



RUNOFF

CALIFORNIA-NEVADA CHAPTER SWCS – SPRING 2014



PRESIDENT'S MESSAGE – Rob Roy

I must confess that since the early part of 2013, I have been enamored with the term **resilient** – especially the concept of resiliency of our natural resources. This concept was brought to the forefront as the theme of the 2013 annual SWCS conference – “Resilient Landscapes”. Consider for a moment the definition of resilience - *“the ability to recover readily from illness, depression, adversity”*

Aquifer systems that are undeveloped tend to be balanced over long periods of time when recharge and discharge are equal. Periods of adversity or drought will sometimes reduce the amount of water in the aquifer but recovery occurs when nature brings a year with high rainfall or runoff and the aquifer recharges. This

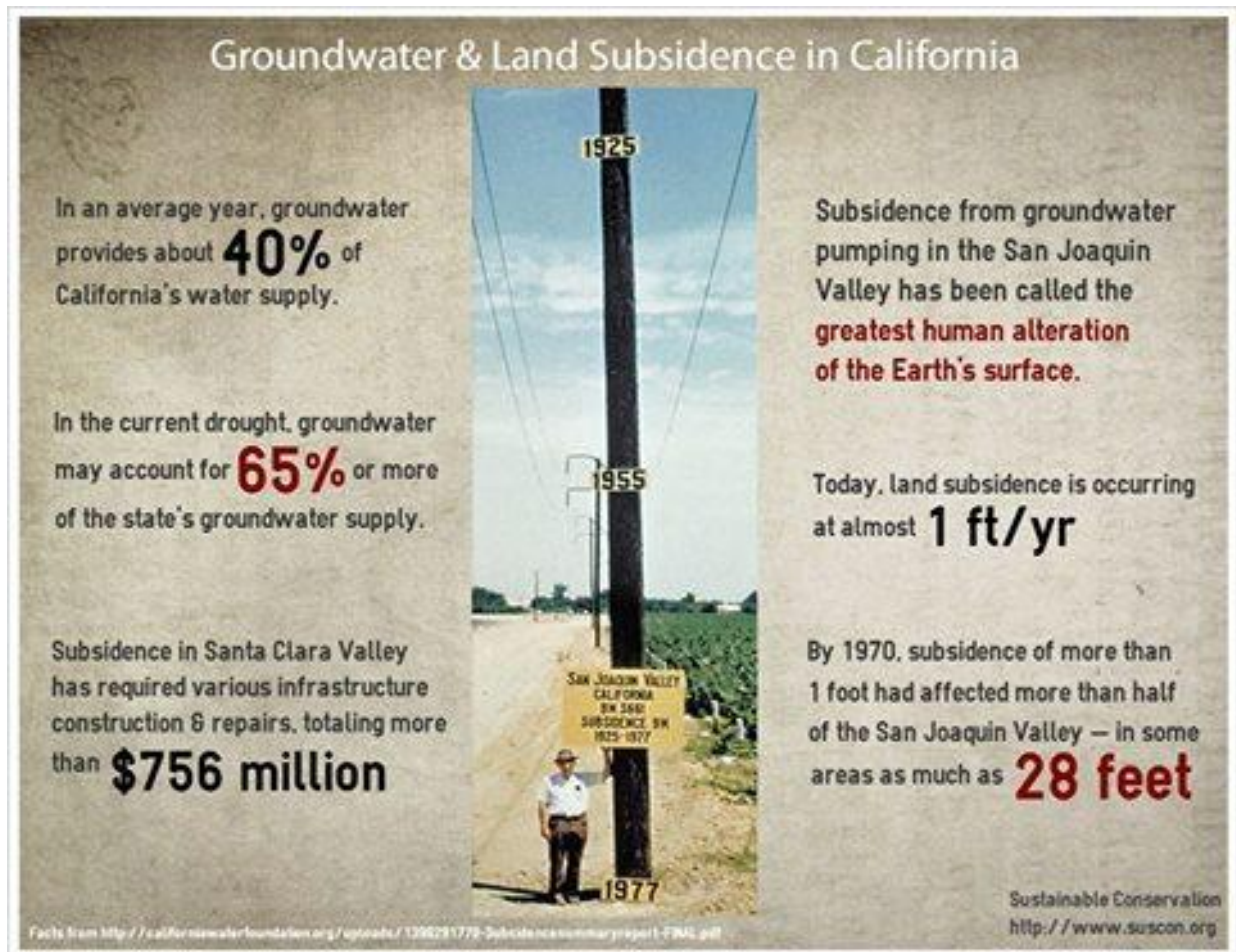
system is resilient.

