

NEBRASKA NATURAL RESOURCES COMMISSION

MEETING MINUTES – August 12th, 2020

Roll Call:

Commissioners		Absent	Present	Commissioners		Absent	Present
Amen	Karen		X	Kraus	Don		X
Anderson	Garry		X	McDonald	Mike (1:35 pm)		X
Barels	Brian		X	Miller	John		X
Batie	Donald		X	Reynolds	Michael (Mick)		X
Bradley	Lawrence		X	Schroer	Lyle		X
Clouse	Stan		X	Shields	Jim	X	
Czaplewski	Mark		X	Smathers	Scott		X
Deines	Dave		X	Steffen	Jeff		X
Dunbar	Brad	X		Strauch	Walter Dennis		X
Fornoff	Kevin		X	Taylor	Loren		X
Hadenfeldt	N. Richard		X	Wilke	Greg	X	
Halligan	Bill		X	Wright	Chad	X	
Heaston	John	X		(Livestock)	Vacant		
Knutson	Thomas		X				

DNR staff in attendance:

Jesse Bradley and Kent Zimmerman.

Others in attendance were:

None

CALL TO ORDER, ROLL CALL

Chairman Smathers called the meeting to order at 1:30 p.m. in the Holiday Inn and Convention Center, Kearney, Nebraska, and asked Zimmerman to call the roll.

NOTICE OF THE MEETING

Notice of the meeting was published on the State Public Meetings Calendar and on the Natural Resources Commission (Commission) web site at <https://nrc.nebraska.gov>. A copy of Nebraska’s open meeting statutes was available in the room. The following DHHS guidelines regarding COVID-19 were implemented:

- Tell invitees not to attend if they are sick.
- Face coverings were provided and use was encouraged when not seated.
- Seating arrangements provide at least six feet of distancing between attendees and presenters.
- Food, beverages and snacks stations were not available to reduce physical proximity and community touching of common surfaces.

- Proper social distancing expectations were reviewed with the attendees related to discussions, training room entry and egress, restroom breaks, etc.
- Attendee roster was completed verbally and recorded by the meeting organizer instead of sign-in sheets.
- Minimize sharing resources/equipment such as pens, markers, presentation remotes, handouts, etc.

MINUTES

Batie moved and Fornoff seconded the motion to approve the minutes of the February 19th, 2020 Commission meeting.

Motion Passed.

Commissioner	Aye	Nay	Abstain	Absent	Commissioner	Aye	Nay	Abstain	Absent
Amen			X		Kraus			X	
Anderson			X		McDonald				X
Barels	X				Miller	X			
Batie	X				Reynolds	X			
Bradley	X				Schroer	X			
Clouse	X				Shields				X
Czaplewski	X				Smathers	X			
Deines			X		Steffen	X			
Dunbar				X	Strauch	X			
Fornoff	X				Taylor	X			
Hadenfeldt	X				Wilke				X
Halligan	X				Wright				X
Heaston				X	(Vacant)				
Knutson	X				TOTALS	16	0	4	6

DNR UPDATE & PUBLIC COMMENTS

Chairman Smathers opened the floor for public comments.

DNR Interim Director Bradley reviewed:

- Office procedures since COVID-19 started and some of the adjustments that have been implemented.
- Legislative issues regarding the department's budget, operations and LB 632 requiring DNR to develop a state wide flood mitigation plan by June of 2022.
- Missouri River MOA and systematic improvements towards flood management impacts in the lower basin.
- Permitting issues including the instream flow requests of LLNRD and LENRD, the trans-basin diversion filing, Auburn's induced recharge request and NPPD's surface water power production permit transfer process.
- Water planning activities by basin including, Inter-State Compact meetings, drought planning, voluntary IMP's and potential federal water rights claims.

Commissioners McDonald and Steffen, members of the Healthy Soils Task Force (LB 243), distributed information (attached) and discussed key aspects of the Healthy Soils Task Force including the following and asked for feedback:

- Education.
- Review of what has been implemented by the Public and Private sectors.
- Economic incentives, disincentives and discounts.
- Add to what is being done without using mandates.

PROGRAM COMMITTEE

Because the Program Committee did not meet, staff led the discussion on agenda topics pertaining to program activities. No unusual activity was reported during review of status reports for the following funds.

Resources Development Fund

The status report showed business as usual. Two projects are near completion and a third should be completed by the end of the year.

Small Watersheds Flood Control Fund

This is currently an unfunded program.

Soil & Water Conservation Program Fund

The status report showed business as usual. In February, \$79,930.19 was returned unobligated and in June an additional \$36,269.72 was returned unobligated. An apportionment of \$1,805,534.09 was distributed in July.

Natural Resources Water Quality Fund

The status report showed business as usual. A semi-annual funds distribution of \$500,000 was made in July 2020.

