

From: Kucera, Jennifer - NRCS, Portland, OR
Sent: 19 May 2017 16:49:36 +0000
To: Archuleta, Ray - NRCS, Little Rock, AR; Boltz, Stanley - NRCS, Huron, SD; Chessman, Dennis - NRCS, Lexington, KY; MirandaBerneche, Donna - NRCS, Amherst, MA; Durham, Willie - NRCS, Temple, TX; Fisher, Barry - NRCS, Washington, DC; Garcia, Rudy - NRCS, Albuquerque, NM; Hoorman, James - NRCS, Findlay, OH; Kabir, Zahangir - NRCS, Davis, CA; Lamm, David - NRCS, Greensboro, NC; Lowder, Nathan - NRCS, Albemarle, NC; Moebius-Clune, Bianca - NRCS - Washington, DC; Morris, Justin - NRCS, Madison, WI; Muloski, Martin - NRCS, Fort Worth, TX; Peterson, Doug - NRCS, Des Moines, IA; Salon, Paul - NRCS, Syracuse, NY; Smith, Brandon - NRCS, Dover, NH; Stott, Diane - NRCS, Lafayette, IN; Thomas, Candy - NRCS, SALINA, KS; Winger, Marlon - NRCS, Casper, WY
Subject: RE: Science Friday

In addition to the UC-Davis piece, it appears that Dave Lindbo was interviewed by Science Friday for a blurb about soils. It will broadcast sometime today (usually 1pm Eastern time I think...)

The link is further down the email chain

From: Kucera, Jennifer - NRCS, Portland, OR
Sent: Friday, May 19, 2017 9:26 AM
To: Archuleta, Ray - NRCS, Little Rock, AR <Ray.Archuleta@ar.usda.gov>; Boltz, Stanley - NRCS, Huron, SD <stanley.boltz@sd.usda.gov>; Chessman, Dennis - NRCS, Lexington, KY <Dennis.Chessman@ky.usda.gov>; Donna - NRCS Amherst MA MirandaBerneche (Donna.MirandaBerneche@ma.usda.gov) <Donna.MirandaBerneche@ma.usda.gov>; Durham, Willie - NRCS, Temple, TX <willie.durham@tx.usda.gov>; Fisher, Barry - NRCS, Washington, DC <Barry.Fisher@wdc.usda.gov>; Garcia, Rudy - NRCS, Albuquerque, NM <Rudy.Garcia@nm.usda.gov>; Hoorman, James - NRCS, Findlay, OH <James.Hoorman@oh.usda.gov>; Kabir, Zahangir - NRCS, Davis, CA <Zahangir.Kabir@ca.usda.gov>; Kucera, Jennifer - NRCS, Portland, OR <Jennifer.Kucera@por.usda.gov>; Lamm, David - NRCS, Greensboro, NC <david.lamm@gnb.usda.gov>; Lowder, Nathan - NRCS, Albemarle, NC <Nathan.Lowder@nc.usda.gov>; Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Morris, Justin - NRCS, Madison, WI <Justin.Morris@wi.usda.gov>; Muloski, Martin - NRCS, Fort Worth, TX <Martin.Muloski@ftw.usda.gov>; Peterson, Doug - NRCS, Des Moines, IA <Doug.Peterson@ia.usda.gov>; Salon, Paul - NRCS, Syracuse, NY <paul.salon@ny.usda.gov>; Smith, Brandon - NRCS, Dover, NH <brandon.smith@nh.usda.gov>; Stott, Diane - NRCS, Lafayette, IN <Diane.Stott@in.usda.gov>; Thomas, Candy - NRCS, SALINA, KS <Candy.Thomas@ks.usda.gov>; Winger, Marlon - NRCS, Casper, WY <marlon.winger@wy.usda.gov>
Subject: FW: Science Friday

From: Myrold, David [mailto:david.myrold@oregonstate.edu]
Sent: Friday, May 19, 2017 9:23 AM
To: Kleber, Markus <Markus.Kleber@oregonstate.edu>; Andrews, Shannon Brooke <Shannon.Andrews@oregonstate.edu>; Kucera, Jennifer - NRCS, Portland, OR <Jennifer.Kucera@por.usda.gov>
Subject: FW: Science Friday

UC-Davis soil health piece.

Dave

From: sboard-request@acs-net.soils.org [mailto:sboard-request@acs-net.soils.org] **On Behalf Of** Ellen Bergfeld
Sent: Friday, May 19, 2017 9:18 AM
To: Susan Fisk <sfisk@sciencesocieties.org>; sboard@acs-net.soils.org
Cc: Dave Lindbo (david.lindbo@wdc.usda.gov) <david.lindbo@wdc.usda.gov>; Nick Comerford <nbc@ufl.edu>; Mary Stromberger <Mary.Stromberger@ColoState.edu>
Subject: RE: Science Friday

And if you haven't seen this yet: <http://www.washingtonpost.com/sf/brand-connect/ucdavis/a-climate-change-solution-beneath-our-feet/>

Ellen Bergfeld, PhD, CEO
Alliance of Crop, Soil and Environmental Science Societies
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October 22-25 | Tampa, FL | acsmeetings.org

From: sboard-request@acs-net.soils.org [mailto:sboard-request@acs-net.soils.org] **On Behalf Of** Susan Fisk
Sent: Friday, May 19, 2017 8:16 AM
To: sboard@acs-net.soils.org
Cc: Dave Lindbo (david.lindbo@wdc.usda.gov) <david.lindbo@wdc.usda.gov>; Nick Comerford <nbc@ufl.edu>; Mary Stromberger <Mary.Stromberger@ColoState.edu>
Subject: Science Friday

Hi S-board members!

We've been working this week to get a soil scientist to talk about this week's blog for Science Friday (blog: <https://soilsmatter.wordpress.com/2017/05/15/what-can-i-tell-by-looking-at-and-touching-my-soil/>) Nick Comerford was not available, but I got word this morning that Dave Lindbo will be filling in!

Dave will be on during the second hour; if you can't listen today, we'll share the Podcast when it's available: <http://www.sciencefriday.com/listen/>

Mary Stromberger will be on Colorado Public Radio soon; when I know those details, I'll let you know...and we are trying to line up other scientists as we always do!

Congrats to Nick on the great blog, to Dave for doing the interview, and to Mary S as well!

Kind regards,

Susan

Susan V. Fisk

Public and Science Communications Director

Alliance of Crop, Soil, and Environmental Science Societies (ACSESS)

American Society of Agronomy | Crop Science Society of America | Soil Science Society of America

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From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 5 May 2017 15:32:27 +0000
To: Rides at the door, Roylene - NRCS, Spokane, WA; Erickson, Terrell - NRCS, Washington, DC
Cc: Ashford, Dana - NRCS, Washington, DC; Brantly, Sid - NRCS, Washington, DC; Padley, Eunice - NRCS, WASHINGTON, DC
Subject: RE: NRE: Talking points on climate change [Today please]

Hi all,

Here's what I just sent to Roylene as some suggestions, before seeing this set of responses. What I sent reflects the Soil Health Building Block, and a bit of nutrient management building block. (not sure how one would distill all NRCS/producer contributions down to 4 talking points...)

Cheers,
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Friday, May 05, 2017 11:26 AM
To: Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov>; Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>
Subject: RE: NRE: Talking points on climate change [Today please]

Hi Roylene,

Below is a suggestion of a very short background statement and four points you all can use if you choose, either with or without the sub-bullet explanations, depending on the technical depth Dr. Clovis desires. I'm sure Terrell's staff would have others to add to the list to choose from, and or more to add to the background!

Bianca

NRCS has contributed to climate change mitigation since its inception through various soil conservation activities. Today NRCS is helping producers implement Soil Health Management Systems (SHMSs) with the best available understanding of soil health and conservation. SHMSs are combinations of location- and situation-adapted NRCS practices built into systems that minimize soil disturbance, and maximize soil cover, living roots, and diversity, in combination with system-adapted nutrient and pest management. These mitigate climate change in a number of ways:

1. SHMSs increase Carbon Sequestration by building organic matter throughout the rootzone. This pulls CO₂ out of the air where it is causing climate change, and into the soil where it improves soil functioning and resilience.
 - a. by growing more biomass throughout the year which builds soil carbon

- b. by reducing tillage and thus the loss of carbon to the atmosphere
- 2. SHMSs reduce fossil fuel use by reducing the amount of tillage and passes across the field that are needed
- 3. SHMSs reduce fossil fuel use for nitrogen fertilizer production (which is very energy intensive), by reducing the amount needed
 - a. Greater use of legumes that biologically fix N from the air
 - b. Lower loss of N to the environment by improved infiltration, aeration, drainage, water storage, and N cycling through organic matter
- 4. SHMSs decrease nitrous oxide losses (300x more potent greenhouse gas than CO₂) by improving soil conditions to those that produce less of this gas
 - a. Better infiltration, aeration, and drainage keep soil aerated and prevent N₂O production
 - b. Better N cycling through organic matter and lower N fertilizer inputs timed to supplement crop demand

Bianca Moebius-Clune, Ph.D.
 Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Rides at the door, Roylene - NRCS, Spokane, WA
Sent: Friday, May 05, 2017 11:03 AM
To: Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>
Cc: Moebius-Clune, Bianca - NRC5 - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Ashford, Dana - NRCS, Washington, DC <Dana.Ashford@wdc.usda.gov>; Brantly, Sid - NRCS, Washington, DC <sid.brantly@wdc.usda.gov>; Padley, Eunice - NRCS, WASHINGTON, DC <Eunice.Padley@wdc.usda.gov>
Subject: RE: NRE: Talking points on climate change [Today please]

Funny you say that because Mike Wilson in soil just emailed group and said the same thing. Cool.

From: Erickson, Terrell - NRCS, Washington, DC
Sent: Friday, May 5, 2017 10:57 AM
To: Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov>
Cc: Moebius-Clune, Bianca - NRC5 - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Ashford, Dana - NRCS, Washington, DC <Dana.Ashford@wdc.usda.gov>; Brantly, Sid - NRCS, Washington, DC <sid.brantly@wdc.usda.gov>; Padley, Eunice - NRCS, WASHINGTON, DC <Eunice.Padley@wdc.usda.gov>
Subject: Re: NRE: Talking points on climate change [Today please]

I can get info from Dana, Eunice and Sid who helped w the USDA building blocks document. Best. Terrell

Sent from my iPhone

On May 5, 2017, at 10:48 AM, Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov> wrote:

Thoughts and suggestion?

From: Brown, Amie - NRCS, Washington, DC
Sent: Friday, May 5, 2017 10:41 AM
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC <Kaveh.Sadeghzadeh@wdc.usda.gov>; Smith, David - NRCS, Washington, DC <David.Smith@wdc.usda.gov>; Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov>
Cc: Cerretani, Katie - NRCS, Washington, DC <Katie.Cerretani@wdc.usda.gov>; Herbert, Noller - NRCS, Washington, DC <Noller.Herbert@wdc.usda.gov>; Deavers, Leslie - NRCS, Washington, DC <Leslie.Deavers@wdc.usda.gov>
Subject: NRE: Talking points on climate change [Today please]

Good morning.

I am writing to request 4 talking points and a short background on NRCS' (producer) contributions to mitigate climate change. What are we doing to address climate change? **Having them today would be ideal**, but first thing Monday morning is okay. These are for Dr. Clovis who his speaking to a group on Tuesday.

Amie Brown
Natural Resources and Environment
amie.brown@wdc.usda.gov
direct (202) 720-0678

Bianca,

Thanks so much for the inquiry and suggestions. This particular visit is geared specifically toward the above state initiatives for FY-2017. Dave and I have discussed the need for a broader meeting related to all soil health topics across our Deputy Chief areas. We do plan to pursue such a discussion at some point in the near future.

THANKS!!!

Jimmy Bramblett

Deputy Chief - Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
202-720-4783 jimmy.bramblett@wdc.usda.gov
www.nrcs.gov

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Friday, December 30, 2016 11:29 AM
To: Smith, David - NRCS, Washington, DC <David.Smith@wdc.usda.gov>; Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>; Lindbo, David - NRCS, Washington, DC <David.Lindbo@wdc.usda.gov>; Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>; Tillman, Denise - NRCS, Washington, DC <Denise.Tillman@wdc.usda.gov>
Subject: RE: S&T/SSRA Coordination of Soil Health Initiatives

Hi Dave and Jimmy,

Thank you for setting this up – this kind of coordination and involvement of the technical staff in the discussion is really important (probably for other topics, too, and especially as budgets shrink). I'd like to clarify the intent/scope of the meeting – how broad is this scope?

- If we are looking to coordinate just those activities that are directly part of the science of soil health project/network, then only some of the complete set of submitted SHD initiatives below need to be included in this discussion
- If we are looking to coordinate all soil health activities across our deputy areas, which looks to be the purpose here, and would make a lot of sense, then there are additional initiatives in SSRA and maybe ESD that should be included in the discussion. I think we have a lot of opportunities here!

If the scope is indeed broader, for coordinating all initiatives that contribute to the agency's soil health effort across the technical team to ensure continuity and effectiveness, then we're likely missing a number of SSRA initiatives below. I have not seen SSRA's FY17 full list, but a simple search for 'soil health' wouldn't have successfully pulled out all relevant initiatives that we have the opportunity to better leverage here (SSRA has been decreasing use of the phrase 'soil health' for soil health related activities – soil conservation, erosion prevention, soil resilience, soil security, soil management, etc). Examples from FY16 SSRA initiatives that indicate the kinds of FY17 initiatives that I would suggest we include in this broader discussion:

- Climate Change initiative: Multiple agreements to fund development of COMET Farm, course development, support of Redlands Community College agreement, soil monitoring network proposal, and other agreements necessary for NRCS to continue building resilience in soil landscapes ...
- Initiatives related to Ecol Site D's – there is frequently talk about how they are applicable to soil health.

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 31 Jan 2017 19:11:31 +0000
To: Nichols, Ron - NRCS, Greensboro, NC
Subject: RE: Carbon Farming Innovation Network

Beautiful language... love how you come up with this stuff...

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Nichols, Ron - NRCS, Greensboro, NC
Sent: Tuesday, January 31, 2017 2:11 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: RE: Carbon Farming Innovation Network

I think you're spot on. The beautiful thing about soil health is that it is the "universal tie that binds." Our existence, regardless of politics or opinion, is linked to it.

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Tuesday, January 31, 2017 2:08 PM
To: Nichols, Ron - NRCS, Greensboro, NC <Ron.Nichols@wdc.usda.gov>
Subject: RE: Carbon Farming Innovation Network

I totally am with you on all that. My main constraint is generally the time constraint that makes follow through with many people a challenge. But now there's a whole other influence to wonder about... but maybe it doesn't need to influence whether we engage, just what we focus on and communicate...

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Nichols, Ron - NRCS, Greensboro, NC
Sent: Tuesday, January 31, 2017 1:22 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: RE: Carbon Farming Innovation Network

Personally, I think we should engage with any and all stakeholders who are interested in improving the health of our soil – because in so doing we are improving the health of our farms, our communities and our country. The reasons individual organizations cite for improving soil health, we cannot and should not try to control. Improving soil health is in agriculture's best interest. And if the climate happens to improve a little in the process, well, we can't help that. (But that's just my humble opinion.)

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Tuesday, January 31, 2017 1:17 PM
To: Nichols, Ron - NRCS, Greensboro, NC <Ron.Nichols@wdc.usda.gov>
Subject: RE: Carbon Farming Innovation Network

Yes, part of what I need to figure out is how I can/should engage with an organization that is still in the pre-Jan 20th dark ages :oP ... so that we can meet our mission with partners without unwanted repercussions with the folks across the street and beyond.

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Nichols, Ron - NRCS, Greensboro, NC
Sent: Tuesday, January 31, 2017 12:24 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: RE: Carbon Farming Innovation Network

It looks like another worthwhile stakeholder to engage with on soil health. But why the emphasis on carbon farming? Didn't the whole climate change problem miraculously disappear at noon on January 20th? (Sorry. I can't help myself.)

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Tuesday, January 31, 2017 12:06 PM
To: Lamm, David - NRCS, Greensboro, NC <david.lamm@gnb.usda.gov>; Nichols, Ron - NRCS, Greensboro, NC <Ron.Nichols@wdc.usda.gov>; Fisher, Barry - NRCS, Washington, DC <Barry.Fisher@wdc.usda.gov>; Kucera, Jennifer - NRCS, Portland, OR <Jennifer.Kucera@por.usda.gov>; Smith, Brandon - NRCS, Dover, NH <brandon.smith@nh.usda.gov>; Chessman, Dennis - NRCS, Lexington, KY <Dennis.Chessman@ky.usda.gov>; Stott, Diane - NRCS, Lafayette, IN <Diane.Stott@in.usda.gov>; MirandaBerneche, Donna - NRCS, Amherst, MA <Donna.MirandaBerneche@ma.usda.gov>
Subject: Fwd: Carbon Farming Innovation Network

Anyone's familiar w this org? Looks pretty cool...

Bianca Moebius-Clune, PhD
Director, Soil Health Division, USDA-NRCS, Washington DC

Begin forwarded message:

From: "Russell Wallack" <RWallack@greenamerica.org>
To: "Moebius-Clune, Bianca - NRCS - Washington, DC" <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: Carbon Farming Innovation Network

Hi Bianca,

My name is Russell Wallack. I am a fellow in Green America's Center for Sustainability Solutions. I'm working with Mary Johnson to develop the Center's Carbon Farming Innovation Network. We are in the process of launching this network, which will work ***to drive carbon farming into mainstream agriculture as part of the global climate change solution, to keep the rise in average global***

temperature under 1.5 degrees C. Based on your work with soil health we thought you would be a great person to hear from.

We are working with companies, NGO's and agencies across the supply chain to convene this network that will use our collaborative change methodology to reach an audacious goal (this has been successful in creating significant change in other industry sectors). We will work first on the US agriculture industry. I have attached an overview of the project and a description of our methodology as well as a one-pager that describes some of the success we have had with it in other networks. I'm interested to hear your current thinking on carbon farming and how it integrates into your work these days. In particular, it would be helpful to get your input on our focus and goal for the Innovation Network.

Are you available to schedule a 60 minute consultation call? I would like to use the time to hear your perspective, and capture your insights on the system dynamics, incentives, and barriers to broad scale adoption of carbon farming methods and innovations, and learn of anything else related to carbon farming that you think would make a significant difference in reversing climate change. We are also looking to identify other people to interview and potential participants to invite to join the Network that we will be launching in late Spring 2017. Do you have any suggestions?

Below are some windows when I could schedule an hour long call in the next few weeks, please let me know if one of them works for you:

2/1-2/2 10 am- 4 pm ET
2/6, 2/8-2/10 10am-6pm ET

Best regards and many thanks for your important work,
Russell

Fellow, Carbon Farming Innovation Network
Green America Center for Sustainability Solutions
Collaborative Innovation for Supply Chains and Complex Systems
Phone: 413-348-2457
Email: RWallack@greenamerica.org

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 11 Jan 2017 15:07:49 +0000
To: Kucera, Jennifer - NRCS, Portland, OR
Subject: RE: soil biology and resilience 5 min.pptx

Sounds great, thanks so much!

