CRS:
Vegetative Treatment Area (Ac.) (635) – Vegetative strip or are of herbaceous plants to treat or trap contaminated runoff	Strips planted with normal farm equipment. Associated practices may include ditch, curb, or gated pipes to disperse flow as sheet flow into strip. Livestock to be excluded (fencing).	PG:	CRS:
Waste Facility Closure (No.) (360) – Decommissioning of facilities where agricultural waste has been handled, treated, or stored and is no longer used	Process of removing long-term accumulation of sludge, floating matter, and wastewater from lagoons, or storage ponds. Impoundments may be breached, filled, or converted to fresh water storage	PG	CRS
Waste Facility Cover (No.) (367) – A fabricated rigid, semi- rigid, or flexible membrane over a waste treatment or storage facility.	Installation of a fabricated rigid, semi-rigid, or flexible membrane over a waste treatment or storage facility	NG	FO
Waste Field Storage (No.) (749) – Temporary stacking of manure/litter outside under a non-structural cover.	Temporary stacking of manure/litter outside under a non-structural cover	NG	FO
Waste Recycling (Ac.) (633) – Using agricultural production by-products, or agricultural use of non-agricultural by-products	Collection and surface application of collected manures, bedding material and other biodegradable products for land application by normal tillage.	NG	FO
Waste Separation Facility (No.) (632) – Filtration or screening device, settling tank, settling basin, or settling channel used to separate solids from liquid waste stream.	Installation of a filtration or screening device, settling tank, settling basin, or settling channel used to separate a portion of solids from a liquid waste stream	G	CRS

Waste Storage Facility (No.) (313) – A waste storage impoundment made by constructing a pond (embankment and/or excavated pit or dugout), or by fabricating a structure.	Usually constructed of earth materials using heavy construction equipment, or the placement of a concrete structure or other storage vessel	G	CRS
Waste Transfer (No.) (634) – A conveyance system using structures, conduits, or equipment to transfer wastes from agricultural operation to point of usage.	Pump and pipe is usually installed to move waste with force from one place to another. Pipe may be installed underground, concrete box may be constructed.	PG	CRS
Waste Treatment (No.) (629) – The mechanical, chemical, or biological treatment of agricultural waste.	Associated components may include collection points, storage and transfer facilities, pipelines, fencing, and treatment structures. Support practices will be individually reviewed per classification in this table	PG	CRS
Waste Treatment Lagoon (No.) (359) – An impoundment made by excavation or earth fill for biological treatment of animal or other agricultural waste. Practice not funded in TN	Heavy construction equipment is used to excavate soil at least 10 feet deep. Soil is placed along top and shaped into a berm.	G	CRS
Wastewater Treatment Strip (Ac.) (635) – A treatment component of an agricultural waste management system consisting of a strip or area of herbaceous vegetation.	Installation of a treatment component of an agricultural waste management system consisting of a strip or area of herbaceous vegetation	NG	FO
Water and Sediment Control Basin (No.) (638) – An earth embankment or a combination ridge and channel generally constructed across the slope and minor water courses to form a sediment trap and a water detention basin.	Constructed using heavy construction equipment. However, the sites are almost always severely degraded form erosion. Soil is collected form surrounding site and placed into an embankment 2 - 6 feet high. An underground outlet is almost always installed in conjunction with this practice.	G	CRS
Water Well (No.) (642) – A well constructed or improved to provide water for irrigation, livestock, wildlife, or recreation.	Generally constructed by driving 2 - 12 inch metal casings into the ground 20 - 200 feet deep. Disturbed area usually <16 sq. ft. Some wells are hand-dug.	PG	CRS -
Water Well Decommissioning (No.) (351) – The sealing and permanent closure of water well no longer in use.	Plugging, sealing, removing of casing	PG	CRS -
Watering Facility (No.) (614) – A permanent or temporary device to provide adequate amount and quality of water to livestock and wildlife	Installation of a device e.g. tank, trough, pump, watertight container and piping	PG	CRS
Well Water Testing (No.) (355) – Physical, chemical, biological parameter testing of groundwater in well or spring developments	Parameters tested site specific	NG	FO
Wetland Creation (Ac.) (658) – Establishment of a wetland that was historically non-wetland	May include land shaping, clearing, berms, water (level) control structures, vegetation plantings	G	CRS
Wetland Enhancement (Ac.) (659) – Rehabilitation or re-establishment of degraded wetland and/or to modify existing wetland to improve functions	May include sediment removal, excavation of pipes/tiles, ditch plugs, levee/dike breaks, earthmoving	G	CRS
Wetland Restoration (Ac.) (657) – Return of a wetland and its functions to approximate original conditions to provide hydrological and biological benefits.	Usually consists of other practices such as tree planting, dike construction or removal, water control structures, or vegetative restoration to re-create the natural hydrology and biology	G	CRS
Wetland Wildlife Habitat Management (Ac.) (644) – Used to	Usually managing other practices that effect habitat and hydro-	PG	CRS

