



Your Regenerative Agriculture Journey:

Soil Health on Cropland



What is Regenerative Agriculture?

Regenerative agriculture is a conservation management approach that emphasizes natural resources through improved soil health, water management, and natural vitality. Emphasizing regenerative agriculture builds upon NRCS's 90 years of conservation work by restoring land health, improving long-term productivity, and ensuring American grown production for the future.



It Starts with a Whole Farm Assessment!

The NRCS Regenerative Pilot Program (RPP) begins with NRCS staff, partners, or technical service providers conducting a whole-farm assessment. An assessment examines the condition of resources across the operation to identify voluntary conservation opportunities. Conservation planning and producer objectives drive the process, ensuring site-specific solutions that work for the producer.

Soil health testing is an important part of the RPP and is required in both year 1 and year 5. The tests are a valuable tool for quantifying some of the soil's physical, biological, and chemical characteristics.

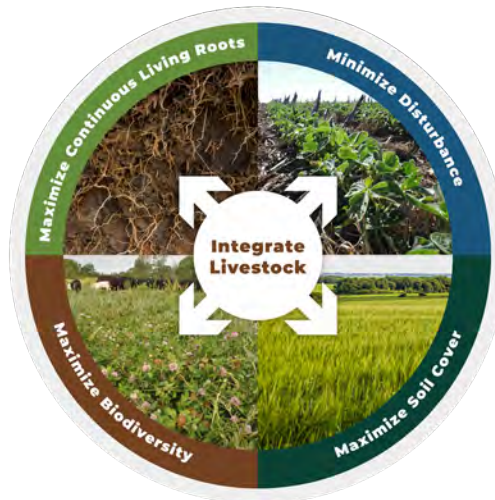
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Putting Conservation Practices to Work

Using the whole farm assessment and conservation planning process, producers identify voluntary conservation practices they would like to implement. The RPP identifies 15 primary conservation practices that producers can select based on their goals and objectives.

Additional NRCS practices can be used to support the regenerative objectives in the right context. Most conservation practices address multiple resource concerns.



NRCS conservation practices are not limited to a single purpose but can have multiple benefits, and the combination of benefits varies with the site conditions and planning.

To make progress on your regenerative journey, follow the soil health principles (see graphic above).



More Information and How to Apply

Farmers and ranchers interested in regenerative agriculture are encouraged to apply through their local NRCS Service Center by their state's ranking dates for consideration in FY2026 funding.

Applications for both EQIP and CSP can now be submitted under the new single regenerative application process.

Scan or click the QR Code for more info.





In any agricultural system, we'd love to have a quick fix to improve soil health, water management, and natural vitality, but these improvements are often a long-term journey. Some improvements may take 5-10 years to become visible or measurable, while others may appear within a single year.



The First Year...

Soil health improvements to your regenerative system start by protecting your soil, including the soil biology, by keeping the soil covered, increasing live roots, and reducing disturbance. A more continuous (undisturbed) soil cover serves as armor to resist erosion from water or wind and provides a steady stream of food for soil organisms. Soil organisms drive dynamic and vital soil processes. Increased plant residues can also increase naturally available water by reducing evaporation and runoff.

Matching nutrient input sources, rates, timing, and placement to crop needs can improve water quality in the first year of implementation by reducing transport off the field and into surface or ground water. Changes in irrigation water management, such as timing and rate, could also yield notable water efficiency benefits during the first year of implementation.

On cropland, depending on your production system, using the following conservation practices can help kick-start these improvements in Year 1: Conservation Crop Rotation (328), Cover Crop (340), Nutrient Management (590), Irrigation Water Management (449), and Residue and Tillage Management, No-Till (329).



Years 2-5...

In the next few years, improvements in soil health are related to continued impacts of soil cover, live roots, reduced disturbance, and varied inputs. Enhancing system biology—from insects to earthworms to microbes—brings many real-life benefits to how the entire system functions, enabling it to support itself with fewer inputs such as tillage, weed and pest control, supplemental fertilizer, and irrigation.

Increased biological activity, along with less soil disturbance, allows more stable soil aggregates to form. Soil aggregates are made up of individual mineral particles all held together with microbial glues, plant roots, and fungal hyphae. Think of soil aggregates as “piggy banks” that hold nutrients, moisture, and organic matter and keep them from being lost to leaching, evaporation, or erosion.

If you have fields with slopes / hills, transitioning to farming on the contour (planting across the slope rather than up and down) can create mini dams at the crop rows that can slow water runoff. You will start to see benefits such as reduced soil erosion, improved moisture retention, and reduced sediment runoff.

In Years 2-5, consider the following conservation practices to continue to build your regenerative system (if not already incorporated): Cover Crop (340), Contour Farming (330), Pest Management Conservation System (595), and if it is possible to integrate livestock into your system, Grazing Management (528).



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5+ Years...

Implementing regenerative agriculture practices for the long-term results in improved soil biology (creating and sustaining soil aggregation), reduced soil erosion and runoff, improved water and nutrient cycling, and overall improved natural vitality. You may find it easier to manage your system, and you likely won't need as many inputs.

You may be able to take advantage of nitrogen fixation from a legume cover crop or livestock manure. With less disturbance and more root exudates, soil organisms that can access and cycle phosphorus, potassium, and micronutrients already present in the soil can make them available to plants.

If you've historically had problems with drought or soil drainage, you may notice system improvements in moisture retention, soil water holding capacity, and how well the soil drains. If you receive more rain than can infiltrate, runoff from your fields will typically have a lower nutrient and sediment load.

Increasing the variety of species in microbial community may also provide support to crops under attack by pathogens and diseases. Some soils have been shown to suppress pathogenic populations as newly-established, mixed microbial communities provide competition and serve as a check on pathogen populations.

INDICATORS	SHORTER JOURNEY 	LONGER JOURNEY 
Natural Soil Properties	Heavy soils, high clay content	Coarse, sandy soils
	High organic matter soils, prairie soils	Lower organic matter soils, forest soils
Previous Management	Already using some soil health principles	Eroded or degraded soils
Management with RPP	Higher level, bundled soil health principles— over- winter cover crop mix, high biomass, no-till, reduced chemical use, more complex rotations	Just meeting soil health principles—winter-killed, single species cover crop, reduced tillage
Climate	Moderate temperatures, adequate rainfall	Cold and/ or dry conditions

Ready To Make Some Changes on Your Farm?

It can be challenging to change your operation and do things differently, but the benefits of transitioning to regenerative agriculture can result in increased land value and profitability. Start small and as you figure things out, add more fields and higher levels of management to your operation.

NRCS Conservation Planners can help you develop a regenerative plan based on your goals and objectives. To start this “conservation conversation,” call your local NRCS team and schedule an appointment today!

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