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Kucera, Jennifer - NRCS, Portland, OR
Sent: Wednesday, January 11, 2017 9:58 AM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: RE: soil biology and resilience 5 min.pptx

Good morning Bianca,

Thanks for the feedback. I also appreciate your input on what to focus on for each slide. I have never done the best job with our goals and really like what you highlighted. Regarding #3, I often neglect to better discuss the roots and will definitely add that. I just got an email from Dave K. and will call him shortly. He asked me to send the slides to him so I guess I'll try that.

On the last slide, I'm still prepping but the idea was to say by adopting the SH principles through implementation of a SHMS such as 1 that includes no-till (minimize disturbance), cover crops (maximize soil cover and provide continuous roots during the traditional fallow period and diversity), along with diverse crop rotations (additional diversity) and the integration of livestock where appropriate (another diversity component) that it would stimulate belowground changes to the soil microbiome that translates into optimized system functioning (nutrient cycling, disease resistance, plant growth, water partitioning, etc....) and thus ecosystem resiliency (especially in the face of increasing weather extremes such as drought, intense storms, etc...) and then have the photo examples pop up.....and all of these factors working together results in high quality food sources that helps support human health.

...or something like that ;-)

If you think of anything else, please don't hesitate to let me know.

Thanks!!
jen

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Wednesday, January 11, 2017 6:02 AM
To: Kucera, Jennifer - NRCS, Portland, OR <Jennifer.Kucera@por.usda.gov>
Subject: RE: soil biology and resilience 5 min.pptx

These are great! Thanks so very much for taking the time for this – the contribution will be of higher quality this way. A couple of comments below – mostly on messages that I feel are important. I don't think slide changes are needed, and Dana tells me that they may not be possible. She asked me to send her the ppt, so I'll do that now and copy you. I just copied you on a response that has today's agenda.

Dana Ashford or one of the organizers will loop us in on additional details, otherwise it looks like you can call in from 11:30 on.

Thanks so much for representing Soil Health in this!
Bianca

Slide 2 – will you verbally discuss some of our key goals and modes of operation? It is important for the research crowd to understand that

- We don't do research ourselves
- But we collaborate with research to translate the research to application, so we can be an effective partner for those needing to show impact on the ground of their research.
- Our mandate is to bring the best available science on soil health assessment, management planning, and management systems implementation into the agency's policies, tools, and programs, and to train our staff and partners on these, so that we can increase adoption by our clients and partners

Slide 3 – with enhanced soil structure – I assume you will verbally note that this is associated with the soils ability to infiltrate rain in heavy downpours, store that water, and make it available to crops during droughts. Roots are part of soil bio – noting the ability of certain plant roots to deepen the available rootzone for cash crops is worth the few seconds (you may already be planning to do so). Emphasizing the critical influence (really as a primary driver) of the biota on soil physical functioning with respect to water partitioning is one of those easy to understand aha-themes that is an important driver in my mind in getting people to understand.

Slide 6 – the last one... I trust you'll make it work. I'm curious about the second 4 quadrant circle ... it splits diversity into three parts and includes no-till, but not the other two of the NRCS principles, and so I'm curious how you are using that one.

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Kucera, Jennifer - NRCS, Portland, OR
Sent: Tuesday, January 10, 2017 6:44 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: soil biology and resilience 5 min.pptx

I know you probably have left by now (at least I hope you have) but if you have a chance, please let me know what you think about these slides. With only 5, it was hard to know what direction to take so I can modify in morning if needed. Also I will review this with Veronica tonight, and will update you if we do any major changes. The last slide is busy but animated. I tried to bring the whole piece together. Let me know what you think.

Thanks
jen

From: Cavallaro, Nancy - NIFA
Sent: 18 Jul 2017 19:04:55 +0000
To: Moebius-Clune, Bianca - NRCS - Washington, DC
Subject: RE: Session on soils and climate and carbon at AGU

Bianca,

We are not just looking for molecular mechanisms, just encouraging novel techniques, don't know why we put in molecular at all as we want a range of scales of studies and mechanisms, including practical. That is, we want to understand how and why so we know why different practices might work and where and in what soils and environments they work. So the practical mixed with the theory or hypotheses or process understanding to inform practical decisions is very welcome.

Ciao,
Nancy

Nancy Cavallaro, Ph.D.
National Program Leader
Soils & Global Change Programs
Email: ncavallaro@nifa.usda.gov
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Mission of NIFA is to advance knowledge for agriculture, the environment, human health and well-being and communities

"...he who controls the soil controls the Earth's productivity, life itself." --from *The Eternal Frontier* by Tim Flannery 2002

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Tuesday, July 18, 2017 2:58 PM
To: Cavallaro, Nancy - NIFA <NCAVALLARO@nifa.usda.gov>
Subject: RE: Session on soils and climate and carbon at AGU

Thanks Nancy – our staff would approach this from a very practical angle that would not be appropriate for the session. For example, we would be discussing how innovative producers manage their soils with integrated soil health management systems that use our four principles, example cases where that management results in changing the technical soil type assigned due to the high C accumulation... but we don't do the research on the molecular mechanisms ;o)

I'd be interested in a report out from the session!

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contact the Soil Health Division:

<https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/soils/health/?cid=nrcseprd1315420>

Customer Survey Link:

[https://www.surveymonkey.com/r/KKN9653?staffName=\[bianca.moebiusclune@wdc.usda.gov\]](https://www.surveymonkey.com/r/KKN9653?staffName=[bianca.moebiusclune@wdc.usda.gov])
(Intended for internal agency use, not external data collection)

From: Cavallaro, Nancy - NIFA

Sent: Tuesday, July 18, 2017 2:51 PM

To: isenhart@iastate.edu; mmamo3@unl.edu; semurinda@cpp.edu; ohno@maine.edu; jill.motschenbacher@ndsu.edu; zhulu.lin@ndsu.edu; dgstrawn@uidaho.edu; khanal@hawaii.edu; jaisi@udel.edu; bvasilas@udel.edu; apaytan@ucsc.edu; krista.jacobsen@uky.edu; chatch@geo.umass.edu; bpwarner@umass.edu; rees@ecs.umass.edu; strick77@vt.edu; jregan@enr.psu.edu; schidema@illinois.edu; castelmj@iastate.edu; tkg@enr.colostate.edu; kellyagrogan@ufl.edu; sandeep.kumar@sdsu.edu; Loeb, Susan -FS <sloeb@fs.fed.us>; deanna_osmond@ncsu.edu; frwalker@utk.edu; tgriffis@umn.edu; cjeffrey@unr.edu; koloj@uw.edu; kurt.schwabe@ucr.edu; frankenb@purdue.edu; nhowell@wtamu.edu; frwalker@utk.edu; kxia@vt.edu; mmorra@uidaho.edu; dbuckley@cornell.edu; witter.7@osu.edu; achow@clemsun.edu; **Moorman, Tom** <Tom.Moorman@ARS.USDA.GOV>; suding@colorado.edu; pjacinth@iupui.edu; dkeiser@iastate.edu; jeanette.norton@usu.edu; cdclark@utk.edu; mp.oneill@uconn.edu; jpaz@abe.msstate.edu; monica.mendez@tamu.edu; chenzhiq@umkc.edu; **Knapp, Eric E -FS** <eknapp@fs.fed.us>; pjd7@psu.edu; ashesh@ksu.edu; strthmnn@mines.edu; mimccarthy@unr.edu; jennifer.kushner@uwex.edu; ashokm@clemsun.edu; wlhargrove@utep.edu; mtw5@cornell.edu; mschaap@cals.arizona.edu; garey.fox@okstate.edu; larryh@iastate.edu; stuart.grandy@unh.edu; heather.darby@uvm.edu; kate.field@oregonstate.edu; songb@vims.edu; pparajuli@abe.msstate.edu; **Franzluebbbers, Alan** <Alan.Franzluebbbers@ARS.USDA.GOV>; mazdak.arabi@colostate.edu; hmv1@cornell.edu; kkarthikeyan@wisc.edu; weizhang@msu.edu; rschultz@iastate.edu; **Miniat, Chelcy - OSEC, Washington, DC** <Chelcy.Miniat@osec.usda.gov>; conserv@ufl.edu; reagan.waskom@colostate.edu; bartholi@msu.edu; michael.dietz@uconn.edu; sbshaw@esf.edu; basso@msu.edu; thomas.borch@colostate.edu; jwinsten@winrock.org; rvargas@udel.edu; jennifer.kushner@ces.uwex.edu; leisnham@umd.edu; ars@umd.edu; meagan.schipanski@colostate.edu; henrylin@psu.edu; sharonw@ucr.edu; dave.bachoon@gcsu.edu; ward.2@osu.edu; nancy.mesner@usu.edu; charles.young@sei-us.org; marco.maneta@umontana.edu; smithada@usc.edu; elizabeth_nichols@ncsu.edu; um_mortiz@suagm.edu; jeremy.conkle@tamucc.edu; jwj@agen.ufl.edu; jwjones@nsf.gov; scharfp@missouri.edu; jzilles@illinois.edu; sschaefS@utk.edu; jia.hu02@montana.edu; jaisi@udel.edu; inamdar@udel.edu; lovettg@caryinstitute.org; erin.cortus@sdsu.edu; led24@cornell.edu; mhondzo@umn.edu; pgvidon@esf.edu; anex@wisc.edu; ralarson2@wisc.edu; ruanbao.zhou@sdsu.edu; inamdar@udel.edu; cem20@cornell.edu; garey.fox@okstate.edu; gdjen@ucr.edu; dave.mcneer@uky.edu; [taghezzehei@ucmerced.edu](mailto>taghezzehei@ucmerced.edu); mbdavid@illinois.edu; francois_birgand@ncsu.edu; ashober@udel.edu; **Vadas, Peter** <Peter.Vadas@ARS.USDA.GOV>; edavidson@umces.edu; vdn@ufl.edu; loryj@missouri.edu; NTHARAY@clemsun.edu; gchen@eng.fsu.edu; thilini.ranatunga@aamu.edu; mdobre@uidaho.edu; crows@hawaii.edu; markwill@vt.edu; jennifer.moore-kucera@ttu.edu; **Kucera, Jennifer - NRCS, Portland, OR** <Jennifer.Kucera@por.usda.gov>; mcmill@purdue.edu; brewbake@msu.edu; oneilg@msu.edu; singletaryl@UNCE.unr.edu

Cc: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Kucera,

Jennifer - NRCS, Portland, OR <Jennifer.Kucera@por.usda.gov>

Subject: Session on soils and climate and carbon at AGU

Dear colleague,

I wanted to bring this session to your attention in case you are thinking about submitting a paper to the Fall AGU meeting, this year in New Orleans, and if you have something on soils and carbon. The deadline to submit abstracts is August 2 so right around the corner. Spread the word. And Sorry if you already got this or if you are not interested in soils anymore.

<https://agu.confex.com/agu/fm17/preliminaryview.cgi/Session27344>

B064:

Soil organic matter and the global carbon cycle: mechanisms for accumulation and loss in a changing world

Session ID#: 27344

Session Description:

The reservoir of carbon contained in soil organic matter is exceedingly large. However the mechanisms for its accumulation, retention and loss are not well understood. Our ability to predict how climate change and man's alteration of the terrestrial landscape affect soil organic matter dynamics ultimately depend on a deeper understanding of the underlying mechanisms. This session will focus on empirical and modeling studies of soils and carbon: storage potential, mechanisms of stabilization/ destabilization/ long term storage, and ecosystem vulnerability. Isotopic, geochemical, spectroscopic and other novel molecular techniques that probe deeper into the fate and function of organic matter across spatial and temporal scales are especially encouraged.

Primary Convener: Marc G Kramer, Washington State University Vancouver, School of the Environment, Vancouver, WA, United States
Conveners: Kate Lajtha, Oregon State University, Corvallis, OR, United States and Nancy Cavallaro, USDA Washington DC, Washington, DC, United States

Index Terms:

0414 Biogeochemical cycles, processes, and modeling [BIOGEOSCIENCES]

0428 Carbon cycling [BIOGEOSCIENCES]

0454 Isotopic composition and chemistry [BIOGEOSCIENCES]

0486 Soils/pedology [BIOGEOSCIENCES]

Ciao,
Nancy

Nancy Cavallaro, Ph.D.
National Program Leader
Soils & Global Change Programs
Email: ncavallaro@nifa.usda.gov

Voice: 202-401-5176

Fax: 202-720-7803

Mail address: 1400 Independence Ave. SW; Mail Stop 2210; Washington, DC 20250-2210

Courier Service address: Waterfront Centre; 800 9th Street SW; Room 3186; Washington, DC 20024

Mission of NIFA is to advance knowledge for agriculture, the environment, human health and well-being and communities

"...he who controls the soil controls the Earth's productivity, life itself." --from *The Eternal Frontier* by Tim Flannery 2002

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 26 Jan 2017 21:11:19 +0000
To: Nichols, Ron - NRCS, Greensboro, NC
Cc: Stott, Diane - NRCS, Lafayette, IN; Lamm, David - NRCS, Greensboro, NC; Kucera, Jennifer - NRCS, Portland, OR; Fisher, Barry - NRCS, Washington, DC; Smith, Brandon - NRCS, Dover, NH; Chessman, Dennis - NRCS, Lexington, KY
Subject: RE: Strategizing broadly acceptable messaging

Avoid → use instead

Climate Change → Weather Extremes

Climate Change Adaptation → Resilience to Weather Extremes/Intense Weather Events: Drought, Heavy Rain, Spring Ponding

Reduce Greenhouse Gases → Build Soil Organic Matter, increase nutrient use efficiency

Sequester Carbon → Build Soil Organic Matter

Additionally the following messages should be tolerated by all:

Soil Health is an opportunity for:

- economic growth
- building equity in land investment
- emerging business opportunities in rural America
- increased production efficiency = increased competitiveness for American agriculture
- wildlife
- agro-tourism
- improved aesthetics: green landscapes are more beautiful than brown

Soil Health improves:

- Production system resilience to stresses
- Economic risks of production
- Nutrient cycling
- Soil organic matter
- Soil structure
- Infiltration
- Water holding capacity

- Rooting depth
- Biodiversity, diversity of microbes, diversity of soil life, soil microbiome

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Nichols, Ron - NRCS, Greensboro, NC
Sent: Wednesday, January 25, 2017 5:44 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Cc: Stott, Diane - NRCS, Lafayette, IN <Diane.Stott@in.usda.gov>; Lamm, David - NRCS, Greensboro, NC <david.lamm@gnb.usda.gov>; Kucera, Jennifer - NRCS, Portland, OR <Jennifer.Kucera@por.usda.gov>; Fisher, Barry - NRCS, Washington, DC <Barry.Fisher@wdc.usda.gov>; Smith, Brandon - NRCS, Dover, NH <brandon.smith@nh.usda.gov>; Chessman, Dennis - NRCS, Lexington, KY <Dennis.Chessman@ky.usda.gov>
Subject: Re: Strategizing broadly acceptable messaging

I'm currently working on a messaging outline/Prezi for NRCS' overall narrative (not quite ready for prime time at present), but the thesis is this: "Healthy soil is the foundation of American agriculture. It is the resource that enables 'growth' for generations to come."

Many of the talking points mentioned below are incorporated therein.

Ron

Sent from my iPad

On Jan 25, 2017, at 5:19 PM, Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov> wrote:

Hi all,

As the new administration gets to know us, messaging soil health for positive first (and second and third...) impressions will be important, and it is important that we provide some explicit guidance to the rest of our division and agency staff so they do not accidentally taint those positive impressions.

David, Barry, Diane, and I tossed around some concepts in a couple of different email conversations – see below. I'd like to get some input from you all on this, then I'd like to run it back through Jimmy and see if he needs to run it through anyone else. He will be briefing the new team across the street in the coming weeks, and has already asked me for some briefing material, so maybe there'll be room to incorporate some of this there and into our ever improving presentations. Let's discuss ideas tomorrow. Thanks!

Bianca

Avoid → use instead

Climate Change → Weather Extremes

Climate Change Adaptation → Resilience to Weather Extremes: Drought, Heavy Rain, Spring Ponding

Reduce Greenhouse Gases → Build Soil Organic Matter

Sequester Carbon → Build Soil Organic Matter

Anything missing?

Additionally the following messages should be tolerated by all:

Soil Health is an opportunity for:

- economic growth
- building equity in land investment
- emerging business opportunities in rural America
- increased production efficiency = increased competitiveness for American agriculture
- wildlife
- agro-tourism
- improved aesthetics: green landscapes are more beautiful than brown

Soil Health improves:

- Production system resilience to stresses
- Economic risks of production
- Nutrient cycling
- Soil organic matter
- Soil structure
- Infiltration
- Water holding capacity
- Rooting depth

What else is missing? Ron any insights on any of these?

THANKS!

Bianca Møebius-Clune, Ph.D.

Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Sadeghzadeh, Kaveh - NRCS, Washington, DC
Sent: 7 Aug 2017 22:17:24 +0000
To: Moebius-Clune, Bianca - NRCS - Washington, DC; Rides at the door, Roylene - NRCS, Spokane, WA
Subject: Re: Censorship and Climate Change

I agree and am disappointed in the story. I've had conversations with 15 outlets today, in addition to providing the statement, to provide context. I've also discussed with the dept, and the thought is that this will blow over. In the end, I don't think your email was the problematic one, and as I explained to each reporter, we were already evaluating our word choice for our audiences. If you feel the need to respond to emails from the public, I'm obviously not going to stop you. I'd ask that you continue to direct all media inquiries to me.

This is a very silly story. I'm sorry.

Kaveh Sadeghzadeh
Communications Director
Natural Resources Conservation Service
Direct: 202-720-2182
Cell: 202-306-7338

sent from my iPhone

On Aug 7, 2017, at 3:08 PM, Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov> wrote:

And another. Not a fan of these repercussions and implications. Agree with the sentiments of those writing in although I'd be more diplomatic if I was on the other end, with as little info as they have about who I am, what I do, what the situation was.

I would very much like a chance to clear up to the public that

- a) I was told to provide guidance to my staff (even if that guidance came from misunderstanding at uncertain times when we all were trying to do our best to adapt) to avoid using climate change language, drafted the guidance with much input from staff and leadership, and did so only because the strong message from leadership was that this would help us stay under the radar while the NRCS figured out the administration's take on things, and therefore would enable us to continue to do the good work we are doing to help farmers and ranchers implement soil health management systems that is particularly critical to help us deal with climate change, but can continue whether we talk about the climate change component of it or not... all that, while other agencies are not so lucky.
- b) I am well aware of the ubiquitous science that backs up human induced climate change, have worked on related items for years, have colleagues who have done good work in it for decades, including tools to help those improve the situation that may not believe in that science, just by managing their land better... allowing

them to adapt to climate change while happening to also provide mitigation benefits for everyone.

- c) I care about science, our natural resources, and our planet greatly, which is part of why I am passionate about and work on soil health, and why I joined NRCS.
- d) I never felt good about following the guidance, was fairly shocked... my first time, but other staff had gotten similar guidance in the past with administration changes... felt like a thing I had to do for the long term good of the agency's ability to thrive and do its work....

Clearing that up may be a selfish request, but also... what are the implications for the soil health movement and the public facing aspect of our leadership in it (that is already strained) when this is such a visible media story? How do we deal with this?

Thanks for your insights.
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contacts for the Soil Health Division

Tell me how I'm doing by completing this quick Customer Survey (Not intended for external data collection)

From: Lindsay Fogelquist [mailto:lkfpublicbiz@gmail.com]
Sent: Monday, August 07, 2017 2:25 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: Censorship and Climate Change

Dear Bianca,

I'm disgusted and dismayed that you would kowtow to Trump and mandate censorship in the USDA. You are a scientist! Science is important.

