Conservation Evaluation and Monitoring Activity

In-Field Soil Health Assessment

CEMA 215

Definition

Assess in-field soil health by utilizing the most current published assessment guide appropriate to the land use and selected assessment tool.

Applicable Land Uses

Crop, forest, pasture, and range.

> *Note: This CEMA applies to a single land use at a time (e.g., Crop, Forest, Pasture, or Range), as each requires a specific assessment tool. A separate CEMA 215, including a full set of deliverables, is required for each land use assessed.*

REQUIREMENTS

Qualified Individual Requirements

The Natural Resources Conservation Service (NRCS) encourages Conservation Evaluation and Monitoring Activity (CEMA) participants to verify their chosen Qualified Individual (QI) meets the requirements by reviewing their credentialing documentation.

A QI for CEMA 215 In-Field Soil Health Assessment must meet one of the following:

1) Certified Crop Advisor (CCA) or Certified Professional Agronomist (CPAg) through the American Society of Agronomy or a Certified Professional Soil Scientist (CPSS) or Associate Professional Soil Scientist (APSS) through the Soil Science Society of America.
2) Technical Service Provider (TSP) certified for Conservation Practice Activity (CPA) Soil Health Management Plan (Code 116) or Design and Implementation Activity (DIA) Soil Health Management (Code 162).
3) An associate degree or higher in an agricultural, forestry, forage, range, or soil science field with at least 1 year of experience assessing soil health.

General Requirements

1) This CEMA includes the performance of work and documentation of the tasks, results, interpretations, and other activities described herein by a QI.
2) Prior to initiation of the CEMA, the QI must arrange a pre-work conference to ensure all parties understand the participant's objectives, required deliverables, and characteristics of the CEMA tasks.
    a) The parties in the pre-work conference must include the participant, the QI, and the NRCS field office staff. The parties should agree whether they will join in-person or join via phone, web-meeting, etc.
    b) If a Technical Service Provider (TSP) is needed to support a specific practice or intends to

use the results in conservation planning, it is recommended that the TSP be invited to the pre-work conference.

3) A QI may use any reference information, resource concerns, conservation practice standards and related documents served in the NRCS Field Office Technical Guide (FOTG) for the state where this CEMA is performed.

Technical Requirements

1) Complete the in-field soil health assessment using the guide from Table 1 specific to the land use.
2) Assess and record all required field indicators according to the published assessment guide.
3) Ensure results clearly reflect conditions under the participant's current implemented management.
4) Summarize observations and findings in a way that evaluates the potential influence of current management, conservation practices, or management changes on observed soil health resource concerns.
   a) Utilize the National Resource Concern List and Planning Criteria (USDA NRCS May 2026), or its replacement, to determine soil health resource concerns if not included in the assessment guidance.

Table 1. Assessments that can be used for soil health by land use.

Land Use	Applicable Assessment(s)
Crop	National Cropland In-Field Soil Health Assessment (CIFSHA) Note: State CIFSHA can be used if established for state where crop land is located.
Forest	Forestland In-Field Soil Health Assessment (FIFSHA)
Pasture	Pasture Condition Score (PCS) Determining Indicators of Pasture Health (DIPH)
Range	Rangeland In-Field Soil Health Assessment (RIFSHA) Interpreting Indicators of Rangeland Health (IIRH)

Note: If links no longer work, please use eDirectives and details in references to navigate to the appropriate assessment document.

DELIVERABLES

The QI must provide documentation showing that all tasks indicated in the **General Requirements** and **Technical Requirements** sections are complete, along with the following sections:

Cover Page

Cover page reporting the technical services provided by the QI. Cover page(s) must include the following:

1) CEMA name and number.
2) Participant information: Name, farm bill program name, contract number (QI obtains contract number from participant), land identification (e.g., state, county, farm, and tract number).
3) QI name, address, phone number, and email.
4) A statement by the QI explaining how they currently meet the Qualified Individual Requirements for this CEMA. Attaching or enclosing a copy of documentation on how the QI requirements are met is encouraged. Examples include:
    - Certification Name and Number,
    - License Name and Number,
    - Other brief written statement indicating how the requirements of a QI for this CEMA are met.
5) A statement by the QI that services provided meet NRCS requirements, such as:

    I certify the work completed and delivered for this CEMA:

    - *Complies with all applicable federal, state, tribal, and local laws and regulations.*
    - *Meets the general requirements, technical requirements, and deliverables for this CEMA.*
    - *Is consistent with and meets the conservation objectives for which the program contract was entered into by the participant.*
    - *Addresses the participant's conservation objectives for this CEMA.*

    QI Signature: _____ *Date:* _____
6) A Participant's acceptance statement, such as:

    I accept the completed CEMA deliverables as thorough and satisfying my objectives.

