

NeFSMA Helping Protect the Good Life

2015 Newsletter Volume 1

MESSAGE FROM THE CHAIR

From Rocky Keehn

This July our Annual Conference will include discussions on resiliency and consideration of how we design projects based on climate change. So I did a little research on climate change and found an interesting resource on the topic. My mom gets the Ravenna News, which is a local paper in central Nebraska about 30 miles north of Kearney. Within it, I found some climate related items in the print. Based on information in the paper, Notes of Yesteryear, I have developed a quiz for our members. Below are a few entries from the paper related to climate (weather) and I want you to figure out which date this event occurred. Here are your date choices: April 12, 1895; April 23, 1935; April 5, 1945; June 7, 1935; June 7, 1945; June 9, 1975; May 31, 1895; or May 31, 1895. Answers are at the end of my message.

The events:

- 1. Continuous dry weather, high wind and a bank failure had a depressing influence upon Ravenna last week, but Saturday it began to rain and continued for 38 hours.
- 2. Nebraska rain, mixed with Oklahoma and Kansas dust, makes a mud storm, then that is what happened last Tuesday evening.
- 3. After a snowless and practically rainless March, the month of April opened with a snowstorm. The temperature dropped to below 2 degrees in a hard freeze.
- 4. The Beaver and Loup are out of their banks this week as a result of rains totaling 7.36 inches. On Saturday, Ravenna was nearly isolated.
- 5. Cold, rainy and cloudy weather has been the weather menu for the past week. The sun has not been out from under the dense gray for about a week.
- 6. The long awaited moisture in the Ravenna area arrived on Monday of this week, and came in a form that was not wanted. Hail wiped out many of the crops, especially north and east of town.
- 7. An umbrella that can be opened with one hand has been invented. You merely press a spring and up it goes. (Not directly related to climate change, but interesting as if we are indeed getting more intense rainfall, this type of umbrella comes in pretty handy).
- 8. Monday was "Blue Monday" A hot dry wind prevailed all day with the mercury reaching 100 degrees. Also on this day, Prairie schooners have already commenced to drift eastward. A citizen of Broken Bow is quoted as saying if the drought continues another month, Custer County will be depopulated.

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When reading this historical account, a few things come to mind. First, weather, or now climate change, has always played a significant part of our lives and impacts what we do on a daily basis and we love to talk about it. One of the first things my Grandma use to ask me was how the weather at my location is. She would also write letters to me and always mentioned the weather at her farm. So I guess I did not know it then, but we were talking about climate change. The other item that came to mind, is it appears that climate has been changing from one extreme to another for quite a long time (in this case at least 120 years). The Ravenna area was of course a farming community which makes me think of the success that farmers have had adjusting to climate and its unpredictability. As a result of weather related issues, they adjusted tilling practices, plant seeds were modified to better adapt to unpredicted weather and they figured out a way to irrigate their crops.

So can we, or should we, have to adjust the way we do things? I just returned from the Association of State Floodplain Managers national conference in Atlanta and climate change and resiliency was part of several presentations - so the discussions have begun. I also just received a tweet referencing a new free paper by American Society of Civil Engineers titled "Adapting Infrastructure and Civil Engineering Practice to a Changing Climate." Not to be left behind, our dialog on climate change begins at our joint meeting with the Silver Jackets on July 29 and continues at our Annual Conference on July 30. Like the farmers, one thing I am sure of is that whichever way the wind blows (climate change), we as professionals will have high level discussions and will make any necessary design or policy changes based on sound engineering practices.

Before I give the answer to my quiz, I have to add this one and hope you also enjoy it as much as I did. "Will Karel proved himself a brave man Wednesday morning. A prairie schooner hitched to three horses was driven into town and while the driver was in the store, leaving the children in the wagon, the horse took fright and bolted down the street. Karel grabbed the bridle bit of the nearest horse and hung on until the team collided with a road grader in front of the barber shop. No one was hurt." This happened on around May 26, 1905 and seems to still have several relevant lessons for today.

The answers to the quiz are...the dates are listed in the same order as the questions! Hope the quiz was insightful and will see everyone at our Annual Conference at the end of July and our membership meeting in November.

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7th Annual NeFSMA Conference

Join us for our 7th Annual Conference and associated events!

Our 7th Annual Conference will be held July 30th, 2015 in Nebraska City, Nebraska.

A block of rooms has been set up for conference attendees. You can contact the Lied Lodge at (800) 546-5433 to take advantage of the special NeFSMA room rate if you plan to stay overnight. The deadline for room block reservations is July 7th, 2015.

