

MEETING NOTES

11th Annual National Water Quality Monitoring Conference
 March 25-29, 2019—Denver, CO
 Dick Ehrman

I attended and presented a paper at the 11th National Water Quality Monitoring Conference (NWQMC) in late March in Denver. The NWQMC is sponsored by USGS, USEPA, the National Water Quality Monitoring Council, and the North American Lake Management Society. This year's conference brought in almost 900 people from all over North America and a few foreign countries. The main portion of the conference consisted of seven separate concurrent sessions, and there were field trips both pre- and post-conference. A bulleted list of the events I attended follows:

Monday, March 25

Field Trip--Next Generation Field Methods—US Geological Survey (Colorado, North Dakota, and North Carolina offices)

- This trip involved three monitoring stations USGS had set up along Cherry Creek in central Denver
- Most high-tech: radar telemetry to accurately measure stream velocity and depth to automate generation of baseline stream data
- Also, demonstration of electrofishing and fish/macroinvertebrate ID
- Finally, demonstration of surface water sampling and preservation with emphasis on QA for trace metals and perfluoroalkyl substances (PFAS—an emerging contaminant of concern that was a major topic of the conference)

Tuesday, March 26

Plenary Session

Welcome--Devon Buckels, Greenway Foundation

- General comments about the conference
- She noted a success—South Platte/Cherry Creek in Denver now supports a trout fishery!

EPA Perspectives on Monitoring for Clean Water Act Implementation--John Goodin, USEPA Office of Oceans, Watersheds and Wetlands

- A discussion of the legacy of Sen. Edmund Muskie and effect on environment and water--esp. the Clean Water Act
- Noted contributions of a variety of citizen scientists and volunteers

Department of Interior Perspectives--Kiel Weaver, USDO I

- People take water, food, energy for granted but management of abundant resources is vital for future generations
- Description of coordination efforts between USDO I, USACE, USEPA, etc.
- For example, between USDO I and USEPA there are 247 different water task forces, committees!
- Drought, water supply, data management, and regulatory streamlining are current priorities
- He emphasized that DOI won't undermine state water rights/management systems

Turning Water Quality Data into Information--Bob Hirsch USGS (retired)

- Water quality monitoring ingredients
 - Set program goals
 - Design--spatial and temporal
 - Execution (field, lab, QA systems)
 - Data systems for storing, sharing, etc.
 - Data analysis

- An interesting history of some historical figures in water quality monitoring
- Information goals:
 - Warning (“nowcast” and short-term forecast)
 - Document what happened
 - Describe evolving behavior of system
 - Relate changes in drivers to changes in water quality
- Probably my favorite quote of the conference: "Models without data are fantasy. Data without models are chaos." Patrick Crill, Stockholm University

Breakout Session on Emerging Contaminants

Synoptic Survey of Pesticides in Florida Freshwaters--Jay Silvanema, Florida DEP

- An interesting survey of pesticides and emerging contaminants in surface water and near-surface ground water
- Canal, river/stream, lake, and unconfined well sites were sampled
- Fisher's exact test; Mann-Whitney U test for statistics; alpha at 0.05
- Sucralose and pharmaceuticals for human waste (I need to explore sucralose as a possible water quality monitoring parameter)
- Imidacloprid and other neonicotinoid pesticides were also emphasized
- Sucralose directly correlated with urban land use; imidacloprid directly correlated with ag and urban uses; pharmaceuticals not correlated with either

Managing Emerging Pesticides with Enhanced Green Structures at the Watershed Scale--Jordyn Wolfand, Stanford University

- Survey of a variety of surface water bodies in San Diego River watershed; high levels of detection of various pesticides
- Examination of infiltrating vs non-infiltrating stormwater control measures (SCMs)
- Effectiveness of infiltrating vs non-infiltrating SCMs depends on setting

Expanding Understanding of Pharmaceutical Exposures in Aquatic Environments--Ed Furlong, USGS

- Heavy-duty lab stuff!!!
- Current methods determine 109 analytes; as of 2013, 1453 drugs have been approved by FDA
- So, basic question is "what additional analytes should be added?"
- Expansion of current methods have yielded about 200 compounds and degradates

Occurrence of Lead and Polonium in Public Drinking Water Supplies--Zoltan Szabo, USGS

- MCL-goal is 0 for all radionuclides in drinking water
- Lead and polonium isotopes are particularly hazardous as they are "bone-seeking"
- Technical discussion of analytical methods for lead and polonium—again, heavy stuff!
- 1150 samples in 18% of principal aquifers comprising about 63% of public water supply
- Documentation of redox conditions in aquifers is important
- Lead > MCL in 3.9% of samples; nationally distributed
- Polonium > MCL in 1.6%; regionally distributed

Meet Your Peers Roundtable Discussion

- This was probably my favorite part of the conference!
- Representatives from WA, OR, ND, and two tribes in MN and OR as well as me
- Really good discussion as to how to communicate and deal with agricultural contaminants and the sociology surrounding it
- Nebraska is way ahead of other states!