Do not succumb to the ineptitude of the current president.

Regards,
Lindsay

From: Sadeghzadeh, Kaveh - NRCS, Washington, DC
Sent: 8 Aug 2017 13:49:03 +0000
To: Moebius-Clune, Bianca - NRCS - Washington, DC
Subject: RE: Climate change

Bianca,

Feel free to keep sending, as they help inform my conversations with the department, but highlight those from media please. I am not responding to individual queries, just media requests, though we likely will be developing a response for these emails as well (and the letters that will start coming in tomorrow).

--Kaveh

-----Original Message-----

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Tuesday, August 08, 2017 8:54 AM
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC <Kaveh.Sadeghzadeh@wdc.usda.gov>
Subject: FW: Climate change

Let me know if you'd prefer for me to not send you more of these when they are not media requests. I don't know if you handle customer comments as part of pub affairs - do you? Thanks!
Bianca.

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contacts for the Soil Health Division

Tell me how I'm doing by completing this quick Customer Survey (Not intended for external data collection)

-----Original Message-----

From: Cameron [<mailto:camron9000@gmail.com>]
Sent: Monday, August 07, 2017 4:12 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: Climate change

Climate change.

Sent from my iPhone

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 7 Aug 2017 17:46:49 +0000
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC
Cc: Rides at the door, Roylene - NRCS, Spokane, WA
Subject: FW: Broadly acceptable soil health messaging

Just for background – see the offending message that went to SHD...

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contacts for the Soil Health Division

Tell me how I'm doing by completing this quick **Customer Survey** (Not intended for external data collection)

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Friday, January 27, 2017 9:14 AM
To: Archuleta, Ray - NRCS, Little Rock, AR <Ray.Archuleta@ar.usda.gov>; Boltz, Stanley - NRCS, Huron, SD <stanley.boltz@sd.usda.gov>; Chessman, Dennis - NRCS, Lexington, KY <Dennis.Chessman@ky.usda.gov>; Durham, Willie - NRCS, Temple, TX <willie.durham@tx.usda.gov>; Fisher, Barry - NRCS, Washington, DC <Barry.Fisher@wdc.usda.gov>; Garcia, Rudy - NRCS, Albuquerque, NM <Rudy.Garcia@nm.usda.gov>; Hoorman, James - NRCS, Findlay, OH <James.Hoorman@oh.usda.gov>; Kabir, Zahangir - NRCS, Davis, CA <Zahangir.Kabir@ca.usda.gov>; Kucera, Jennifer - NRCS, Portland, OR <Jennifer.Kucera@por.usda.gov>; Lamm, David - NRCS, Greensboro, NC <david.lamm@gnb.usda.gov>; Lowder, Nathan - NRCS, Albemarle, NC <Nathan.Lowder@nc.usda.gov>; MirandaBerneche, Donna - NRCS, Amherst, MA <Donna.MirandaBerneche@ma.usda.gov>; Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Morris, Justin - NRCS, Madison, WI <Justin.Morris@wi.usda.gov>; Peterson, Doug - NRCS, Des Moines, IA <Doug.Peterson@ia.usda.gov>; Salon, Paul - NRCS, Syracuse, NY <paul.salon@ny.usda.gov>; Smith, Brandon - NRCS, Dover, NH <brandon.smith@nh.usda.gov>; Stott, Diane - NRCS, Lafayette, IN <Diane.Stott@in.usda.gov>; Thomas, Candy - NRCS, SALINA, KS <Candy.Thomas@ks.usda.gov>; Winger, Marlon - NRCS, Casper, WY <marlon.winger@wy.usda.gov>
Cc: Ron - NRCS Greensboro NC Nichols (Ron.Nichols@wdc.usda.gov) <Ron.Nichols@wdc.usda.gov>; Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>
Subject: Broadly acceptable soil health messaging

Hi Everyone,

We had promised some further guidance on messaging as we navigate the transition. The SHD leadership team compiled a list of what to avoid, and what to replace it with, as well as concepts/messages that will be neutral or positively seen, so that you all can integrate into/edit presentations as necessary – see below.

We ran these through Kaveh (Public Affairs Division Director). His feedback was that these are all good to go, and that they ask to “tamp down on discretionary messaging right now and not presume to know where the administration will end up on this, but to give them the time. We won't pull the plug on anything, but will also not start up new pushes.” He appreciates our efforts to make sure we're staying with our “bread and butter” right now.

If you have questions about anything along these lines, please be sure to send them to me and Ron Nichols.

Thanks so much!
Bianca

Avoid → use instead

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Climate Change Adaptation → Resilience to Weather Extremes/Intense Weather Events: Drought, Heavy Rain, Spring Ponding

Reduce Greenhouse Gases → Build Soil Organic Matter, increase nutrient use efficiency

Sequester Carbon → Build Soil Organic Matter

Additionally the following messages should be tolerated if not appreciated by all:

Soil Health is an opportunity for:

- economic growth
- building equity in land investment
- emerging business opportunities in rural America
- increased production efficiency = increased competitiveness for American agriculture
- wildlife
- agro-tourism
- improved aesthetics: green landscapes are more beautiful than brown

Soil Health improves:

- Production system resilience to stresses
- Economic risks of production
- Nutrient cycling
- Soil organic matter
- Soil structure

- Infiltration
- Water holding capacity
- Rooting depth
- Biodiversity, diversity of microbes, diversity of soil life, soil microbiome

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Bramblett, Jimmy - NRCS, Washington, DC
Sent: 24 Jan 2017 19:33:13 +0000
To: Kuykendall, Holli - NRCS, Greensboro, NC
Cc: Sadeghzadeh, Kaveh - NRCS, Washington, DC; Deavers, Leslie - NRCS, Washington, DC; Cohen, Kari - NRCS, Washington, DC; Erickson, Terrell - NRCS, Washington, DC; Guerrero, Rafael - NRCS, Fort Worth, TX; Herbert, Noller - NRCS, Washington, DC; McKinney, Shaun - NRCS, Portland, DR; Moebius-Clune, Bianca - NRCS - Washington, DC; Porter, Jeffrey - NRCS, Greensboro, NC; Tillman, Denise - NRCS, Washington, DC
Subject: RE: 330 - MGT - Division - ENTC - S&T Webinars

Holli,

First, let me say the upcoming list of webinars is impressive. You have done a fabulous job of amassing timely, relevant training for our staff and other stakeholders. Thank you for leading us (NRCS) by delivering a technically sound; as well as an efficient, and effective, training effort.

Kaveh and I have visited on the list you provided. Going forward everything looks good.

Keep up the good work ☺

Jimmy Bramblett

Deputy Chief - Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
202-720-4783 jimmy.bramblett@wdc.usda.gov
www.nrcs.gov

From: Kuykendall, Holli - NRCS, Greensboro, NC
Sent: Tuesday, January 24, 2017 12:52 PM
To: Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>
Cc: Sadeghzadeh, Kaveh - NRCS, Washington, DC <Kaveh.Sadeghzadeh@wdc.usda.gov>; Deavers, Leslie - NRCS, Washington, DC <Leslie.Deavers@wdc.usda.gov>; Cohen, Kari - NRCS, Washington, DC <kari.cohen@wdc.usda.gov>; Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>; Guerrero, Rafael - NRCS, Fort Worth, TX <Rafael.Guerrero@ftw.usda.gov>; Herbert, Noller - NRCS, Washington, DC <Noller.Herbert@wdc.usda.gov>; McKinney, Shaun - NRCS, Portland, OR <Shaun.Mckinney@por.usda.gov>; Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Porter, Jeffrey - NRCS, Greensboro, NC <jeffrey.porter@gnb.usda.gov>; Tillman, Denise - NRCS, Washington, DC <Denise.Tillman@wdc.usda.gov>
Subject: RE: 330 - MGT - Division - ENTC - S&T Webinars

Jimmy,

S&T's current 2017 planned conservation webinars schedule is provided in the attached spreadsheet.

The spreadsheet listing is taken from our online 2017 planned conservation webinars. Write-ups for announced webinars are linked. Write-ups are developed and linked 30-45 days out from the presentation dates.

We have been using a “Climate Change” tag to provide a navigation list for the associated on-demand webinars, the most recent of which was presented on Dec 20, 2016.

The complete tag list is:

Air Quality
Climate Change
Community Assistance
Cropping Systems
Domestic Livestock
Energy
Environmental Compliance
Farm Bill
Fish & Wildlife
Forestry & Agroforestry
FOTG & Planning
Insects & Pollinators
Invasive Species & Pests
Manure Management
Nutrient Management
Organic Agriculture
Pasture Management
Pest Management
Plant Materials
Range Management
Resource Assessment
Resource Economics
Social Sciences
Soil Erosion
Soil Health
Water Management
Water Quality
Watersheds
Wetlands

Holli Kuykendall, Ph.D.
National Technology Specialist

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[2017 Planned Conservation Webinars](#)



From: Bramblett, Jimmy - NRCS, Washington, DC
Sent: Tuesday, January 24, 2017 12:07 PM

To: Kuykendall, Holli - NRCS, Greensboro, NC <holli.kuykendall@gnb.usda.gov>
Cc: Sadeghzadeh, Kaveh - NRCS, Washington, DC <Kaveh.Sadeghzadeh@wdc.usda.gov>; Deavers, Leslie - NRCS, Washington, DC <Leslie.Deavers@wdc.usda.gov>; Cohen, Kari - NRCS, Washington, DC <kari.cohen@wdc.usda.gov>; Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>; Guerrero, Rafael - NRCS, Fort Worth, TX <Rafael.Guerrero@ftw.usda.gov>; Herbert, Noller - NRCS, Washington, DC <Noller.Herbert@wdc.usda.gov>; McKinney, Shaun - NRCS, Portland, OR <Shaun.Mckinney@por.usda.gov>; Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Porter, Jeffrey - NRCS, Greensboro, NC <jeffrey.porter@gnb.usda.gov>; Tillman, Denise - NRCS, Washington, DC <Denise.Tillman@wdc.usda.gov>
Subject: 330 - MGT - Division - ENTC - S&T Webinars

Holli,

This email is to ask for a list of upcoming webinar topics. We were notified last week some terminology we have used during the past 8-years may need to be revisited (e.g. climate change). Can you respond to this email with a list of the upcoming S&T webinar topics, please ma'am?

I will include the S&T Division Directors to reemphasize the importance of this topic per our discussion during last week's staff meeting. I will also copy Kaveh and Leslie in this so your response can be vetted as necessary. Once you submit the list of topics, they will be reviewed by the Acting Chief's Staff and we will follow-up as needed to help ensure the business of our agency continues as seamlessly as possible during this transition.

THANKS!!!

Jimmy Bramblett

Deputy Chief - Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
202-720-4783 jimmy.bramblett@wdc.usda.gov
www.nrcs.gov

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 7 Aug 2017 18:11:21 +0000
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC
Subject: FW: Language

Wow... never gotten any emails like this in my life. Never been told to give guidance to avoid talking about climate change either though.

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contacts for the Soil Health Division

Tell me how I'm doing by completing this quick Customer Survey (Not intended for external data collection)

-----Original Message-----

From: Paul O'Doherty [<mailto:ica1965@icloud.com>]
Sent: Monday, August 07, 2017 2:06 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: Language

I was interested to read in The Guardian newspaper that you are censoring language relating to the issue of climate change. Is this your personal scientific view, as a PhD, or are you being instructed to do this as a political move by climate deniers? If so, what does this say to your Departmental colleagues regarding your professional credibility?

Best Regards
Paul O'Doherty
Athy
Co.Kildare
Ireland

Sent from my iPhone

From: Muloski, Martin - NRCS, Fort Worth, TX
Sent: 8 May 2017 13:24:46 +0000
To: Moebius-Clune, Bianca - NRCS - Washington, DC
Subject: RE: FY2018 NatGLC Agreement draft paperwork

Hello Bianca,

Before I respond to Sid, what do you think about what David just said?

Martin A. Muloski
Presidential Management Fellow
Soil Health Division
USDA-NRCS
202-205-0327
martin.muloski@ftw.usda.gov

From: Lamm, David - NRCS, Greensboro, NC
Sent: Monday, May 08, 2017 8:21 AM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Muloski, Martin - NRCS, Fort Worth, TX <Martin.Muloski@ftw.usda.gov>
Subject: RE: FY2018 NatGLC Agreement draft paperwork

Why don't we let Sid take care of this? GLCI has been around for a long time and he knows the players. Don't see any soil health in this one at all.

David Lamm
National Soil Health Team, Leader
2901 E. Gate City Blvd.
Greensboro, NC 27401

Office: 336-370-3339
Cell: 336-339-6246

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Friday, May 05, 2017 4:24 PM
To: Muloski, Martin - NRCS, Fort Worth, TX <Martin.Muloski@ftw.usda.gov>; Lamm, David - NRCS, Greensboro, NC <david.lamm@gnb.usda.gov>
Subject: RE: FY2018 NatGLC Agreement draft paperwork

Took a quick look at the decision template. Two comments:

- 1) A lot of climate change language there... curious to see how our new secretary will fall on that one – any word yet? I got an interesting request for talking points on our contributions to mitigation for folks across the street today, so maybe it's all good again.
- 2) Mini-grants for demonstration projects... we should include a note that wherever soil health assessments are included in minigrant proposals for these projects, the methods should include those being compiled by NRCS at this time.

Feel free to quote the above, Marty, in a response to Sid, and copy me so I'm in the loop.
Thanks!!
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Muloski, Martin - NRCS, Fort Worth, TX
Sent: Friday, May 05, 2017 2:12 PM
To: Lamm, David - NRCS, Greensboro, NC <david.lamm@gnb.usda.gov>
Cc: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: FW: FY2018 NatGLC Agreement draft paperwork

Hello David,

This is the response Sid gave when I asked about the Grazing Land Conservation Cooperative Agreement.

Bianca/David, In response to his question, how should I reply? Can the accommodation be made?

Martin A. Muloski
Presidential Management Fellow
Soil Health Division
USDA-NRCS
202-205-0327
martin.muloski@ftw.usda.gov

From: Brantly, Sid - NRCS, Washington, DC
Sent: Friday, May 05, 2017 2:08 PM
To: Elliott, Julie - NRCS, Holyoke, CO <Julie.Elliott@co.usda.gov>
Cc: Chad <crellis@noble.org> Ellis <crellis@noble.org>; Muloski, Martin - NRCS, Fort Worth, TX <Martin.Muloski@ftw.usda.gov>; Stine, Kimberli - NRCS, Fort Worth, TX <Kimberli.Stine@ftw.usda.gov>; Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>
Subject: Fwd: FY2018 NatGLC Agreement draft paperwork

We received a spreadsheet (Terrell did) after we had requested 200k showing 300k for 18 months, so we have been working off that presumption. We have increased the time span from 12 mos to 18 mos (increasing from 200 to 300 corresponding with the increase from 12 mos to 18 mos) for this NatGLC agreement.

Greater continuity of operations as per L Jordan recommendations last year. Reckon this can be accommodated?

Paperwork attached.
Sid 202-407-2895

From: Jordan, Leonard - NRCS, Washington, DC
Sent: 8 Aug 2017 20:07:12 +0000
To: Jordan, Leonard - NRCS, Washington, DC
Bcc: ug-nrcs
Subject: Climate change story

NRCS Employees,

As you've likely seen, there has been considerable news coverage during the past two days centered around two emails that discuss the use of the phrase "climate change." The articles allege that NRCS has received direction and has provided direction to censor the use of the phrase "climate change."

I want you all to know that this is not the case. There has never been a directive from the administration regarding the use of the phrase climate change, or any other language. There is nothing stopping you from communicating to your customers using the terminology that you see as most beneficial for getting conservation on the ground. The Department and NRCS are fact-based, science-driven, and customer-focused, and nothing about who we are or what we do has changed.

The climate change websites for both [USDA](#) and [NRCS](#) remain active. We work each day to help agricultural producers plan and implement conservation practices that sequester carbon and benefit our natural resources, enabling producers to improve their bottom line while rising to the challenge of today. With partners like Colorado State University, we're able to offer tools like COMET-Farm, an accounting system for greenhouse gases on agricultural lands. Our Conservation Innovation Grants program continues to empower partner organizations and producers to develop cutting-edge approaches and technologies that support greenhouse gases, cleaner water and air, healthier soil and development of conservation finance systems. And this is just the beginning.

We remain committed to empowering you to do what you do best, whether you're a district conservationist or a snow surveyor, or a biologist or a conservation technician. Our team provides one-on-one, personalized advice on the best solutions to meet the unique conservation and business goals of those who grow our nation's food and fiber. We help people make investments in their operations and local communities to keep working lands working, boost rural economies, increase the competitiveness of American agriculture, and improve the health of our air, water, soil, and habitat. And we generate, manage and share the data, technology and standards that enable partners and policymakers to make decisions informed by objective, reliable science.

Nothing is going to keep us from carrying out our mission.

Leonard Jordan
Acting Chief
NRCS

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information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 7 Aug 2017 17:51:47 +0000
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC
Cc: Rides at the door, Roylene - NRCS, Spokane, WA
Subject: FW: USDA censoring use of 'climate change'/HuffPost

Please let me know if/how I can reply directly to any of these. It would be great for us to have an opportunity to set the record straight for the agency.

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contacts for the Soil Health Division

Tell me how I'm doing by completing this quick Customer Survey (Not intended for external data collection)

From: Jenna Amatulli [mailto:jenna.amatulli@huffpost.com]
Sent: Monday, August 07, 2017 1:45 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: USDA censoring use of 'climate change'/HuffPost

Hi Bianca,

I hope this finds you well. I'm a reporter at HuffPost and I'm reaching out regarding The Guardian's report today on the USDA avoiding the phrasing "climate change."

I was wondering if you had a comment you'd like to provide regarding the report.

Thanks so much,
Jenna Amatulli

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 24 Jan 2017 15:25:44 +0000
To: Bramblett, Jimmy - NRCS, Washington, DC
Subject: RE: ARS gag order

Hi Jimmy,

Thanks – very important. Since SHD staff are specifically some of the most publically visible, and that is their mandate, I'm hoping we can be proactive in providing some guidance to keep them going safely. We might want to create a list of fine 'buzz words/concepts' - seems like the following terminology should be neutral:

- Soil/system resilience
- Nutrient cycling
- Carbon cycling?
- Soil organic matter
- Biota build soil structure
- Infiltration
- Water holding capacity
- Rooting depth
- Climate considerations such as extreme drought and rainfall
- Adapting to/building resilience to extreme weather events
- Reducing risks of production

Thoughts? Additions? If these seem fine, we might start w these so folks giving talks in the next week have something to go on, then we can refine.

Thanks!
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Bramblett, Jimmy - NRCS, Washington, DC
Sent: Tuesday, January 24, 2017 10:03 AM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: RE: ARS gag order

Bianca,

I think we can continue to emphasize this during regular meetings and encourage others to use common sense about how we articulate what we do. I will plan to raft up something you, and the other Division Directors, can use.

THANKS!!!