Watch for more details including a preliminary agenda in the near future <u>here</u>. Registration:

Members - \$100

Non Members - \$135

Join us for our hospitality reception at the Lied Lodge and Conference Center on July 29, 2015 at 7pm.

On July 29th, 2015 The Nebraska Silver Jackets team, in association with NeFSMA, will be presenting a one-day (9:00 am – 4:30pm) course on the technical tools to assess and adapt to climate change impacts. The workshop will provide information on

- General climate change information
- How processes and regulations are incorporating climate change
- Technical tools from USACE, EPA, and NWS to assess and adapt climate change impacts

Target Audience: Floodplain managers, stakeholders, state officials, community leaders, and the engineering community.

Registration is fee, but space is limited. Registration and additional information is available <u>here</u>.

The New nefsma.com!

If you are a frequent visitor to our website, you might have noticed that it has a new look. Or if you're an infrequent visitor, but have had to use two different websites to look up information and to register for events, you might also notice something different.

We have been using a service called Wild Apricot to manage our membership database and event registrations. We started using this new service last year and it has been helpful for our volunteer board. However, it didn't integrate well into our existing, self-hosted website. This was confusing to members and difficult for the board to maintain.

So, we have migrated our website over to Wild Apricot. You will still use www.nefsma.com to get information about our upcoming events, see our blog posts and newsletters, and link to our NeFSMA store (you know you

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want a NeFSMA shirt). But now you can also renew your membership and register for events on the same website. You are also able to update your contact information just by logging in with your email address.

So take a few minutes to look through the new www.nefsma.com website. We hope that this change will be helpful for you and would love to have any feedback you may have!

MESSAGE FROM THE SECRETARY

From Dan Fricke

During my time on the Board and involvement with NeFSMA I have learned a number of things, including the fact that NeFSMA is an ever-evolving group. Specific to the role of Secretary, communication of pertinent information to Board members and membership has definitely changed. Do you think the NeFSMA founders envisioned a phone application that would allow you to "tweet" information to our membership? Although I'm sure they are technologically savvy people, I think not. As much of our communication has evolved to more (hopefully) useful and timely methods with our website, blogging and tweeting the Board has decided that the newsletter will be an annual endeavor as opposed to the past quarterly efforts. This also follows the ASFPM Chapter requirements that a membership newsletter be developed. This makes it very important for our membership to subscribe to our blog (http://www.nefsma.com/Blog) and follow us on Twitter (@NeFSMA) to ensure timely receipt of valuable information and announcements.

I would also like to thank Carrie Romero who helped immensely with development of this publication. Carrie's participation is a great example of committee involvement. Someone once told me that the value you get out of something is relative to what you put in, and participation in an organization of professionals is no different. We have a very talented and diverse membership that can be tapped for the betterment of the entire organization. There are a number of committees within NeFSMA including Publications, Public Outreach, Promotions and Professional Development that would greatly benefit from membership involvement and the general membership would, in turn, benefit. Please consider committee participation and email Rocky Keehn or any of the other Board members if you are interested.

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ASFPM District 4 Chapter Director Update

Since my last message I have continued with one assignment, attended the Board meeting in Madison, WI, and I am about to take on a new role on the board. Somehow the 2015 ASFPM Annual Conference in Atlanta, GA is upon us. So, with it rapidly approaching, I have been scrambling to prepare here in Ankeny at Snyder for while I am gone as well as at home. My wife is a homemaker that will now need lots of help from family with a 4 year old and 2 year old twins by herself. My wife traveled with me to the Seattle conference last year, but we just couldn't make it work this year with her younger sister getting married the Saturday after conference.

The assignment I am continuing is being a member of the Long Term Financial Committee. The committee has met many times via conference call and while we were in Madison in late February. Our first task was to look through past conferences and assess what we should be doing for planning for Atlanta and for future conferences. These planning efforts included costs, venues, material, and etc. We had to make easy and hard decisions, but rest assured, decisions were made with the membership in mind while keeping ASFPM's premier event viable long term. The second task was to analyze the 2011 Long Term Financial Report that was prepared. We are in the process of updating these strategies, adding strategies, or even getting rid of some that we feel are not good moving forward.

A wrap up to the Board meeting in Madison is that it was, again, jam packed full of content for us to review and go through. Even though we speak by phone frequently, we only meet in person twice a year, so we like to get as much done face to face as possible. One whole day was dedicated to one goal, however. We went line by line going through policy recommendations. This was in an effort to update the National Flood Policies and Programs in Review (NFPPR) last published in 2007. It was a very long and tedious day, but the end product should be one of the best resources ASFPM has to shape flood policy.

