

PRODUCING A SUSTAINABLE FUTURE: PRODUCERS' FEEDBACK ON THE NATION'S LEADING CONSERVATION PROGRAM



A REPORT BY KELSEY WILLARDSON
WITH SUPPORT FROM KAYLA BERGMAN



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RURAL AFFAIRS

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with support from Kayla Bergman

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In spring 2022, the Center for Rural Affairs surveyed farmers and ranchers about their experiences with CSP. Participants provided key insights into how CSP has helped enhance their operations and affected their soil quality. | Photo by Kylie Kai

I. INTRODUCTION

The Conservation Stewardship Program (CSP) specializes in supporting continued conservation on productive agricultural lands, commonly referred to as working lands.¹ It is administered by the U.S. Department of Agriculture’s Natural Resources Conservation Service (USDA-NRCS) and is the largest conservation program in the U.S. This approach supports conservation without taking land out of production and provides financial and technical support for farmers and ranchers to care for the land and local resources.

In spring 2022, the Center for Rural Affairs surveyed farmers and ranchers in Nebraska, Iowa, Minnesota, South Dakota, and Kansas about their experiences with CSP. Participants were mailed voluntary questionnaires covering several aspects of CSP. A total of 421 surveys were completed and returned to the Center.

Participants provided key insights into how CSP has helped enhance their operations and affected their soil quality. They also offered feedback on soil-testing requirements, changes to the application process, and suggestions for additional enhancements and improvements for the program. These insights from end-users of the program highlight the most beneficial aspects of the program and provide input for growth and improvement.

1 “Conservation Stewardship Program: Rewarding farmers for adopting and managing advanced conservation systems.” National Sustainable Agriculture Coalition, April 2019, sustainableagriculture.net/publications/grassrootsguide/conservation-environment/conservation-stewardship-program. Accessed November 2022.

The goal of federally funded conservation efforts, such as CSP, is to “Provid[e] assistance to agricultural producers and landowners to adopt conservation activities on agricultural and forest lands to protect and improve water quality and quantity, soil health, wildlife habitat, and air quality.”² CSP is intended to support producers already engaged in conservation to continue and improve their work and focus on priority resources.

Priority resources are the state NRCS’s highest natural resource concerns. They are determined annually by conservationists, who are advised by State Technical Advisory Committees on what local resources are in need of attention. These priorities vary between states and help inform conservation planning and funding.³ For example, Iowa’s top three priority resources for 2022 included wind and water erosion, concentrated erosion, and soil quality limitations.⁴