Jimmy Bramblett

Deputy Chief - Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
202-720-4783 jimmy.bramblett@wdc.usda.gov
www.nrcs.gov

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Tuesday, January 24, 2017 9:16 AM
To: Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>
Subject: FW: ARS gag order

Hi Jimmy,

Please let me know whether drafting an SHD internal email to inform our staff in writing (in addition to talking about this during yesterday's meeting) would be appropriate at this time – see David's email and article linked below.

Thank you for your guidance,
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Lamm, David - NRCS, Greensboro, NC
Sent: Tuesday, January 24, 2017 8:52 AM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: ARS gag order

Bianca

Ray sent this article about an ARS gag order related to climate change. We might want to (b)(5)

(b)(5)

(b)(5)

had an old

DC tell me once the secret to getting conservation on the land is to find the current buzz words and apply them to what you're doing, buzz words change but conservation activities really don't.....

https://www.buzzfeed.com/dinograndoni/trump-usda?utm_term=.nyrdpLVPrA#.ceGZxP39O5

David Lamm
National Soil Health Team, Leader
2901 E. Gate City Blvd.
Greensboro, NC 27401

Office: 336-370-3339
Cell: 336-339-6246

From: Lamm, David - NRCS, Greensboro, NC
Sent: 24 Jan 2017 14:27:43 +0000
To: Moebius-Clune, Bianca - NRCS - Washington, DC
Subject: RE: ARS gag order

We might want to create a list:

- Soil resilience
- Water holding capacity
- Nutrient cycling
- Infiltration
- Soil organic matter
- ?????

Better to be proactive...

David Lamm
National Soil Health Team, Leader
2901 E. Gate City Blvd.
Greensboro, NC 27401

Office: 336-370-3339
Cell: 336-339-6246

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Tuesday, January 24, 2017 9:16 AM
To: Lamm, David - NRCS, Greensboro, NC <david.lamm@gnb.usda.gov>
Subject: RE: ARS gag order

Checking in with Jimmy on this...
Sounds like a wise DC... curious to see what the right buzzwords will be.
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Lamm, David - NRCS, Greensboro, NC
Sent: Tuesday, January 24, 2017 8:52 AM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: ARS gag order

Bianca

Ray sent this article about an ARS gag order related to climate change. We might want to (b)(5)
(b)(5) (b)(5)
I had an old
DC tell me once the secret to getting conservation on the land is to find the current buzz words and apply them to what you're doing, buzz words change but conservation activities really don't.....

https://www.buzzfeed.com/dinograndoni/trump-usda?utm_term=.nyrdpLVPrA#.ceGzP39O5

David Lamm
National Soil Health Team, Leader
2901 E. Gate City Blvd.
Greensboro, NC 27401

Office: 336-370-3339
Cell: 336-339-6246

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 16 Feb 2017 17:11:40 +0000
To: Hafner, Tim - NRCS, Beltsville, MD
Cc: Bramblett, Jimmy - NRCS, Washington, DC; Simmons, Machelie - NRCS, Beltsville, MD
Subject: RE: 130 - AGN - Agency General - Branding

Hmmm... sorry I don't have suggestions for these as they are all names that I am not the right person to change. Jimmy – what are your thoughts?

Seems like the story about climate hubs differs depending on who's telling it – Joel Larson from the Climate Change Program Office said he's had no indication of problems the new administration has so far, and that they are just continuing, and communicating with the transition team to avoid any surprises, until possibly asked to do otherwise.

Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Hafner, Tim - NRCS, Beltsville, MD
Sent: Thursday, February 16, 2017 8:56 AM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Cc: Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>; Simmons, Machelie - NRCS, Beltsville, MD <Machelie.Simmons@wdc.usda.gov>
Subject: FW: 130 - AGN - Agency General - Branding

Bianca

Could you provide me some edits/ suggestion for those items highlighted (blue and yellow) below.

Tim Hafner

From: Hafner, Tim - NRCS, Beltsville, MD
Sent: Thursday, February 16, 2017 8:44 AM
To: Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>
Subject: RE: 130 - AGN - Agency General - Branding

Jimmy

This is part of the Soil Health APG

1.

2. The SHD participated in USDA Climate Hub and greenhouse gas (GHG) Building Block activities. The SHD provided education on climate smart agriculture and forestry by working with numerous groups including:

- No-Till on the Plains
- State Soil Health Advisory groups
- Cover Crop Councils (NRCS helped establish the Midwest, and the new Northeast and Southeast councils)
- Soil Health Institute committees
- Climate Hubs

Soil Carbon retained		200,000 Tons
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This Indicator is officially what we report, I guess I can inquire to the Office of Budget and Policy Analysis (OBPA) and if we need to inquire with OMB who approved the Soil Health APG and its indicator.

From: Bramblett, Jimmy - NRCS, Washington, DC

Sent: Thursday, February 16, 2017 8:38 AM

To: Hafner, Tim - NRCS, Beltsville, MD <tim.hafner@wdc.usda.gov>

Cc: Lawson, Dan - NRCS, Washington, DC <Dan.Lawson@wdc.usda.gov>

Subject: RE: 130 - AGN - Agency General - Branding

Tim,

There is a decision memo being developed by Dan Lawson on that one. (b)(5)

(b)(5). I will copy Dan here so he can fill you in on the latest

☺

THANKS!!!!

Jimmy Bramblett

Deputy Chief – Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
14th and Independence Avenue
Washington, DC 20250
Jimmy.bramblett@wdc.usda.gov

From: Hafner, Tim - NRCS, Beltsville, MD

Sent: Thursday, February 16, 2017 8:31 AM

To: Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>

Subject: RE: 130 - AGN - Agency General - Branding

Thanks Jimmy,

One additional question, how about the name climate hubs.

From: Bramblett, Jimmy - NRCS, Washington, DC
Sent: Thursday, February 16, 2017 7:45 AM
To: Hafner, Tim - NRCS, Beltsville, MD <tim.hafner@wdc.usda.gov>
Subject: FW: 130 - AGN - Agency General - Branding

Tim,

Below is guidance I sent regarding the phrase "climate change". When discussing carbon sequestration, I recommend we use verbiage related to building organic matter in the soil to improve soil health.

Let me know if you need more....

THANKS!!

Jimmy Bramblett

Deputy Chief – Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
14th and Independence Avenue
Washington, DC 20250
Jimmy.bramblett@wdc.usda.gov

From: Bramblett, Jimmy - NRCS, Washington, DC
Sent: Tuesday, January 24, 2017 12:41 PM
To: Cohen, Kari - NRCS, Washington, DC <kari.cohen@wdc.usda.gov>; Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>; Guerrero, Rafael - NRCS, Fort Worth, TX <Rafael.Guerrero@ftw.usda.gov>; Herbert, Noller - NRCS, Washington, DC <Noller.Herbert@wdc.usda.gov>; McKinney, Shaun - NRCS, Portland, OR <Shaun.Mckinney@por.usda.gov>; Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Porter, Jeffrey - NRCS, Greensboro, NC <jeffrey.porter@gnb.usda.gov>; Tillman, Denise - NRCS, Washington, DC <Denise.Tillman@wdc.usda.gov>
Cc: Tillman, James - NRCS, Washington, DC <James.Tillman@wdc.usda.gov>; Sadeghzadeh, Kaveh - NRCS, Washington, DC <Kaveh.Sadeghzadeh@wdc.usda.gov>; Deavers, Leslie - NRCS, Washington, DC (Leslie.Deavers@wdc.usda.gov) <Leslie.Deavers@wdc.usda.gov>; Wickey, Kevin - NRCS, Washington, DC <Kevin.Wickey@wdc.usda.gov>; Barry, Gayle - NRCS, Washington, DC <gayle.barry@wdc.usda.gov>; Chessman, Dennis - NRCS, Lexington, KY <Dennis.Chessman@ky.usda.gov>; Boozer, Astor - NRCS, Washington, DC (Astor.Boozer@wdc.usda.gov) <Astor.Boozer@wdc.usda.gov>; Jordan, Leonard - NRCS, Washington, DC <Leonard.Jordan@wdc.usda.gov>; Smith, David - NRCS, Washington, DC <David.Smith@wdc.usda.gov>; Kramer, Tony - NRCS, Washington, DC <Tony.Kramer@wdc.usda.gov>; Reed, Lesia - NRCS, Beltsville, MD <lesia.reed@wdc.usda.gov>; Christensen, Thomas - NRCS, Washington, DC (Thomas.Christensen@wdc.usda.gov) <Thomas.Christensen@wdc.usda.gov>
Subject: 130 - AGN - Agency General - Branding

Good Afternoon,

This email is a follow-up to our staff meeting last week. During our visit we discussed the transition team moving into the Department, and priorities of our new administration. It has become clear one of the previous administration's priority is not consistent with that of the incoming administration. Namely, that priority is climate change. Please visit with your staff and make them aware of this shift in perspective within the Executive Branch.

Within the Natural Resources Conservation Service (NRCS), we address resource concerns related to soil, water, air, plants, and animals. We have approved resource concerns and causes associated with Air Quality as follows:

1. AIR QUALITY IMPACTS - Emissions of Particulate Matter - PM - and PM Precursors
 - Direct emissions of particulate matter - dust and smoke -, as well as the formation of fine particulate matter in the atmosphere from other agricultural emissions - ammonia, NO_x, and VOCs - cause multiple environmental impacts, such as: 1) The unintended movement of particulate matter - typically dust or smoke - results in safety or nuisance visibility restriction, 2) The unintended movement of particulate matter and/or chemical droplets results in unwanted deposits on surfaces, 3) Increased atmospheric concentrations of particulate matter can impact human and animal health and degrade regional visibility.
2. AIR QUALITY IMPACTS - Emissions of Greenhouse Gases – GHGs
 - Emissions increase atmospheric concentrations of greenhouse gases.
3. AIR QUALITY IMPACTS - Emissions of Ozone Precursors Emissions of ozone precursors - NO_x and VOCs
 - resulting in formation of ground- level ozone that cause negative impacts to plants and animals.
4. AIR QUALITY IMPACTS - Objectionable odors
 - Emissions of odorous compounds - VOCs, ammonia and odorous sulfur compounds - cause nuisance conditions

At this juncture, please be encouraged to use terminology associated with these approved resource concerns to describe the work you/we do to serve our nation's agricultural producers and woodland owners. Having said that, we will be revisiting Air Quality – Emissions of Greenhouse Gases to determine the relevance of its continued use. Prudence when discussing this particular resource concern-cause is advised until further notice.

I will copy other agency leaders on this message for the purpose of alerting them to our current communications within the Deputy Chief for S&T family. Many thanks to each of you for exercising diplomacy when communicating this information internally and externally, and for your leadership during this transient period.

THANKS!!!

Jimmy Bramblett

Deputy Chief - Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture

202-720-4783 jimmy.bramblett@wdc.usda.gov
www.nrcs.gov

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 27 Jan 2017 14:14:04 +0000
To: Archuleta, Ray - NRCS, Little Rock, AR; Boltz, Stanley - NRCS, Huron, SD; Chessman, Dennis - NRCS, Lexington, KY; Durham, Willie - NRCS, Temple, TX; Fisher, Barry - NRCS, Washington, DC; Garcia, Rudy - NRCS, Albuquerque, NM; Hoorman, James - NRCS, Findlay, OH; Kabir, Zahangir - NRCS, Davis, CA; Kucera, Jennifer - NRCS, Portland, OR; Lamm, David - NRCS, Greensboro, NC; Lowder, Nathan - NRCS, Albemarle, NC; MirandaBerneche, Donna - NRCS, Amherst, MA; Moebius-Clune, Bianca - NRCS - Washington, DC; Morris, Justin - NRCS, Madison, WI; Peterson, Doug - NRCS, Des Moines, IA; Salon, Paul - NRCS, Syracuse, NY; Smith, Brandon - NRCS, Dover, NH; Stott, Diane - NRCS, Lafayette, IN; Thomas, Candy - NRCS, SALINA, KS; Winger, Marlon - NRCS, Casper, WY
Cc: Nichols, Ron - NRCS, Greensboro, NC; Bramblett, Jimmy - NRCS, Washington, DC
Subject: Broadly acceptable soil health messaging

Hi Everyone,

We had promised some further guidance on messaging as we navigate the transition. The SHD leadership team compiled a list of what to avoid, and what to replace it with, as well as concepts/messages that will be neutral or positively seen, so that you all can integrate into/edit presentations as necessary – see below.

We ran these through Kaveh (Public Affairs Division Director). His feedback was that these are all good to go, and that they ask to “tamp down on discretionary messaging right now and not presume to know where the administration will end up on this, but to give them the time. We won’t pull the plug on anything, but will also not start up new pushes.” He appreciates our efforts to make sure we’re staying with our “bread and butter” right now.

If you have questions about anything along these lines, please be sure to send them to me and Ron Nichols.

Thanks so much!
Bianca

Avoid → use instead

Climate Change → Weather Extremes

Climate Change Adaptation → Resilience to Weather Extremes/Intense Weather Events: Drought, Heavy Rain, Spring Ponding

Reduce Greenhouse Gases → Build Soil Organic Matter, increase nutrient use efficiency

Sequester Carbon → Build Soil Organic Matter

Additionally the following messages should be tolerated if not appreciated by all:

Soil Health is an opportunity for:

- economic growth
- building equity in land investment
- emerging business opportunities in rural America

- increased production efficiency = increased competitiveness for American agriculture
- wildlife
- agro-tourism
- improved aesthetics: green landscapes are more beautiful than brown

Soil Health improves:

- Production system resilience to stresses
- Economic risks of production
- Nutrient cycling
- Soil organic matter
- Soil structure
- Infiltration
- Water holding capacity
- Rooting depth
- Biodiversity, diversity of microbes, diversity of soil life, soil microbiome

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Chessman, Dennis - NRCS, Lexington, KY
Sent: 13 Jan 2017 18:16:42 +0000
To: Chessman, Dennis - NRCS, Lexington, KY;Fisher, Barry - NRCS, Washington, DC;Kucera, Jennifer - NRCS, Portland, OR;Lamm, David - NRCS, Greensboro, NC;Moebius-Clune, Bianca - NRCS - Washington, DC;Smith, Brandon - NRCS, Dover, NH;Stott, Diane - NRCS, Lafayette, IN
Subject: FW: Carbon Plan Guidance
Attachments: TGN-Notice-134.pdf, Carbon_Plan_Guidance_12-28-16.docx

Since CAPs may still be on our minds from yesterday's discussion, I thought I would forward this. It will be interesting to watch the response from operators and landowners, and see to see if CA can develop any TSPs to do the plans. All part of the not-so-clear world of CAPs. Nonetheless, there is a direct SII connection, which is a good thing I think.

Dennis Chessman
USDA-NRCS, Soil Health Division

From: Dang, Hue - NRCS, Davis, CA
Sent: Friday, January 13, 2017 10:29 AM
To: Chambers, Adam - NRCS, Portland, OR <Adam.Chambers@por.usda.gov>; Chessman, Dennis - NRCS, Lexington, KY <Dennis.Chessman@ky.usda.gov>
Subject: Carbon Plan Guidance

Good morning,

Thank you for your input and comments in development of the carbon plan. Attached is the final plan.

After much discussion, NHQ has agreed to pilot this as a CAP. We are working with them to provide additional information and documentation. We also released this as a tech note in CA as some of our offices and partners are in the middle of RCCP implementation and need guidance. I see this as an on-going process with some learning and revisions as we and partners write and implement these plans. Let's keep in touch as we move forward in our respective efforts on this.

Best,
Hue

HUE DANG | Resource Conservationist | Natural Resources Conservation Service | 430 G Street Davis, CA 95616 | (530) 792-5657 | Hue.Dang@ca.usda.gov
Telework Days: Tuesday and Friday

From: Kocsis, Terryl - NRCS, Davis, CA
Sent: Wednesday, December 28, 2016 4:53 PM
To: ug-CA-nrcs <ca-nrcs@one.usda.gov>
Subject: ELECTRONIC DIRECTIVES - Technical Guide Notice 134

CALIFORNIA NRCS TECHNICAL GUIDE 450-VI

TECHNICAL GUIDE NOTICE NO. 134

SUBJECT: Issue New Document to the Field Office Technical Guide, Section III.

Purpose: Issue Guidance for a Carbon Plan

Effective Date: When contents are received.

Explanation:

Section III: “Carbon Plan Guidance” has been posted to Section III under the Carbon Planning folder. The document defines a Carbon Plan as follows:

A carbon plan is a whole-farm conservation plan that when implemented will enhance soil health, increase carbon sequestration and reduce greenhouse gas (GHG) emissions. The planner and client develop the carbon plan by addressing resource concerns on the farm, ranch, or forestland through application of targeted, site-specific conservation practices. The carbon plan contains all the elements of a conservation plan including an inventory and analysis of current resource conditions, on-farm carbon sequestration and GHG mitigation potential, and the client’s decision regarding the implementation of a conservation system that will address the identified resource concerns. Global climate change is ubiquitous and can be considered a resource concern for all farms, ranches and forest lands, reducing greenhouse gas emissions and enhancing carbon sequestration on these lands have numerous co-benefits that improve ecosystem function and health.

Location of Documents

The California eFOTG, located on the web at http://efotg.sc.egov.usda.gov/efotg_locator.aspx, is being updated to reflect changes to Section III.

/s/

TOM HEDT
State Resource Conservationist

ATTACHMENT: Carbon Plan Guidance (Copy also posted to the California eFOTG.)



December 28, 2016

CALIFORNIA NRCS TECHNICAL GUIDE 450-VI

TECHNICAL GUIDE NOTICE NO. 134

SUBJECT: Issue New Document to the Field Office Technical Guide, Section III.

Purpose: Issue Guidance for a Carbon Plan

Effective Date: When contents are received.

Explanation:

Section III: “Carbon Plan Guidance” has been posted to Section III under the Carbon Planning folder. The document defines a Carbon Plan as follows:

A carbon plan is a whole-farm conservation plan that when implemented will enhance soil health, increase carbon sequestration and reduce greenhouse gas (GHG) emissions. The planner and client develop the carbon plan by addressing resource concerns on the farm, ranch, or forestland through application of targeted, site-specific conservation practices. The carbon plan contains all the elements of a conservation plan including an inventory and analysis of current resource conditions, on-farm carbon sequestration and GHG mitigation potential, and the client’s decision regarding the implementation of a conservation system that will address the identified resource concerns. Global climate change is ubiquitous and can be considered a resource concern for all farms, ranches and forest lands, reducing greenhouse gas emissions and enhancing carbon sequestration on these lands have numerous co-benefits that improve ecosystem function and health.

Location of Documents

The California eFOTG, located on the web at http://cfotg.sc.cgov.usda.gov/cfotg_locator.aspx , is being updated to reflect these changes to Sections III.

THOMAS HEDT

Digitally signed by THOMAS HEDT
DN: c=US, o=U.S. Government, ou=Department of
Agriculture, cn=THOMAS HEDT,
0.9.2342.19200300.100.1.1-12001000236585
Date: 2016.12.28 16:42:40 -08'00'

TOM HEDT
State Resource Conservationist

ATTACHMENTS: (copies sent by request) (Copies will be posted to the California eFOTG.)

Carbon Plan Guidance

Definition and Purpose

A carbon plan is a whole-farm conservation plan that when implemented will enhance soil health, increase carbon sequestration and reduce greenhouse gas (GHG) emissions. The planner and client develop the carbon plan by addressing resource concerns on the farm, ranch, or forestland through application of targeted, site-specific conservation practices. The carbon plan contains all the elements of a conservation plan including an inventory and analysis of current resource conditions, on-farm carbon sequestration and GHG mitigation potential, and the client's decision regarding the implementation of a conservation system that will address the identified resource concerns. Global climate change is ubiquitous and can be considered a resource concern for all farms, ranches and forest lands, reducing greenhouse gas emissions and enhancing carbon sequestration on these lands have numerous co-benefits that improve ecosystem function and health.