Machine Learning Applications for Predicting Ground Water Quality—Various USGS personnel (Tuesday PM and Wednesday AM)--

- This is important work but it's very mathematical, model-based, and somewhat theoretical
- The critical work now is seeing how the predictions match up with observed water quality data
- I didn't understand a lot of the math behind the models, but I want to talk to USGS to see how these techniques can be applied in LPSNRD for things like arsenic

Wednesday, March 27

Machine Learning Applications for Predicting Ground Water Quality (see above)

Ground Water and Anthropogenic Influences on Arsenic Levels in New Hampshire--James Degnan, USGS

- A survey of arsenic levels in New Hampshire ground water
- Bedrock types contribute significant amounts of arsenic
- Industrial and chemical facilities over past century + have also contributed
- Relation of bedrock to arsenic can be used to distinguish between sources

Ground Water Changes on a Decadal Basis--Bruce Lindsey, USGS

- Chloride trends across country are mostly increasing; TDS very similar
- Nitrate trends across US are more increasing than decreasing
- Wet-dry cycles are a primary driver of water quality
- Ground water age dating as a primary means of determining recharge rates!
- Stressing the importance of long-term monitoring--Nebraska is way ahead!

PFAS Determination by GC/LC/MS --James Gray, USGS

- PFAS—Per- and polyfluoroalkyl substances
- First manufactured in 1940s; recently becoming a concern in water
- Sources: ScotchGard/stain repellants, firefighting foams, other chemicals
- Very persistent in living tissue; medical evidence indicates multiple hazards
- Lab methods to detect and document are being improved quickly

Kentucky Assessment and TMDL Tracking--Katy McKone, KY Dept of Water

- A good description of a Water Health Portal--web-based portal for citizens to track water quality results
- Easy to access, really good graphics

Comparison of Random and Bridge Monitoring Sites--Mike Miller, WI DNR

- Discussion of costs/benefits of randomly-selected sites vs those accessible via road--are there any differences?
- Study area-Wisconsin Driftless Area--20% of WI land area; \$600 M/year in recreational income, mostly relating to fishing and outdoor activities
- Compared habitat, chemistry, and biology
- 116 sites on 58 streams; average difference between random and bridge sites 700 m
- No statistically significant differences in habitat, chemistry, and biology between random and bridge sites
- Land use/cover heterogeneity is key
- Bridge sites seem to be acceptable surrogates in most cases

Canada's Freshwater Program--Catherine Paquette, WWF Canada

- Assessments for only about 57 of 167 major watersheds in Canada
- Most issues are along southern border where most population and industry is located

Watershed Framework for Wild and Scenic Rivers (WSRs)--Jennifer Back, National Park Service

- About 114 WSRs containing 22,000 miles in the US; most managed by Forest Service
- 43% of WSRs are impaired; 38% unknown or not assessed; 18% considered good
- Working on local and regional partnerships to protect and restore WSRs
- General approach: evaluate watershed condition, communicate with state and local agencies, and develop/implement strategic actions

Nebraska's NRDs: Monitoring Ground Water for the Long Haul—Dick Ehrman, Lower Platte South NRD

- I gave an overview of the NRD system and history
- I provided a summary of the last 40 years of nitrate monitoring in Nebraska
- We discussed the indications of success and not-so-successful activities!
- Overview of AEM and vadose zone monitoring was popular!
- Lots of good questions and discussion

Ground Water Quality Studies in Eastern Nebraska--Cory Kavan, USGS Nebraska Water Science Center

- Overview of studies with Papio-Missouri River NRD since 1992
- 2017 revisions to ground water regs/plan based on 30-50-80% of MCL
- Planning on starting monitoring for pharmaceuticals and CECs
- Utilizing cluster wells
- Cool use of GeoScene, which is the software designed to handle our AEM data

Trends of 30 Years of Agchemical Monitoring in the South Platte Alluvial Basin--Karl Mauch, Colorado Department of Agriculture

- Biennial sampling began in 2001, mostly since 2010; several dozen private wells
- Downward trend since late 1990s from roughly 20-15 ppm
- Droughts have affected water quality--mainly through efforts at artificial recharge
- Orthophosphate detections--uncertain why but possibly upwelling from lower geological units
- Metolachlor detected, sometimes correlated to nitrate

Trends in High-Frequency Ground Water Data in Eight Networks across the US--Justin Kulongosky, USGS

- Eight locations around US
- Located in different hydrogeologic settings (e.g. High Plains, alluvial, bedrock)
- Typically three wells/network
- Highly variable results, but as expected results correlate with land use, recharge, etc.

