

RUNOFF

CALIFORNIA-NEVADA CHAPTER SWCS –SUMMER 2017

PRESIDENT'S CORNER – JOE WILLIAMS



Hello Fellow Chapter Members!

I was fortunate to attend the 72nd International Annual Conference of the Soil and Water Conservation Society in Madison, WI a few weeks ago. The focus of the conference was “Conservation Connections: Creating Pathways to Sustainability” with the intent to highlight the idea that the conservation of natural resources is connected both in the *physical*, as well as *social* ways.

This is an extremely important message and one which I now take even more to heart. Although there were over 200 excellent symposia, papers and posters presented during the conference, several recurring themes stuck out to me as related to the conference focus:

- 1) **We, as professional natural resource conservationists, need to continue to strengthen and expand our partnerships.** As individuals we can't “do-it-all”, but by strength in numbers and diversity we can have a much bigger and lasting impact on natural resource conservation. Think outside our normal professional partners and seek out opportunities with additional stakeholders who can bring something new to the table even if they have a different view or background.
- 2) **“Build resilient systems”.** We must *think and plan ahead* when we work with our clients and partners, **even if the project is small.** As an example, can you answer the following questions of how the project you are doing today will continue to be successful in the future? Additionally, have you considered future impacts from drought or high precipitation? Does the project impact the neighboring landowner, watershed or floodplain? Should it? Could you involve additional partners to expand the project to have a bigger footprint on the landscape?

The many symposia sessions and colleague interactions over the course of the conference continued to strengthen my resolve to work on both of these aspects of getting more conservation on the ground. By the energy exhibited at the conference, I believe we are all moving in that direction!

I look forward to seeing you in beautiful Reno, Nevada soon!

USDA OFFICE TOLD TO USE ‘WEATHER EXTREMES’ INSTEAD OF ‘CLIMATE CHANGE’

BY DEVIN HENRY - 08/07/17 THE HILL

Officials at a U.S. Department of Agriculture (USDA) office told staffers to avoid the term “climate change” in their communications and use language like “weather extremes” instead. According to emails obtained by *The Guardian*, officials told staffers in the USDA's Natural Resources Conservation Service (NRCS) to change the way they discuss climate change in their work.

According to the office, climate change would become “weather extremes.” Climate change adaptation should instead be “resilience to weather,” and efforts to “reduce greenhouse gases” should instead be deemed as ways to “build soil organic matter, increase nutrient use efficiency.”

“We won't change the modeling, just how we talk about it,” **Bianca Moebius-Clune**, the NRCS's director of soil health, wrote in an email to staff on Feb. 16, according to the report. Moebius-Clune said the new language was given to her to pass on to staff.

CHAPTER ELECTION RESULTS

Executive Council Director **John McCann** from Reno, NV was elected to serve a two year term as President-Elect and then become our Chapter President; **Tom Esgate** from Penn Valley was elected to serve another two-year term as Treasurer; **Pamela Hertzler** from Grass Valley was elected to her first term as an Executive Council Director; **Jim Komar** from Reno, NV and **Patti Novak-Echenique** from Silver Springs, NV were elected to serve another two year term as Executive Council Directors.



Ladi Asgill – Next President

These officers will be installed at the Chapter Annual Meeting in Reno on October 20. Also at that time our current President Elect **Ladi Asgill** will become **Chapter President** for a two year term and our current Chapter President **Joe Williams** will become the Past President for a two year term.

Chapter Secretary **Erika Boyland** will serve for one more year and Executive Council Directors **Austin Avwunudiogba**, **Phil Hogan** and **Zahangir Kabir** will serve for one more year.

SCHOLARSHIP WINNER

Scholarship Committee Chair **Tina Vander Hoek** announced the \$1,000 Chapter scholarship will be awarded to **Suzette Nicole Turner**, an Agriculture Land Resource Management major at Chico State University, at our Conference in Reno in October. Suzette plans to pursue a master's degree in soils science after graduating to continue to study soil processes and soil conservation. She participated in the Pathways program with Natural Resources Conservation Service as a Soil Conservation intern and was on the Dean's List fall of 2016.

Suzette was a Student Ambassador at the O'Brien Youth Leadership Conference, Junior Class President, FFA Chairperson at Butte College for Ag Machinery, FFA Field Day Judge at Chico State University and participated in an Individual Research Project at Chico State. She presented an initial version of her research at the 2017 California Chapter of American Society of Agronomy and won the essay competition allowing her to attend the 2017 SSSA meeting in Orlando Florida. She is a member of Soil Science Society of America, Agronomic Society of America, and Crop Science Society of America.