A. Requirements for the Carbon Plan

1. The plan will address the following for each land use.

Cropland

- a. At a minimum, address the NRCS planning criteria for:
 - Soil quality: Soil organic matter depletion and available water holding capacity
 - Insufficient water: Inefficient moisture management
 - Air quality: Emissions of greenhouse gases (nitrous oxide, methane, and carbon dioxide)
- b. Additionally, address NRCS planning criteria for soil erosion, other soil quality/health, plant condition, efficient energy use, and other identified resource concerns.
- c. Meet the client's objectives.
- d. Comply with federal, state, tribal, and local laws, regulations and permit requirements.

Rangeland

- a. At a minimum, address the NRCS planning criteria for:
 - Soil quality: Soil organic matter depletion and available water holding capacity
 - Insufficient water: Inefficient moisture management
 - Air quality: Emissions of greenhouse gases (nitrous oxide, methane, and carbon dioxide)
 - Degraded plant condition: Plant health and productivity
 - Degraded plant condition: Inadequate structure and composition
 - Degraded plant condition: Wildfire hazard and excessive biomass accumulation
- b. Additionally, address NRCS planning criteria for soil erosion, other soil quality/health, efficient energy use, and other identified resource concerns.
- c. Determine baseline animal unit month (AUM) and/or vegetation productivity.

- d. Meet the client's objectives.
- e. Comply with federal, state, tribal, and local laws, regulations and permit requirements.

Pastureland

- a. At a minimum, NRCS planning criteria will be met for:
 - Soil quality: Soil organic matter depletion and available water holding capacity
 - Insufficient water: Inefficient moisture management
 - Air quality: Emissions of greenhouses gases (nitrous oxide, methane, and carbon dioxide)
 - Degraded plant condition: Plant health and productivity
 - Degraded plant condition: Inadequate structure and composition
 - Degraded plant condition: Wildfire hazard and excessive biomass accumulation
- b. Additionally, address NRCS planning criteria for soil erosion, other soil quality/health, efficient energy use, and other identified resource concerns.
- c. Determine baseline animal unit month (AUM) and/or vegetation productivity
- d. Meet the client's objectives.
- e. Comply with federal, state, tribal, and local laws, regulations and permit requirements.

Forestland (Includes Agroforestry, Afforestation, and Herbaceous Wildlife-beneficial practices on other land uses)

- a. Meet the requirement of a Forest Management Plan (FMP) for forestland land use.
- b. Additionally at a minimum, address the NRCS planning criteria for the following if they were not addressed in the FMP:
 - Soil quality: Soil organic matter depletion and available water holding capacity
 - Soil quality: Compaction
 - Insufficient water: Insufficient moisture management
 - Air quality: Emissions of greenhouses gases (nitrous oxide, methane, and carbon dioxide)
 - Degraded plant condition: Plant health and productivity
 - Degraded plant condition: Excessive plant pest pressure
 - Degraded plant condition: Wildfire hazard and excessive biomass accumulation
- c. Meet the client's objectives.
- d. Comply with federal, state, tribal, and local laws, regulations and permit requirements.

2. Resource Inventory

- a. Background and Site Information:
 - Landowner information – name, address, operation type, size
 - Location and plan map of parcel
- b. Identify Client's Objectives: Includes client's short and long term goals for soil health, carbon sequestration and GHG emissions reduction.
- c. Document Existing Conditions:
 - Resource inventory map – boundaries, fields, surface waters, wetlands, fences, land uses, etc.
 - Soils map and interpretations
 - Current management activities, existing practices, and history
 - Resource assessments including the results of all appropriate tools such as COMET-Planner and COMET-Farm, Soil Conditioning Index, Soil Health Field Assessment Worksheet, Rangeland Health Assessment, and Pasture Condition Score, and other NRCS approved methodologies.
 - Identify all resource concerns that do not currently meet NRCS planning criteria. See Resource Concerns List in Section III of eFOTG at <https://efotg.sc.egov.usda.gov/treemenuFS.aspx>.

3. Desired Future Conditions and Recommended Conservation Practices

- a. Develop and evaluate alternatives recommended to the client.
- b. Based on the alternatives selected, develop the carbon plan that includes the following:
 - A record of the conservation practices that have been selected to address the identified resource concerns.
 - Any necessary specifications to implement the practices.
 - A schedule of planned practice implementation.
 - A plan map showing the record of the client's decisions and location(s) of planned conservation practices.
 - Quantify the amount of greenhouse gas reduction and/or enhanced carbon sequestration using COMET-Farm, COMET-Planner or other approved NRCS quantification tools.

- c. Following is a list of conservation practices that may be useful in a carbon plan. In some situations other practices may also enhance carbon sequestration and/or reduce GHG emissions. Planning is location-specific and the following list of conservation practices are also recognized to have quantifiable benefits and support the USDA Secretary of Agriculture's Climate Mitigation Building Blocks. A list of all NRCS Conservation Practices is located in Section IV for eFOTG, <https://efotg.sc.egov.usda.gov/treemenuFS.aspx>.

Code	Practice Name
366	Anaerobic Digester
672	Building Envelope Improvement
327	Conservation Cover
328	Conservation Crop Rotation
332	Contour Buffer Strips
330	Contour Farming
340	Cover Crop
342	Critical Area Planting
374	Farmstead Energy Improvement
386	Field Border
393	Filter Strip
512	Forage and Biomass Planting
666	Forest Stand Improvement
412	Grassed Waterway
422	Hedgerow Planting
603	Herbaceous Wind Barriers
670	Lighting System Improvement
590	Nutrient Management
528	Prescribed Grazing
550	Range Planting
329	Residue and Tillage Management, No-Till
345	Residue and Tillage Management, Reduced Till
391	Riparian Forest Buffer
390	Riparian Herbaceous Cover
381	Silvopasture Establishment
585	Stripcropping
612	Tree/Shrub Establishment
645	Upland Wildlife Habitat Management
601	Vegetative Barrier
650	Windbreak/Shelterbelt Renovation
380	Windbreak/Shelterbelt Establishment

4. Monitoring will ensure long term carbon storage.

Practices must be monitored and maintained so the benefits of carbon storage in the soil and perennial vegetation continue to be realized.

B. Deliverables for the Client – a hardcopy and digital copy of the plan that includes:

- Cover page – name, address, phone of client and TSP; NRCS Conservation practices including planned implementation dates for selected alternative; Total Acres of the Plan, signature blocks for the TSP, producer, and a signature block for the NRCS acceptance.
- Plan map – boundaries, fields, scale, north arrow, appropriate map symbols for existing and planned conservation practices, land use designations, and other features such as streams, surface water, and sensitive areas.
- Soils map and appropriate soil descriptions. The Web Soil Survey can provide the needed information: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- All resource assessments as indicated in previous sections, including copy of COMET-Planner and COMET-FARM for the final selected alternative.
- Implementation requirements and maintenance requirements of selected practices.

C. Deliverables for NRCS Field Office

Complete Hardcopy and Electronic copy of the client's plan as described in previous section.

From: Muloski, Martin - NRCS, Fort Worth, TX
Sent: 26 Apr 2017 11:18:40 +0000
To: Moebius-Clune, Bianca - NRCS - Washington, DC
Subject: FW: Food and Conservation Groups Invest in Soil to Sustain Food Production

Hi Bianca,

You might be interested in this information.

Marty

From: Dzedzic, Jeffrey - NRCS, FDRT WDRTH, TX
Sent: Tuesday, April 25, 2017 5:06 PM
To: ug-txfortwort-NEDC <txfortwort-NEDC@one.usda.gov>
Subject: FW: Food and Conservation Groups Invest in Soil to Sustain Food Production

FYI

From: Soil Health Institute [<mailto:brath@soilhealthinstitute.org>]
Sent: Tuesday, April 25, 2017 2:14 PM
To: Guerrero, Rafael - NRCS, Fort Worth, TX <Rafael.Guerrero@ftw.usda.gov>
Subject: [CAUTION: Suspicious Link]Food and Conservation Groups Invest in Soil to Sustain Food Production



GENERAL MILLS



SOIL HEALTH



Food and Conservation Groups Invest in Soil to Sustain Food Production

A national effort to enhance farm sustainability through soil health has additional backing from a major consumer foods manufacturer. Leaders from General Mills, The Nature Conservancy, the Soil Health Institute and the Soil Health Partnership announce a collaborative effort to advance soil health on America's farms and ranches, paving the way for measurable economic and environmental gains for farmers, businesses and communities for generations to come.

Global populations are expected to grow to more than 9 billion by 2050, doubling the demand for food, fuel and fiber production and placing unprecedented stress on the health and viability of soils. To help ensure soil health, General Mills has made a three-year, \$2 million commitment to The Nature Conservancy, Soil Health Institute and Soil Health Partnership to support the development of tools and resources for farmers, landowners, and supply chain leaders to achieve widespread adoption of soil health practices.

"Soil health is critical for everyone including farmers, farm communities, consumers, and companies," said Jerry Lynch, Chief Sustainability Officer at General Mills. "We are grateful to

partner with farmers in our supply chain in their ongoing work to build healthy soils, and welcome further collaboration with all interested parties in the value chain."

Collaborating across business, science and policy sectors will help achieve meaningful soil health outcomes more quickly and at an unprecedented scale. Specifically, these organizations will partner to:

- Improve soil health measurements and standards;
- Increase support for soil health practice adoption by absentee landowners;
- Target, plan and expand the field network of on-farm demonstration sites;
- Coordinate soil health activities and communications for maximum impact;
- Mobilize and support diverse constituents in advancing public policy solutions.

"This commitment from General Mills will help us plan for strategic growth and expansion into new cropping systems, new partnerships and new geographies, both inside and outside the Upper Midwest where we have focused our efforts so far," said Nick Goeser, Director of the Soil Health Partnership. "It will also assist us in developing a framework to help others working on soil health efforts in the areas of research, education and networking."

According to the organizations' leaders, the scale-up of integrated research and soil health promotion is essential to enhancing global food production and protecting the ecosystem.

"The needs for advancing soil health are far greater than any single organization can provide public or private," said Wayne Honeycutt, President and CEO of the Soil Health Institute. "Soil health management systems can build resilience to drought as well as provide protection from other extreme weather events, such as flooding. In fact, when we increase soil organic carbon by a single percent just 1percent we increase soil water-holding capacity by approximately 2,500 to 12,000 gallons per acre in many agricultural soils. These same soil health practices that are good for farmers can also improve water quality, reduce greenhouse gas emissions, and enhance pollinator and other wildlife habitat. Partnering is the way we can achieve national scale of such benefits."

"Healthy soil is the foundation for all life, yet we estimate that less than 10 percent of U.S. soils are managed optimally today," said Michael Doane, Global Director of Working Lands for The Nature Conservancy. "With a goal to transform the soil health management systems on at least 50 percent of US croplands by 2025, healthier soils can create substantial economic benefits for farmers and provide consumers and future generations with resilient food systems, clean water and a stable climate."

For more information, contact:

Mollie Wulff | General Mills

763-764-6364

Media.line@genmills.com

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Byron Rath | Soil Health Institute

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brath@soilhealthinstitute.org

Jenna Rose | Soil Health Partnership

573-808-0815

Jenna@rosemedia.biz

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-
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About General Mills

General Mills is a leading global food company that serves the world by making food people love. Its brands include *Cascadian Farm, Cheerios, Annie's, Yoplait, Nature Valley, Fiber One, Haagen-Dazs, Betty Crocker, Pillsbury, Old El Paso, Wanchai Ferry, Yoki* and more. Headquartered in Minneapolis, Minnesota, USA, General Mills had fiscal 2016 worldwide sales of US \$17.6 billion, including the company's US \$1.0 billion proportionate share of joint-venture net sales. For more information about General Mills, visit www.generalmills.com.

About The Nature Conservancy

The Nature Conservancy is a global conservation organization dedicated to conserving the lands and waters on which all life depends. Guided by science, we create innovative, on-the-ground solutions to our world's toughest challenges so that nature and people can thrive together. We are tackling climate change, conserving lands, waters and oceans at unprecedented scale, and helping make cities more sustainable. Working in more than 65 countries, we use a collaborative approach that engages local communities, governments, the private sector, and other partners. To learn more, visit www.nature.org/soil or follow [@nature_press](https://twitter.com/nature_press) on Twitter.

About the Soil Health Institute

The Soil Health Institute's mission is to safeguard and enhance the vitality and productivity of soil through scientific research and advancement. An evolution of the Soil Renaissance, an initiative established in 2013 by the Samuel Roberts Noble Foundation and Farm Foundation to advance soil health and make it the cornerstone of land use management decisions, the Soil Health Institute serves as the primary resource for soil health information. For more information about the Soil Health Institute, visit www.soilhealthinstitute.org.

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About the Soil Health Partnership

The Soil Health Partnership is a farmer-led initiative that fosters transformation in agriculture through improved soil health, benefiting both farmer profitability and the environment. The SHP tests, measures and advances progressive farm management practices that will enhance sustainability and farm economics for generations to come. SHP brings together diverse partners to work towards common goals. At least a ten-year scientific program led by the National Corn Growers Association, our vision is driven by initial and continuing funding and guidance from NCGA, Monsanto, the Walton Family Foundation, the Midwest Row Crop Collaborative and USDA, with technical support from The Nature Conservancy and the Environmental Defense Fund. For more, visit soilhealthpartnership.org.

[Click here to unsubscribe](#)

From: Fisher, Brad - NRCS, Washington, DC
Sent: 2 May 2017 11:19:26 +0000
Bcc: Abramovich, Ron - NRCS, Boise, ID;Gollehon, Noel - NRCS, Beltsville, MD;Tippie, Chris - NRCS, Fort Worth, TX;Meza, Jesse - NRCS, Washington, DC;Mikasa, Karl - NRCS, Honolulu, HI;Olson, Carolyn - NRCS, Washington, DC;Gilbert, Gwen - NRCS, Washington, DC;Geter, Frank - NRCS, Fort Collins, CO;Ingram, Kevin A - NRCS, Beltsville, MD;Miller, Selena - NRCS, Washington, DC;Weller, Jason - NRCS, Washington, DC;Reaves, Fred - NRCS, Washington, DC;Boozer, Astor - NRCS, Washington, DC;McAfee, Robert - NRCS, Annapolis, MD;Strobel, Mike - NRCS, Portland, OR;Hoeft, Claudia - NRCS, Washington, DC;Groves, Jessica - NRCS, Washington, DC;Glover, John - NRCS, Washington, DC;Howard, Dwayne - NRCS, Washington, DC;Mason, Mark - NRCS, Easton, MD;Deavers, Leslie - NRCS, Washington, DC;Rose, Mark - NRCS, Washington;Pilkowski, Tim - NRCS, Washington, DC;Larsen, Dana - NRCS, Fort Worth, TX;Snieckus, Robert - NRCS, Washington, DC;Lowenfish, Martin - NRCS, Washington, DC;Widman, Norm - NRCS, Washington, DC;White, Jeffrey - NRCS, Washington, DC;DuVarney, Andree - NRCS, Washington, DC;Cruz, Gregorio - NRCS, Washington, DC;Taylor, Ciji - NRCS, Washington, DC;Miller, Spencer - NRCS, Washington, DC;Thomas, Pattie - NRCS, Washington, DC;Banks, Michelle - NRCS, Washington, DC;Kenyon, Emmabelle - NRCS, Washington, DC;Rhodes, Maggie - NRCS, Madison, WI;Cohen, Kari - NRCS, Washington, DC;Cerretani, Katie - NRCS, Washington, DC;Lawson, Dan - NRCS, Washington, DC;Diggs, Jackie - NRCS, Beltsville, MD;Shively, Rebecca - OSEC;Lawrence, Patty - NRCS, Washington, DC;Smith, David - NRCS, Washington, DC;Reed, Lesia - NRCS, Beltsville, MD;Barry, Gayle - NRCS, Washington, DC;Cosby, Terry - NRCS, Columbus, OH;Lockwood, Amanda - DSEC;Hubbert, Jon - NRCS, Des Moines, IA;Chambers, Candace - NRCS, Jackson, MS;Bertelson, Lisa - NRCS, Washington, DC;Hanlin, Kirk - NRCS, Washington, DC;Decker, Denise - NRCS, Washington, DC;Vick, Roy - NRCS, Washington, DC;Barnes, Verlon - NRCS, Omaha, NE;Smith, Alexandra - NRCS, Albany, TX;Ice, Karen - NRCS, Hillsboro, TX;Torske, Seanna - NRCS, Hardin, MT;Caldwell, Larry - NRCS-ST, Stillwater, OK;de la Torre, Rebecca - NRCS, Phoenix, AZ;Wetterberg, Larry - NRCS, Omaha, NE;Pratt, Daniel - NRCS, Chinook, MT;Schnoor, Lori - NRCS, Maquoketa, IA;Smith, ChristopherW - NRCS, Washington, DC;Lawrence, Bart - NRCS, Barrigada, GU;Dwens, Cory - NRCS, Portland, OR;Dostie, Daniel - NRCS, Harrisburg, PA;Andrews, Susan - NRCS, Washington, DC;Duyck, Garrett - NRCS, The Dalles, OR;Hudson, Tansel - NRCS, Athens, GA;Holy, Doug - NRCS, Washington, DC;Robotham, Michael - NRCS, Washington, DC;Ferge, Kathy - NRCS, Portland, OR;Fouk, Robin - NRCS, Chadron, NE;Lester, Amie - NRCS, Lebanon, IN;Dickson, Randall - NRCS, Rensselaer, IN;DeVoss, Pamela - NRCS, Valparaiso, IN;Struben, Gary - NRCS, Indianapolis, IN;Haygood, Cindy - NRCS, Carrollton, GA;Elke, Curtis - NRCS, Boise, ID;Bilbo, Keri - NRCS, Bozeman, MT;Kyser, Janene - NRCS, Fort Smith, AR;Wallace, Bonnie - NRCS, Choteau, MT;Bray, Robert - NRCS, Culbertson, MT;Haymaker, Sarah - NRCS, Washington DC;Lamm, David - NRCS, Greensboro, NC;Dalton, Jennifer - NRCS, Medina, OH;Jordan, Leonard - NRCS, Washington, DC;Knight, Lynn - NRCS, Greensboro, NC;Combs, Jeffrey - NRCS, Bozeman, MT;Kuykendall, Holli - NRCS, Greensboro, NC;Moebius-Clune, Bianca - NRCS - Washington, DC;Gunderson, Paula - NRCS, Choteau, MT;Surface, Jan - NRCS, Little Rock, AR;Duriancik, Lisa - NRCS, Beltsville, MD;Mikell, Gordon - NRCS, Columbia, SC;Overstreet, Amy - NRCS, Colchester, VT;Webster, Michael - NRCS, New Hampton, IA;Jordan, Darvis - NRCS, Phoenix, AZ;Jacobs, Alayna - NRCS, Coffeeville, MS;Kent, Julie - NRCS, Port Gibson, MS;Allison, Jon - NRCS, Coffeeville, MS;Harris, Ronald - NRCS, Washington, DC;Olson, James - NRCS, Choteau, MT;Afman, Dawn - NRCS, Oxnard, CA;Goodwin, Craig - NRCS, Washington, DC;Jones, Luther - NRCS, Washington, DC;Walchuk, Debra - NRCS, Thief River Falls, MN;Lindsay, Kathleen - NRCS, Washington, DC;Yates, Leona - NRCS, Fort Pierce, FL;Eschmeyer, Jeff - OSEC;Mullarkey, Daniel - NRCS, Beltsville, MD;Haines, Lindsay - NRCS, Washington, DC;Wright, Katura - NRCS, Athens, GA;VanDyke, Angela - NRCS, Syracuse, NY;Belcher, Katherine - NRCS, Lexington, KY;Neumann, Kimberly - NRCS, Fort Wayne, IN;D'Addio, Terry - NRCS, Washington, DC;Berry, Kim - NRCS, Washington, DC;Herbert, Noller - NRCS, Washington, DC;Caire, Teresah - NRCS, Ft. Worth, TX;Turner, Michael - NRCS, Washington, DC;Bohach, Mark - NRCS-CD, New