create or improve habitat for waterfowl, furbearers, or other wildlife by retaining, creating, or managing wetland habitats. Practice not funded in TN.	period. Applies to existing wetland areas.		
Wildlife Watering Facility (No.) (648) – Constructing, improving, or modifying watering places for wildlife. Practice no longer available in TN.	Heavy construction equipment is used to excavate and shape soil	G	CRS
Windbreak/Shelterbelt Establishment (Ft.) (380) – Single or two rows of trees or shrubs in a linear configuration to serve as a visual or noise screen, odors or dust from agricultural operation, and enhance wildlife habitat .	Planting of two or more rows of trees using hand tools or mechanical tree planters	PG	CRS
NOTES			
Unit of measure for practice denoted as Ac. (acres); Ft. (linear feet); No. (number)			
Practice code is 3 digit number in practice name; standard national code			
ABBREVIATIONS			
G: ground disturbing practice; approval to proceed must be obtained from CRS	**PG**: potential ground disturbing practice; review and approval to proceed must be obtained from CRS		
NG: non-ground disturbing; practice does not have potential to effect cultural resources and as such does not need CRS review or approval. FO documents "NG" on NRCS CPA-52 Environmental Evaluation worksheet. No further action needed	**FO** means field office employee trained in cultural resources identification and review. FO employee must have completed module training and planning certification requirements. FO visual observation requires that at least 50% of the ground surface must be visible.	**CRS** is professional archeologist; designated as NRCS cultural resources specialist	

APPENDIX B
PROCEDURES FOR EMERGENCY RESPONSE

NRCS TENNESSEE
EMERGENCY WATERSHED PROTECTION PROGRAM EMERGENCY RECOVERY
REVISED DRAFT SEPTEMBER 2013

(Document not included. Available electronically upon request.)

APPENDIX C
GLOSSARY OF ACRONYMS USED IN THIS DOCUMENT

USDA	**United States Department of Agriculture**
NRCS	**Natural Resources Conservation Service**
ACHP	**Advisory Council on Historic Preservation**
NHL(s)	**National Historic Landmark(s)**
NRHP	**National Register of Historic Places**
SHPO	**State Historic Preservation Officer**
THPO	**Tribal Historic Preservation Officer**
NCSHPO	**National Conference of State Historic Preservation Officers**
NHO	**Native Hawaiian Organization**
NEPA	**National Environmental Policy Act**
CEQ	**Council on Environmental Quality**
DHS	**Department of Homeland Security**
FEMA	**Federal Emergency Management Agency**
NHPA	**National Historic Preservation Act**
FPO	**Federal Preservation Officer (Federal Preservation Officer)**
SPO	**Senior Policy Official (NRCS)**
NHQ	**National Headquarters (NHQ)**
APE	**Area of Potential Effect—from ACHP regulations 36 CFR Part 800**
CRS	**Cultural Resources Specialist (NRCS—meets Secretary of Interior's Professional Qualification Standards, generally an archaeologist or historian)**
EWP	**Emergency Watershed Program (NRCS program)**

APPENDIX D
TENNESSEE SHPO
REFERENCE DOCUMENTS

"Section 106 Initial Review Checklist":
http://www.tn.gov/environment/history/docs/check12.pdf

"**Assessing Project Effect Checklist"**
http://www.tn.gov/environment/history/docs/check34.pdf;

"**Reporting Standards Checklist**"
http://www.tn.gov/environment/history/docs/appexb.pdf.