Thursday, March 28

Development of the USGS Sampling Protocol for PFAS in Uncontaminated Groundwater—Gerolamo Casile, USGS

- Sources of PFAS—Industry, consumer products, fire-fighting materials, wastewater
- Complex monitoring and analytical protocol
- Health limit currently set at 70ng/l (parts per trillion!)
- Very common compounds like personal care products, ScotchGard, etc. can't be present while sampling so monitoring personnel have to be very careful
- Materials that can be used—stainless steel, copper, HDPE, nitrile gloves
- Cleaning: liquinox, deionized water, methanol
- Preliminary approach seems to have worked—no blank detects and very few environmental hits, so methods will continue to be developed

Occurrence of GW PFAS on Long Island—Irene Fisher, USGS New York Water Sciences Center

- Long history of development on Long Island

- Concern over wastewater as source of PFAS; this is a sole-source aquifer for drinking water
- 37 shallow (<50') sentinel wells in installed in three counties
- Wastewater facilities can be primitive onsite, modern onsite, or more centralized (apartments, strip malls, etc.)
- Sampling of wells ranged from 0-90 ng/l
- New York State's Drinking Water Quality Council has set a goal of 10 ng/l

PFAS Precursors in Ground Water and Surface Water—Andrea Tokranov, USGS

- Precursors can transform into PFAS in the human body, presenting a possible adverse health effect
- USGS Cape Cod Toxic Substances Hydrology Research Site—site documented to be affected by PFAS and wastewater but has been inactive for about 20 years
- Trying to determine if precursors are still present and are they transported in ground water
- Sampling revealed that precursors contributed about 31% of PFAS
- Precursors appear to persist in surface water and in downgradient ground water
- Precursors appear to pass through ground water-surface water boundary and are slowly removed/bound
- Precursors should be tested for as they appear to be a significant portion of total PFAS load

A Public Health Response to Large-Scale PFAS Contamination in Minnesota—Chris Green, MN Dept of Health

- PFAS known in Twin Cities since 2002; about 150 square miles, 140,000 residents affected, 2700 drinking water wells sampled, over 1100 health advisories issued
- Some PFAS are accumulative so history of past exposure is as/more important than current exposure
- Development of an exposure model—lots of math!
- But modeled exposure over 20,000 days and concluded that history of exposure + current exposure gives an idea of risk

Flash Flood Monitoring in Remote Parts of the Grand Canyon—Thomas Chapin, USGS

- Monitoring of remote sites in the Grand Canyon—10-25 miles one way hike, several thousand feet of relief, high temperatures—some USGS personnel have died in this effort
- Using ISCO samplers for water quality sampling and a smaller instrument called a Mini-Sipper
- Flash flood events especially in October/November are associated with spikes in uranium, arsenic, and selenium, but other times there is dilution
- California—management of post wildfire hazardous waste sites following Camp fire
- Not going well—huge winter rains/floods; instruments have been wiped out or stolen

Wildfire and WQ Event Response in CO Front Range—Sheila Murphy USGS

- Increase in size, frequency, and duration of wildfires in last 30 years and are often occurring in critical water supplies
- Case example—Four Mile Canyon fire west of Boulder Colorado in 2010—6400 acres burned, 1500 structures (no deaths)
- Wildfires increase runoff, sediment, and contaminants, >2 orders of mag TSS increase
- At this site, water quality impairment continued for >3 years
- DOC increasing downstream due to ash; nitrate all over the place
- Potential for interactions of many factors (e.g. fires, abandoned mines) is significant

Flushing of Anthropogenic Contaminants following Storm Events in Southern California—Frederick Pononcos, San Diego State U

- San Diego River—urban river and environment which flows into Pacific Ocean
- Dry Season—April-October; “Wet” Season—November-March
- Looking at traditional (e.g. fecal coliform, DOC, nutrients) and non-traditional (various isotopes) contaminants
- E coli is suspected to be mostly from human sources; this is supported by detections of high concentrations of caffeine and sucralose
- Human sources: homeless encampments, sewer exfiltration, sanitary sewer overflows, illicit connections/discharges, septic tanks

Friday, March 29

- I was scheduled to take a walking tour of Red Rocks Amphitheatre south of Denver, but this was cancelled due to not enough sign-ups. Not a bad thing as the weather was cold and rainy!

