

Resilient Soils and Water Quality Act

2024 Annual Report

This annual report is submitted in accordance with Neb. Rev. Stat. § 2-409(4), which requires the Department of Natural Resources (Department) to report annually, beginning in 2022, the status and progress of implementing the Resilient Soils and Water Quality Act (RSWQA).

Background and Baseline Conditions



Introduced by Senator Tim Gragert of Creighton, LB 925 created the RSWQA. The Act seeks to accelerate the use of best management practices for healthy soil; protect and improve soil and water quality; protect the public's health and enhance agricultural production and profitability; address soil health economics, resource stewardship, and environmental issues; increase awareness, education and promotion of best management practices for healthy soils through producer-to-producer, peer-to-peer, and mentoring relationships; and provide proof of healthy soil benefits

through demonstration and research farms.

Some statewide metrics the Department is using to gage baseline agriculture practices as determined by the 2022 Census of Agriculture (USDA) are:

- No-till is the most widely used practice across the state.
 - o 51% of the acreage on farms with 1,000 to 1,999 acres
 - o 45% of the acreage on farms with more than 2,000 acres

Findings from the 2022 Census of Agriculture show that approximately 900,000 acres of cover crops were grown on about 21 million cropland acres across Nebraska in 2022. Cover crops were planted on about 4.4% of cropland acres across the state (*Figure 1*). Data from the Department's legally irrigable website shows that in 2022 there was a little over 9.7 million acres with the potential to be irrigated.

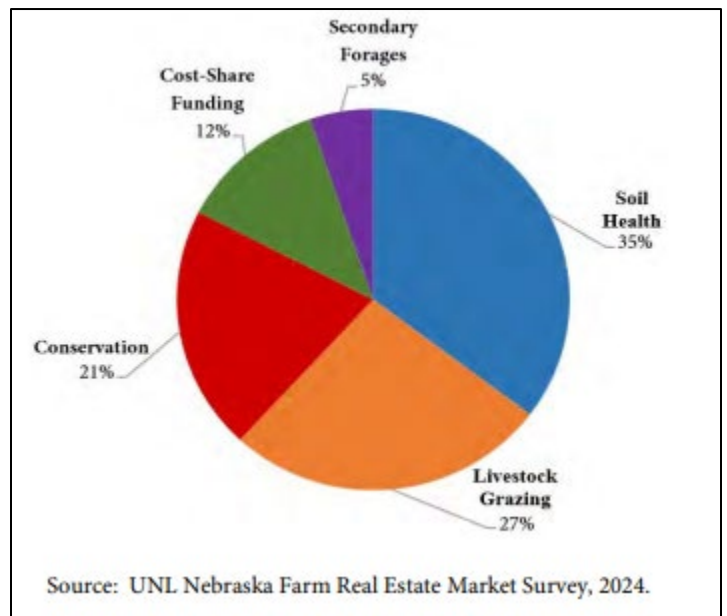
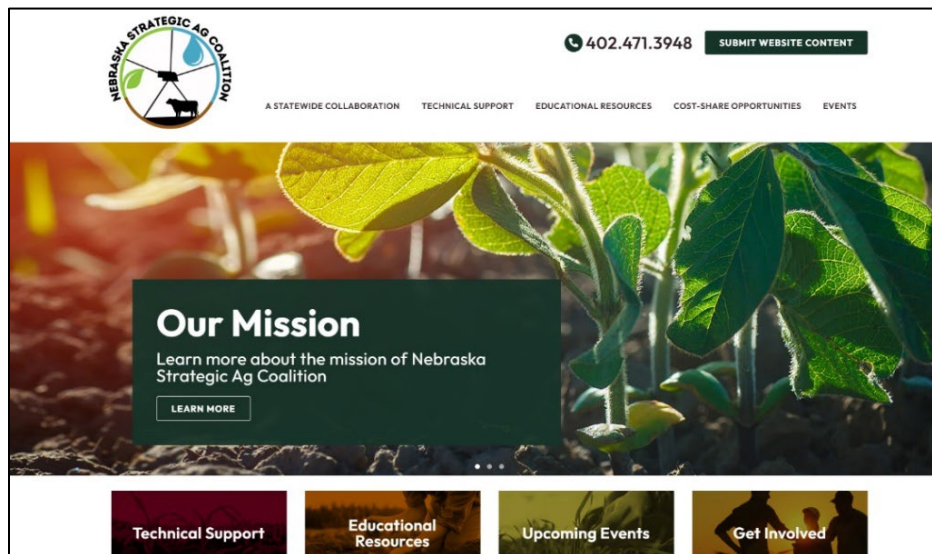