Development of aquifer systems to enable urban, industrial, and agricultural uses creates a challenge to the resiliency of the aquifer. Historically, groundwater has been pumped as needed in many areas of California and Nevada without regard for the **sustainability** of the groundwater supply. And here I have introduced another word that I became enamored with in the 1980s – “sustainability”. Consider the definition of Sustainable, *“pertaining to a system that maintains its own viability by using techniques that allow for continual reuse”*. In many instances the concept of sustainability has become a cliché - a term that is often overused, misused, and redefined by many.

Where is the nexus between sustainability and resilience? To maintain a sustainable water supply, we must recognize the resilience of this resource. The ability of our groundwater resource to recover from withdrawals is sometimes limited. If we ignore this concept, we run the risk of eventually losing the use of our aquifers. Over pumping is not sustainable in the long term and can lead to problems that transcend the disappearing water supply including increased energy costs for groundwater pumping, water quality degradation, costs for well deepening or replacement, impacts to nearby waterways, and land subsidence.

Land subsidence is one effect of water withdrawals that clearly illustrates a lack of resilience – if you know where to look. Groundwater pumping seriously challenges the resiliency of an aquifer and has, in some cases, deformed the land surface permanently. When water is drained from clays, permanent subsidence will result because much of the water drained cannot be replaced. This permanent deformation, called inelastic or non-recoverable compaction, is responsible for permanent or non-recoverable land subsidence.

This leads me to the theme of our 2014 annual conference and workshop, **THE RESILIENCY OF GROUND AND SURFACE WATER SUPPLIES IN CENTRAL CALIFORNIA AND NEVADA**. Speakers from the California Department of Water Resources, NRCS, and local water conservation districts will present information on ground water supplies and subsidence. And just in case you don't know where to look for an illustration of subsidence, our tour of the western San Joaquin Valley will put these impacts, including the famous Poland's pole near Mendota, right in front of you. Please join us if you can.



Poland's Pole near Mendota shows amount of land subsidence from 1925 to 1977.

THE 2014 ANNUAL CONFERENCE/WORKSHOP

- WHEN:** June 17 and 18, 2014
- WHERE:** Video Teleconference (VTC) sites around California and Nevada on June 17 plus a field trip in Fresno and Kings Counties, CA on June 18.
- DEADLINES:** DISCOUNTED REGISTRATION DUE BY JUNE 9TH

Pre-registration is strongly encouraged. Registration will begin at all VTC sites at 9:00 am.

On **Tuesday, June 17th** 2014. Presentations will begin at 9:30 am. Interactive sessions between presentations will allow feedback and discussion between locations. Presentations will conclude at 3 pm.

On **Wednesday June 18th**, there will be a unique tour of soil and water resources in the San Joaquin Valley and a relaxing lunch at the Cardella Winery. Registration at the Best Western Clovis Cole at 415 Clovis Avenue parking lot will begin at 8:00 am. Lunch and Transportation are included with registration for Wednesday. We will depart from the parking lot at 8:30 am and return by 4 pm. We will travel south to Hanford and then west toward the Arroyo Passajero alluvial fan. **Kerry Arroues**, NRCS Earth Team Soil Scientist, will introduce topics as the tour continues out to the west side. For the first part of the tour, we will view sedimentation near the California Aqueduct. A second stop will allow us to observe construction work to raise levees and aqueduct inlets in response to this sedimentation by the Arroyo Passajero canyon. As the tour travels north to sites related to salinity and high water table issues, we will view areas of extensive shallow subsidence, and visit a geological source area for high selenium west of I-5 near Panoche Creek. The final stop of the tour will be a visit to the San Luis Drain and a discussion of the history of water challenges in this area.

You will not have to drive very far to attend the Tuesday session.

Convenient VTC sites in California:

Bakersfield – NRCS Service Center, 5000 California Ave, Suite 100
Fresno – NRCS Area Office, 1907 N. Gateway, Suite 101
Salinas – NRCS Area Office, 318 Cayuga Street, Suite 206
Lockeford – NRCS Plant Materials Center, 21001 N. Elliott Road
Davis – NRCS State Office, 430 G Street, Room 215
Red Bluff – NRCS Area Office, 1345 Main Street

Convenient VTC sites in Nevada:

Reno - NRCS State Office, 1365 Corporate Blvd.
Caliente - NRCS Service Center, 360 Lincoln Street
Elko – NRCS Service Center, 555 West Silver Street
Ely – NRCS Service Center, 744 E. North Industrial Way
Fallon – NRCS Service Center, 111 Sheckler Road
Las Vegas – NRCS Service Center, 7080 La Cienega Street, Suite 100
Lovelock – NRCS Service Center, 1155 Lovelock Ave
Minden – NRCS Service Center, Hickey Building, 1702 County Road, Suite A1
Winnemucca – NRCS Service Center, 1200 Winnemucca Blvd. East
Yerington – NRCS Service Center, 215 West Bridge Street, Suite 11A

AGENDA – Tuesday, June 17th, 2014

9:00 am - *Check in at your VTC location*

9:30 am - *Welcome and introduction to the meeting. Rob Roy, CA-NV Chapter SWCS President.*

9:45 am - *Mike McKenzie, Engineering geologist; California Department of Water Resources.*

Ground water resources in the Central Valley of California – the impact of drought.

10:15 am - *Mike McKenzie, Engineering geologist; California Department of Water Resources*

California Statewide Groundwater Elevation Monitoring (CASGEM) program.

10:45 am - *Jim Gulliford, SWCS Executive Director and John Peterson, SWCS Washington DC Representative Soil and Water Conservation Society update.*

11:15 am - *Steve Stadler, Kings River Conservation District –*

A local perspective on ground water supplies and subsidence.

12:00 noon – *lunch break (On your own)*

1:00 pm – *Doug Merkler, NRCS Soil Scientist, Las Vegas, Nevada*

Ground water withdrawals and subsidence in Nevada

2:00 pm – *Rebecca Elwood, Soil Conservationist, Fresno NRCS*

Mechanisms of Subsidence in Western San Joaquin Valley

3:00 pm – *adjourn*

4:00 pm – *Chapter Annual Business Meeting, Installation of Officers, Scholarship Award & Chapter Awards*

Day 2 FIELD TRIP/TOUR – Wednesday, June 18, 2014

NEW CHAPTER MEMBERS

We extend a **GREAT BIG WELCOME** to the following four members who recently joined the SWCS and our California-Nevada Chapter SWCS. We have **131 members** as of May 19, 2014.

Kay Joy Barge - Salinas **Mel Duncan** - Folsom
Margaret Perry - Atascadero **Sarah Tanuvasa** - Bakersfield

CHAPTER ELECTION RESULTS

Joe Williams from Visalia will be our President-Elect starting on June 17. After one year he will become our Chapter President and hold that office for two years.

Erika Boyland from Bakersfield was elected Chapter Secretary for a two year term starting on June 17.

Executive Council Directors **Austin Avwunudiogba** from Turlock, **Phil Hogan** from Sacramento, and **Zahangir Kabir** from Davis were reelected for another two years that will start on June 17.

Members cast 34 valid ballots that were counted by **Wendy Rash** and **Walt Bunter** at the USDA-NRCS office in Davis on May 8. The Nominations Committee was unable to recruit any candidates from **Nevada**. Our Bylaws state that "At least one officer shall reside in Nevada". All the members of the Executive Council are officers.

ATTEND THE SWCS INTERNATIONAL ANNUAL CONFERENCE THIS JULY

Chapter Past President **Tibor Horvath**, Treasurer **Tom Esgate**, and Executive Council Director **Zahangir Kabir** will be attending the Conference.

Topics include:

- Adaptive Management of Conservation Efforts
- Agricultural and Conservation Economics
- Biodiversity Conservation and Management
- *NEW* Conservation in Nontraditional Agriculture
- Conservation in Urban Settings
- Conservation Models, Tools, and Technologies
- Conservation Policy and Program Design
- Outreach, Education, and Community Engagement
- Soil Health Resources, Indicators, Assessment, and Management
- Water Resource Assessment and Management



In addition to the three conference tracks, there will be two specialized symposia topics:

- Increasing Intensity: Rethinking Precipitation Averages and Outliers in Conservation Design and Planning
- Informing Conservation through Social Sciences: Understanding the Human Component of Land Management Stewardship

Get more details at www.swcs.org/14ac

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.

PROBLEMS AND SOLUTIONS

By Mark Steffek, SWCS Western Director



The western United States faces a lot of natural resource challenges, and the current challenge is drought. Farmers in California’s Central Valley and throughout the state will not be getting the needed rainfall or irrigation water for their orchards, vineyards, and vegetable fields. Our dairy and beef producers are included in the water shortage and will have a difficult time growing hay crops for their herds’ feed requirements.