I really appreciate the opportunity to attend this conference. As mentioned, there were a very large number of attendees and I made lots of new contacts from all over the country, in addition to gaining insight into additional possible monitoring techniques and parameters we might look into at LPSNRD. I also appreciated the opportunity to be able to share the story of LPSNRD and all of the NRDs with the audience, and I think that information was well received. Thanks again!

BILL	INTRODUCER	DESCRIPTION	COMMITTEE	HEARING	ACTION	POSITION		GENERAL FILE	SELECT FILE	FINAL READING	GOVERNOR SIGN
						NRD	NARD				
2019 BILLS											
48	Stinner	Change provisions relating to sufficient cause for nonuse of a water appropriation	NR	2/13/2019		-	S	2/14/2019 2/21/2019	2/28/2019 3/7/2019	3/12/2019 3/15/2019	3/21/2019
53	Scheer	Change and provide duties for landowners or their tenants relating to removal of a blockage or obstruction in a watercourse and provide for court costs and attorney's fees	NR	2/14/2019		M	M				
103	Linehan	Change provisions relating to property tax requests	RV	1/24/2019		O	O	2/5/2019 2/11/2019	2/19/2019 3/1/2019	3/5/2019 3/7/2019	3/12/2019
128	Hughes	Provide for Wildlife Conservation Plates	TR	2/5/2019		M	M				
134	Stinner	Provide levy authority and duties for natural resources districts	RV	1/30/2019		S	S				
148	Groene	Change requirements for public hearings on proposed budget statements and notices of meetings of public bodies	GM	2/6/2019		-	O	3/5/2019			
150	Brewer	Change provisions relating to access to public records and provide for fees	GM	2/8/2019		S	S				
158	Brewer	Change provisions relating to the assessed value of real property	RV	1/24/2019		O	O				
163	Hunt	Permit counties to conduct elections by mail	GM	3/6/2019		-	M				
177	Lindstrom	Change a termination date for bonding authority of natural resources districts ***PRIORITY BILL***	NR	2/14/2019		S	S	3/18/2019 4/8/2019	4/10/2019		
204	Briese	Require approval of voters for bonds under the Interlocal Cooperation Act	GM	1/24/2019		-	O				
243	Gragert	Create the Healthy Soils Task Force ***PRIORITY BILL***	AG	1/29/2019		S	M	3/15/2019 3/21/2019	3/25/2019 4/3/2019	4/3/2019 4/11/2019	
261	DeBoer	Require use of redistricting maps drawn using state-issued computer software	EX	2/14/2019		M	M				
283	<u>Pansing Brooks</u>	Provide for a climate change study	EX	2/11/2019		S	O				
293	Speaker Scheer	Provide, change and eliminate provisions relating to appropriations	AP	2/26/2019		-	S				
294	Speaker Scheer	Appropriate funds for the expenses of Nebraska State Government for the biennium ending June 30, 2021	AP	2/26/2019		-	S				
298	Speaker Scheer	Repeal funds and authorize, provide, change, and eliminate fund transfer provisions	AP	2/26/2019		-	S				