II. CSP ENHANCES FARMING OPERATIONS

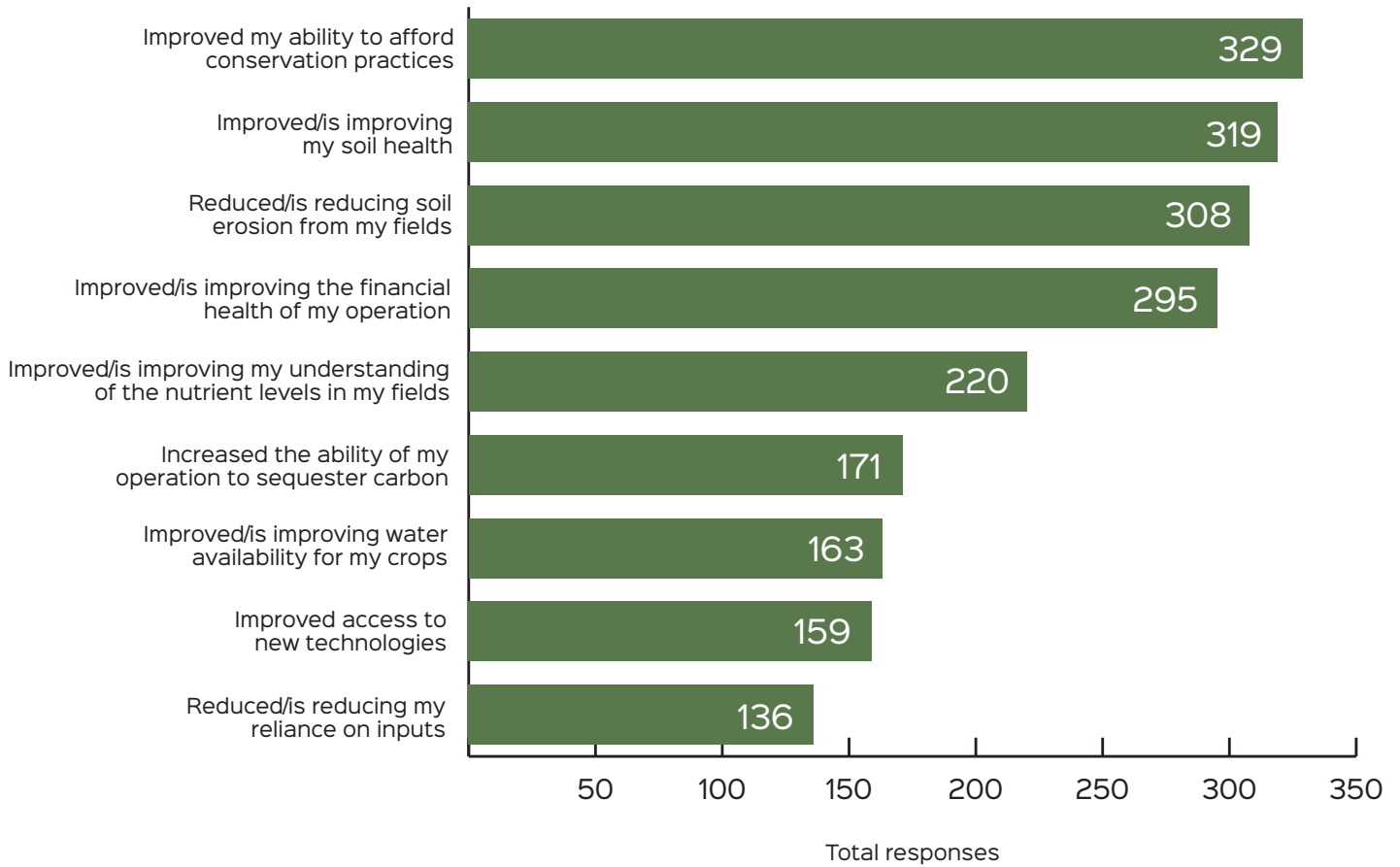
According to the survey, CSP has enhanced many aspects of farming operations. See Figure 1 on page 2. Nearly 79% of respondents identified the program’s ability to improve the affordability of con-

2 “H.R.2 - Agriculture Improvement Act of 2018, Public Law No. 115-334, Title II: Conservation.” U.S. Congress, Dec. 20, 2018, [congress.gov/bill/115th-congress/house-bill/2/text](https://www.congress.gov/bills/115/2/text). Accessed November 2022.

3 “State Technical Committees.” U.S. Department of Agriculture, Natural Resources Conservation Service, [nrcs.usda.gov/state-technical-committees](https://www.nrcs.usda.gov/state-technical-committees). Accessed November 2022.

4 “Conservation Stewardship Program - Iowa.” U.S. Department of Agriculture, Natural Resources Conservation Service, [nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program/iowa/conservation-stewardship-program](https://www.nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program/iowa/conservation-stewardship-program). Accessed November 2022.