Water Well Decommissioning Fund

The status report showed business as usual. An allocation of \$70,000 was made in July, 2020.

Water Sustainability Fund

- The status report showed business as usual.
- Eight applications were filed in July. Two requesting grants from the Large Projects category and six from the Small Projects category.
- Procedures were reviewed for Commissioners 2020 WSF application review process.

EXECUTIVE COMMITTEE

Chairman Smathers stated the Executive Committee met prior to this meeting on August 12th, and brought forward the following for discussion:

- Recommended rescheduling the November Commission meeting as necessary. It was noted that because of the COVID-19 situation, the location for the November NRC meeting was unavailable. Therefore, the location and date of the next Commission meeting will likely be rescheduled, into October of 2020 pending completion of the Application Review committee's 2020 recommendations.
- Announced Czaplewski (A) would Chair the Application Review Committee for 2020. Czaplewski announced the following members would serve on the Committee; Anderson (E), Batie (A, & alternate), Clouse (A), Deines (E), Fornoff (changed to Hadenfeldt after the meeting) (E), Heaston (A, & Vice Chair), Miller (E, & alternate), Schroer (E), Shields (A), Strauch (A), Wilke (E).
- No applications requesting funding for a Combined Sewer Overflow project were filed in the 2020 WSF Application cycle. The Executive Committee requested staff contact the City of Omaha, the only known entity eligible to apply, and inform them that they may either request a variance from the Commission waiving the filing date deadline; or file next July requesting both years appropriation. It was noted that 10% of the 2020 grant available to local aid would be held in this category and rolled into next year, if not requested this year.
- Commission appointments for 2020 have not yet been released and 2021 Caucuses will be held in early January 2021. Together, this effects half of the Commissioners.
- The Comprehensive Planning Committee has not met since the last Commission meeting. No public comments were received during the public comments period. Staff is

preparing to take the next step in the rules change process by conducting public hearings on Commission rules Titles 257, 259, 260, 262 and 263.

- Staff will work with the Legislative Committee to develop informational material about the WSF that can be used for meetings with members of the Legislature as well as for new NRC members.

OTHER BUSINESS

Smathers thanked Brian Barels for chairing the Comprehensive Planning Committee as this will be his last meeting as a Commissioner.

Reynolds suggested inviting sponsors of completed projects to present their findings and describe their projects accomplishments during Commission meetings.

ADJOURNMENT

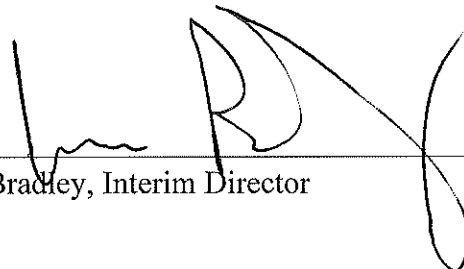
The meeting was adjourned at 2:43 p.m.

Attachments

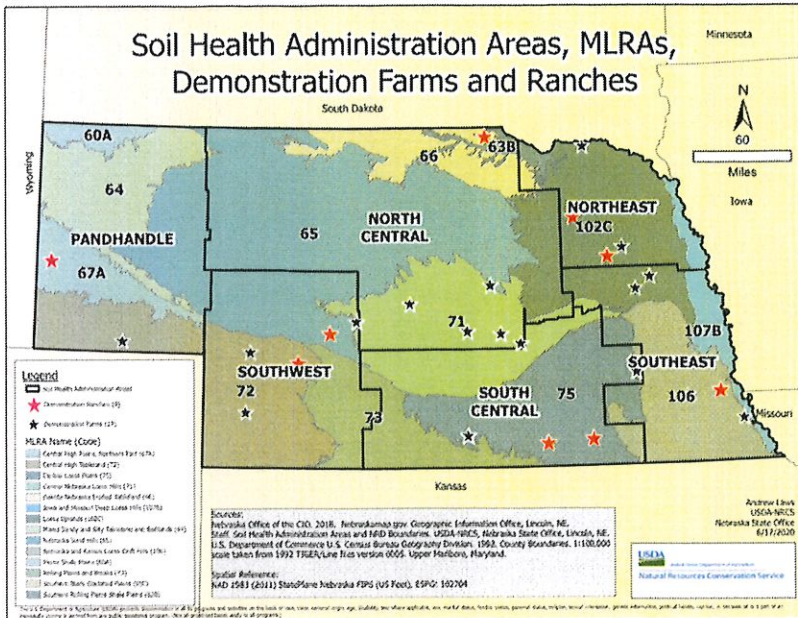
Information on Soil Health distributed during the meeting by members of the Healthy Soils Task Force (LB 243).