BILL	INTRODUCER	DESCRIPTION	COMMITTEE	HEARING	ACTION	POSITION		GENERAL FILE	SELECT FILE	FINAL READING	GOVERNOR SIGN
						NRD	NARD				
299	Speaker Scheer	Change Cash Reserve Fund provisions	AP	2/26/2019		-	M				
302	Hughes	Merge the State Energy Office with and rename the Department of Environmental Quality	NR	1/30/2019		M	S	2/1/2019 2/7/2019	2/13/2019 2/21/2019	2/27/2019 3/15/2019	3/21/2019
307	Albrecht	Change provisions relating to certain Department of Environmental Quality funds	NR	1/31/2019		-	S	2/1/2019 2/8/2019	2/13/2019 2/21/2019	2/27/2019 3/7/2019	3/12/2019
319	Moser	Change provisions relating to notices, rules and regulations of the Department of Natural Resources	NR	2/6/2019		-	S	2/11/2019 2/13/2019	2/21/2019 3/1/2019	3/6/2019 3/15/2019	3/21/2019
336	<u>Hansen, M.</u>	Change the vote requirement to exceed certain budget limitations	GM	3/7/2019		S	S				
367	Hughes	Eliminate provisions relating to fund transfers and change a termination date under the Nebraska Litter Reduction and Recycling Act	GM	3/7/2019		-	S				
368	Hughes	Eliminate overappropriated river basins, subbasins and reaches	NR	2/20/2019		M	S				
386	Erdman	Change provisions relating to cash reserves under the Nebraska Budget Act	GM	2/21/2019		M	O				
412	<u>Geist</u>	Require an election regarding creation of a joint public agency	GM	2/7/2019		O	O				
552	McDonnell	Change provisions relating to the Nebraska Tree Recovery Program	AP	3/4/2019		S	O				
573	<u>Hansen, M.</u>	Change provisions relating to agreements under the Intergovernmental Risk Management Act	BC	3/18/2019	IPPD	-	O				
581	Albrecht	Require the use of generally accepted accounting principals in preparing budgets under the Nebraska Budget Act	GM	3/20/2019		O	O				
606	Groene	Provide for water augmentation projects and retention of water rights as prescribed ***PRIORITY BILL***	NR	3/14/2019		-	O				
632	Hughes	Clarify a statutory reference relating to rural water districts	NR	2/28/2019		-	M				
712	Friesen	Prohibit joint entities and joint public agencies from taking action against representative for their speech	JU	3/14/2019		-	M				
729	Walz	Adopt the Soil Health and Productivity Incentive Act	AG	2/19/2019		M	O				
2020 BILLS											

BILL	INTRODUCER	DESCRIPTION	COMMITTEE	HEARING	ACTION	POSITION		GENERAL FILE	SELECT FILE	FINAL READING	GOVERNOR SIGN
						NRD	NARD				
LEGISLATIVE RESOLUTIONS											
LR8CA	Linehan	Constitutional amendment to limit the total amount of property tax revenue that may be raised by political subdivisions	RV	2/27/2019		o	o				
LR12CA	Vargas	Constitutional amendment to change legislators' salaries	EX	2/6/2019		-					
WATCH LIST											
254	McCollister	Adopt the Fair Chance Hiring Act	BL	2/4/2019		-		2/14/2019 2/20/2019	2/26/2019 3/7/2019	3/12/2019	
311	Crawford	Adopt the Paid Family and Medical Leave Insurance Act ***PRIORITY BILL***	BL	2/4/2019		-		3/7/2019			

**NATURAL RESOURCES CONSERVATION SERVICE
REPORT TO THE
LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT
April 17, 2019**

PERSONNEL:

- Colton Hintz, Student Trainee in the Lincoln Field Office, is departing for a full-time Soil Conservationist position in Hartington, NE. He will report to his new duty station on May 13th.

LAND TREATMENT:

- Staff continues to take applications for the Summer Conservation Program.
- The NRD technicians are finishing up annual dam inspections.
- Staff is busy completing conservation practice design and layout. The weather has presented a challenge in completing projects. There have been many producers that have cancelled their plans to complete work this spring.

PROGRAMS:

- EQIP – Staff is finishing up contract obligations for FY19.
 - 27 applications - \$718,700 in requests
 - Lancaster – 4 contracts - \$79,250 obligated
 - Cass – 5 contracts - \$114,500 obligated
- CSP – The next cutoff deadline for CSP applications is May 10th. 2019 contract renewals will be extended to 2020.
- CRP – The 2018 Farm Bill increases the acreage cap by 3 million acres nationwide. There have been no updates regarding when FSA will begin taking applications.
- Emergency Conservation Program (ECP) – ECP is administered through the Farm Service Agency (FSA) with NRCS providing technical assistance to producers that need to repair fields and conservation practices due to damage from recent flooding. FSA is taking applications on a continuous basis.

UPCOMING EVENTS:

- May 5th & 6th – NRCS Quarterly Leadership Meeting
- May 10th – Conservation Stewardship Program Application Deadline

Cory Schmidt - District Conservationist



LOWER PLATTE SOUTH natural resources district

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581 | P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

Memorandum

Date: April 14, 2019
To: Each Director
From: Deborah Eagan, Karen Amen, Ray Stevens, Luke Peterson,
 Greg Osborn, Larry Ruth, David Potter & Paul Zillig
Subject: NARD Conference in Washington D.C.