FIGURE 1. HOW CSP ENHANCES OPERATIONS



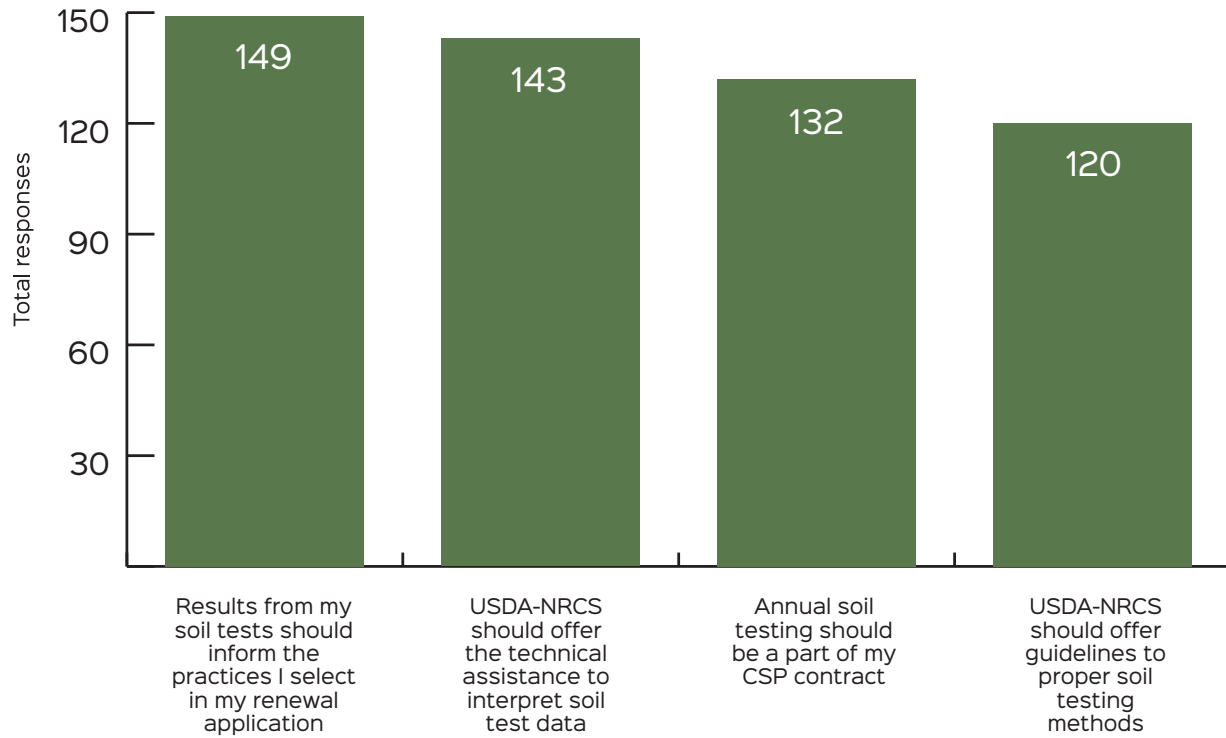
conservation practices as the top enhancement they've experienced. The cost of conservation practices is a common barrier for producers, so increasing the affordability of these practices affects their adoption and continuation. More than 70% of participants said CSP improved or is improving the financial health of their operations. As the majority of producers depend on their operations to make a living, maintaining good financial health is essential. By improving this aspect of their operations, CSP is strengthening agricultural communities.

Healthy crop production and yields depend on soil nutrients, which vary across crops. Understanding how to amend soil to meet crops' needs can be complex. About 50% of respondents reported that CSP has or is helping them understand the nutrient

levels in their fields, which shows there is room for the program to expand its support services for soil testing and data interpretation. This knowledge is essential for producers and helps determine future management in their operations.

Implementing CSP practices helps producers reduce soil erosion and improve soil health. CSP-supported conservation efforts have improved or are improving the soil health for 76.5% of survey participants. Improved soil health reduces the need for soil inputs and increases carbon sequestration. Healthy soil is better able to store and absorb oxygen, carbon, and water, leading to healthier plants and reduced wind and water erosion.

FIGURE 2. SOIL TESTING FEEDBACK



III. SOIL TESTING WITHIN CSP

The status of the soil must be understood to determine the effectiveness of conservation practices and inform future management decisions. As the Center’s survey indicates, many producers believe soil testing should be a larger part of CSP and that testing results should inform future conservation practices. See Figure 2.