Hampton, IA;FosterWest, Erin - OSEC, Washington, DC;Guerrero, Rafael - NRCS, Fort Worth, TX;Coreil, Chris - NRCS, Alexandria, LA;Walker, Nancy - NRCS, New Madrid, MO;Illenberg, Mike - OC, Washington, DC;Spriggs, Perdita, NRCS - Raleigh, NC;Gelnar, Dwaine - NRCS, Columbia, MO;Spencer, Carissa - NRCS, St. Paul, MN;Kovacs, Tricia - AMS;Bowers, Jeremy - NRCS, Athens, GA;Thomas, Michelle - NRCS, Washington, DC;Douglas, Chad - NRCS, Washington, DC;Bramblett, Jimmy - NRCS, Washington, DC;Ortiz, Ramon - NRCS, Annapolis, MD;Mabry, Brian - OC, Washington, DC;Muller, Eva - NRCS, Bozeman, MT;Remley, Chad - NRCS, Salina, KS;Johnson, Lane - NRCS, Forth Worth, TX;Vongkhamdy, Pooh - NRCS, Warwick, RI;Lindig, Carrie - NRCS, Somerset, NJ;Heater, Thad - NRCS, Reno, NV;Taylor, Kasey - NRCS, Dover, DE;Wilson, Mike - NRCS, Lincoln, NE;Brown, Tomasina - OC, Washington, DC;Wickey, Kevin - NRCS, Washington, DC;Westcott, Nick - OSEC, Washington, DC;Rella, Elias - OSEC, Washington, DC;Brown, Amie - NRCS, Washington, DC;Aspey, Louis - NRCS, Morgantown, WV;Schaller, Amanda - NRCS, Washington, DC;Thompson, Katrina - NRCS, Washington, DC;Woodrich, Karen - NRCS, Lexington, KY;Gordon, James - NRCS, Fort Worth, TX;Branham, Sharif - NRCS, Washington, DC;Titla, Millie - NRCS, San Carlos, AZ;ug-WY-nrcs-publicinfo;ug-WV-nrcs-publicinfo;ug-WI-nrcs-publicinfo;UG-WDC-NRCS-publicinfo;ug-WA-nrcs-publicinfo;ug-VT-nrcs-publicinfo;ug-VA-nrcs-publicinfo;ug-TX-nrcs-publicinfo;ug-TN-nrcs-publicinfo;ug-SD-nrcs-publicinfo;ug-SC-nrcs-publicinfo;ug-RI-nrcs-publicinfo;ug-PR-nrcs-publicinfo;ug-PA-nrcs-publicinfo;ug-OR-nrcs-publicinfo;ug-OK-nrcs-publicinfo;ug-OH-nrcs-publicinfo;ug-NY-nrcs-publicinfo;ug-NV-nrcs-publicinfo;ug-NM-nrcs-publicinfo;ug-NJ-nrcs-publicinfo;ug-NH-nrcs-publicinfo;ug-NE-nrcs-publicinfo;ug-ND-nrcs-publicinfo;ug-NC-nrcs-publicinfo;ug-MT-nrcs-publicinfo;ug-MS-nrcs-publicinfo;ug-MD-nrcs-publicinfo;ug-MN-nrcs-publicinfo;ug-MI-nrcs-publicinfo;ug-ME-nrcs-publicinfo;ug-MD-nrcs-publicinfo;ug-MA-nrcs-publicinfo;ug-LA-nrcs-publicinfo;ug-KS-nrcs-publicinfo;ug-IN-nrcs-publicinfo;ug-IL-nrcs-publicinfo;ug-ID-nrcs-publicinfo;ug-IA-nrcs-publicinfo;ug-HI-nrcs-publicinfo;ug-GA-nrcs-publicinfo;ug-FL-nrcs-publicinfo;ug-DE-nrcs-publicinfo;ug-CT-nrcs-publicinfo;ug-CD-nrcs-publicinfo;ug-CA-nrcs-publicinfo;ug-AZ-nrcs-publicinfo;ug-AR-nrcs-publicinfo;ug-AK-nrcs-publicinfo;ug-ne-nrcs-lteam

Subject: NRCS in the News: NSAC Applauds Congressional Support of Conservation Programs, Tornadoes Ravage East TX, CA Reduces Almond Harvest Dust, Vid: Conserving TX Wildlife Corridors, S&T Insecticide, Wetlands Webinar Today @ 2 p.m. Eastern

NRCS in the News

Tuesday, May 2



Inside The Beltway

National Sustainable Agriculture Coalition Applauds Congressional Support of Family Farms

AGRIMARKETING

The National Sustainable Agriculture Coalition commends appropriators for prioritizing investment in USDA programs that help American farmers and ranchers conserve natural resources on working lands. The omnibus package increases funding for Conservation Technical Assistance and refrains from cutting farm bill funding for the Natural Resources Conservation Service's Conservation Stewardship Program, USDA's largest working lands conservation program. NSAC is "dismayed that Congress has

once again elected to cut mandatory farm bill funding” from the Environmental Quality Incentives Program.

Editorial: Sec. Perdue's First Week on the Job

FARM FUTURES

By *DC Dialogue* editor Jacqui Fatka: "After months of waiting, agriculture finally got its voice on President Trump's cabinet. And after a front-row seat for many of his firsts, I can say agriculture indeed has a great advocate on their hands. What many hadn't expected was Sonny Perdue himself sitting with his wife and many of his family members in the Senate gallery looking on at the Senators as they cast his vote. In the words of his press secretary who I spoke with later that day, she said, "Expect the unexpected," she said, adding if there's some where he needs to be, he'll be there."

Outside The Beltway

NRCS on Tour – Video: Southeast Texas Wildlife Corridors Conservation. Funded by an NRCS Conservation Innovation Grant — the [Wildlife Habitat Federation](#) presents conservation practices and wildlife corridors in southeast Texas near Cat Springs.

California | Almond Industry Making Strides to Reduce Harvest Dust

WESTERN FARM PRESS

A decade of dust research funded by Almond Board of California, partnerships with equipment manufacturers and the USDA Natural Resources Conservation Service, has resulted in methods, resources, and incentives to help reduce the dust generated at harvest, and to keep the dust created inside the orchard and away from neighbors. NRCS has funding incentives available through the Environmental Quality Incentives Program for almond growers wishing to utilize clean harvest technology. NRCS this year has more than tripled reimbursements, to \$37.50 per acre, for up to three years to almond growers who purchase harvest equipment shown to reduce particulate matter at harvest.

Oregon | Wet April Helps Snow Stick around Longer

ASSOCIATED PRESS

Heavy rainfall in April has helped boost Oregon's snowpack after several years of below-average levels. Natural Resources Conservation Service data show no portion of Oregon was in a drought at the end of April. This, compared to 2015 when the entire state to the east of the Cascades had moderate to severe drought conditions.

South Dakota | Converting CRP to Cropland: Set It Up by Burning Residue?

DAKOTA FARMER

A couple of years ago, Chris Nelsen didn't disk or plow land coming out of the Conservation Reserve

Program. He burned the residue instead. He hoped to reduce the residue that would interfere with planting, but preserve the soil structure that had developed while the land was idled. "The tilth of that field was so mellow, it was like digging down into cottage cheese anywhere I took a soil sample. That kind of soil structure allows for a high degree of water infiltration. It seemed counterproductive to destroy it," Nelsen says. "Burning down the residue rather than plowing it was a good decision, and I would do it again in a similar situation."

Texas | Multiple Tornadoes Ravage East Texas

AG FAX

Texas A&M AgriLife Extension Service agents and volunteers are assessing the damage caused by multiple tornadoes in East Texas near Canton April 29. AgriLife mobilized emergency responses to affected areas in Henderson, Smith, Van Zandt, Rains and Wood counties following multiple confirmed tornadoes, high winds and flooding. AgriLife encourages residents who lost cattle, fences or buildings to document losses and contact the U.S. Department of Agriculture's Natural Resources Conservation Service and Farm Service Agency for possible emergency relief funds.

Texas | Top 10 Traits of a Successful Grazing Land Manager

LAND & LIVESTOCK POST

According to recent data, the number of people moving to Southern Great Plains states such as Texas is more than 1,400 per day. Private lands in the U.S. are undergoing significant changes. More than 1 acre of farmland is lost per minute. A survey recently was conducted of 14 resource professionals who have spent their entire working careers assisting these land stewards through the good and tough times. The list includes professionals from the Natural Resources Conservation Service. *Land & Livestock Post* organized their response to come up with the top 10 traits of successful grazing land managers. Coming in at #1 is

Wyoming | Snowpack Increases with Spring Storm

ASSOCIATED PRESS

The spring snowstorm over the last week has increased Wyoming's snowpack. The Natural Resources Conservation Service on Monday reported that the state's snowpack increased from 117 percent of median last week to 137 percent of median. The big snowpack has raised worries about potential spring flooding when the annual mountain snowmelt begins.

Soil Health & Organics Events

Colorado

The Ecology of Soil Health Summit

Scientists, students, program managers, land managers, and industry representatives will discuss ways to advance the development and implementation of science-based programs that enhance soil health. Event on [Facebook](#).

Fort Collins, Monday, June 5 through 7

Kansas

Cover Crop Field Day

Kansas State University researchers discuss cover crop management options for farmers growing dryland wheat. This event is funded in part by a Natural Resources Conservation Service **Conservation Innovation Grant**.

Brownell, Friday, May 19

Louisiana

Next week . . . Cane River Soil Health Workshop

Hosted by the Natural Resources Conservation Service, Natchitoches Soil and Water Conservation District and the Cane River Commission.

Natchitoches, Tuesday, May 9

Maryland and Pennsylvania

This Friday . . . Cover Crop Burn Down Field Demonstrations

Three on-farm planting field demonstrations will cover some of the fine points of cover crop burning from farmers who are successfully doing so.

Chambersburg, PA, Friday, May 5; and Greensboro, MD, Wednesday, May 10

Minnesota

Soil Health Field Day

Crop producers and other agricultural professionals can see the latest in soil health, cover crop varieties and management, and relay cropping.

Morris, Wednesday, June 28

Ohio

Ohio No-Till (Summer) Field Day

Click the above link for updates about this event.

Les Seiler Farm, Fulton County, Wednesday July 26

Washington, D.C.

Organic Confluences Summit

The Organic Confluences Summit brings together organic stakeholders to address methods for improving research communication among farmers, scientists, extension agents, industry members and key policy influencers.

organic experts and
will discuss the NRCS Organic Farming Handbook. Held in conjunction with Organic Week D.C.

Washington, D.C., Monday and Tuesday, May 22-23

Wisconsin

Cover Crop Field Days with NRCS' Jay Fuhrer

Featured topics include managing cover crops, different cover crop termination options, using grazing and

livestock to improve your soil, and understanding more about the life in your soil.

Viroqua, Friday, May 19 and Mt. Sterling, Saturday, May 20

Organic Dairy Cattle Pasture Walk & Soil Health Demonstration

Features **Justin Morris**, **Natural Resources Conservation Service** regional soil health specialist, leading a demonstration on soil health in pastures.

Columbus, Wednesday, August 23

Science & Technology Conservation Webinars

Contact **Holli Kuykendall**, National Technology Specialist, **East National Technology Support Center**, for more information.

The **Science & Technology Training Library** offers more than 300 on-demand webinars, and it has new and improved search functionality. From **On-demand Webinars**, or any of the “On-Demand Webinars by Category” topics listed on the Home page, Search allows library users to view a list of webinars specific to their interests.

Today ...Tuesday, May 2, at 2:00 p.m. Eastern, 60 minutes — **Mitigating Potential Impacts of Neonicotinoid Insecticides on Wetland Ecosystems** presented by Christy A. Morrissey, Ph.D., Associate Professor, Department of Biology/School of Environment and Sustainability, University of Saskatchewan. Participants will learn about opportunities to mitigate for potential risks of neonicotinoid insecticides to aquatic systems.

Tomorrow ... May 3, at 1:00 p.m. Eastern, 60 minutes — **Water Quality Credits from Stream Restoration Projects** presented by _____, Ph.D., fluvial geomorphologist, _____, Portland, OR; Marc Leisenring, Principal Engineer, Geosyntec Consultants, Portland, OR; and _____, Ph.D., environmental engineer, _____, Portland, OR. Participants will learn basics of Water Quality Trading and how stream restoration, improved crop management, and conservation practices can lead to water quality credits that can serve as an additional source of income for landowners.

Tuesday, May 9, at 2:00 p.m. Eastern, 60 minutes — **Pest Management from an Ecological Framework** presented by John Tooker, Ph.D., Associate Professor of Entomology and Extension Specialist, Penn State, University Park, PA. This webinar will focus on ecological management of agricultural pests (insects and slugs); and, it will emphasize the importance of pairing soil health practices with Integrated Pest Management (IPM) to ensure that gains in soil health are not degraded by unnecessary pesticide use.

Tuesday, May 16, at 2:00 p.m. Eastern, 60 minutes — **Concrete Repair Alternatives: Techniques, Economic Feasibility, Limitations, and Application** presented by _____, P.E., Construction Engineer, _____, Ft. Worth, TX. Learn basic concrete repair alternatives and how to formulate and carry out a repair plan tailored to site specific needs.

Tuesday, May 23, at 2:00 p.m. Eastern, 60 minutes — **Water Productivity - Concept, Utility, and Pathways for Improvement** presented by Hamid J. Farahani, Ph.D., acting national water management engineer, USDA Natural Resources Conservation Service, Greensboro, NC. Participate to better understand what the concept of "water productivity" is, where it comes from, what its usefulness is, and how to improve it.

Thursday, June 1, at 2:00 p.m. Eastern, 60 minutes — **Using Fire and Grazing to Maintain Productive and Ecologically Resilient Grasslands** presented by Chris Helzer, Ph.D., Director of Science, The Nature Conservancy, Aurora, NE. Participants will learn about the effects of grazing and fire on grassland wildlife and opportunities to manage grazing lands to accomplish production and wildlife goals.

Tuesday, June 6, at 3:00 p.m. Eastern, 60 minutes — **Results of a National Transition to Organic Survey** presented by Garry Stephenson, Director, Center for Small Farms and Community Food Systems Coordinator, Small Farms Program, Oregon State University, Corvallis, OR. Join this webinar to learn about the motivations, needs, and challenges of the transition to organic.

Wednesday, June 7, at 2:00 p.m. Eastern, 60 minutes — **COR Webinar Series 4: Administration of a Construction Contract - Differing Site Conditions, Contract Modifications and Progress Payments** presented by **Todd Davis**, Acquisition Analyst, Policy, Practices, and Standards Branch, USDA **Natural Resources Conservation Service** Office of the Chief Procurement and Property Officer, Washington, D.C., and **Joe Freeland**, P.E., construction engineer, USDA NRCS National Design, Construction and Soil Mechanics Center, Fort Worth, TX. Participants will learn how to address contract changes in a federal contract through contract modifications, and they will also learn how the government makes payments to the contractor and the requirements for both parties.

Wednesday, June 14, at 2:00 p.m. Eastern, 60 minutes — **The National Agricultural Library: Electronic Services and Resources for NRCS Employees** presented by Tanya Tanner, Reference Librarian, USDA ARS National Agricultural Library, Beltsville, MD, and Wayne Thompson, Reference Librarian, USDA ARS National Agricultural Library, Beltsville, MD. Participants will learn how to access and use the online resources and services of the National Agricultural Library with emphasis on those available via DigiTop, USDA's Digital Desktop Library. This webinar is an update to the 2014 presentation.

USDA Climate Hub - Climate Science Webinars

Contact [Holli Kuykendall](#), National Technology Specialist, [East National Technology Support Center](#), for more information.

This Thursday...Thursday, May 4, at 2:00 p.m. Eastern, 60 minutes — [Agricultural Decision Tools from the Cornell Climate Smart Farming Program and the Network for Environment and Weather Applications](#) sponsored by the NE Climate Hub and presented by Jonathan Lambert, Program Manager, Cornell Institute for Climate Smart Solutions, and Dan Olmstead, Coordinator, Network for Environment and Weather Applications, New York State IPM Program, Cornell Cooperative Extension. Participants will learn how to navigate the Network for Environment and Weather Applications (NEWA) and Cornell Climate Smart Farming (CSF) Program websites and use their agricultural decision-making tools based on weather and climate.

New . . . Thursday, June 15, at 2:00 p.m. Eastern, 60 minutes — [Energy Strategies for Farm Resilience in the Northeast](#) sponsored by the NE Climate Hub and presented by Daniel Ciolkosz, research associate and assistant professor, The Pennsylvania State University, and Zane Helsel, Emeritus Extension Specialist in Agriculture Energy, Rutgers University. Participants will learn how energy-oriented design and operation can impact the resilience (the capacity to recover quickly from challenges) and long term success of farm operations, as well as identify common energy strategies for farm viability and resilience.

More News

Borlaug: 'It Is Impossible to be Anti-hunger and Anti-technology'

AG UPDATE

Well-known anti-hunger advocate Julie Borlaug, granddaughter of Norman Borlaug, recently spoke at South Dakota State University on "Biotechnology: Friend or Foe in Fighting World Hunger?" Borlaug explained how biotechnology is, at times, a controversial issue in the world today, but pointed out that biotechnology holds the key to helping to feed a hungry world. She noted, "It is impossible to be anti-hunger and anti-technology."

Satellites are Helping Wine Taste Better

IBM COGNITIVE STORIES

Having farmed in California for more than 80 years, E. & J. Gallo Winery knows that no resource is more important than water, which is why water management has been a top priority for the company for decades. Gallo and IBM's Watson are now using weather reports and remote sensor data to deliver precise amounts of water to each vine, optimizing growth. The secret is located above the clouds, in a satellite looking down on the vineyard. Learn about IBM and precision agriculture.

OBTW . . . Explore Agricultural Engineering on Pinterest!

Features links to articles, books, infographics, videos, t-shirts (including one that declares "This is what an awesome agricultural engineer looks like") and a TV drama in which a small-town agricultural engineer or "extensionist" faces the indifference and mockery of farmers.

Subscribe to 'NRCS in the News'.

Contact [Brad](#), [Ciji](#) or [Jocelyn](#) @ NRCS NHQ Public Affairs.