The NARD Conference in Washington D.C. was held March 31- April 3, 2019. A total of 14 NRD's were represented at this year's conference along with NARD staff and NRCS State Conservationist Craig Derickson. This year's format was again for speakers from a variety of agencies and organizations to meet with the group at the hotel conference center on Monday and Tuesday. On Wednesday the group attended the Nebraska Breakfast featuring all 5 Nebraska Congressional Delegates with each giving an overview of the current issues and important issues coming up in the near future. I've attached the summary of the presenters as compiled by NARD.

The March flooding in Nebraska was definitely the priority issue being discussed at every meeting or presentation. The entire group expressed the need for assistance. The entire Congressional Delegation had firsthand experience with the extent of the flooding back home and they were working to make sure assistance would be provided. Our message was the top priority is flood damage assistance, followed by funding for additional flood mitigation measures (Deadmans Run Flood Reduction Project) and additional planning assistance to study the Lower Platte River Watershed for both ecological and flood reduction measures.

In addition to the conference presentations we worked with Water Strategies LLC to line up meetings with the Corps and Senator Fischer's staff. On Monday afternoon Larry Ruth and I traveled to the US Army Corps of Engineers to meet with Steven Kopecky, Deputy for Civil Works (Northwest Division) and his staff. Our primary interest was PL84-99 assistance to repair the Western Sarpy Clear Creek Project near the Ashland Guard Camp and Lincoln Well Field, Section 205 funding for the Deadman's Run Flood Reduction Project (both technical assistance to design the project and then construction funding), and the Lower Platte River Watershed Restoration Aquatic Ecosystem Comprehensive Study.

We then traveled to Senator Fischer's Office to meet with the Senator's new Legislative Assistant Laura Lee Burkett (originally from Mississippi) and Cicely Batie, Legislative Aide for the Senator. Batie has been on staff over 1 year and is now working primarily on water issues. Batie is a Nebraska



native from Lexington and graduate of Nebraska Wesleyan so she is very familiar with the Uni Place neighborhood and the Deadmans Run Project area.

On Wednesday we attended the Nebraska Breakfast and heard updates from all of the Nebraska Delegation. We had brief conversations with Congressman Bacon, Senator Fischer, Senator Sasse, Congressman Smith, and Congressman Fortenberry.

We will work with Water Strategies on following up with the congressional delegation and staff both in DC and back in Nebraska.

It was a very beneficial trip with LPSNRD having interest in a number of federal programs. We all appreciated the opportunity to attend and participate!

PDZ/pdz

pc: Steve Seglin

NARD 2018 Washington DC Conference

2019 NARD Washington DC Conference – Fifty-three NARD members, representing fourteen NRDs, were in Washington DC this week attending the annual NARD Washington DC Conference. After participating in the two-day sessions to learn more about ag and natural resources issues at the national level, the NARD members spent a day on the hill visiting Nebraska US Senators and Congressional Representatives. Members of the NRD delegation met personally with Senator Deb Fisher, Senator Ben Sasse, Congressman Don Bacon, Congressman Jeff Fortenberry and Congressman Adrian Smith at the Nebraska Breakfast and followed up with sessions with them and their staff. The following is a summary of the conference sessions.

Water Strategies, LLC, and the National Water Resources Association (NWRA) – Kris Polly, President of Water Strategies, Steve Stockton, Senior Policy Advisor for NWRA, and Ian Lyle, Executive Vice President of NWRA, provided the opening address at the NARD DC Conference. Polly summarized the work of Water Strategies to promote and protect water use throughout the nation. Stockton provided a overview of the eight purposes of the Army Corp of Engineers Missouri River projects and the legal issues that surround them. Lyle provided an update of elections and resulting changes in leadership positions with the 100 new members of Congress.

NACD Update – Rich Duesterhaus and Director of Government Affairs Coleman Garrison joined Nebraska's district representatives to discuss the 2018 Farm Bill and what to expect moving forward as the U.S. Department of Agriculture (USDA) begins implementing the new law. Garrison also prepared the attendees for meetings with their Members of Congress, including NACD's priorities in the Fiscal Year 2020 federal appropriations cycle. Duesterhaus provided updates on NACD's second round of technical assistance grants, the Urban Agriculture Conservation Grant Initiative and Conservation Planning Boot Camp, noting funds are available from NACD for districts employees to attend.

EPA WaterSense – Beth Livingston, Brand Manager of WaterSense™, provided an overview of the voluntary partnership program sponsored by the U.S. Environmental Protection Agency (EPA). The program is both a label for water-efficient products and a resource for helping individuals and companies save water. The WaterSense label makes it simple to find water-efficient products, new homes, and programs that meet EPA's criteria for efficiency and performance. WaterSense-labeled products and services are certified to use at least 20 percent less water, save energy, and perform as well as or better than regular models.