An Associate Professor at CSU Chico stated that Suzette is a bright and tenacious student with considerable potential as an innovative agricultural manager, soil scientist, and leader demonstrating diverse abilities, and keen intuition. She is an independent, creative, and prepared critical thinker. As a productive young professional she has demonstrated a high standard of quality across all she does. A Student Life Advisor at Butte College stated that Suzette is incredibly dedicated to her academic goals and is a role model student.

Tina reminds all members to refer college student friends to our website for information and the application form for our 2018 Chapter scholarship.

NEW CHAPTER MEMBERS

We extend a **GREAT BIG WELCOME** to five new members who recently joined our California-Nevada Chapter SWCS. We had **84 members** as of July 31, 2017.

Karen Lowell - Royal Oaks

Sherman Swanson - Reno, NV

Kay Mercer - Paso Robles

Suzette Turner - Chico

Nicholas Owens - Thousand Oaks

CA-NV SWCS 2017 ANNUAL CONFERENCE: RENO, NEVADA - OCTOBER 19-20, 2017

PREPARING FOR EXTREME WATER CONDITIONS

After four years of drought, parts of California and Nevada saw record rainfall events, record snow packs, and record runoff events. This conference will examine what it takes to prepare and manage for extremely low water availability as well as excessive runoff from the perspective of municipal infrastructure, agriculture and production, and riparian habitat maintenance and restoration. This year's conference will be held the Renaissance in Downtown Reno, which is perched on the banks of the Truckee River and provides a perfect backdrop for the topics we plan to cover.

Field Tour (10/19): While details are still being worked out, we plan to take participants on a trip that begins at the outlet of Lake Tahoe and moves downstream looking at issues related to river flow management, construction of major roadways within the Truckee River floodplain, riparian restoration at a former ranch within the Truckee River floodplain, management of water rights under the Truckee River Operating Agreement, and management of water at the "end of the pipe" for agricultural use in Fallon, NV.

Networking Social (10/19): After the field tour, participants and guests will be invited to participate in an informal social event. Time and location TBD.

Invited Speaker Series (10/20): We are in the process of identifying a lineup of invited speakers that will address topics related to management of water during drought and flood conditions that are relevant to both California and Nevada. Throughout the day, we hope to have seven different speakers plus a keynote address. **Input from local experts is always appreciated, so if you would like to help in planning this event or have suggestions for invited speakers, please let us know.**

Student Poster Session (10/20): During the lunch break on Friday, participants will be invited to view a series of student posters. Our hope is to have as many posters included in this session as possible and to include a juried award for the best student poster. Details will be provided as soon as possible.

Chapter Awards Ceremony (10/20): A portion of Friday has been set aside to recognize deserving individuals and groups (members and non-members alike) in California and Nevada whose accomplishments are in line with the Chapter's mission.

Date and Time: Thursday, Oct 19, 2017, 8:00 AM –Friday, Oct 20, 2017, 5:30 PM PDT

Location: Renaissance Reno Downtown Hotel, One South Lake Street, Reno, NV 89501

Registration is \$200 for the full conference. Student members can register for \$50.

We are also looking for help in getting the word out about this event, so please share this with anyone who may be interested.



MISSION STATEMENT

The Chapter is a multidisciplinary scientific and educational organization dedicated to natural resource enhancement through an ethic which recognizes the interdependence of human communities and natural systems.

The Chapter achieves its mission through its members using mutual cooperation and understanding to create opportunities for improving soil and water conservation in California and Nevada.

WHAT DOES THE END OF THE PARIS DEAL MEAN FOR AGRICULTURAL INNOVATION?

By Suzy Friedman, Published: June 15, 2017 (Environmental Defense Fund)



No matter your views on climate change, the United States' exit from the Paris agreement could compromise the ability of farmers and agribusinesses to become more resilient in the face of extreme weather events.

In the absence of federal leadership, individual farmers, state and national ag associations, food companies, retailers, and environmental organizations will need to fill the void. I'm confident we can do this, because all the farmers I've ever known are incredible innovators and are willing to implement practices that can mitigate the effects of an unpredictable climate – practices that also protect their businesses.

