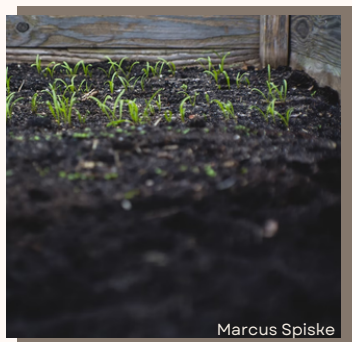


RESILIENT SOILS AND WATER QUALITY ACT

2022 ANNUAL REPORT

Steven Weeks

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BACKGROUND

The Resilient Soils and Water Quality Act (RSWQA) arose from work completed by the Nebraska Healthy Soils Task Force in 2020. LB 243 (2019), passed by the 106th Legislature, created a 17-member Task Force charged with development of a Healthy Soils Initiative for Nebraska. Over a year and a half later, the Task Force concluded its work and offered its findings, recommendations, and an action plan. Upon conclusion of the Task Force efforts, LB 925 (2022) was passed by the 109th Legislature creating the RSWQA. (Neb. Rev. Stat. §§ 2-401 to 2-410). This annual report is submitted pursuant to Neb. Rev. Stat. § 2-409(4), which requires the Department of Natural Resources (Department) to prepare a report beginning in 2022, on the status and progress of implementing the RSWQA.

RSWQA identified the following six specific purposes as being necessary to accelerate the voluntary, grassroots effort to protect and enhance Nebraska's soil and work to achieve the benefits described in the Task Force report.

1. Initiate first steps to accelerate the use and scope of Best Management Practices (BMPs) for healthy soil management practices.
2. Protect and improve soil and water quality throughout the state.
3. Protect the public's health and enhance agriculture production and profitability.
4. Address soil health economics, resource stewardship, and managerial and environmental issues.
5. Increase awareness, education, and promotion of healthy soil BMPs through producer- to - producer, peer - to - peer, and mentoring relationships, networking, and sharing of technical information.
6. Provide observational proof of healthy soil benefits through access to demonstration and research farms and data.

The Department is charged with the duty to administer the RSWQA and provide technical and legal assistance in the formation of a producer learning community. The Department will also assist the producer learning community in building awareness, knowledge, and widespread adoption of soil health BMPs. The Department is authorized to partner or contract with entities to assist in the producer learning community and also assist the producer learning community in acquiring gifts, grants, and sponsorships.



CURRENT YEAR ACTIVITIES

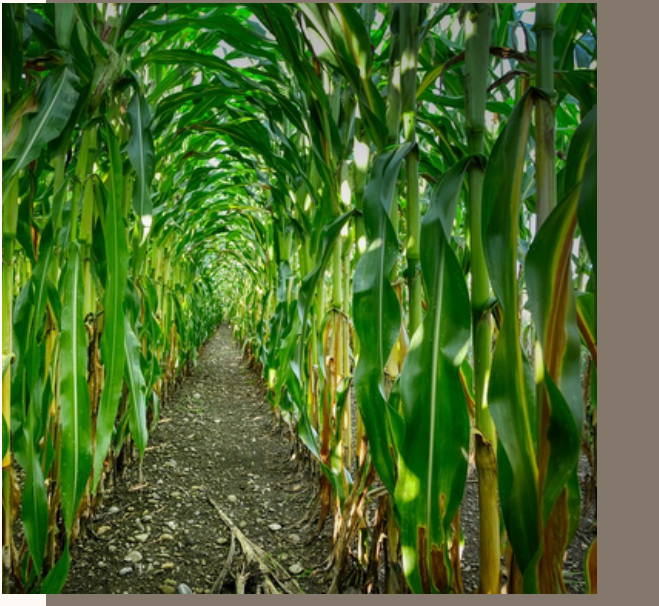
TAs a first step in implementing LB925 the Department needed to identify and hire coordination and staffing support for the effort. The Department has secured a coordinator for the effort and allocated additional resources to support outreach and communication efforts for the effort. In preparation for developing a plan to implement LB925, Department staff have participated in the following activities for the purpose of gathering background information on efforts other entities are accomplishing related to the six purposes of the RSWQA.