Figure 1 Reasons for Planting Cover Crops on Cropland from Jansen 2024

Current Activities

The Department developed an electronic platform to help engage producers across the state while also promoting educational tools and technical resources. The Department identified and created a working and advisory group with 14 members from Nebraska Corn, Natural Resources Conservation Service (NRCS), Nebraska Association of Resources Districts (NARD), University of Nebraska- Lincoln (UNL) Extension, The Nature Conservancy (TNC), Rainwater Basin Joint Venture, Center for Rural Affairs, Nebraska Department of Environment and Energy (NDEE), Nebraska Wheat, Midwest Cover Crops Council, Nebraska Soybean Board, UNL Agronomy and Horticulture, Nebraska Dry Bean Commission, and the U.S. Fish and Wild Life Service, each working to implement goals like those of the RSWQA.

Website link: <https://nebraskastrategicagcoalition.org/>



Together the group is known as the Nebraska Strategic Ag Coalition (NSAC or the Coalition). NSAC presented at multiple conferences and field events informing producers and agribusiness stakeholders of its shared vision and mission promoting profitable sustainable agriculture. The Coalition connects farmers with essential resources, peer networks, and opportunities that support resilient, profitable farming. By emphasizing best management practices (BMPs), the Coalition aims to boost soil and water health while empowering farmers with the tools needed to adopt environmentally sound practices that can lead to more sustainable long-term operations. NSAC hosted two stakeholder events in 2024 to help identify and define impediments to wide scale adoption of soil health BMPs; and to identify ways to better connect the resources of the partners to Nebraska producers.



Using feedback from stakeholders, NSAC is currently collaborating and refining the website's content and has contracted with UNL to create Nebraskan centered program videos for producers. NSAC is also preparing for multiple statewide producer stakeholders' meetings and producer field days in 2025 to provide observational proof of soil health benefits. Scan the QR code to see some of the videos done so far!



Department staff participated in over 100 events and engaged over 200 producers this year promoting the values set forth in the RSWQA including addressing soil health economics, resource stewardship, and managerial and environmental issues.

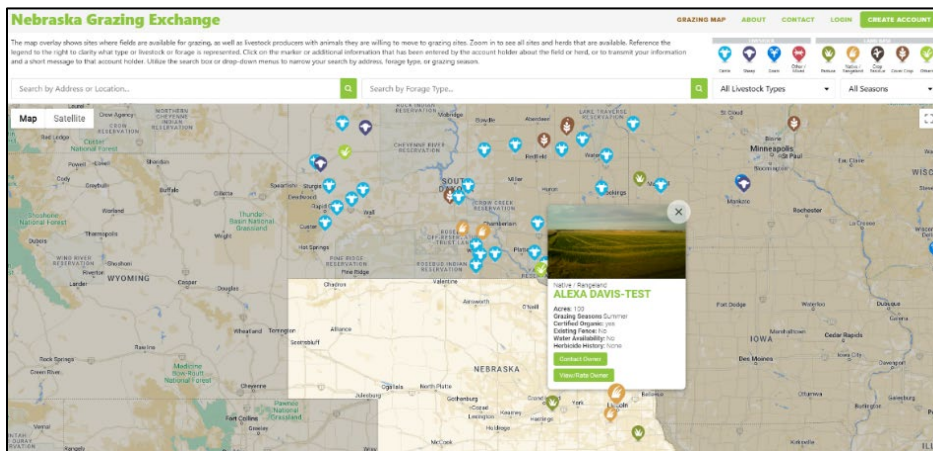
The Department also led a producer networking session during the Northeast Nebraska Ag Conference in December. The 300-seat



event sold out quickly and promoted exchange of soil health practices for farm and ranch. Producers learned from other producers who have adopted soil health BMPs.