In his book, *From Poverty to Prosperity*, **Nick Shultz** notes, “Maybe there is no free lunch, as the saying goes; but we do not have to work nearly as hard to put food on the table as we used to. Just two hundred years ago, over half of all Americans worked in agriculture. Today, the figure is less than two percent.” From improved seeds to precision agriculture technologies, today's farmers can produce more crops with far less inputs. According to the [USDA's Economic Research Service](#), a farmer in 1970 could plant 40 acres of row crops in a day each spring, and in the fall could harvest 4,000 bushels per day. Today, farmers can plant 945 acres a day and harvest 50,000 bushels a day. Using 1940 methods and tools, the US would have needed another 150 million hectares to grow what they grow today.

Continuous improvement

The point in looking back in awe at these advancements is to recognize how desperately we need that same pace of innovation to continue as we face an ever-changing climate.

Agriculture has faced [increasing disruption from extreme weather and climate shifts](#) over the past 40 years, and this trend is expected to increase over the next 25 years. However, through changing crop rotations, adjusting planting times, technological advancements, as well as fertilizer, pest and water management – farmers can make their crops more resilient.

Take, for example, the story of my friend [Brent Bible](#). I visited Brent at his farm in Indiana not long after the severe drought in the Midwest in 2012. Brent estimated that practices such as conservation tillage, cover crops and precision use of nutrients meant he got about 70 percent of his normal yield that year while many of his neighbors had no yield at all. These practices didn't just help the environment, they were key for his business, too.

Keeping the momentum

I'm disappointed by the new Administration's decision – not just because I am an environmentalist, but also because it slows momentum for implementing practices that help both farmers and the planet. For example, [using fertilizer more efficiently](#) saves money and reduces emissions, capturing methane emissions from manure can generate energy, and planting riparian or forested buffers alongside farmland can reduce erosion and sequester carbon.

I realize that the Paris agreement may not be top of mind for most farmers, and it's unlikely that the industry will join states like Washington, California or New York in independently committing to the Paris agreement.

Instead, my hope is that farmers and the agricultural sector will continue to innovate – even if behind the scenes – to continue improving the way we produce food, taking these solutions to scale and exporting them to the world. Climate-smart agriculture practices can protect food security in uncertain times.

2017 CHAPTER AWARDS PROGRAM NOMINATIONS DUE BY AUGUST 31

The mission of the Soil and Water Conservation Society is to foster the science and art of natural resource conservation by carrying out activities and programs in professional development, conservation science, education, and public affairs. In addition, the mission of the California-Nevada Chapter of the Society is to foster the protection, enhancement, and improvement of California’s and Nevada’s natural resources through education and multi-disciplinary professional development.

The objectives of the Society are to:

1. Advocate the conservation, protection, enhancement and wise use of soil, water and related natural resources,
2. Develop and communicate a worldwide knowledge base on the conservation, protection, enhancement and wise use of soil, water and related natural resources;
3. Promote a stewardship ethic of soil, water and related natural resources that recognizes the interdependence of people, soil, water and natural resources.

Please take some time to consider those individuals and groups that have contributed to the ideals and objectives of the California-Nevada Chapter of the Soil & Water Conservation Society during the past year. Select a suitable award category from the list that follows and complete the pertinent information. Nominations may be made by Chapter members and others.

AWARD CATEGORIES AND SELECTION INFORMATION

DISTINGUISHED SERVICE AWARD: For unusual and extraordinary activities and significant contribution in furthering the objectives of the California-Nevada Chapter of the Soil & Water Conservation Society. Only SWCS members are eligible for this award.

HONOR AWARD: For special accomplishments contributing to the objectives of the California-Nevada Chapter. Individuals, groups, organizations or businesses are eligible for nomination.

CHAPTER RECOGNITION AWARD: The Chapter Recognition award is presented to recognize a member who has provided outstanding service to the Chapter.

MERIT: For outstanding effort or activity in promoting the conservation and development of natural resources in California and/or Nevada. Individuals, groups, organizations or businesses are eligible for nomination.

MEDIA: To recognize outstanding news coverage of natural resources conservation issues in California and/or Nevada. Eligibility is open to all media sources, as well as individual reporters, members of the press, or free-lance reporters and photographers.

CONSERVATION EDUCATION: To recognize outstanding conservation education activities in California and/or Nevada. Individuals, groups, organizations or businesses are eligible for nomination.