Of course, the entire nation and the world will feel the effects of the drought as store shelves will have fewer and higher priced food options for consumption.

The drought is just the beginning of the cycle of related challenges. The heavy spring rains, flooding, landslides, and wildfires will come next. These phenomena are not new to California. Programs are in place or ready to be implemented as conditions demand. People and organizations come together to help each other get through these calamities. For example, the USDA Natural Resources Conservation Service has developed a drought initiative that includes \$25 million in financial assistance for California agricultural landowners to implement practices to protect bare ground, improve irrigation efficiency, and enhance rangeland grazing conditions through distribution of livestock watering facilities.

An important agronomic practice that I believe California landowners are ready to install to their dry and fallow fields is a cover crop. SWCS has been one of the leading promoters of cover crops during the last few years. Our Society has worked with other professional organizations to develop face-to-face workshops throughout the United States along with recent webinars detailing the benefits of cover crops for soil health and protecting bare soil from the ravishes of drought.

Members of SWCS are the leaders in their communities throughout the world who come together to share their knowledge and experiences to help save soil and water for improved production on farm and rangelands across the globe.

I am proud to be one of the Society’s members. During the last three years I have been extremely fortunate to serve as the western director on the Board of Directors for the Society. Due to the Society’s reorganization and for personal reasons, my term on the Board will be ending at the conclusion of our Annual Conference in Lombard, Illinois, on July 26-29. I have enjoyed interacting with our other Board members, Executive Director Jim Gulliford, and the Society’s outstanding and professional staff.

All of us (members) have shown how an international professional organization like ours, working together, can explore and discover the science and art of soil and water conservation. We face challenges like the California drought head-on and carry out our role in providing strong soil management practices and techniques.

Thanks to all of you for your hard work, perseverance, and commitment to providing answers and ideas to soil and water conservation as members of the Soil and Water Conservation Society. I hope to see you in July at the annual meeting in Lombard, Illinois.

Note: Mark is a member and a Past President of our Chapter.

CHECKOUT THE CA-NV CHAPTER SWCS WEBSITE

www.caswcs.org

CALIFORNIA ROLLS OUT 2014 FARM BILL CONSERVATION PROGRAMS

Based on a USDA NRCS Davis, CA News Release dated April 25, 2014.

Congress whittled down the number of conservation program names to remember, but continued a strong commitment to conservation when it passed the 2014 Farm Bill on February 7 of this year. The Nation is investing \$3.4 billion for conservation programs administered by USDA's Natural Resources Conservation Service (NRCS) in fiscal year 2014 and \$18.7 billion over five years.

Programs have now been combined into three general categories:

- 1) financial assistance programs—these continue assistance through the popular **Environmental Quality Incentives Program (EQIP)** and the **Conservation Stewardship Program (CSP)**;
- 2) easement programs—three programs to protect wetlands, prevent farmland conversion, and conserve grazing lands, have been consolidated into the new **Agricultural Conservation Easement Program (ACEP)**; and
- 3) partnership programs—four former programs that allowed partners to apply for special targeted funding to a group of producers with a shared resource protection focus have been consolidated into the new **Regional Conservation Partnership Program (RCPP)**

According to California State Conservationist **Carlos Suarez**, all applications received by NRCS last fall will be transitioned and processed using the 2014 Farm Bill programs with little if any additional work required by the landowner.

Currently, conservation opportunities are being rolled out gradually, using both new and continuing programs. Application sign-ups have recently concluded for those interested in wetland easements, the national water quality initiative, the joint Forest Service-NRCS initiative, and the effort to protect the tricolored blackbird. Most Farm Bill related changes will be reflected in program roll outs in fiscal year 2015.

The 2008 Farm Bill partnership programs have been successful in California and made needed inroads addressing issues such as nitrates, dairy water quality, pollinator decline, wildlife habitat, rangeland health, forest health, and irrigation efficiency. This effort will be expanded using the new RCPP program. A federal register notice giving more information on RCPP is anticipated soon.

NRCS pledges to continue to help farmers and ranchers address the complex regulatory requirements they face using both the technical and financial tools available to accomplish this. In California alone, NRCS invested over \$680 million using the 2008 programs. Including investments made by farmers and ranchers this means approximately \$1 billion was spent by the agricultural community improving California's natural resources using Farm Bill programs during 2009-2013.

NRCS will continue to emphasize conservation planning as the wisest and most efficient way to choose scientifically valid options to address natural resource concerns on the farm and ranch. Landowners who have worked with conservationists to plan the best suite of practices to protect their natural resources will receive priority in funding decisions.