- National Conservation Planning Partnership's Working Conference and Training Sessions covering conservation planning using best management practices, economics, soil health initiatives and communication, branding, and marketing.
- UNL West Central Research, Extension & Education Center's Water, Crops and Soil Health Field Day included Producer Panels discussing soil health and answering questions regarding their farms. The soil health plot tour included presentations on inter-seeding cover crops, cover crop variety trials, nematode and cover crop research, and a soil health demonstration.
- Green Cover Field Plot Demo included a walk through of over 100 field plots growing different varieties of cover crops and cover crop mixtures. Presenters led group discussion regarding each crop's benefits and growing characteristics as well as a presentation on the role of mycorrhizal fungi.
- Soil Health Institute's 7th Annual Meeting: Scaling Up Soil Health. This webinar covered several farmers' experiences adopting soil health systems, strategic approaches for evaluating soil health measurements, mitigating climate change through soil health, and creating learning opportunities in soil health education programs.
- Farm Journal hosted a Producer Learning Community Field Demonstration Day with tour stops at three farms. The event kicked off with a local high school vocational agriculture class attending the NRCS soil health and rainfall simulator demonstration presentation followed by producer and nonproducer discussions of lessons learned regarding the use of cover crops. Presenters covered the effects on water conservation, grazing, migratory birds, and soil health.



- Presentations describing the Illinois STAR Program and Colorado's STAR PLUS Program. Both programs are producer lead and voluntary. Producers choose to participate starting with an assessment of their current soil health practices. The STAR Program is qualitative, while the STAR PLUS Program becomes quantitative by incorporating financial incentives, technical assistance, equipment cost share grants, and more.
- UNL Eastern Nebraska Research, Extension & Education Center's 2022 Cover Crop Grazing Conference included presentations on rotational and strip grazing cover crops and grazing of perennial and annual cover crops. During panel presentations, producers discussed success stories as well as issues that they encountered trying different strategies. Two field demonstrations offered insight on cover crops under drought conditions and weaning success utilizing different cover crop forages.
- UNL Institute of Agriculture and Natural Resources Carbon in Agriculture Summit focused on the role carbon plays in soil, crop production, grazing lands, and livestock systems. Speakers covered agriculture's role in the larger carbon cycle, measuring and modeling carbon, sequestration, and market opportunities.

The Department will evaluate the apparent success and effectiveness of existing activities such as those described above to determine if partnering with existing work or creating and implementing new or additional activities would be more effective at reaching a greater number of landowners and producers. In developing this plan, the Department also intends to incorporate activities geared at reaching High School, and College-aged members of the learning community including agriculture groups such as 4-H and FFA. This plan must have the ability to reach and engage the target audience, while retaining the flexibility to adjust for unforeseen issues that arise. The plan must also include metrics for measuring successes and providing feedback such as increased producer participation and awareness.



PLANNED ACTIVITIES FOR UPCOMING YEAR

The Department plans to work on furthering its engagement with stakeholders in the upcoming year as it works to create the Producer Learning Community. These efforts will be broad-based and work to recognize the diversity of soils, topography, rainfall, cropping systems across the state. The department will work to establish different regions in which to establish demonstration and research farms that are representative of each region's particular agricultural diversity. The department may also begin to enter into agreements for the purpose of expanding demonstration opportunities for producers.

FIRST QUARTER

Meet with individuals in commodity organizations, NRDs and other agriculture groups with interest in activities that relate to soil health and the six purposes of the RSWQA

SECOND QUARTER

- Identify and engage potential members to create a RSWQA advisory panel to foster a producer's peer sounding board.
- Analyze the benefits of existing activities related to reaching the target audience for the RSWQA.
- Identify producer learning community regions.
- Develop Plan for expanding outreach and demonstration opportunities.

THIRD QUARTER

Begin Implementing the Plan

ALL YEAR

Attend, support, encourage and promote other activities and events related to six purposes of the RSWQA.