WaterSense partners with manufacturers, retailers and distributors, homebuilders, irrigation professionals, utilities and local governments to promote indoor and outdoor water efficiency and WaterSense-labeled products and programs. Partners also participate in national outreach campaigns, such as Fix a Leak Week, Sprinkler Spruce-Up, and quarterly partner

only webinars. To learn more about partnership opportunities, go to: <https://www.epa.gov/watersense/watersense-partnerships>,

Environmental Protection Agency 404 Permits – Russell Kaiser, Chief of the CWA 404 Program, provided an overview of the process for states to take over the 404-permitting process. Two states have the program (New Jersey & Michigan) and Florida is currently going through the process. Nine other states have expressed interest. Kaiser stressed the importance of developing efficient processes and developing a good working relationship between the EPA and the Army Corp of Engineers. Kaiser also reviewed the process for the WOTUS rule.

American Soybean Association – Hanna Abou-El-Seoud, Government Affairs Representative from Gordley Associates, provided an overview of trade agreements, disputes and negotiations. Hanna noted that trade is one of the most prioritized topics for the agriculture groups in DC currently, not just for the American Soybean Association. She reported that current areas of focus are with China, the former NAFTA agreement with Mexico and Canada, as well as with Japan, UK and the EU. China is the #1 market for US soybeans, as 60% of US soybeans are exported and 1/3rd of those exports go to China.

More information on trade agreements can be found at: <https://soygrowers.com/key-issues-initiatives/key-issues/trade/>.

National Corn Growers Association – Jon Doggett, Chief Executive Officer of the National Corn Growers Association (NCGA), provided an over-view of NCGA involvement in the response to the Bud Light Super Bowl ad that attacked the use of corn syrup. NCGA avoided the debate about corn syrup, instead responded by asking why Budweiser was attacking American family corn farmers. The negative ad has helped corn growers build relationships and promote discussions about family farmers. The Budweiser ad has generated 3.3 thousand news stories, 3.7 billion people reached, and provided an estimated \$4.5 million in free publicity. Since running the ad during the super bowl, Budweiser has lost 8.8% market share to Miller/Coors, America's corn farmers have gained free advertising, and the NCGA have new partners in promotions about what American family corn farmers provide to the economy.

For more information, go to: <https://www.millercoorsblog.com/category/news/> and <https://www.ncga.com/home>.

American Farm Bureau Federation – Don Parrish, Senior Director of Regulatory Relations for American Farm Bureau Federation, provided an update on the proposed 2018 Waters of the United States (WOTUS) rule that would reverse the over-reaching 2015 WOTUS rule. In 2015, EPA adopted a WOTUS rule that grants the federal government regulatory control over virtually any waters – and many land areas that only temporarily hold water – assuming a scope of authority Congress never authorized. It effectively eliminated any constraints the term

“navigable” previously imposed on the agencies’ Clean Water Act jurisdiction and expanded the federal authority and jurisdiction to regulate all water, including groundwater.

The 2015 WOTUS rule provided the agencies almost unlimited authority to regulate, at their discretion, any low spot where rainwater collects, including common farm ditches, ephemeral drainages, agricultural ponds and isolated wetlands found in and near farms and ranches across the nation, no matter how small or seemingly unconnected they may be to true “navigable waters.”

At the end of 2018, after years of litigation and controversy, the agencies proposed a new rule that provides farmers and ranchers with “Clean Water and Clear Rules”. Parrish provided the following highlights of the proposed 2018WOTUS rule:

- The proposed new rule provides clarity, regulatory certainty and protects water resources, while respecting the federal-state balance that Congress struck in the Clean Water Act. It alleviates unpredictable and inconsistent case-by-case determinations of which waters fall under the agencies’ jurisdiction. It also brings an end to the decades-long trend of persistent federal government overreach that cannot be reconciled with either congressional intent or judicial precedent.**
- The proposed rule eliminates much of the uncertainty, ambiguity and inconsistency that characterized previous definitions related to the scope of EPA and the Corps’ jurisdiction. The proposal also appropriately places the burden on the government, not landowners, to show jurisdiction in cases where historic evidence is needed.**
- The proposal reaffirms the “prior converted cropland” exclusion, which grandfathered in many acres of cropland and exempted them from federal jurisdiction.**

For more information and a link to provide comments on the 2018 rule, go to: <https://www.fb.org/issues/regulatory-reform/clean-water-act>

NRCS Program Update – Kevin Norton, Acting Associate Chief NRCS, and Kevin Wickey, NRCS Regional Conservationist, provided an update on the conservation programs under the new farm bill. Norton outlined that the late passage of the Farm Bill and recent government shutdown has caused some delays. Norton reported NRCS is within a couple of weeks of starting to release regulations for the 19 programs. According to NRCS, there are no foreseen reasons seen why all regulations won’t be in place and ready to implement by October 1st.