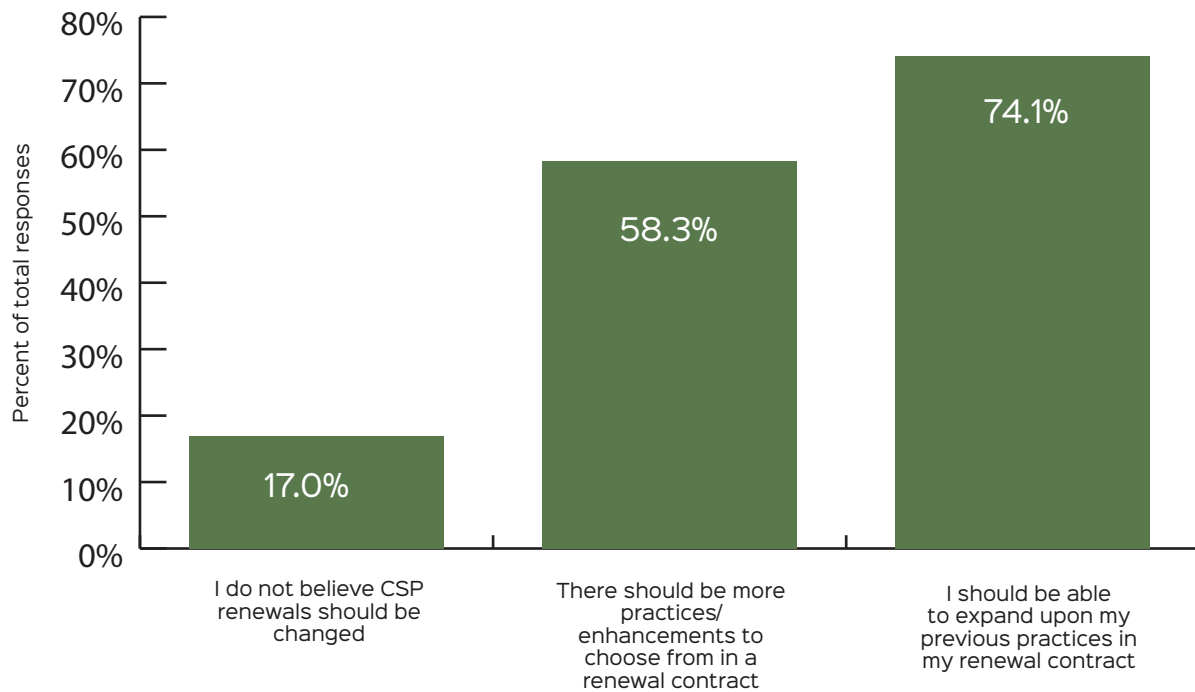
Producers must be able to understand and accurately interpret their soil test results, especially from a conservation perspective. For this reason, 143 respondents indicated support for USDA-NRCS to provide technical assistance, and 120 were in favor of establishing guidelines for soil testing. Adding this assistance will empower producers to fully use soil testing data to make informed decisions on future practices, especially in a time of rising input prices. Routine soil testing will also provide clearly defined and measurable values to conservation efforts, helping quantify their effectiveness.

The desire for additional soil testing aligns with recommendations from the Soil Health Institute, a global nonprofit dedicated to studying and improving soil and empowering farmers with this knowledge. After a three-year study conducted throughout North America, Soil Health Institute determined three key measurements that accurately represent soil health: soil organic carbon concentration, carbon mineralization potential, and aggregate stability.⁵

Measuring soil organic carbon can determine the soil’s water-holding capacity, nutrient levels, structure, and biodiversity. Carbon mineralization potential measures the size and structure of the microbial communities living within the soil, which helps inform nutrient availability and resistance to chang-

5 “Soil Health Institute Announces Recommended Measurements for Evaluating Soil Health.” Soil Health Institute, Aug. 12, 2022, soilhealthinstitute.org/news-events/soil-health-institute-announces-recommended-measurements-for-evaluating-soil-health. Accessed November 2022.

FIGURE 3. RECOMMENDED CHANGES TO THE CSP RENEWAL PROCESS



ing climate.⁶ It also helps determine soil aggregation, which is the arrangement of major soil components such as sand, silt, and clay.⁷ Aggregate stability tests then determine how strongly these components are grouped together, which helps inform how absorbent the soil is to water and air, how easy or difficult it may be for plants to take root in the soil, or if the area is susceptible to high rates of erosion.⁸

The Soil Health Institute recommends these measurements as a starting point to determine overall soil health, and advises the inclusion of other soil

tests for more specific soil quality research.⁹ This information can assist farmers with soil management, which can lead to increased yields and higher profits.

IV. CSP RENEWALS

The renewal process for CSP contracts changed under the 2018 farm bill. Previously, contracts were renewed automatically for interested producers. Now, farmers wishing to renew their contract must compete with other applicants.¹⁰ Participants were asked about their opinions on the current renewal process. Of those who responded, 17% thought no changes should be made to the current renewal process.