Fact sheets are available providing information on each of the new programs, comparing the 2008 and the 2014 set of conservation programs, and detailing the step by step process for farmers and ranchers to participate in Farm Bill conservation programs. <http://www.nrcs.usda.gov/wps/portal/nrcs/main/ca/newsroom/factsheets/>.

USDA ROLLS OUT STRONG NEW PARTNERED CONSERVATION PROGRAM

Last month Agriculture Secretary **Tom Vilsack** announced a new era in American conservation efforts with an historic focus on public-private partnership. The USDA Natural Resources Conservation Service (NRCS) **Regional Conservation Partnership Program (RCPP)**, created in the 2014 Farm Bill, will fund a number of conservation activities across California with special funding available for the **California's Bay-Delta watershed**.

"This is an entirely new approach to conservation," said Vilsack. "We're giving private companies, local communities, and other non-government partners a way to invest in what are essentially clean water start-up operations. By establishing new public-private partnerships, we can have an impact that's well beyond what the Federal government could accomplish on its own. These efforts keep our land resilient and water clean, and promote tremendous economic growth in agriculture, construction, tourism and outdoor recreation, and other industries."

RCPP will competitively award funds to conservation projects designed by local partners specifically for their region. Eligible partners include private companies, universities, non-profit organizations, local and tribal governments and others joining with agricultural and conservation organizations and producers to invest money, manpower and materials to their proposed initiatives. Through RCPP, partners propose conservation projects to improve soil health, water quality and water use efficiency, wildlife habitat, and other related natural resources on private lands. USDA's \$1.2 billion in funding over the life of the five-year program can leverage an additional \$1.2 billion from partners for a total of \$2.4 billion for conservation. \$400 million in USDA funding is available in the first year.

Secretary Vilsack announced California's Bay-Delta Watershed as one of eight critical conservation areas (CCA) that will compete for one third of the total available funds. This future work will build upon the more than \$50 million invested by NRCS since 2011 to protect and improve natural resources in the Bay-Delta.

Additionally the Colorado River Basin CCA will take in small portions of Imperial, Riverside and San Bernardino Counties.

The RCPP funds will be divided among three funding pools:

- 35 percent of total program funding will be directed to the eight critical conservation areas.
- 40 percent will be directed to regional or multi-state projects through a national competitive process.
- 25 percent will be directed to state-level projects through a competitive process established by NRCS state leaders.

RCPP replaces the former NRCS **Agricultural Water Enhancement Program (AWEP)** and **Cooperative Conservation Partnership Initiative (CCPI)** program. These two programs also worked with conservation partners to implement conservation using a landscape approach.

NRCS California has established eight natural resource priority concerns for which applications will be accepted. These are soil health, water quality, air quality, water quantity, habitat degradation for at-risk species, inefficient energy use, forest health, and rangeland health.

Pre-proposals are due July 14, and full proposal are due September 26.

For more information on applying, visit

<http://www.grants.gov/web/grants/view-opportunity.html?oppld=256049>

NRCS has provided leadership in a partnership effort to help America's private landowners and managers conserve their soil, water and other natural resources since 1935. For more information on NRCS, visit www.nrcs.usda.gov

CALIFORNIA-NEVADA CHAPTER SWCS
430 G STREET #4172
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“Too many people have lost sight of the fact that productive soil is essential to the production of food.

Almost invariably, conservation farming—which, after all, is common sense farming with scientific methods—begins to show results the very first years it is applied. And, usually, it takes no more labor or machinery to carry on conservation farming than it does to farm the wasteful way—without consideration of conservation needs..

Many farmers—most farmers, and that means millions—need some technical help in making the change to this more efficient, easier, and more productive type of farming, and they need also moral support and encouragement..”

Hugh Hammond Bennett

September 18, 1943, Washington, DC

CHAPTER EXECUTIVE COUNCIL

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- Vacant**, President-Elect
- Tibor Horvath**, Past President
- Joe Williams**, Secretary
- Tom Esgate**, Treasurer
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RUNOFF is the official California-Nevada Chapter SWCS newsletter.

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Please submit articles via email to the Editor.
RUNOFF reserves the right to edit all submissions.

YOUR PHOTOS ARE WANTED
FOR THE CA-NV CHAPTER SWCS
WEBSITE

www.caswcs.org

PLEASE SUBMIT PHOTOS, NEWS
ITEMS, AND FEATURE ARTICLES TO
THE EDITOR FOR THE SUMMER
ISSUE OF RUNOFF

BY JULY 24
