An Ag Innovator's Guide:

Tips for Recommending Innovation and New Technologies for Use in Conservation Assistance



Introduction

If you have recommendations for an innovation that you would like the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) to consider, this fact sheet provides some key questions and background to help you effectively share your ideas and facilitate your initial discussion with NRCS. Innovations do not need to be completely new to be supported by an NRCS activity. It could be an existing innovation that is used in a new geographic location or in a different sector of agriculture or conservation.

This guide includes information geared toward innovations that help address resource concerns. If needed, NRCS can provide appropriate contacts for discussions of other types of innovations, including tools for conservation planning, new technologies for soil measurements, and data and business tools.

Engagement with NRCS state offices is a critical part of the process. Let us know if you have been in contact with other federal agencies or other parts of NRCS (e.g., local working group, State Technical Committee, state office, local field office).

Key Questions to Consider



How does the innovation support the NRCS mission?

- Simply put, NRCS is helping people help the land. NRCS's mission is to deliver conservation solutions so agricultural producers can protect natural resources and feed a growing world. NRCS envisions a world of clean and abundant water, healthy soils, resilient landscapes, and thriving agricultural communities through voluntary conservation.
- As the USDA's primary private lands conservation agency, NRCS works with producers and partners to make decisions informed by objective science that advance technology and standards.
- If the proposed innovation does not appear to advance the mission and support conservation, NRCS may not be the right fit for this innovation. Consider other parts of USDA that support production or marketing of agricultural products if relevant, including the <u>Farm</u> <u>Service Agency</u> or <u>Agricultural Marketing Service</u>.



How does the innovation help address or improve a natural resource concern?

- To address or improve resource concerns, NRCS helps producers voluntarily implement conservation practices, enhancements, and activities. These include management, vegetative, or structural activities that help protect, preserve, manage, and restore natural resources on agricultural, grazing, and forest lands.
- Visit the <u>Conservation Concerns Tool</u> to learn more about NRCS resource concerns, such as those related to soil, water, air, plants, animals, or energy.



What is the research and evidence, including field testing, that supports the innovation?

- To be considered by NRCS, an innovation must have a scientific basis and have been previously evaluated through transparent research. Benefits of the technology must be validated by an independent third party. Third-party validation provides an independent perspective, free from potential conflicts of interest or internal biases. Support within peer-reviewed literature helps ensure the innovation is sufficiently vetted and is suitable for further consideration.
- If the innovation has not yet been thoroughly researched, consider reaching out to your local university or one of USDA's Research, Education and Economics agencies, such as the <u>Agricultural Research</u> <u>Service</u> or <u>National Institute of Food and Agriculture</u> to explore options to support additional research.
- Innovations tested in greenhouses or experimental settings likely require additional on-farm or in-field testing prior to producer adoption. This may include assessment of economic feasibility and accessibility, or other factors that a producer would need to consider for a new technology. While many practices may be applicable nationwide, specific applicability or limitations of the innovation should also be explored.

- If the innovation has not yet been field tested, consider applying for a grant through the <u>NRCS Conservation</u> <u>Innovation Grants (CIG)</u> program.
- Visit the <u>CIG website</u> to learn more about the program and view open or upcoming funding opportunities.



How does the innovation align with an existing Conservation Practice Standard?

- NRCS Conservation Practice Standards (CPS) contain information on why and where a practice is applied, and how it can achieve its intended purpose(s).
 For example, the standards set forth the minimum criteria that must be met during the design and implementation of the practice. If the purpose can be met within an existing CPS, the innovation could be supported through that existing practice.
- For more information on CPS, visit the <u>Conservation Practice Standards Information page</u> where a list of all national CPS can be found. The overview sheets are a good place to start. To find state adopted CPS and associated state-specific documents, visit the <u>Field Office Technical Guide website</u> and Section 4 of your state's guide.
- If the use of a technology aligns with the broader definition of a practice but does not align with the details (e.g., existing purpose, criteria, or specification sections of the CPS), there could be an opportunity to update the CPS as part of its regular review cycle. View this <u>infographic</u> for more information on the national CPS review process.
- If the use of a technology is eligible through NRCS assistance, there may be opportunities for technical guidance to inform appropriate use and promote awareness.
- If the technology aligns to the definition of a practice and addresses additional levels of conservation beyond what the CPS requires, it could be suitable for an enhanced implementation of the practice available through the Conservation Stewardship Program (CSP). CSP is for producers who want to take their conservation efforts to the next level. For more information on CSP and practice enhancements, visit the program web page.

• If the innovation does not align with an existing CPS, it may be appropriate for testing as an Interim Conservation Practice Standard (ICPS). Approved state initiated ICPS requests are typically evaluated over a 3-year period to evaluate new technology or innovations for potential adoption into an existing practice standard or as a new, standalone CPS. If you think an ICPS is appropriate for your innovation, contact your local State office to discuss the idea with a technical specialist or contact your State Technical Committee.





How do the financial assistance options for an existing CPS reflect the implementation of the innovation?

- NRCS provides financial assistance for selected conservation activities. Financial assistance varies by program and state and reflects the estimated incurred costs for equipment, material, and labor associated with practice implementation to address a natural resource concern within the state, as well as considerations for offset costs in some cases. Visit the Payment Schedules webpage for more information and to view state payment scenarios.
- NRCS financial assistance schedules are based on costeffective delivery of program benefits and represent the least costly option to address a resource concern.

More Information

To learn more about NRCS visit <u>nrcs.usda.gov</u>.

To learn more about how NRCS adopts innovations contact your <u>local State office</u> to discuss the idea with a technical specialist or contact your <u>State Technical Committee</u>.

Note: NRCS does not endorse or exclusively recommend any one vendor, contractor, consultant, method, service, or trade name product.