From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 8 Aug 2017 11:24:04 +0000
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC
Subject: Fwd: Truth

Bianca Moebius-Clune, PhD
Director, Soil Health Division, USDA-NRCS, Washington DC

Begin forwarded message:

From: John Fisher <jnowfisher@mc.com>
Date: August 7, 2017 at 9:07:05 PM EDT
To: bianca.moebius-clune@wdc.usda.gov
Subject: Truth

Dear Ms. Moebius-Clune:

Is it true, as reported in "The Guardian" today, that you have instructed your staff to avoid using the term "climate change" in correspondence and discourse? If so, what is your scientific basis for doing so? Have you had the opportunity to review the draft report on climate change prepared by government scientists and referenced in a NY Times article today? If not, please do so and let me know what you think. If not, why not? Do you even care about science? Do you have children or grandchildren? Do you care what happens to them? What is the value of your soul?

Have a warm day. Strike that. Have a blistering day.

John Fisher
1520 Laurel Ave.
Richmond, CA 94805
ph: 971-241-8815

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 8 Aug 2017 12:59:10 +0000
To: Lindbo, David - NRCS, Washington, DC
Subject: RE: USDA denies directive to prohibit the use of the term 'climate change'

Interesting indeed. I know Jimmy's ask to us was about as clear as it gets. Not sure of the level of clarity he got from others.

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contacts for the Soil Health Division

Tell me how I'm doing by completing this quick Customer Survey (Not intended for external data collection)

From: Lindbo, David - NRCS, Washington, DC
Sent: Monday, August 07, 2017 4:13 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: FW: USDA denies directive to prohibit the use of the term 'climate change'

If you have not seen the response from USDA...see below.

David L. Lindbo, PhD
Director, Soil Science Division, USDA-NRCS
1400 Independence Ave SW Rm 4840
Washington DC 20250
202-720-7848 (D)
202-251-3518 (M)
202-260-9234 (F)
david.lindbo@wdc.usda.gov

From: Weindorf, David [<mailto:david.weindorf@ttu.edu>]
Sent: Monday, August 07, 2017 4:06 PM
To: Lindbo, David - NRCS, Washington, DC <David.Lindbo@wdc.usda.gov>
Subject: FW: USDA denies directive to prohibit the use of the term 'climate change'

Interesting....

DCW

.....
David C. Weindorf, Ph.D., P.G.

Associate Dean for Research
College of Agricultural Sciences and Natural Resources

Professor & BL Allen Endowed Chair of Pedology
Department of Plant and Soil Sciences
Texas Tech University
Box 42122
Lubbock, TX 79409

Office: (806) 834-5287
Fax: (806) 742-0775
E-mail: David.Weindorf@TTU.edu

Documentary Film – Between Earth and Sky:

<http://betweenearthandskymovie.com>

Documentary Film – An Arctic Soils Perspective:

<https://www.youtube.com/watch?v=5q1Y33vll8M&feature=youtu.be>



From: POLITICO Pro [<mailto:politicoemail@politicopro.com>]
Sent: Monday, August 7, 2017 1:57 PM
To: Weindorf, David <david.weindorf@ttu.edu>
Subject: USDA denies directive to prohibit the use of the term 'climate change'

USDA denies directive to prohibit the use of the term 'climate change'

By Jenny Hopkinson

08/07/2017 02:53 PM EDT

USDA is pushing back against reports that the Trump administration, shortly after taking office, instructed Natural Resources Conservation Service officials not to use the term climate change.

"There has never been a directive to NRCS regarding the term 'climate change,'" USDA spokesman Tim Murtaugh told POLITICO Monday.

In a series of emails published Monday by The Guardian, career officials at the conservation service say that "weather extremes" should be used instead of "climate change," while "build organic soil matter" is the preferred phrase over "reduce greenhouse gases." The Feb. 16 memo from Bianca Moebius-Clune, director of NRCS' soil health division, also instructed staff to talk about how soil health increases opportunities for economic and business growth and production efficiency.

Murtaugh said that he didn't know why officials thought they were supposed to change their terminology. "It could be just internal discussion of what they think was happening ... no one was ever told to do what the story was claiming," he said.

President Donald Trump has long questioned the existence of climate change, once calling it a "hoax" perpetuated by the Chinese, and has been mum on whether he thinks it is caused by humans. Since taking office, the Trump administration has pulled the United States out of the Paris climate deal and changed climate change pages from EPA and other government websites to reflect it's uncertainty about the science.

According to the just-disclosed emails, the directives on terms to use followed meetings with transition officials.

"It has become clear one of the previous administration's priority is not consistent with that of the incoming administration. Namely, that priority is climate change," Jimmy Bramblett, NRCS deputy chief, wrote in a Jan. 24 email. "Please visit with your staff and make them aware of this shift in perspective within the Executive Branch."

Even the Climate Hubs — the seven centers spread across the country that were created in 2014 to study regional effects from changes in climate — are set to get a new name, according to the documents.

However, the science behind things like carbon sequestration in the soil and other issues will not change, Moebius-Clune wrote.

"We won't change the modeling; just how we talk about it," she wrote.

This isn't the first time a memo or moves by the administration on climate change and environmental issues has been in the spotlight. On Inauguration Day, the Interior Department shut down all its Twitter accounts following a post by the National Park Service of photos showing a substantially smaller crowd during Trump's swearing-in than at Obama's in 2009.

Several days later, EPA staff were warned to stay off social media and press releases were blocked. Employees were also warned that they must flag any speaking arrangements in the next month for the administration.

Then on Jan. 23, USDA transition leaders had to clean up from a memo sent to the Agricultural Research Service prohibiting the release of documents, including "but not limited to, news releases, photos, fact sheets, news feeds and social media content," until further notice. That memo did not reflect the administration's stance, officials said.

Agriculture Secretary Sonny Perdue has said that the climate is changing, but it's unclear whether it is due to human activities. He had yet to be confirmed at the time the emails were sent.

To view online:

<https://www.politicopro.com/agriculture/story/2017/08/usda-denies-directive-to-nix-the-use-of-climate-change-160500>

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POLITICOPRO

This email was sent to david.weindorf@ttu.edu by: POLITICO, LLC 1000 Wilson Blvd. Arlington, VA, 22209, USA

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 8 Aug 2017 12:54:29 +0000
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC
Subject: FW: Climate change

Let me know if you'd prefer for me to not send you more of these when they are not media requests. I don't know if you handle customer comments as part of pub affairs - do you? Thanks!
Bianca.

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

Contacts for the Soil Health Division

Tell me how I'm doing by completing this quick Customer Survey (Not intended for external data collection)

-----Original Message-----

From: Cameron [<mailto:camron9000@gmail.com>]
Sent: Monday, August 07, 2017 4:12 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: Climate change

Climate change.

Sent from my iPhone

From: Fisher, Barry - NRCS, Washington, DC
Sent: 20 Mar 2017 13:26:11 +0000
To: Dozier, Ivan - NRCS, Champaign, IL
Cc: Lamm, David - NRCS, Greensboro, NC; Moebius-Clune, Bianca - NRCS - Washington, DC; Roberts, Brett - NRCS, Champaign, IL
Subject: FW: UIC Forum-Good Food Sustainability Conference

Ivan,

Quick trip report from Chicago this past weekend- This went much better than I expected

http://www.goodfoodfestivals.com/event/importance-soil-connection-good-food/?instance_id=68 I

forget, sometimes how engaged the urban farmers are compared to our typical audience. Just so you know the topic of climate change was not discussed directly as the moderator- Seth Itzkan Co-Founder Co Director- Soil4Climate, could not get a flight due to weather on the east coast. He was slated for that portion of the discussion. The main climate issue was the over taxed HVAC system in the UIC Forum as it tried to supply enough oxygen to the packed facility. Thank goodness for fellow panelists Jennifer Filipiak- AFT (S & T Conservation Webinar presenter) and Allen Philo- organic crop consultant, who completed our panel that fielded questions for about an hour after our 75 min session. As this sector of agriculture becomes aware and engaged in soil health we will need a good strategy to meet the demand. Side note: Jennifer and I were pulled into a last minute radio interview with Mike Nowak-The Mike Nowak Show on 1590 WCGO Radio, who was broadcasting live from the festival. He actually put in an unsolicited plug for USDA Conservation programs in the upcoming farm bill. The interview will also run on their podcast.

Barry Fisher

Central Team Leader/ Soil Health Specialist

National Soil Health Division

Natural Resources Conservation Service

6013 Lakeside Blvd

Indianapolis, IN 46278-2933

Cell: 317-902-1101

Phone: 317-295-5850

NRCS Soil Health <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/>

NRCS Indiana Home Page: <http://www.in.nrcs.usda.gov/>

NRCS Illinois Home Page: <http://www.il.nrcs.usda.gov/>

Conservation Cropping Systems Initiative: <http://ccsin.iaswcd.org/>

From: Fisher, Barry - NRCS, Washington, DC

Sent: Monday, March 20, 2017 8:24 AM

To: 'Rhonda Williams' <rwilli48@csu.edu>

Subject: RE: UIC Forum-Good Food Sustainability Conference

Thanks for your help and great getting to visit. We had such great questions and discussion. Don't hesitate to contact me if I can help with any projects or programs on campus. Between Jennifer and I, we have a great network of soil health specialists.

Barry Fisher

Central Team Leader/ Soil Health Specialist

National Soil Health Division

Natural Resources Conservation Service

6013 Lakeside Blvd

Indianapolis, IN 46278-2933

Cell: 317-902-1101

Phone: 317-295-5850

NRCS Soil Health <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/>

NRCS Indiana Home Page: <http://www.in.nrcs.usda.gov/>

NRCS Illinois Home Page: <http://www.il.nrcs.usda.gov/>

Conservation Cropping Systems Initiative: <http://ccsin.iaswcd.org/>

From: Rhonda Williams [mailto:rwilli48@csu.edu]

Sent: Sunday, March 19, 2017 5:03 AM

To: Fisher, Barry - NRCS, Washington, DC <Barry.Fisher@wdc.usda.gov>

Subject: UIC Forum-Good Food Sustainability Conference

Good Day Barry Fisher

It was a pleasure meeting you on Saturday! Your Lecture and Demonstration was the best ever.
Now I am a "No Tilling" Advocate!

From your Volunteer....

R. Veronica Williams



Distinguished Graduate Fellow

C.S.U. Aquaponics Agricultural

C.S.U. Pre Law Association Criminal Justice, Philosophy and Political Science

Masters of Science- Geography

Concentration in G.I.S. - Community Development

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 5 May 2017 15:32:27 +0000
To: Rides at the door, Roylene - NRCS, Spokane, WA; Erickson, Terrell - NRCS, Washington, DC
Cc: Ashford, Dana - NRCS, Washington, DC; Brantly, Sid - NRCS, Washington, DC; Padley, Eunice - NRCS, WASHINGTON, DC
Subject: RE: NRE: Talking points on climate change [Today please]

Hi all,

Here's what I just sent to Roylene as some suggestions, before seeing this set of responses. What I sent reflects the Soil Health Building Block, and a bit of nutrient management building block. (not sure how one would distill all NRCS/producer contributions down to 4 talking points...)

Cheers,
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Friday, May 05, 2017 11:26 AM
To: Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov>; Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>
Subject: RE: NRE: Talking points on climate change [Today please]

Hi Roylene,

Below is a suggestion of a very short background statement and four points you all can use if you choose, either with or without the sub-bullet explanations, depending on the technical depth Dr. Clovis desires. I'm sure Terrell's staff would have others to add to the list to choose from, and or more to add to the background!

Bianca

NRCS has contributed to climate change mitigation since its inception through various soil conservation activities. Today NRCS is helping producers implement Soil Health Management Systems (SHMSs) with the best available understanding of soil health and conservation. SHMSs are combinations of location- and situation-adapted NRCS practices built into systems that minimize soil disturbance, and maximize soil cover, living roots, and diversity, in combination with system-adapted nutrient and pest management. These mitigate climate change in a number of ways:

1. SHMSs increase Carbon Sequestration by building organic matter throughout the rootzone. This pulls CO₂ out of the air where it is causing climate change, and into the soil where it improves soil functioning and resilience.
 - a. by growing more biomass throughout the year which builds soil carbon

- b. by reducing tillage and thus the loss of carbon to the atmosphere
- 2. SHMSs reduce fossil fuel use by reducing the amount of tillage and passes across the field that are needed
- 3. SHMSs reduce fossil fuel use for nitrogen fertilizer production (which is very energy intensive), by reducing the amount needed
 - a. Greater use of legumes that biologically fix N from the air
 - b. Lower loss of N to the environment by improved infiltration, aeration, drainage, water storage, and N cycling through organic matter
- 4. SHMSs decrease nitrous oxide losses (300x more potent greenhouse gas than CO₂) by improving soil conditions to those that produce less of this gas
 - a. Better infiltration, aeration, and drainage keep soil aerated and prevent N₂O production
 - b. Better N cycling through organic matter and lower N fertilizer inputs timed to supplement crop demand

Bianca Moebius-Clune, Ph.D.
 Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Rides at the door, Roylene - NRCS, Spokane, WA
Sent: Friday, May 05, 2017 11:03 AM
To: Erickson, Terrell - NRCS, Washington, DC <Terrell.Erickson1@wdc.usda.gov>
Cc: Moebius-Clune, Bianca - NRC5 - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Ashford, Dana - NRCS, Washington, DC <Dana.Ashford@wdc.usda.gov>; Brantly, Sid - NRCS, Washington, DC <sid.brantly@wdc.usda.gov>; Padley, Eunice - NRCS, WASHINGTON, DC <Eunice.Padley@wdc.usda.gov>
Subject: RE: NRE: Talking points on climate change [Today please]

Funny you say that because Mike Wilson in soil just emailed group and said the same thing. Cool.

From: Erickson, Terrell - NRCS, Washington, DC
Sent: Friday, May 5, 2017 10:57 AM
To: Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov>
Cc: Moebius-Clune, Bianca - NRC5 - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>; Ashford, Dana - NRCS, Washington, DC <Dana.Ashford@wdc.usda.gov>; Brantly, Sid - NRCS, Washington, DC <sid.brantly@wdc.usda.gov>; Padley, Eunice - NRCS, WASHINGTON, DC <Eunice.Padley@wdc.usda.gov>
Subject: Re: NRE: Talking points on climate change [Today please]

I can get info from Dana, Eunice and Sid who helped w the USDA building blocks document. Best. Terrell

Sent from my iPhone

On May 5, 2017, at 10:48 AM, Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov> wrote:

Thoughts and suggestion?

From: Brown, Amie - NRCS, Washington, DC
Sent: Friday, May 5, 2017 10:41 AM
To: Sadeghzadeh, Kaveh - NRCS, Washington, DC <Kaveh.Sadeghzadeh@wdc.usda.gov>; Smith, David - NRCS, Washington, DC <David.Smith@wdc.usda.gov>; Rides at the door, Roylene - NRCS, Spokane, WA <roylene.rides-at-the-door@wa.usda.gov>
Cc: Cerretani, Katie - NRCS, Washington, DC <Katie.Cerretani@wdc.usda.gov>; Herbert, Noller - NRCS, Washington, DC <Noller.Herbert@wdc.usda.gov>; Deavers, Leslie - NRCS, Washington, DC <Leslie.Deavers@wdc.usda.gov>
Subject: NRE: Talking points on climate change [Today please]

Good morning.

I am writing to request 4 talking points and a short background on NRCS' (producer) contributions to mitigate climate change. What are we doing to address climate change? **Having them today would be ideal**, but first thing Monday morning is okay. These are for Dr. Clovis who his speaking to a group on Tuesday.

Amie Brown
Natural Resources and Environment
amie.brown@wdc.usda.gov
direct (202) 720-0678

From: Alexis Baden-Mayer [mailto:alexis@organicconsumers.org]

**Senate staff briefing: "How to Feed the World and Cool the Planet: Soil Is the Solution"
January 11, 2017, 9:00-11:00 a.m., Dirksen Senate Offices Conf Room 212-10**

Agenda:

The Big Idea - Kristin Ohlson, author of the *Soil Will Save Us*, shows us the big picture by explaining why she gave her book that title.

Evidence - Kris Nichols, scientist at the Rodale Institute, lays out the evidence that backs up this assertion.

Unexpected Benefits - Judith Schwartz, author of *Water Everywhere*, explains how improving soil health not only increases soil carbon, but also enhances the land's ability to retain water and has many other co-benefits.

Practice - Will Allen, farmer at Cedar Circle Farm, describes what farmers do to make all this happen.

Policy - Dave Smith, NRCS, outlines USDA programs that support farmers' efforts.

Action - Diana Donlon, Soil Solutions, wraps up the program with a call-to-action to support soil carbon sequestration. We close Diana's Soil Solutions video featuring Michael Pollan, encouraging the audience to share this video as a means of teaching others what they've learned from the briefing: <https://www.youtube.com/watch?v=NxqBzrx9yIE>

Questions - We'll have to keep each speakers' remarks very short (5 minutes is ideal and everyone will have to speak for less than 15) in order to leave room for discussion.

Policy talk:

To summarize points that the previous speakers have made in a probably oversimplified way...

- that the relationship between climate change and soil carbon resources is of key concern to human society, and
- that advances in our understanding of carbon dynamics in soil allow us to plan and implement sustainable soil management systems that maximize the possibility of increasing soil organic carbon in agricultural systems (and in the process, reduce atmospheric CO₂ from agricultural sources).

Keeping our soil healthy and productive on America's working lands is of paramount importance, as the previous speakers have described. By farming and ranching using "soil health" principles and systems, more and more farmers and ranchers are actually increasing their soil's organic matter and improving microbial activity. As a result, they are sequestering more carbon, increasing water infiltration, improving wildlife and pollinator habitat—all while harvesting better profits and often better yields.

Soil health is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. Most farmers and ranchers can increase their soil organic matter (and enhance soil health) the by adopting certain conservation practices to achieve this goal.

USDA, NRCS programs

The USDA, NRCS offers programs that encourage farmers and ranchers to manage their lands using conservation practices that maintain and increase the amounts of soil organic carbon (SOC) and soil organisms in soil.

Assistance is provided to farmers and ranchers to help them plan and implement conservation practices is provided through the voluntary and incentive-based Farm Bill programs such as EQIP, CSP, RCPP, ACEP, CRP (FSA), and so on, and through and NRCS's Conservation Technical Assistance program and the conservation planning process.

Since 2009, NRCS has invested more than \$29 billion to help producers make conservation improvements, working with as many as 500,000 farmers, ranchers and landowners to protect over 400 million acres nationwide, boosting soil health and air quality, cleaning and conserving water, and enhancing wildlife habitat.

Examples of practices applied through these programs that are effective in increasing SOC stocks include:

- (i) improved plant productivity through nutrient management and diverse crop rotations;
- (ii) no-till and other reduced or conservation tillage practices;

- (iii) cover cropping;
- (iv) mulching and residue management;
- (v) planting legumes or improving the crop mix; and
- (vi) more effective use of organic amendments.
- (vii) Other practices include land use change, for example from crops to grass or trees; agroforestry; and prescribed grazing and optimizing livestock densities.

Organic matter and microbial activity build as tillage declines and as plants and residue continuously cover the soil. Organic matter increases water holding capacity and recycles nutrients for plants to use.