Scott Smathers, Chairman



Jesse Bradley, Interim Director



Keeping Economics (ROI) Front and Center for Farmers

Ask yourself...

- Increased yield?
- Decreased input cost?
- More stable, uniform yield?
- Differentiated, higher value products?
- Market-based solutions?
- Other innovations?

How can YOU help to create WIN-WINS for ROI, Soil Health and Water Quality?

IAWA
 IOWA AGRICULTURE WATER ALLIANCE

www.iowaagwateralliance.com

Jerry Hatfield's research on soil health, moisture and reducing the field variability (SWCD Conf., 7.20).

Implications of the changes in soil

- Yield is negatively correlated with April and May rainfall at the county level, correlation is not evident since 2015
- Yield is positively correlated with July-September rainfall at the county level, correlation is not evident since 2015
- Water use efficiency (corn) Fredericks fields
 - 2004 3.9 bu/inch 2018 5.5 bu/inch 41% increase
 - 2005 5.3 bu/inch 2017 7.9 bu/inch 49% increase
- Water use efficiency (soybean)
 - 2005 1.9 bu/inch 2017 2.4 bu/inch 26% increase
- Profitability of the field will increase because the yields have become more uniform.

Think Soil: Just for the Health of It Initiative: An Overview

LB 243 passed by the 106th Legislature created a Healthy Soils Task Force (HSTF) to develop a Nebraska Healthy Soils Initiative and a comprehensive action plan to carry out the Initiative. The 17 member HSTF adopted as their Mission Statement: ***“To develop a positive, proactive plan for soil health to ensure an enriched, resilient, and sustainable future for the state of Nebraska.”***

Working with key stakeholders the HSTF looked at what other states were doing as well as current efforts in Nebraska. Foremost in the development of the Nebraska Initiative and Action Plans was the **aim to increase producers and non-operators bottom lines while protecting the environment**. Recommendations are designed to increase **voluntary adoption of healthy soil management practices without mandates and regulations**. Proposed are **approaches to increase the effectiveness of current efforts and the addition of new methods** to increase awareness and knowledge of healthy soil practices and benefits. **Producers are always striving to do better and implement the latest technology and knowledge to do the best they can for their business and for the land. Improving soil health can do both**. Since two major benefits of healthy soils are improved water quality/quantity and reduced erosion, these two critical issues were naturally addressed as well.

A strategic focus on soil health, water quality/quantity, conservation and erosion reduction offers a **“win-win-win”** opportunity for producers, landowners, the general public and the environment. Background on the HSTF is at-- <https://nda.nebraska.gov/healthysouls/index.html>

HSTF conclusions were based on the following three fundamentals:

What is Soil Health: *Soil health is the capacity of the soil to function as a dynamic living ecosystem that nourishes plants, sustains animals and people, and improves the environment. A soil becomes healthier when organic matter levels are increasing (carbon sequestration), water infiltration rates are improving (reducing erosion, runoff and flooding), and the soil biological life is diverse and abundant.*

Why Is Soil Health Important: Soil is essential for life and is the foundation for plant growth, plant nutrient uptake, and healthy food production. Without soil, humans and animals could not exist. Healthy soil is critical to providing food that supports the health of humans and animals. Our soil has lost organic carbon since the advent of the plow. It is less healthy and productive than it was in its undisturbed native state--created by centuries of natural organic carbon buildup from the growth and decay of prairie grasses. David R. Montgomery in his book, “Growing A Revolution”, states that “American soils have already lost about half of their organic matter,” and Nebraska is no exception.

Principles of Soil Health: The process of improving soil health is increasingly called “Regenerative Agriculture”. Large food companies such as General Mills, Unilever, Dannon, and Nestle are using this term to describe practices that improve soil health. David Montgomery defines regenerative agriculture as farming practices that build soil and restore fertility as a consequence of crop and /or livestock production. The key difference between regenerative agriculture and sustainable agriculture is the intention to regenerate, or renew, the productivity and growth potential of the soil, not just sustain at current levels. *The five main principles are: Keep the Soil Covered, Minimize Soil Disturbance, Maximize Diversity, Maximize Life and Growth of Plants, and Integration of Livestock.*

Major Topics:

The Soil Health / Regenerative Agriculture Movement: The Regenerative Agriculture Movement is worldwide. This year USDA announced a new Innovation Initiative that includes enhancing carbon sequestration through soil health and forestry. In Nebraska, some farmers are discovering a myriad of benefits by combining some of the older, more natural farming and ranching management practices, with today’s more scientific amendments, advancements and practices. For example, by blending regenerative agriculture practices with precision agriculture technology the overall benefits are enhanced. Adopters are finding healthier soil leads to improved yield stability and greater net financial returns over time. Healthy soils improve infiltration rates and water storage capacity, making the soil more resilient to drought, flooding and erosion among other benefits. Producers can build wealth in their land through enriched soil and protect both the economic engine and the environment for future generations.