NOMINATION FORM – E-mail the completed form **by August 31st to: aavwunudiogba@csustan.edu**

Austin Avwunudiogba, Acting Chapter Awards Committee Chair
 Stanislaus State University, Turlock (phone 209-667-3574)

Nominator: _____
 Address: _____
 Phone: _____ E-Mail: _____

Nominee: _____
 Address: _____
 Phone: _____ E-Mail: _____

Award Category (check one):

- Distinguished Service Award
- Honor Award
- Chapter Recognition Award
- Merit Award
- Media Award
- Conservation Education Award

Contacts: _____
 Title or Position: _____
 Brief Description of nominee's accomplishments: _____

POST-FIRE DISASTER ASSISTANCE

Wildfires, especially those caused by human activity, can take a tragic toll on the people and landscape affected. In California the wildfire season is typically followed by the rainy season presenting hazards such as flooding, erosion and more to the already fire- damaged watersheds and the people who live in them. USDA's Natural Resources Conservation Service (NRCS) is a federal non-regulatory agency that can work with partners and landowners to assess and possibly mitigate damages following wildfires.



One program available through NRCS is the Emergency Watershed Protection Program (EWP). This program is designed to *help people reduce imminent hazards to life and property. All projects undertaken through EWP are done in conjunction with a sponsor, such as a city, state, county or other eligible party.*

It is not intended to assist individuals. EWP can pay up to 75 percent of the cost of emergency measures. Typical work includes removing debris from stream channels, culverts and bridge abutments; reshaping and protecting eroding banks; correcting damaged drainage facilities; repairing levees; or reseeding a damaged area.

NRCS may also be able to assist impacted landowners and communities with technical information to help them return damaged watersheds to normal functioning. NRCS conservationists may be able to offer advice on preventing erosion, covering and protecting exposed soil, directing water away from vulnerable areas and more. This assistance is accessed through [one of California's 55 local offices](#).

WATERSHED AND FLOOD PREVENTION FUNDING OPPORTUNITIES

DAVIS, Calif., July 21, 2017 – USDA's Natural Resources Conservation Service (NRCS) in California is announcing funding opportunities for planning, design, and construction of watershed scale projects. This money is being made available through NRCS's Watershed and Flood Prevention Operations (WFPO) Program under Public Law 566.

Funding for projects is limited to \$150 million available nationally. The funding can be used to further existing watershed projects which already have NRCS authorized Watershed Plans, or new projects without approved Watershed Plans. All projects receiving funding must follow the program's requirements found in the NRCS National Watershed Program Handbook.

Any eligible sponsor may apply. Eligible sponsors are local organizations of government such as counties or districts that meet the requirements defined in the NRCS National Watershed Program Handbook.

Requirements for an eligible sponsor include, but are not limited to, the following:

- Ability to acquire real property through eminent domain;
- Ability to obtain permits and licenses;
- Authority to levy taxes;
- Ability to perform operation and maintenance.

Any eligible sponsor who would like to develop a proposal should contact **Greg Norris**, Acting State Conservation Engineer, at (530)792-5609 or **Steve Hill**, Natural Resource Manager, at (530) 792-5642 for more information.

COW CREEK PARTNERSHIPS - BAR ELEVEN RANCH, MILLVILLE

This story is courtesy of the California Rangeland Conservation Coalition. To learn more visit www.carangeland.org .

Several deep gullies in areas near Clover Creek needed to be repaired to prevent further erosion and protect water quality. Bar Eleven Ranch encompasses more than 2,000 picturesque acres of grazeable oak woodlands and irrigated pasture in the Cow Creek Watershed in Shasta County. Clover Creek, a tributary to Cow Creek, runs through the middle of the ranch and provides a source for irrigation water.



Good stewardship is a core value at the Bar Eleven, a family-run cow-calf operation, and ranch owner **Tim DeAtley** is both observant and tireless in his efforts to improve the land.

In 2006, the Bar Eleven property had several natural resource concerns, including areas suffering from sheet and rill erosion, deep gullies, and severe streambank erosion along Clover Creek. DeAtley wanted to address these problems and also wanted to improve other aspects of the ranch. His conservation goals included fencing to keep cattle out of the riparian areas and improve grazing management, establishing new stock water facilities, improving water use efficiency and water quality.

Knowing that tackling all of these projects alone would be difficult, DeAtley turned to the Natural Resources Conservation Service (NRCS) for assistance. He had worked with NRCS before, getting conservation planning and cost-share assistance for projects on another property near Fall River Mills and was pleased with the results.