    Participant Signature: _____ *Date:* _____
7) A space for an NRCS reviewer to certify the agency's acceptance of the completed CEMA such as:

    NRCS administrative review completion by:

    Signature: _____ *Title:* _____ *Date:* _____

Notes and Correspondence

1) Document each site visit, its participants, the activity completed in the field, and results of each site visit.
2) Document correspondence between the QI and the participant relating to goals for soil health assessment and completion of this CEMA.
3) Document supporting field notes, observations, data, photos, and assessment results prepared for this CEMA.

Maps, Diagrams, Plan Views

1) Maps to include, but not limited to:
   a) General location map to locate the assessment area, such as geographic coordinates, public land survey coordinates, roads to access the site, etc.
   b) Map showing assessment locations on the PLU polygon data and GPS point data (WGS84 latitude, longitude) for assessment locations.
   c) Other maps as needed, with appropriate interpretations.
2) All maps developed for the CEMA will include:
   a) Map title.
   b) Client's name (individual or business).
   c) Assisted By [QI name].
   d) Date prepared.
   e) Map scale.
   f) North arrow.
   g) Appropriate map unit symbols and a map symbol legend on the map or as an attachment.

Evaluation or Monitoring Results

At a minimum, prepare a report (including the following):

1) Documented indicator ratings and observations collected according to the published assessment guide.
2) Completed assessment worksheets for the applicable land use (crop, forest, pasture, or range).
3) A summary of findings that evaluates the potential influence of current or implemented management on the observed soil health resource concerns.
4) Schedule of additional evaluation and monitoring as determined by NRCS. The QI will identify additional evaluation and monitoring needed for NRCS to consider.

Deliver Completed Work

The QI must:

1) Prepare two complete, identical sets of all deliverables.
2) Provide one set (Participant's Copy) directly to the participant for their permanent records.
3) Provide the second set (NRCS Field Office Copy) to the participant for submission to the agency.
   - The QI may submit deliverables directly to the local NRCS Field Office only if authorized by the participant using the CPA-1270 form.

The participant must:

1) Deliver the NRCS Field Office Copy to the local NRCS office or provide authorization (using the CPA-1270 form) for the QI to deliver it on their behalf.
2) Ensure that, by either method, the copy is submitted early enough to allow for a thorough agency review before final acceptance is requested.

References

US Department of the Interior, Bureau of Land Management. 2020. Interpreting Indicators of Rangeland Health, Version 5 Tech Ref 1734-6. Denver, CO. https://www.blm.gov/sites/blm.gov/files/docs/2020-12/IB2021-007_att1.pdf

USDA Natural Resources Conservation Service (NRCS). (n.d.). Field Office Technical Guide. Washington, D.C. https://efotg.sc.egov.usda.gov/#/

USDA NRCS. 2020. Guide to Pasture Condition Scoring. Washington, D.C. https://www.sare.org/wp-content/uploads/2020-Guide-to-Pasture-Condition-Scoring.pdf

USDA NRCS. 2020. Pasture Condition Score Sheet. Washington, D.C. https://www.nrcs.usda.gov/sites/default/files/2022 09/Pasture%20Condition%20Score%20Sheet.pdf

USDA NRCS. 2026. National Instruction Subpart C, Part 309 (Title 450), National Resource Concern List and Planning Criteria. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Ecological Sciences Division. 2024. Range and Pasture Technical Note No. 4 (Title 190), Determining Indicators of Pasture Health. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Soil Health Division. 2025. Soil Health Technical Note No. 8 (Title 470), Forestland In-Field Soil Health Assessment (FIFSHA) Guide, Version 1.3. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Soil Health Division. 2025. Soil Health Technical Note No. 10 (Title 470), Cropland In-Field Soil Health Assessment Guide. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Soil Health Division. 2025. Soil Health Technical Note No. 11 (Title 470), Rangeland In-Field Soil Health Assessment (RIFSHA) Guide. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Soil Health Division. 2025. Soil Health Technical Note No. 12 (Title 470), Determining and Managing for Soil Health in Pasture. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Soil Health Division. 2025. Soil Health Technical Note No. 15 (Title 470), Pastureland Soil Health: Soil Organism Habitat Loss or Degradation, Version 2. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Soil Health Division. 2025. Soil Health Technical Note No. 18 (Title 470), The Basics of Addressing Resource Concerns with Conservation Practices within Integrated Soil Health Management Systems on Cropland, Version 2. Washington, D.C. https://directives.sc.egov.usda.gov/

USDA NRCS Soil Health Division. 2026. Soil Health Technical Note No. 19 (Title 470), Soil Health Principles. Washington, D.C. https://directives.sc.egov.usda.gov/