Barriers, Economics and Incentives: Of all the barriers, the lack of awareness or interest, resistance to change and concern for the economic feasibility is probably the most prominent. Better approaches to learning and transfer of knowledge are needed. Emphasis needs to be placed on reaching the non-operator landlord audience. Economic benefits should be measured in profits per acre and not yields per acre as yields may decrease, but input costs go down and other income opportunities may arise.

Programs and Initiatives are being developed that reward producers that implement soil health practices and store carbon. Both the House and Senate in June proposed legislation to facilitate farmer and forest landowner participation to gain new revenue streams. The *Growing Climate Solutions Act* has the support of the National Association of State Departments of Agriculture and over 40 farm groups including the National Farm Bureau, environmental organizations and Fortune 500 companies.

Why the need for the Initiative: Granted, considerable efforts are underway by various entities to remove barriers to adoption of management practices to protect and enhance

Nebraska's soils, but progress is slow. No-till practices have been broadly adopted but still have much room to grow, however cover crops were only used on 3.8% of cropland acres in 2017. And these practices are only two of a set of recommended practices. While current efforts are admirable and involve quality programs, the HSTF recommends adjustments and new approaches.

Another factor is increased public scrutiny concerning the impact that agricultural practices have on the environment. This creates a challenge and a delicate balancing act to produce food and fiber for a growing world population **while maintaining profitability and protecting natural resources and health**. The adoption of regenerative agriculture practices can be seen as part of the solution and to develop our state. A well-organized Nebraska program should place producers and the state in a better position to be successful with potential investors.

The Initiative: The HSTF proposes an Initiative that is a visible, coordinated, highly publicized statewide campaign throughout Nebraska to protect and enhance the health of its soils by increasing awareness and adoption of soil health principles. It will be important the Initiative quantify and validate the economic value of improving soil health. Keys to the Initiative include:

- * Increased **coordination, collaboration, and communication—the 3 C's** across all stakeholders currently providing research, education, demonstration, measurements, technical support and mentoring to facilitate healthy soils and support conservation across the state.
- * The need to differentiate which management practices are best suited to use based on region, individual farm and grazing lands.
- * The direct involvement of producers in the change process, not as bystanders, but as participants.
- * A needs-based educational approach to support a new generation of producers.
- * New funding for programs and incentives.
- * A means to measure soil health to gauge improvement and guide improved economic- and risk management steps.

The action plan to carry out the Initiative is based on six goals:

- 1. Establish a Nebraska Soil and Water Hub with Education and Demonstration Regions:** The HSTF recommends the establishment of a formalized partnership structure that aligns and coordinates the Initiative goals through interagency and producer collaboration. Education Regions across the state would be established to facilitate more localized soil health education and demonstration.

- 2. Develop the Nebraska Statewide Producer Learning Community:** The HSTF recommends the establishment of a formalized "Nebraska Producer Network". A producer organization of progressive producers in soil health can provide much needed

peer to peer relationships which can aid in improving or advancing farm economics, resource stewardship, and the management of environmental issues on working farms and ranches.

- 3. Utilize a Statewide Educational Framework to Support a New Generation of Producers:** Develop an educational framework to collaboratively educate producers, land-owners and work with stakeholders. The needs-based approach will be structured to address regional needs and build capacity in future generations to be successful in agriculture.
- 4. Recruit \$50,000,000 in outside additional soil health funding and incentives for Nebraska over the next 10 years:** Never before has so much public and private funding been poised to be invested in agriculture's future. The Nebraska Soil and Water Hub will act as an economic development engine to recruit outside funding sources to drive soil health adoption in the state. Grants, industry partnerships, carbon and environmental incentive programs, and other funding sources will be sought.
- 5. Create Nebraska Soil Health Benchmarks and Measurements of Success:** We need to establish appropriate criteria or metrics that reflect the soil health status of a field, currently there is a lack of metrics that can be used by all to 'measure and manage' soils to improve soil health.
- 6. Lead the nation in soil health education, adoption and awareness:** XX% of crop and grassland acres will be considered healthy soils by 2030 and XX% by 2040. This goal assumes adoption will occur at an increasing rate, rising sharply in later years as the principles and practices become more widely accepted. (draft)

This year's **World Food Laureate** Dr. Rattan Lal, Distinguished University Professor of Soil Science and founding Director of the Carbon Management & Sequestration Center at The Ohio State University (OSU), says it best:

“Soil health determines the productive capacity of any agricultural practice... By improving soil health, we can produce more from less: less land, less water, less fertilizer, less pesticides, less environmental damage, less emission of greenhouse gases.”