Simply stated -- Follow four basic soil health principles to improve soil health and sustainability:

- (i) Use plant diversity to increase diversity in the soil.
- (ii) Manage soils more by disturbing them less.
- (iii) Keep plants growing throughout the year to feed the soil.
- (iv) Keep the soil covered as much as possible.

NRCS Soil Health Initiative (and Unlock Secrets of the Soil information campaign)

NRCS launched a Soil Health Initiative and the “Unlock the Secrets in the Soil” information campaign in October of 2012. This has contributed a great deal to the Growing Awareness of the Benefits of Soil Health Management. Go to the NRCS website to learn more.

Increasingly, producers, researchers, business leaders, NGOs and other conservationists recognize the critical importance of maintaining and improving the health and function of the nation’s soil is a critical priority. Adoption rates of cover crops, no-till and reduced tillage, and other soil health management practices are climbing and stakeholder interest increasing throughout the nation.

USDA Building Blocks for Climate Smart Ag and Forestry – In April 210S Secretary Vilsack announced the BB plan designed to help farmers, ranchers, and forest landowners, and rural communities respond to climate change. The plan consists of 10 BB’s which span a range of technologies and practices to reduce GHG emissions, increase C storage, and generate clean renewable energy:

- Soil Health
- Nitrogen Stewardship (outline the 4R’s)
- Livestock Partnerships
- Conservation of Sensitive Lands
- Grazing and Pasture Lands
- Private Forest Growth and Retention
- Stewardship of Federal Forests
- Promotion of Wood Products

- Urban Forests
- Energy Generation and Efficiency

Actions taken through this initiative are:

- Voluntary and incentive-based – within USDA’s approach of cooperative conservation.
- Focused on multiple economic and environmental benefits – through efficiency improvements, co-benefits, improved yields, or reduced risks.
- Designed to meet the needs of producers – we encourage actions that enhance productivity and improve efficiency.
- Cooperative and focused on building partnerships – we seek out opportunities to leverage efforts by industry, farm groups, conservation organizations, municipalities, public and private investment products, Tribes, and States.
- Measured to evaluate progress – USDA has set goals and objectives for each building block and will track and report on progress using internationally recognized measures.

Through this comprehensive set of voluntary programs and initiatives, USDA expects to reduce net emissions and enhance carbon sequestration by more than 120 million metric tons of carbon dioxide equivalent (MMTCO₂e) per year by 2025. This reduction is equivalent of taking 25 million cars off the road or offsetting the emissions produced by powering nearly 11 million homes per year. Go to USDA web site to view Implementation Plan and Progress Report.

USDA is not alone in recognizing the benefits of soil health: As mentioned, there is rapidly growing interest (a national and international “movement” really) by producers, researchers, business leaders, NGOs and other conservationists in managing soil health. Just a few of many examples include:

The range of interested NGOs and individuals present in this room all working toward expanding the awareness and discussion about the benefits of healthy soils.

National Corn Growers Association’s “Soil Health Partnership” initiative with support from Monsanto, United Soybean Board, The Walton Family Foundation, Midwest Row Crop Collaborative. Technical support TNC, EDF.

Samuel Roberts Nobel Foundation’s and Farm Foundation’s Soil Renaissance initiative leading to the establishment of a *Soil Health Institute* in Sept 2015 with a mission to safeguard and enhance the vitality and productivity of the soil through research and advancement.

The Nature Conservancy’s “ReThink Soil” initiative ... a roadmap for collective action to secure the conservation and economic benefit of healthy soils.

National Science and Technology Council's "Framework for a Federal Strategic Plan for Soil Science" that was released for comment in Dec 2016 (a product of the Committee on Environment, Natural Resources, and Sustainability, Subcommittee on Ecological Systems). The document outlines a Federal Strategic Plan to establish soil research priorities and improve coordination, ensure availability of tools and information for improved soil management and stewardship (i.e., soil health), deliver key information to help land managers implement soil conserving systems, and inform related policy coordination and development.

USDA participation in international efforts such as the UNFAO's *Global Alliance for Climate Smart Agriculture*, the *Global Research Alliance on Agricultural GHG's*, and the *Global Soil Partnership*.

Conclusion: Franklin Roosevelt's statement, "The nation that destroys its soil destroys itself," is as true today as it was 75 years ago. NRCS is encouraging and assisting producers to implement SH practices to conserve and enhance soils.

Healthy soils:

- are high-performing, productive soils that reduce costs—and improve profits.
- hold more water (by binding it to organic matter), and lose less water to runoff and evaporation.
- increase drought tolerance and resilience to extreme weather by increasing infiltration and water holding capacity (as soil organic matter increases).
- reduce nutrient loading and sediment runoff and increase efficiencies.
- save energy by using less fuel for tillage, and maximizing nutrient cycling.
- protect natural resources on and off the farm.

By improving soil health we can improve water and air quality, increase soil water availability, reduce erosion, increase carbon sequestration, enhance nutrient cycling, improve biodiversity and wildlife habitat (including pollinators), and simultaneously help our nation's farms be more productive, profitable, and resilient.

Thank you for your time!

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 3 Jan 2017 18:46:32 +0000
To: Bramblett, Jimmy - NRCS, Washington, DC
Subject: RE: 250 - FNM - Budget - 2017 - Initiatives

Hi Jimmy,

Sorry to be slow on this one –

1. Bianca - Soil health - Capacity Building, Training, and Partnership Development – Why the increase from \$100,000 in FY-2016 to \$350,000 in FY-2017? Is this related to SHI activities?

This is not related to SHI activities nor to soil health assessment standardization efforts we've been leading, and for which we were leveraging the partnership with them up until recently, nor even really the SH network except peripherally if outcomes from that endeavor can be integrated with the funded activities.

It is somewhat analogous to the SSRA Climate Change Initiative in that this is a group of multiple agreements to fund development of capacity, training, and partnership activities based on both national and regional needs. It includes activities such as funding printing of the Mini Microbes Tale coloring book, creating the next iteration of follow up case studies (w Buz Kloot) with farmers who are now a number of years into SHMS and have new knowledge to share about what they've learned, that specifically target some of the 'how to take the next step and make it happen' kinds of questions that are coming up around the country, facilitating our specialists entering into partnerships with local entities on demonstration trials and other partnership activities that promote adoption of science based locally-adapted SHMS, etc, creation of more in depth podcasts and/or practical how-to videos (such as what a farmer might watch in their combine that's driving itself across the field (we've gotten requests for this kind of thing repeatedly), activities with partners to typically target some of the underserved populations, etc.

The description that was submitted was:

Capacity building in soil health expertise and available technical materials useful to multipliers, producers, including specifically reaching underserved populations, and the next generation (including web, videos, and podcasts). Through training and equipping our newly hired SHD staff, training of the extended network of SH POCS across the country, and collaborating with PAD and others on improved outreach communications, take the technical information shared to the next level with recommendations on implementation. Build capacity for inspiring adoption through collaboration with other NRCS and partner staff to meet critical needs to expand impact. Development of partnerships and collaborative approaches, through strategic participation in meetings and conferences with external partners, joint training and collaborative planning sessions, joint demonstration site establishment and use, pilot work, and leveraging other opportunities with ongoing efforts.

Does this help?

Thanks!

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: 19 Jan 2017 18:47:54 +0000
To: Bramblett, Jimmy - NRCS, Washington, DC
Subject: RE: Do you need to review? FW: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Thanks very much! Can do!

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Bramblett, Jimmy - NRCS, Washington, DC
Sent: Thursday, January 19, 2017 1:44 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: RE: Do you need to review? FW: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Bianca,

You are good to go. I trust you will operate professionally with the discussions we have had on this subject. Having said that, please let me know – at any time – if you need help, support, clarification 😊

THANKS!!

Jimmy Bramblett

Deputy Chief - Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
202-720-4783 jimmy.bramblett@wdc.usda.gov
www.nrcs.gov

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Thursday, January 19, 2017 1:43 PM
To: Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>
Subject: RE: Do you need to review? FW: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Considerations it is. Will we receive formal written guidance with expectations?

Also – do you need to see a final talk and send me an official acceptance statement or are we not that formal at least for this one? I assume we'll have more conversations about the gradations and protocols.

Thanks!
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Bramblett, Jimmy - NRCS, Washington, DC
Sent: Thursday, January 19, 2017 1:01 PM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Subject: RE: Do you need to review? FW: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Bianca,

Thanks so much for inquiring. I think I would recommend (b)(5)
(b)(5) Then not variability in climate, rather than infer system trends implied by the word change.

Hope this helps!

Jimmy Bramblett

Deputy Chief - Science and Technology
Natural Resources Conservation Service
United States Department of Agriculture
202-720-4783 jimmy.bramblett@wdc.usda.gov
www.nrcs.gov

From: Moebius-Clune, Bianca - NRCS - Washington, DC
Sent: Thursday, January 19, 2017 12:38 PM
To: Bramblett, Jimmy - NRCS, Washington, DC <Jimmy.Bramblett@wdc.usda.gov>
Subject: Do you need to review? FW: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Hi Jimmy,

I wanted you to be in the loop on me attending this conference on Tuesday. Can you let me know re review: is the protocol for you to review any presentations I plan to give at conferences only if they include published abstracts (not this one) or at what point do we cross the line for what needs review? (my staff will be afraid to ask that same question... we need to determine a path that works for the division). I am attaching the draft for this 15min overview I was asked to provide. I don't think the content will change drastically... maybe some adjustments to the soil bio and resilience component.

Re sensitivities... based on what you said during staff meeting... I am showing a graph of modeled anticipated temp change (one small piece of a slide) and noting that we know the climate is changing, debate is over exactly how that will play out, but we need to develop systems that can adapt to those changes and be resilient to those extremes... are we really at a point where guidance is that such a thing shouldn't be said in a public talk or did I over interpret? (if so... wow... it sounded like the potential repercussions we were looking to avoid are drawing attention to our message and programs/efforts as ones to be eliminated by the new administration?...?!)

Thanks for your insights
Bianca

Bianca Moebius-Clune, Ph.D.
Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Mary Ann Bruns [mailto:mvb10@psu.edu]
Sent: Tuesday, October 25, 2016 10:15 AM
To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>
Cc: ARNAB BHOWMIK <axb594@psu.edu>
Subject: RE: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Hi Bianca, I'm thrilled that your calendar is open for this event, and I will hope for a better federal budget! Arnab and I are working on getting the other speakers for the panel, which I can confirm is at 300-430 pm on Tues, Jan 24. The audience includes academics, policy makers, NGO reps, and business people. I've pasted the conference vision and themes below and will get back to you soon about your registration. Thank you! Mary Ann

**NCSE 2017: Integrating Environment and Health, <http://www.ncseconference.org/>
Conference Vision and Themes**

Vision

The health of the people, the planet, and all living beings is complex and interconnected. *NCSE 2017: Integrating Environment and Health* will bring together diverse groups of individuals and experts – including researchers, educators, students, policy-makers, and entrepreneurs – to explore these relationships on specific issues and develop recommendations on actionable items.

A decade ago, the 7th NCSE Annual Conference addressed environmental and human health connections. Much has transpired since then, both in the scientific community and among regulatory agencies. A good deal of cutting-edge research has been undertaken (the results of which have been recently published) and several policy-related initiatives have been launched, all of which place greater emphasis on emerging issues and innovative solutions.

Themes

The overall theme of the 2017 NCSE Annual Conference will include the following topics:

- **Critical Current Issues**
 - Vulnerable Populations / Children's Health
 - Environmental Justice / Health Equity
 - Climate Change / Extreme Weather Events
 - Human-Built Environment / Urban Planning
 - Degraded Ecosystems / Food-Chain Impacts
 - Animal-Human Interactions / Zoonotic Diseases
- **New Dimensions in Environmental Health**
 - Risk Assessment / Risk Management / New Models
 - Epigenetic Studies / Non-Conventional Research
 - Endocrine Disrupting Chemicals / Recent Advances
 - Fetal and Developmental Disorders
- **Solutions-Based Approaches**
 - Systems Approach / Interdisciplinary Research
 - One Health / Planetary Health
 - Agriculture / Food Safety
 - Toxic Substances Control / New Legislation and Regulation
 - Public Health Response / Disaster Management

- Green Chemistry / Alternative Products
- Public Education / Scientific Literacy
- Media Outreach Strategies and Approaches / Science Communications
- Education and Engagement on Campuses
- Innovative Program Implementation

Mary Ann Bruns, Ph.D.

Associate Professor of Soil Microbiology

Dept. of Ecosystem Science and Management

116 Ag Sciences & Industries Bldg

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Phone: (814)863-0779

FAX: (814)863-7043

Website: <http://ecosystems.psu.edu/directory/mvb10>

Faculty Coordinator, Biogeochemistry Dual Title Ph.D. Program: <http://www.biogeochemistry.psu.edu/>

From: Moebius-Clune, Bianca - NRCS - Washington, DC [<mailto:Bianca.Moebius-Clune@wdc.usda.gov>]

Sent: Tuesday, October 25, 2016 9:24 AM

To: Mary Ann Bruns

Subject: RE: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Hi Mary Ann,

Apologies for the delay. My calendar is in fact open for Jan 24, so this should work out well – please let me know when I should plan to be there and the full agenda when you have it. This looks like it will be a good program. Who is the audience and how big is it anticipated to be?

This is assuming that the Continuing Resolution (which has us cutting over 75% of our travel at the moment) will be replaced by a decent budget. It generally does by that point, so the registration fee should be no problem, and travel will be easy as you point out.

Thanks – looking forward to it!

Bianca

Bianca Moebius-Clune, Ph.D.

Director, Soil Health Division, USDA-NRCS, Washington, DC

From: Mary Ann Bruns [<mailto:mvb10@psu.edu>]

Sent: Friday, October 07, 2016 4:39 PM

To: Moebius-Clune, Bianca - NRCS - Washington, DC <Bianca.Moebius-Clune@wdc.usda.gov>

Cc: ARNAB BHDWMIK <axb594@psu.edu>

Subject: Speak at the NCSE 2017 Conference on Jan 24 in Wash DC?

Hello Bianca, greetings once again from Penn State! My postdoc Arnab and I are organizing a symposium at a January conference in Washington, DC, organized by the National Council for Science and The Environment. The conference is entitled "Integrating Environment and Health." Our symposium is

entitled, "Soil Health, Microbiomes, and Climate-Adaptive Agriculture". Symposium goal is to explore how microbiome information might support efforts to improve soil health and manage soils for sustainability.

We are inviting you to be one of the speakers at this symposium. We would like you to give a 15-minute overview of the Soil Health Division at USDA-NRCS, because you are its Director and an important leader in communicating soil's importance in food security! We are also hoping that the location of this symposium will make it relatively convenient for you to attend, as long as you don't already have a scheduling conflict!

The symposium is on the first day of the conference, from 300-430 on Tuesday, January 24, at the Hyatt Regency Hotel at Reagan National Airport (see links below). The symposium runs concurrently with 11 other symposia (see yellow-highlighted text on page 2 of attached agenda).

We will be inviting three other speakers (I'm thinking of Janet Jansson or Vanessa Bailey from Pacific NW National Labs and Alan Franzluebbers from NCSU/ARS). The organizers of the conference have recommended that we also invite Anthony Michaels from Midwest BioAg based in Madison, WI (see links below), because he is a director on the NCSE board. (I'm curious if you have ever met Tony Michaels?) He of course would represent the agribusiness perspective. With four speakers, we anticipate each would speak for 15 minutes, with a 30-min panel discussion immediately afterward.

Could you please let us know if you are able and willing to attend? We will really appreciate your considering our request!

If you have any questions, let me know. (see yellow-highlighted text on page 2 of attached agenda), and it Thank you, Mary Ann

Working blurb

Farmers face new challenges to maintain food security in the face of increasing urbanization, soil degradation, and climate change. Practitioners of both large- and small-scale agriculture are recognizing the importance of soil organic matter and biological activity for improved soil tilth, water infiltration, and nutrient delivery to crops. Across the U.S., soil management objectives are moving beyond "tolerable erosion limits" toward more comprehensive improvement of soil health through reduced tillage, diversified crop rotations, cover cropping, and organic amendments. Paradoxically, well-intentioned management changes to increase soil biological activity and nutrient- and water-holding capacity could result in increased emissions of nitrous oxide, a greenhouse gas which is 300 times more potent than carbon dioxide. Since soil nutrient cycling is microbially driven, can new technologies for studying complex microbiomes be applied to soils to avoid negative trade-offs? Can plant-soil microbiome information be useful to farmers, crop advisors, and agricultural support workers? This symposium presents perspectives of researchers, government officials, agribusiness leaders, and farmers to discuss the relevance of microbiome technologies for improving soil health and managing agricultural soils for sustained productivity.

Mary Ann Bruns, Ph.D.
Associate Professor of Soil Microbiology

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Website: <http://ecosystems.psu.edu/directory/mvb10>

Faculty Coordinator, Biogeochemistry Dual Title Ph.D. Program: <http://www.biogeochemistry.psu.edu/>

From: Lilah Sloane [<mailto:lsloane@ncseonline.org>]

Sent: Tuesday, September 27, 2016 3:06 PM

To: Mary Ann Bruns; arnab.bhowmik@ndsu.edu

Subject: Thank you for organizing a session at the NCSE 2017 Conference

Dear Dr. Bruns and Dr. Bhowmik,

On behalf of the National Council for Science and the Environment (NCSE), thank you for submitting a session proposal to NCSE's 17th National Conference and Global Forum: *Integrating Environment and Health*. We received many excellent proposals including yours. I am pleased to inform you that we have **accepted** your proposal as a symposium.

Your session, titled "Soil Health, Microbiomes, and Climate-Adaptive Agriculture," will take place on Tuesday, January 24, 2017 from 3:30 - 5:00 PM.

We have modified the abstract from your submission and will post it on the conference website at www.NCSEConference.org this week. We would greatly appreciate an updated version from you at your earliest convenience. In addition, we also request that you provide a 250-word biography and high resolution photograph of all session organizers and speakers. Please fill out the attached form with your session's updated information and return to conference@ncseonline.org **no later than October 31, 2016**.

I would like to suggest one additional speaker for consideration. Dr. Anthony Michaels, CEO of Midwest BioAg, is a nationally recognized leader in sustainability, innovation, and environmental science. A full biography can be found here: <http://www.midwesternbioag.com/leadership/dr-anton-michaels/>. If you are interested in including Dr. Michaels as a speaker, I would be happy to make an introduction.

Once your speakers are confirmed, please remind them to register for the Conference. We are pleased to offer our session organizers and speakers a discounted registration rate of \$350 for the full conference and \$250 for one day. Additional discounts are available for students, sponsors, and University and Community College members. Please visit <http://www.NCSEConference.org/registration/> for more information about registration prices.

To register at the discounted session organizer and speaker rate:

1. Visit <http://www.cvent.com/d/jvqk5w/4W>.
2. Enter the registration code **SESSION** (all caps) on the **first** page of registration.

Please contact me at 202-207-0013 or lsloane@ncsconilnc.org if you have any trouble registering.

I look forward to working with you on the conference. If you have any questions, please do not hesitate to contact me at lsloane@ncsconline.org or 202-207-0013 (direct).

Best,
Lilah Sloane
Conference Manager
National Conference and Global Forum
National Council for Science and the Environment
[202-207-0013](tel:202-207-0013), lsloane@ncseonline.org

Please visit <http://www.ncseconference.org/> to learn more about the 2017 National Conference and Global Forum on Science, Policy and the Environment.

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