6 Ibid.

7 “Aggregation.” North Dakota State University, ndsu.edu/soilhealth/soil-health/soil-property-1/aggregation. Accessed November 2022.

8 “Soil Health Institute Announces Recommended Measurements for Evaluating Soil Health.” Soil Health Institute, Aug. 12, 2022, soilhealthinstitute.org/news-events/soil-health-institute-announces-recommended-measurements-for-evaluating-soil-health. Accessed November 2022.

9 Ibid.

10 Johnson, Anna. “New CSP rule expands eligibility, but contracts not automatically renewed.” Center for Rural Affairs, Dec. 6, 2019, cfra.org/blog/new-csp-rule-expands-eligibility-contracts-not-automatically-renewed. Accessed November 2022.

Renewal contracts are also hindered by the limited number of enhancement options. More than 58% of respondents believe there should be more practices/enhancements from which to choose. Nearly 75% believe they should be able to expand on previous practices in their renewal contract. Figure 3 on Page 4 depicts participants' responses.

Respondents offered suggestions for additional enhancements for the program. The most common of these were:

- More options targeted at pasture management.
- More options for forestry and tree management.
- More support for edge of field management.
- Assistance in purchasing equipment for conservation work.
- Funding for irrigation systems.
- Requiring farmer education.

Respondents also called for additional measurements to the program. Suggested measures included:

- Soil biomass,
- Soil carbon, and
- Fungus and bacteria ratios in tile water outlets.

The addition of more concrete measurements can help mark farmers' successes as well as indicate areas that need further work or improvement. More enhancements may also benefit producers struggling with renewal contracts. According to feedback from the respondents, CSP becomes less accessible after the first contract has been renewed.

Respondents said if they exceeded the expectations of their first contract or included several enhancements, they found it challenging to renew as they were limited on additional conservation enhancement options. Some would like to be able to build off of past practices or otherwise be credited in their applications for continuing those conservation practices. Producers said the new renewal process was more difficult than their initial CSP contract and would like to see this change.

Other common feedback referred to the variations between local NRCS offices. Some noted that local offices were helpful and informative, while others felt their local offices needed more staff or more training.

Overall, respondents provided significant positive feedback about CSP.

"I really like the program. It has allowed me to put conservation practices on the land I normally would not have. Very pleased."
-Iowa producer

"The CSP contract was very motivational and a big help with costs."
-Minnesota producer

"CSP has increased my awareness [of] the health of pastures and erosion control practices. It has been a kickstart to my five-year improvement plan. I will continue to grow in management, [information], and skills of monitoring and managing."
-Anonymous CSP user

Producers new to the program and those who have been farming for decades expressed gratitude for CSP and the conservation opportunities and funding it has provided.

"As a new farmer, this program has helped me improve a farm that had been neglected by previous owners."
-Iowa producer

"It's good to be recognized for the work in conservation my farm has practiced for 30 years."
-South Dakota producer

"CSP is an outstanding program for conserving our precious ranches and farms for now and the future."
-Nebraska producer

V. CONCLUSION

CSP is designed to help agricultural producers implement and continue conservation work on their operations. The Center for Rural Affairs' survey of CSP participants in midwestern states shows the program is making strides toward its goal. Survey respondents reported the program has or is helping improve the soil health of their land and the financial health of their operations.

Continued funding and support for CSP from Congress will help agriculture operations implement and continue conservation efforts that are improving soil quality and protecting priority resources. To improve the program, we recommended that more enhancements are added to give producers more options for contract renewal.

We also advise that soil testing be incorporated into CSP through enhancement options to help producers track their soil health, inform their conservation practices, and quantify the changes created by CSP practices. To make the most of this data, we recommend that USDA-NRCS provide technical assistance and training to producers to ensure they understand their soil testing results and that those results are appropriately informing their selection of future conservation practices.

About the Center for Rural Affairs

Established in 1973, the Center for Rural Affairs is a private, nonprofit organization with a mission to establish strong rural communities, social and economic justice, environmental stewardship, and genuine opportunity for all while engaging people in decisions that affect the quality of their lives and the future of their communities.