Kevin Wickey reported on staffing issues. The NRCS is working with the Under-Secretary of Agriculture to revise workload requirements and collecting data on how long it takes to complete a task. Any extra staff would be distributed based on workload. Wickey reported there are 47 positions vacant in Nebraska, and NRCS is poised to add 16 in the next quarter.

USDA-FSA Disaster Aid programs – Martin Bomar, Deputy Director, FSA Conservation Division, provided an update on FSA Disaster relief programs. Provided an overview of how FSA can help producers through the Emergency Conservation Program (ECP). ECP works with individual ranchers and producers to provide 75% cost share for debris removal, grading and shaping of damaged land, livestock and wildlife exclusion fences, Rehab of terraces, waterways, and other conservation structures and restore wildlife and ecological benefits.

The process for individuals with damage is to reach out to their local USDA farm service agency or state office and report damage. This can be a phone call. Producers need to follow-up and provide documentation of damages to be eligible for reimbursement under the programs. After the report is filed documented, disaster damage payments would be made. He also noted local and state offices are gathering information locally to estimate total resource needs. That estimate will be sent by the State FSA office to DC and they will take the estimate to congress to work on receiving funding.

Bomar also noted that under the new Farm Bill, the individual payment limitation will be increased from \$200,000 to \$500,000.

Information about disaster aid from USDA-FSA in Nebraska can be found at: <https://www.fsa.usda.gov/state-offices/Nebraska/index>

USDA-NRCS Disaster Aid – Kevin Farmer, Branch Chief for Watershed Programs with NRCS, provided an update on EWP programs for recovery and floodplain easements which is a 75/25 cost-share. For emergency situations, when there is imminent threat to life or property, estimates are done locally working with the State NRCS Office. The goal is to complete the repair within 10 days. For non-emergency, they have 60 days to report to NRCS and 220 days to finish the projects.

Farmer also reviewed the watershed rehab and operations programs. There are three remedial projects currently in Nebraska. The watershed rehab program has updated standards with cost share rate of 65/35.

More information can be found at: <https://www.nrcs.usda.gov/wps/portal/nrcs/site/ne/home/>

E15 Rule – Bob Dinneen, former CEO of the Renewable Fuels Association (RFA), provided an update on the proposed EPA rule allowing for the year-round sale of E15 (15% Ethanol blend fuel). The RFA, along with others, have petitioned the U.S. Environmental Protection Agency (EPA) to change its regulations to account for lost volumes of renewable fuel resulting from the unprecedented number of retroactive small refinery exemptions from Renewable Fuel Standard (RFS) obligations granted by the EPA. The RFS was created to preserve our

environment, protect America's energy independence, and give Americans more affordable options at the pump.

Dinneen noted there has always been a small refinery exemption to the rules and waivers have increased over the last 2 years. These waivers have had a huge impact on the ethanol industry and there is an estimated \$2.6 billion in lost demand because of the exemptions. If waivers continue to be granted the ethanol industry will continue to struggle.

A Renewable Identification Credit (RIN) is a numbered credit assigned to each gallon of renewable fuel produced for the purpose of tracking its production and use under the RFS. Petroleum refiners and importers turn in RINs to the EPA to demonstrate that they fulfilled their annual renewable fuel blending obligations. Refiners and importers who do not wish to blend renewable fuels may instead purchase RINs from other parties who blended more than their obligated volume. The system was designed so that as RFS volume requirements escalate, RIN supplies tighten, and RIN prices rise. This creates greater incentive to blend more renewable fuels, helping to lower vehicle emissions while making gas more affordable.

Ethanol helps reduce greenhouse gas emissions by 40-50% compared to traditional gas. By displacing hydrocarbon substances like aromatics in gasoline, ethanol significantly reduces emissions of air toxics, particulate matter, carbon monoxide, nitrous oxides, and exhaust hydrocarbons.

More information on the E15 rule can be found at: <https://ethanolrfa.org/e15cleanfuel/>.