Finally, the new role I will be taking on with the board. There is a standing Chapter Director ad hoc committee that is appointed by the Board Chair. This ad hoc committee is the same committee that tackled the issue on whether or not the Chapter Districts should be reshuffled that I have written about previously. When our committee met in Madison in February, I was chosen to be the next committee chair when the current chair steps down at the Conference in Atlanta. I will obviously tackle issues as they have been coming up as we have been, but I also plan to develop resources that chapters can use in their marketing strategy for members to become more relevant or to stay relevant in their respective markets. More details to come.

Thank you for your continued support and please feel free to contact me with your information or concerns.

Kyle D. Riley, P.E., CFM
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City of Lincoln Moves to a CRS Class 5 Rating

Rock Krzycki

As of May 1, 2015, the City of Lincoln was upgraded in the Community Rating System (CRS) administered by the Federal Emergency Management Agency (FEMA). The three goals of the Community Rating System are to reduce flood losses, facilitate accurate insurance ratings and promote awareness of flood insurance.

Since 2009, the City has had a class 6 rating, which provides a 20-percent reduction in flood insurance. The upgrade to class 5 will provide a 25-percent reduction for the 1,740 Lincoln residents who participate in the National Flood Insurance Program (NFIP) and whose properties are located in the floodplain. The average savings for policy-holders will increase from \$288 per year to \$360 per year. Flood insurance premiums are being increased due to federal changes, but the total savings still adds up to about \$500,000 City-wide.

Mayor Chris Beutler said "This system rewards cities like Lincoln for taking extra steps to protect residents from floods," with this upgrade, Lincoln will be one of the highest rated cities in the nation, and that adds up to significant savings for our residents."

Lincoln is one of six cities in Nebraska and about 1,200 nationwide to take advantage of the CRS, a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Lincoln has been active in the CRS since October 1991. The city's rating is based on activities in the areas of public information, mapping and regulations, flood damage reduction and flood preparedness. These programs even benefit those without property in the floodplain by implementing practices that save lives, protect the environment and prevent damage to private property and public infrastructure. A significant reason for the CRS Class upgrade was the City's work with FEMA to take into account the amount of open space the City has along major creeks and other drainage corridors.

University of Nebraska Stormwater Management Resources

Over the past several years, the University of Nebraska Stormwater Management Education Team has developed numerous materials including a website, several publications, and other resources. Development was supported in part by a USDA National Institute of Food and Agriculture integrated programming grant. Below is a sampling of these materials.

Publications:



One of the most recent publications, titled "Stormwater Management: What Stormwater Management Is and Why It is Important" provides an overview of what stormwater is; what it means to manage stormwater; why it is important to do so; and the changing practice of stormwater management. This 4-page publication can be downloaded for free at: http://www.ianrpubs.unl.edu/sendIt/g2238.pdf





Another free publication titled "Stormwater Management: How to Make a Rain Barrel" gives instructions for assembling a rain barrel and provides tips for the safe use of the barrel and collected water. Download at: http://www.ianrpubs.unl.edu/sendlt/ec2001.pdf



Follow Stormwater Sleuth and Running Rain through an adventure to help youth learn about stormwater runoff, water pollution from runoff, and practices that help slow stormwater runoff and keep it clean. Youth can explore the watershed they live in and the stormwater runoff from their own home or school, and discover ways they can be a part of the solution to stormwater runoff pollution. The 16-page black and white booklet includes a maze, crossword puzzle, and two hands-on activities that promote exploration and observation of stormwater runoff pollution. This award-winning booklet is available for \$2.00 at:

http://marketplace.unl.edu/extension/extpubs/mp97.html



Stormwater Sleuth and Running Rain Decision-Making Card Game:

This full color card game can be used by people ages 9 to 99 to learn about different threats to water quality and ways to address them. The game deck consists of 40 water threat cards each with a different picture and description; and 80 BMP cards each with a different photo and definition. Players are first dealt BMP cards and a threat card is turned over. Each player then selects and defends a BMP to address the threat. If you would like to see photos of threat/BMP cards before ordering, or have any questions, e-mail kfeehan2@unl.edu. She will send a photo of a few of the cards. Each card deck costs \$20.00 and is available to order at:

http://marketplace.unl.edu/extension/extpubs/stormwater-sleuth-game.html

Website:

The website http://water.unl.edu/stormwater offers a wealth of stormwater management resources such as links to additional publications, a rain garden animation, green infrastructure photos, learning videos, an interactive rain garden design tool, youth activity guides, and much more. Check it out today.