DeAtley's conservation plan provided the road map for implementation of practices to address natural resource concerns. NRCS conducted a resource inventory and worked with DeAtley to develop a conservation plan for the entire property. DeAtley also applied for cost-share assistance through the Environmental Quality Incentives Program (EQIP) to implement his plan.

To address serious erosion and sloughing of the streambank along Clover Creek, 880 feet of the streambank was reshaped and armored with large rocks harvested from other areas of the ranch. Rock stream barbs were installed to buttress the structure and divert water away from the streambank. An erosion control blanket was installed above the rock and perennial grasses planted to stabilize the slope and minimize sedimentation. Deep gullies were also eliminated using rock and fill.

The completed stream restoration project will help to prevent the loss of land, maintain channel capacity, reduce sedimentation, and improve habitat for fish and other wildlife. It was a complex job that required engineering expertise and heavy equipment. EQIP provided 50 percent of the cost for the project. Another 40 percent of the cost was provided by Western Shasta Resource Conservation District through a grant from the Bay Delta Ecosystem Restoration Program. DeAtley said that the cost-sharing made the project affordable.

Other practices that DeAtley has implemented with EQIP cost-sharing include brush clearing, nutrient management, prescribed grazing, riparian fencing, and erosion control in heavy use areas. A tailwater recovery system was installed, consisting of an impoundment pond, pipelines, and pumping equipment. The system will store and transport irrigation water for reuse, saving water and improving water quality. "The technical and cost-share assistance has been critical," said DeAtley. "I couldn't have implemented all of these measures in such a short time on my own."

DeAtley serves as a director of the Cow Creek Watershed Management Group, an organization comprised of private citizens who own land or reside within the watershed and volunteer their time to improve water quality and other resource conditions there. Ongoing conservation work at the Bar Eleven is in harmony with the group's goal of maintaining and enhancing the water quality, fisheries, and wildlife of the watershed.

"Most ranchers are good land stewards," said DeAtley. "It just makes good business sense. I think that many city folks would be very surprised to find out how much ranchers really do to care for the land."

"We love this land and know it better than anyone else," said DeAtley. "We want to manage it in a way that will ensure its sustainability for the next generation."

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CHAPTER EXECUTIVE COUNCIL

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CHECKOUT THE CA-NV CHAPTER SWCS WEBSITE

www.caswcs.org

PLEASE SUBMIT PHOTOS,
NEWS ITEMS, AND
FEATURE ARTICLES
TO THE EDITOR FOR THE
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BY SEPTEMBER 25

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RUNOFF reserves the right to edit all submissions.

National Soil Health Measurements to Accelerate Agricultural Transformation

Research Triangle Park, NC, Aug. 7, 2017

For scientists, farmers and ag policy makers, one nagging question has yet to be completely “unearthed.” Just how healthy (or unhealthy) are the nation’s soils?

“We can’t really know the answer to that question until we have a set of common soil health measurements that scientists and farmers can compare and track over time,” said **Dr. Wayne Honeycutt**, CEO of the Soil Health Institute. “But we believe our endorsement of 19 measures today will help us seek and track that common ground – and ultimately answer that important question.”

The concept of soil health is gaining widespread attention because it promotes agricultural practices that are not only good for the farmer, but also good for the environment. An abundance of research shows that improving soil health boosts crop yield, enhances water quality, increases drought resilience, reduces greenhouse gas emissions, increases carbon sequestration, provides pollinator habitat, and builds disease suppression. To help implement widely-applicable, consistent measures of soil health, the Soil Health Institute announces its endorsement of 19 national soil health measurements.

The specific Tier 1 measures are organic carbon, pH, water-stable aggregation, crop yield, texture, penetration resistance, cation exchange capacity, electrical conductivity, nitrogen, phosphorus, potassium, carbon mineralization, nitrogen mineralization, erosion rating, base saturation, bulk density, available water holding capacity, infiltration rate, and micronutrients

“Many of these Tier 1 measures have proven effective to help producers achieve high yields for decades,” Honeycutt said. “Consequently, many of the soil test laboratories and field conservationists are already using these measurements. Currently, the Soil Health Institute is reaching out to those organizations to explore additional implementation opportunities.”

For further information, visit www.soilhealthinstitute.org

NEWSLETTER EDITOR AND PUBLISHER POSITION OPEN

Walt Bunter is stepping down as your newsletter editor and publisher after 15 years. The job involves editing and publishing four issues a year and posting them to our website. Most members receive copies via email but some still prefer to get their copy by regular mail. Tell President **Joe Williams** you want the job.