

Environmental Quality Incentives Program Soil Health Initiative

Baseline Assessment

Soil Evaluation And Baseline Determination

Soil quality is the inherent capacity of the soil to perform its important biological, physical and chemical functions. Soil health represents the condition of the soil as a result of its management. Soil health can be evaluated for each individual soil using indicators that reflect changes in the capacity of the soil to function. Useful indicators are those that are sensitive to change and change in response to management. The type and number of indicators used depends on the scale of the evaluation and the soil functions of interest.

To evaluate soil health, indicators can be assessed at one point in time or monitored over time to establish trends.

An **assessment** provides information about the current functional status or health of the soil. The assessment must start with an understanding of the standard, baseline value, or reference value to be used for comparison. Assessments can be made to help identify areas of special interest or to compare fields under different management systems. Monitoring of soil quality indicators over time identifies changes or trends in the functional status or quality of the soil.

Monitoring can be used to determine the success of management practices or the need for additional management changes or adjustments.

Establishing the Baseline

As a participant in the EQIP Soil Health Initiative, the NRCS-NJ Soils Team will establish a baseline condition by performing these analyses for the next three years to monitor changes in soil health over time.

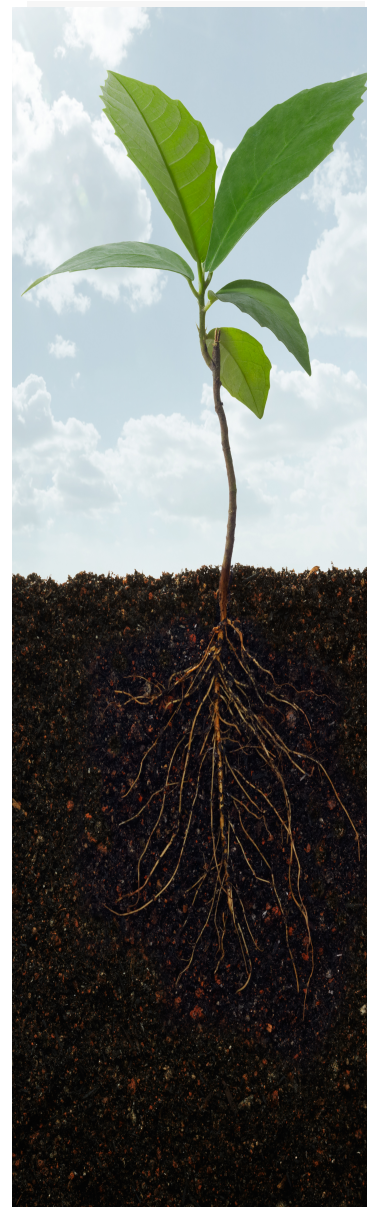


Soil Analyses to include:

- Soil Quality Information Sheet
- Soil profile description
- Soil pH Soil chemical analysis for macronutrients
- Soil electrical conductivity (soluble salts)
- Soil organic matter content
- Bulk density measurement
- Soil infiltration utilizing the Cornell rainfall simulator
- X-Ray Fluorescence (trace metals)
- Electromagnetic induction
- soil microbial activity by Solvita test

For More Information Contact:

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