The Department also created an online interface that connects producers with forage to those searching for it in an attempt to promote livestock grazing of cover crops as a profitable connection between cattlemen and crop producers. The Nebraska Grazing Exchange website is free to users and is a part of a nationwide effort to connect producers with producers by simply creating a pin and entering their contact information and a description of what they have to offer or what they are looking for. Producers connect and negotiate terms outside of this website. Link:

<https://nebraskagrazingexchange.com/>



The Department also contracted with the Nebraska Soil Health Coalition to drive toward a specific producer centered community in Hastings Nebraska. The Nebraska Soil Health Coalition aims to advance producer-centered education, outreach, and adoption of soil health principles to build resilient farms, ranches, and communities across Nebraska. Nebraska Soil Health Coalition website link: <https://www.nesoilhealth.org/>



Challenges and Obstacles to Widespread Adoption of Soil Health Practices

While many successes have been made, the Department has identified the following obstacles that challenge widespread adoption of soil health BMPs:

- Increased immediate expense: seed, equipment upgrades, cost to plant second crop, cost to terminate cover crop, reduction in soil moisture level available to next cash crop.
- Delayed return on investments for increases in soil fertility, net profit, soil structure improvements, increases in soil water & carbon storage.
- Increased risk due to lack of crop insurance for many non-traditional crops when switching to diverse crop rotations.
- Peer pressure and concerns from agriculture lending institutions to maintain a healthy balance sheet and remain profitable.
- An implied expectation to continue to dominate corn/bean production yields and acreage bases; and maintain the status quo.
- Lack of local markets for alternative crops.
- Uncertainty by tenant of how many years they will be farming a rented field.
- Lack of interest in soil health improvements by absentee landowner.

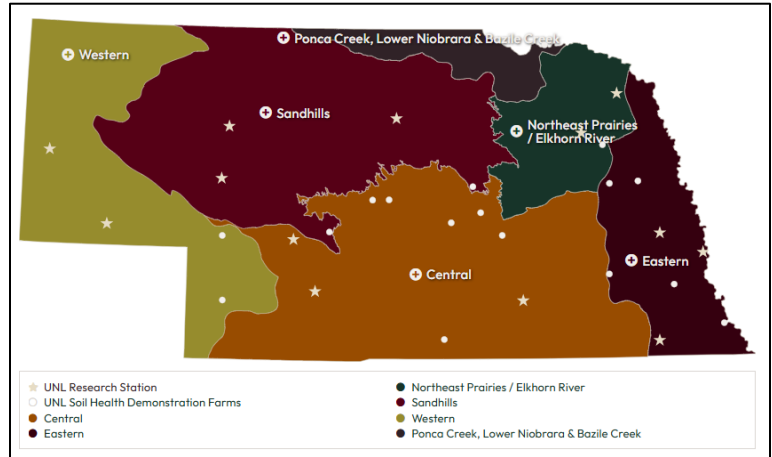


These obstacles must be overcome, and education, producer networking and continued outreach by members of NSAC have been identified as the most efficient means of accomplishing widespread adoption of soil health BMPs. It is important to recognize that a shift of this magnitude within the agriculture industry will take time, but successes are occurring.

Future Activities

Future activities of the Department include:

- Finalize changes with resources and information on the NSAC website.
- Promote the NSAC work at conferences such as Woman in Ag, NARD, UNL soil health conferences and others.
- Host additional stakeholder engagement meetings.
- Host producer feedback panels on the NSAC efforts
- Support producer field days partnering with NRD's and other agriculture related entities across Nebraska in each of the six determined agroeco regions.
- Create and publish a web-based producer communication platform.



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Reference:

Jansen, J., Stokes, J. "Cover Crop Utilization, Implications for Cropland Lease Arrangements in 2024." *CAP Series 24-0702*, Center for Agricultural Profitability, University of Nebraska-Lincoln, July 19, 2024. DOI: [10.32873/unl.dc.cap041](https://doi.org/10.32873/unl.dc.cap041)