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Omaha Green Infrastructure Tour

Registration is now open for the annual Omaha Green Infrastructure Tour.

On Thursday, July 9, the UNL Stormwater Team, UNO Center for Urban Sustainability, and the Omaha Stormwater Program will be sponsoring a the annual Omaha Green Infrastructure Tour. This year's tour will provide a great opportunity to see how people across the city are implementing porous pavements, bioretention gardens, green spaces, wetlands, green roofs, tree planters and more! More information is available at http://water.unl.edu/stormwater. Registration is available online at





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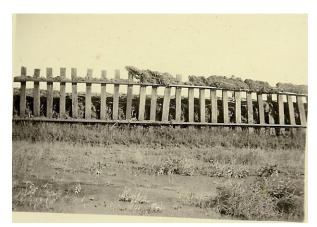
80th Anniversary of the 1935 Republican River Flood

Carrie Romero

The last few days of May and first few days of June 2015 were the 80th Anniversary of the infamous Republican River Flood. During that event, up to 9 inches of rain fell over a large portion of the watershed. In a rare occurrence, the storm moved in the same direction as the drainage basin. This resulted in many large creeks reaching their flood peaks at the same time as the Republican River flood crest passed. According to the online Wikipedia article on the flood, estimates show that 113 people were killed. Up to 41,500 head of cattle were lost. 341 miles of highway and 307 bridges were destroyed, and 74,500 acres of farmland was inundated.

As a result of the flood, a series of dams and reservoirs were constructed along the river basin to try and control the river flow and prevent future floods, irrigate, and allow for recreational uses. The National Weather Service has compiled an interesting and in-depth website covering the 1935 flood. The site covers the flood, as well as the aftermath and future impacts. It has a plethora of historical photographs as well as records of personal stories from flood survivors. You can find the website at

http://www.weather.gov/gld/1935flood



Railroad at Cambridge, NE after flood



McCook Power and Light Plant – notice the men on the roof in the center of the photo



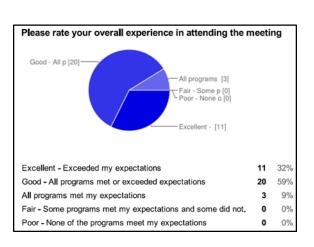
House near Cambridge, NE

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2014 Membership Meeting

For the first time in NeFSMA's short history we had our membership meeting at the Strategic Air and Space Museum on November 20, 2014. There were over 100 individuals that attended the meeting which was our largest turnout for the membership meeting ever! Our program included a morning session for all attendees and then we broke into two tracks, one for storm water management and one for floodplain management. There were several great presentations and our members that responded to our program survey agreed!





Bill Jones receives several gifts, including becoming our first ever lifetime member, from Lori Laster past NeFSMA chair and John Callan, Program Chair

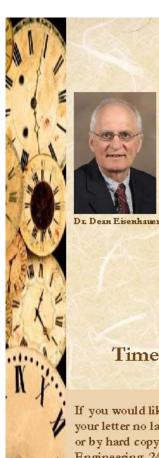
One of the highlights was NeFSMA awarded it first ever lifetime membership to Bill Jones with the Nebraska DNR at lunch. Bill was one of the founding fathers of NeFSMA and was instrumental in floodplain management education in Nebraska over his career (how many of you took floodplain management 101 from Bill?). Congratulation to Mr. Jones!

The only major issue with the conference was we lost the afternoon break cookies! It appears that another group at the facility thought they were theirs, so this year we will make sure to keep a close eye on our food. We will be going back to SAC again this year and "fix" a few of the bugs to provide another great conference. The board decided to have the membership meeting each year the on Thursday the week before Thanksgiving. This gives us a set date and makes it

easier for everyone to mark it on their calendars. We promise not to have turkey and the all the fix-in's for lunch. See you at the 2015 Membership meeting!

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Retirement Reception

Biological Systems Engineering Department University of Nebraska-Lincoln

Dr. Dean Eisenhauer Professor David Shelton



Prof. David Shelton

Please join us to celebrate these two outstanding professional careers.

Date: Friday, June 26, 2015

Place: Arbor Suite, Nebraska East Union

Time: Reception 3:30 - 5:30 PM Remarks at 4:00 PM

If you would like to contribute to our "Book of Letters" for Dean or Dave please send your letter no later than Friday, June 19, in PDF format Teresa Ryans (tryans2@unl.edu) or by hard copy to: Teresa Ryans, University of Nebraska-Lincoln, Biological Systems Engineering, 241 Chase Hall, Lincoln, NE 68583-0726.



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